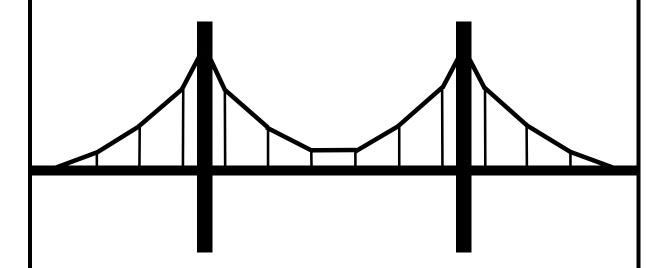
# NEW YORK CITY BRIDGE TRAFFIC VOLUMES 2004





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

August 2005

# **New York City Bridge Traffic Volumes 2004**

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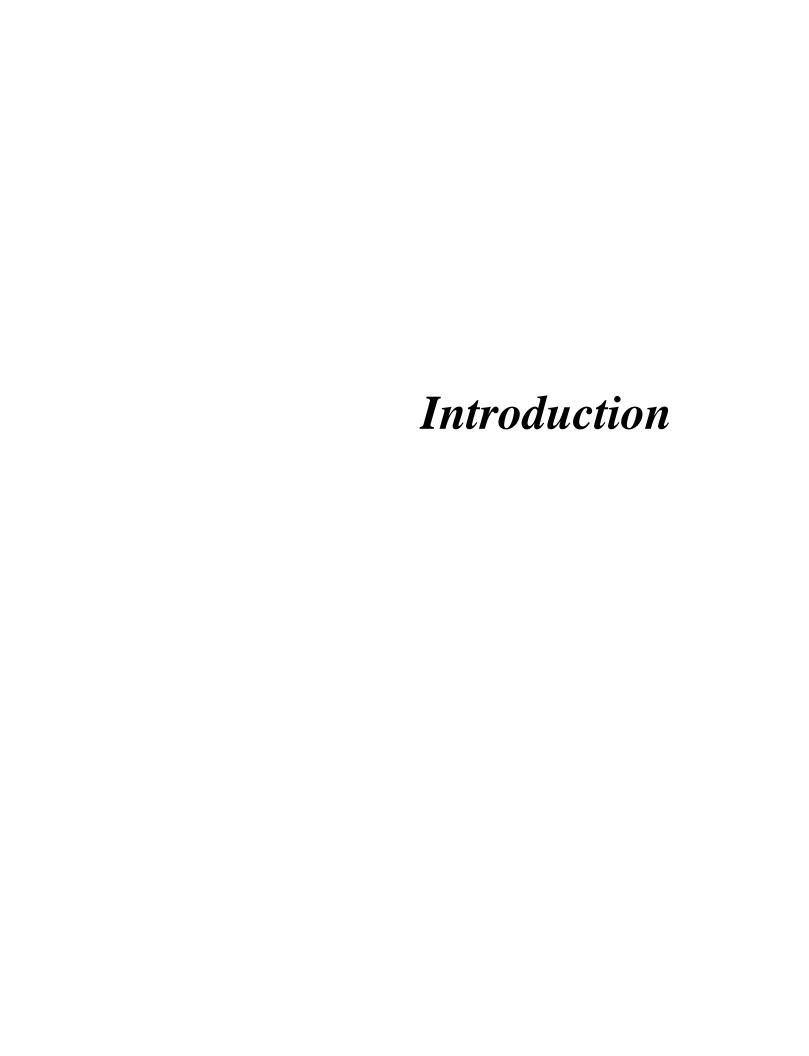
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#### INTRODUCTION

The 2004 *New York City Bridge Traffic Volumes* 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 New York City Department of Transportation (NYCDOT) has monitored traffic flow on 47 bridges operated by the City of New York. This 2004 *New York City Bridge Traffic Volumes* report summarizes vehicular volumes, classification data, and trends for the 47 bridges that cross over water. Volume and trend information also is presented for the nine bridges and tunnels operated by the Metropolitan Transportation Authority Bridges and Tunnels (MTABT), and the six bridges and tunnels operated by the Port Authority of New York and New Jersey (PANYNJ).

All bridges are monitored with automatic traffic recording (ATR) machines. Hourly volumes by direction for each bridge are presented in tabular form. Graphical presentations of the hourly volumes by direction are provided by histograms. Hourly classification data identifies the volumes of automobiles, buses, commuter vans, trucks, and commercial vans for the 7am-7pm time period. A regression analysis of the total daily volumes for each facility for the years 1948-2004 was performed in order to develop trend information. In addition, changes in the traffic volumes for all facilities over the past 56 years are shown in graphical form.

The report presents annual growth rates for each bridge. These growth rates are derived from the linear regression equation, which reflects the best fitting straight line for the data plotted. A more comprehensive analysis of bridges and tunnels serving Manhattan is presented in the *Manhattan River Crossings* report which also is published annually.

The 47 New York City bridges and the MTABT and PANYNJ facilities have been designated a highway functional classification. Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service each roadway provides.

The five functional systems are defined as follows:

- 1. <u>Interstate</u> connects population centers across state lines.
- 2. <u>Principal Arterial</u> serves major centers of activity of an urban area and carries a high proportion of the total urban area travel on a minimum of mileage.
- 3. <u>Minor Arterial</u> interconnects with and augments urban principal arterials; provides service for trips of moderate length at a somewhat lower level of travel mobility than principal arterials; distributes travel to geographic areas smaller than those identified with the higher system.
- 4. <u>Collector Street</u> provides both land access service and traffic circulation within residential neighborhoods, and commercial and industrial areas. Differs from the arterial systems in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from arterials to the ultimate destination. Conversely, collector streets also collect traffic from local streets in residential neighborhoods and channel it into the arterial system.

| <ol> <li>Local Street - comprises all facilities not on one of the higher systems. to provide direct access to abutting land and access to the higher order the lowest level of mobility and usually contains no bus or truck routes</li> </ol> | Serves primarily systems. Offers |
|---|----------------------------------|
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#### **SUMMARY**

#### 2004 Volumes

- In 2004, daily traffic on the 47 bridges operated by the New York City Department of Transportation increased 0.4%, to 2.739 million from 2.727 million in 2003.
- Volumes on the East River bridges continued to rebound from the major decline caused by the events of 9/11/2001, which had severely restricted traffic flow into lower Manhattan. Daily traffic on the four East River bridges rose 2.9%, to 507,600 in fall 2004 from 493,400 in fall 2003. This was only 7,200 fewer daily vehicles using the four East River bridges than the 514,800 that had been recorded four years earlier in fall 2000 (prior to the events of 9/11/2001).
- Daily volume using the nine Harlem River bridges increased 0.5%, to 552,400 in 2004 from 549,500 in 2003.
- Daily traffic using the four bridges over Newtown Creek between Queens and Brooklyn was unchanged at 275,700.
- On the eight bridges in The Bronx, daily traffic increased 1.1%, to 453,000 from 448,200.
- On the ten bridges in Brooklyn, daily traffic increased 1.2%, to 335,900 from 331,800.
- On the eleven bridges in Queens, daily traffic decreased 2.2%, to 549,600 from 562,100.
- Daily traffic on the Fresh Kills Bridge in Staten Island decreased 2.2%, to 64,700 from 66,200.
- The most heavily used City-operated water crossing in 2004 was the Kosciuszko Bridge, which carried 193,600 daily vehicles across Newtown Creek between the boroughs of Brooklyn and Queens.
- Other high volume bridges were the Whitestone Expressway Bridge in Queens (188,900 daily vehicles), the Queensboro Bridge over the East River between Manhattan and Queens (180,400), the Eastern Boulevard Bridge in The Bronx (178,700), the Alexander Hamilton Bridge over the Harlem River between The Bronx and Manhattan (175,300), the Mill Basin Bridge on the Belt Parkway in Brooklyn (145,800), and the Brooklyn Bridge over the East River between Brooklyn and Manhattan (137,600).

# **Major Increases**

- On bridges carrying more than 50,000 daily vehicles, the largest percentage increase was on the Willis Avenue Bridge over the Harlem River between Manhattan and The Bronx (+12.0%).
- On bridges carrying fewer than 50,000 daily vehicles, the Madison Avenue Bridge over the Harlem River between The Bronx and Manhattan had the highest percentage increase (+17.2%).

#### **Major Decreases**

- On bridges carrying more than 50,000 daily vehicles, the Little Neck Bridge in Queens showed the largest percentage decline (-9.8%).
- On bridges carrying fewer than 50,000 daily vehicles, the East 174<sup>th</sup> Street Bridge in The Bronx showed the largest percentage reduction (-14.4%).

#### **Ten-Year Trends: 1994 - 2004**

- Total bridge traffic increased at an average rate of 1.4% per year during this ten-year period, more than three times as fast as the 0.4% average annual growth rate during the preceding decade. The highest annual growth rates occurred on the Madison Avenue Bridge over the Harlem River between The Bronx and Manhattan (+9.8%), the University Heights Bridge over the Harlem River between The Bronx and Manhattan (+4.8%), the Pulaski Bridge over Newtown Creek between Brooklyn and Queens (+4.3%), and the Hutchinson River Parkway Bridge in The Bronx (+4.3%).
- Traffic on the four toll-free East River bridges increased at an average rate of 0.5% per year, versus an annual rate of decline of 0.4% during the preceding decade. The highest growth rates occurred on the Queensboro and Williamsburg Bridges, +1.4% per year apiece. Average volume on the Brooklyn and Manhattan Bridges declined, by 0.7% per year and 0.8% per year, respectively.
- Traffic on the nine toll-free Harlem River bridges increased 0.6% per year, twice the 0.3% annual rate of the preceding decade. The highest growth rate occurred on the Madison Avenue Bridge, +9.8% per year.
- On the four bridges over Newtown Creek between Brooklyn and Queens, daily traffic increased 1.7% per year, over four times the 0.4% annual growth rate during the preceding decade. The highest growth rate occurred on the Pulaski Bridge, +4.3% per year.
- Daily volume on the eight bridges in the Bronx increased 3.2% per year, over six times the average growth rate of 0.5% per year during the preceding decade. The fastest individual facility growth rates were recorded on the Hutchinson River Parkway Bridge (+4.3% annually), the Eastern Boulevard Bridge (+3.9% annually), and the Unionport Bridge (+3.7% annually). Average volume on the Pelham Bridge declined by 3.3% annually.
- Average daily traffic on the ten bridges in Brooklyn increased 1.1% per year, compared to the 1.3% annual growth rate during the preceding ten years. The fastest annual growth rate occurred on the Cropsey Avenue Bridge (+2.8%).
- Traffic on the eleven Queens bridges increased 1.8% per year, over three times the 0.5% annual growth rate of the preceding decade. The fastest growth rates occurred on the North Channel Bridge (+3.5% annually), the Midtown Highway Bridge (+2.7% annually), the Rikers Island Bridge (+2.5% annually), and the Whitestone Expressway Bridge (+2.3% annually). Average volume on the Roosevelt Avenue Bridge declined by 1.6% annually.

#### **Historic Trends**

- In 1948, traffic on the City-operated bridges was 924,000 daily trips. By 1968, that figure had more than doubled to 1,912,000. In 2004, it stood at 2,739,000 daily trips, nearly three times the 1948 volume.

- Between 1954 and 1964, bridge traffic increased 3.6% per year on the 45 City bridges open during that time. The highest annual growth rates were on the Unionport Bridge in The Bronx (+17.3%), the Third Street Bridge in Brooklyn (+9.6%), the Carroll Street Bridge in Brooklyn (+8.2%), the City Island Bridge in The Bronx (+8.1%), and the Brooklyn Bridge over the East River between Manhattan and Brooklyn (+8.0%).
- Between 1964 and 1974, bridge traffic increased 1.1% per year on the 46 City bridges open during that time. The Fresh Kills Bridge in Staten Island had the highest annual growth rate (+11.0%), followed by the Roosevelt Island Bridge in Queens (+9.4%), and the Eastchester Bridge in The Bronx (+9.1%).
- Between 1974 and 1984, total traffic on the 47 City bridges showed an average annual growth rate of 1.2%. The highest individual facility annual growth rates were on the Rikers Island Bridge in Queens (+7.7%), the Fresh Kills Bridge in Staten Island (+5.5%), the Grand Street Bridge over Newtown Creek between Brooklyn and Queens (+5.4%), and the Metropolitan Avenue Bridge in Brooklyn (+5.1%).
- Between 1984 and 1994, bridge traffic grew 0.4% per year on the 47 City bridges. The highest annual growth rates were on the Hunters Point Avenue Bridge in Queens (+7.4%), the Greenpoint Avenue Bridge over Newtown Creek between Brooklyn and Queens (+6.4%), the Pelham Bridge in The Bronx (+6.3%), and the Rikers Island Bridge in Queens (+5.9%).
- Traffic crossing the Harlem River increased significantly following the opening of the Alexander Hamilton Bridge in 1963. By 1965, daily traffic on the Alexander Hamilton Bridge had exceeded 125,000 vehicles. As a result, traffic on the Harlem River crossings increased 28% between 1962 and 1965.
- Bridge traffic increased steadily in the late 1960s and by 1971 had reached 2,059,000 vehicles per day. The decline in the City's economy and gasoline shortages led to a downward trend between 1971 and 1979. Daily bridge traffic in 1979 was 65,000 below the 1969 level. Thereafter, bridge traffic increased in most years, with 773,000 more daily vehicles crossing the bridges in 2004 than in 1979.

# **Major Bridge Reconstruction In 2004**

# Brooklyn Bridge

Eastbound lane closures were in effect as follows.

| 01/01-07/23: | 10:00am - 3:00pm<br>6:00am - 2:00pm | Mon-Fri<br>Sat | 1 e/b lane closed intermittently, 1 e/b lane closed intermittently. |
|--------------|-------------------------------------|----------------|---|
| 07/24-12/31: | 10:00am - 3:00pm                    | Mon-Fri        | 1 e/b lane closed intermittently,                                   |
|              | 1:00am - 7:00am                     | Mon-Fri        | 1 e/b lane closed intermittently,                                   |
|              | 6:00am - 2:00pm                     | Sat            | 1 e/b lane closed intermittently.                                   |
| 02/06-02/09: | 11:00pm Fri - 6:00am                | Mon            | 1 e/b lane closed,  |
|              | 4:00am - 10:00am                    | Sat            | 2 e/b lanes closed,   |
|              | 2:00am - 7:00am                     | Sun            | 2 e/b lanes closed,   |
|              | 12:01am - 6:00am                    | Mon            | 2 e/b lanes closed.   |
| 09/07-09/08: | 2:00am - 6:00am                     | Tue-Wed        | 2 e/b lanes closed.   |

Westbound lane closures were in effect as follows.

01/10-01/30: 10:00am - 2:00pm Mon-Fri 1 w/b lane closed intermittently.

| 01/12-01/23: | 10:00am - 2:00pm<br>12:01am - 5:00am | Mon-Fri<br>Mon-Fri | 1 w/b lane closed intermittently,<br>2 w/b lanes closed intermittently. |
|--------------|--------------------------------------|--------------------|---|
| 04/17-10/15: | 11:00pm - 6:00am                     | Mon-Fri            | 1 w/b lane closed intermittently.                                       |
| 10/16-11/12: | 10:00am - 2:00pm<br>12:01am - 5:00am | Mon-Fri<br>Mon-Fri | 1 w/b lane closed intermittently, 2 w/b lanes closed intermittently.    |
| 10/31:       | 12:01am - 9:00am                     | Sun                | 2 w/b lanes closed.   |
| 11/13-12/31: | 11:00pm - 6:00am                     | Mon-Fri            | 1 w/b lane closed intermittently.                                       |

From September 18 to October 10, the westbound entrance ramp from the Brooklyn-Queens Expressway was closed Saturdays between 12:01am-6:00am and Sundays between 12:01am-9:00am. The entrance ramp from either Sands Street or from Tillary Street was also closed during these times.

On Sunday, October 31, from 12:01am to 9:00am, either the Tillary Street entrance or the Sands Street entrance (one at a time) was closed.

Throughout 2004, there were additional intermittent closings of single lanes in both directions on the Brooklyn Bridge during off-peak hours.

#### Manhattan Bridge

From January 1 to July 9, **pedestrian and bicycle access** was provided on the south side of the Manhattan Bridge, on an interim roadway.

From July 10 to July 23, **pedestrian and bicycle access** was provided on the north side of the Manhattan Bridge.

From July 24 to December 31, **bicycle access** was on the north side of the bridge and **pedestrian access** was on the south side of the Manhattan Bridge.

From January 1 to April 25, either the **Lower Roadway or South Upper Roadway** was closed intermittently weeknights between 9:00pm and 5:00am for installation of overhead message board structure. Only one of these two roadways was closed at any specific time, leaving two operating traffic lanes in each direction.

#### Manhattan Bridge Operation: January 1 – April 25, 2004.

South Upper Roadway or Lower Roadway closed intermittently weeknights 9:00pm - 5:00am for installation of overhead message board structure.

One or two of the three lanes on the reversible Lower Roadway closed as noted.

Four peak direction lanes on weekdays.

- Mon-Fri 5:00am 10:00am.
  - 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 10:00am – 1:00pm.

- 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.

#### • Mon-Fri 1:00pm – 3:00pm.

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

#### • Mon-Fri 9:00pm – 5:00am.

- Manhattan-bound: 2 lanes on North Upper Roadway.
- Brooklyn-bound: 2-4 lanes: 2 on South Upper Roadway, and/or 2 on Lower Roadway.
- South Upper Roadway or Lower Roadway closed intermittently for installation of overhead message board structure.

#### All other times.

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

#### Manhattan Bridge Operation: April 26 – May 27, 2004.

Flatbush Avenue approach to Manhattan-bound North Upper Roadway closed round-the-clock, with traffic routed to the Lower Roadway. Access from the Brooklyn-Queens Expressway to the Manhattan-bound North Upper Roadway was not affected.

One or two of the three lanes on the reversible Lower Roadway closed as noted.

Five Manhattan-bound lanes weekdays 5:00-10:00am; four Brooklyn-bound lanes weekdays 3:00-9:00pm.

#### • Mon-Fri 5:00am - 10:00am.

- Manhattan-bound: 5 lanes: 2 on North Upper Roadway,
  - 3 on Lower Roadway.
- Brooklyn-bound: 2 lanes on South Upper Roadway.

#### • Mon-Fri 10:00am - 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: 3 lanes: 2 on North Upper Roadway,

1 on Lower Roadway.

- Brooklyn-bound: 4 lanes: 2 on South Upper Roadway,

2 on Lower Roadway.

#### • Mon-Fri 9:00pm - 5:00am.

- Manhattan-bound: 3 lanes: 2 on North Upper Roadway,

1 on Lower Roadway.

- Brooklyn-bound: 2 lanes on South Upper 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: May 28 – December 31, 2004.

Flatbush Avenue approach to Manhattan-bound North Upper Roadway reopened May 28 (had been closed round-the-clock since April 26).

One or two of the three lanes on the reversible Lower Roadway closed as noted.

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.

#### • 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.

# Queensboro Bridge

Throughout 2004, **trucks** were permitted only on the two Lower Inner Roadways.

Throughout 2004, 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.

From 10:00pm Friday, March 5 to 5:00am Monday, March 8, one of two lanes on the Queens-bound South Inner Roadway of the bridge was closed. Also, the inner roadways of Queens Plaza North and Queens Plaza South were closed, with traffic diverted to the service roadways.

From March 12 to March 22, the inner roadway of Queens Plaza South was closed from 10:00pm Friday to 5:00am Monday. Eastbound traffic was directed to the south service roadway and/or the Queens Plaza North inner roadway. Westbound traffic was directed to the Queens Plaza North service roadway. Motorists were advised to avoid the plaza and use alternate East River crossings such as the Williamsburg Bridge, Queens-Midtown Tunnel, and Triborough Bridge.

From June 19 to August 20, the Queens-bound South Upper Roadway was closed intermittently Mondays through Wednesdays between 1:00am and 5:30am.

From June 19 to August 20, the Manhattan-bound North Upper Roadway was closed intermittently Thursdays and Fridays between 1:00am and 5:00am, and Saturdays between 1:00am and 6:00am.

#### **Queensboro Bridge Operation: All of 2004.**

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 2004, there were intermittent closings of single lanes on individual roadways of the Queensboro Bridge during off-peak hours.

# Williamsburg Bridge

Throughout 2004, **trucks** were permitted only on the outer roadways of the Williamsburg Bridge.

Prior to August 7, **Manhattan-bound trucks** were banned from the Williamsburg Bridge.

Either the **North Outer Roadway or South Outer Roadway** (one at a time) was closed according to the following schedule.

```
09/11-09/12: 4:00am Sat. - 8:00pm Sun.
```

Eastbound & westbound trucks banned from the bridge during this time.

The **North Outer Roadway** was closed according to the following schedule.

```
02/28-02/29: 4:00am Sat. - 8:00pm Sun.
05/22: 4:00am - 8:00pm Sat.
06/05: 4:00am - 8:00pm Sat.
```

The **South Outer Roadway** was closed according to the following schedule.

```
04/17-04/25: 4:00am Sat. - 8:00pm Sun.
05/08: 4:00am - 8:00pm Sat.
08/21-08/22: 4:00am Sat. - 8:00pm Sun.
09/18-09/19: 4:00am Sat. - 8:00pm Sun.
```

Eastbound & westbound trucks banned from the bridge during these times.

The **Footwalks** were closed according to the following schedule.

```
05/15-08/17: Round-the-clock All days. North footwalk closed. 08/18-12/31: Round-the-clock All days. South footwalk closed.
```

Two Brooklyn-bound lanes were closed Saturday, June 26, between 6:00am-2:00pm.

#### Williamsburg Bridge Operation: January 1 – March 26, 2004.

Manhattan-bound trucks banned round-the-clock (through August 6, 2004).

Four peak direction lanes available on weekdays.

North Outer Roadway closed as follows.

```
02/28-02/29: 4:00am Sat. - 8:00pm Sun.
```

• Mon-Fri Midnight - 5:00am.

Manhattan-bound: 3 lanes. One lane closed in Brooklyn-bound: 3 lanes. each direction.

• Mon-Fri 5:00am - 3:00pm.

Manhattan-bound: 4 lanes. Two lanes closed in the off-peak direction.

• Mon-Fri 3:00pm – Midnight.

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

• Sat-Sun 1:00am - 8:00am.

Manhattan-bound: 3 lanes. One lane closed in Brooklyn-bound: 3 lanes. each direction.

• All other times.

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

#### Williamsburg Bridge Operation: March 27 - December 31, 2004.

Manhattan-bound trucks banned round-the-clock through August 6.

#### Four peak direction lanes available on weekdays.

#### North Outer Roadway closed as follows.

05/22: 4:00am - 8:00pm Sat. 06/05: 4:00am - 8:00pm Sat.

#### South Outer Roadway closed as follows.

04/17-04/25: 4:00am Sat. - 8:00pm Sun. 05/08: 4:00am - 8:00pm Sat. 08/21-08/22: 4:00am Sat. - 8:00pm Sun. 09/18-09/19: 4:00am Sat. - 8:00pm Sun.

Eastbound & westbound trucks banned from the bridge during these times.

# North Outer or South Outer Roadway (one at a time) closed as follows.

09/11-09/12: 4:00am Sat. - 8:00pm Sun.

Eastbound & westbound trucks banned from the bridge during this time.

#### One lane in each direction closed as follows.

09/25-09/26: 4:00am Sat. - 8:00pm Sun.

#### Footwalks closed as follows.

05/15-08/17: Round-the clock All days. North footwalk closed. 8/18-12/31: Round-the clock All days. South footwalk closed.

#### Two Brooklyn-bound lanes closed Saturday, June 26, between 6:00am-2:00pm.

• Mon-Fri Midnight - 5:00am.

Manhattan-bound: 3 lanes. One lane closed in Brooklyn-bound: 3 lanes. each direction.

• Mon-Fri 5:00am - 10:00am.

Manhattan-bound: 4 lanes. Two lanes closed in Brooklyn-bound: 2 lanes. the off-peak direction.

• Mon-Fri 10:00am - 3:00pm.

Manhattan-bound: 3 lanes. *1 westbound lane closed*, Brooklyn-bound: 2 lanes. *2 eastbound lanes closed*.

• Mon-Fri 3:00pm – Midnight.

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

• Sat-Sun 1:00am - 8:00am.

Manhattan-bound: 3 lanes. One lane closed in Brooklyn-bound: 3 lanes. each direction.

• All other times.

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

# Broadway Bridge

Throughout 2004, one of three lanes in each direction on the Broadway Bridge was closed round-the-clock.

#### Macombs Dam Bridge

Throughout 2004, 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.

No closures within two hours of the start or end of Yankee home

games.

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

02/02-12/31: 12:01am - 5:00am Mon-Fri. 1:00am - 6:00am Sat-Sun.

No closures within two hours of the start or end of Yankee home

games.

# Madison Avenue Bridge

Eastbound lane closures were in effect as necessary on the Madison Avenue Bridge as follows:

01/01-03/12: 8:00am - 3:00pm Mon-Fri. 1 E/B lane closed intermittently. 03/13-04/16: 7:00am - 3:00pm Mon-Fri. 1 E/B lane closed intermittently. 04/17-04/23: 7:00am - 3:00pm All Days. 1 E/B lane closed intermittently. No eastbound lane closures during Yankee home games. 7:00am - 3:00pm 1 E/B lane closed intermittently. 04/24-12/31: All Days. 11:00pm - 5:00am Mon-Fri. 1 E/B lane closed intermittently. No eastbound lane closures during Yankee home games.

Westbound lane closures were in effect as necessary on the Madison Avenue Bridge as follows:

01/01-03/12: 9:30am - 3:00pm 1 W/B lane closed intermittently. Mon-Fri. 03/13-04/16: 10:00am - 4:00pm Mon-Fri. 1 W/B lane closed intermittently. 04/17-04/23: 10:00am - 4:00pm Mon-Fri. 1 W/B lane closed intermittently. 7:00am - 3:00pm Sat-Sun. 1 W/B lane closed intermittently. 04/24-12/31: 10:00am - 4:00pm 1 W/B lane closed intermittently. Mon-Fri. 11:00pm - 5:00am Mon-Fri. 1 W/B lane closed intermittently. 7:00am - 3:00pm 1 W/B lane closed intermittently. Sat-Sun.

# Third Avenue Bridge (Harlem River)

Throughout 2004, two of the four Manhattan-bound lanes were closed for long term bridge rehabilitation.

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

An additional lane on the bridge was also closed as follows, leaving only one operational lane.

01/19: 11:00am - 2:00pm Mon. 3<sup>rd</sup> lane closed.
03/22-03/30: 12:01am - 5:00am Mon-Fri. 3<sup>rd</sup> lane closed intermittently.
04/17-12/31: 12:01am - 5:00am All Days. 3<sup>rd</sup> lane closed intermittently.

From January 1 to February 29 at 10:00am, the Third Avenue approach to the bridge was closed.

As of February 29 at 10:00am, the Bruckner Boulevard approach was closed.

The Third Avenue Bridge was completely closed as follows.

02/01: 1:00am - 6:00am Sun. 02/29: 12:00am - 10:00am Sun. 06/13: 12:00am - 8:00am Sun. Alternate date from 11:00pm Mon. 06/14, until 5:00am Tues. 06/15. 06/28: 5:45pm - 6:15pm Mon. Closed for a maximum of 15 minutes. 10/29: 9:00am - 3:00pm Fri. Periodic closures of 15-30 minutes. 11/29-12/03: 1:00am - 5:00am Mon-Fri. One lane reversed to Manhattan-bound on the Willis Avenue Bridge. 12/15-12/17: 1:00am - 5:00am Wed-Fri. One lane reversed to Manhattan-bound on the Willis Avenue Bridge. Mon-Wed. 12/20-12/23: 1:00am - 5:00am One lane reversed to Manhattan-bound on the Willis Avenue Bridge. 12/27-12/30: 1:00am - 5:00am Mon-Thu. One lane reversed to Manhattan-bound on the Willis Avenue Bridge.

# Washington Bridge

Throughout 2004, 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

Throughout 2004, 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 as follows;

```
11/29-12/03: 1:00am - 5:00am Mon-Fri.
12/15-12/17: 1:00am - 5:00am Wed-Fri.
12/20-12/23: 1:00am - 5:00am Mon-Wed.
12/27-12/30: 1:00am - 5:00am Mon-Thu.
```

There were intermittent closures of one of two lanes from the First Avenue and FDR Drive approaches as follows.

```
01/01-04/16: 12:01am - 5:00am Mon-Fri.

05/15-06/11: 11:00pm - 5:00am Mon-Fri,

12:01am - 6:00am Sat.

06/12-06/18: 12:01am - 5:00am Mon-Fri,

1:00am - 6:00am Mon-Fri,

Sat-Sun.

06/26-07/22: 12:01am - 5:00am Mon-Fri,

1:00am - 6:00am Sat-Sun.
```

One of two lanes on the northbound FDR Drive exit to the Willis Avenue Bridge was closed as follows

```
04/26-04/29: 11:30pm - 5:00am Mon-Thu.
```

The First Avenue approach was closed as follows.

The FDR Drive approach was closed as follows.

```
09/24-11/12: 12:01am - 5:00am Mon, Wed, Fri, Sat. FDR approach closed.
```

One of two lanes on the northbound FDR Drive exit to the Willis Avenue Bridge was closed April 26-29 (Monday-Thursday) from 11:30pm to 5:00am.

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

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

```
01/01-03/12: 9:30am - 3:00pm Mon-Fri.
03/13-08/06: 10:00am - 2:00pm Mon-Fri.
No eastbound lane closures during Yankee home games.
08/07-11/12: 9:00am - 3:00pm Mon-Fri.
No lane closures during Yankee home games.
11/13-12/31: 7:00am - 3:00pm Mon-Fri.
```

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

```
01/01-03/12: 9:30am - 3:00pm Mon-Fri.
```

03/13-03/26: 10:00am - 2:00pm Mon-Fri. 08/07-11/12: 9:00am - 3:00pm Mon-Fri.

No lane closures during Yankee home games.

11/13-12/31: 9:00am - 5:30pm Mon-Fri.

# Grand Street Bridge

One of two eastbound lanes was closed 10pm to 6am, October 18-21.

# Greenpoint Avenue Bridge

From January 3 to April 30, there were intermittent closures of one of two lanes in each direction during off-peak hours.

#### Kosciuszko Bridge

From January 1 to September 3, lane closures were in effect on the Brooklyn-Queens Expressway in the vicinity of the bridge according to the following schedule.

12:01am - 5:00am Mon-Fri 2 lanes each way closed. 1:00am - 6:00am Sat 2 lanes each way closed. 1:00am - 8:00am Sun 2 lanes each way closed.

Throughout 2004, there were additional intermittent closures of single lanes in either direction on the Brooklyn-Queens Expressway in the vicinity of the Kosciuszko Bridge during off-peak hours.

# Pulaski Bridge

From January 24 to April 30, there were intermittent closures of one of three Brooklynbound lanes during off-peak hours.

From July 5 to November 26, there were intermittent closures of one of three lanes in each direction during off-peak hours.

# Eastern Boulevard Bridge

Throughout 2004, lane closures were in effect on the main roadway of the Eastern Boulevard Bridge (Bruckner Expressway) according to the following schedule.

10:00am - 3:00pm Mon-Fri 1 lane each way closed as needed.

# Unionport Bridge

There is a permanent one-lane closure on the eastbound service road from the northbound Bruckner Expressway exit ramp to the Unionport Bridge.

#### Hamilton Avenue Bridge

From June 5 to June 18, only one northbound/westbound lane was available from 11pm to 4am Tuesday night to Wednesday morning, and Wednesday night to Thursday morning, to facilitate NYCDOT bridge repairs.

Throughout 2004, there were intermittent closures of single lanes in both directions during off-peak hours.

# Mill Basin Bridge

Lane closures were in effect on the Mill Basin Bridge according to the following schedule.

```
08/14-12/10: 10:00am - 2:30pm Mon-Fri 1 w/b lane closed intermittently, 10:00am - 2:30pm Mon-Fri 1 e/b lane closed intermittently. 12/11-12/31: 12:01am - 5:00am Mon-Fri 2 w/b lanes closed intermittently.
```

# Metropolitan Avenue Bridge

As of March 20, 2004, the Metropolitan Avenue Bridge was under rehabilitation, with one lane maintained in each direction.

# Borden Avenue Bridge

Only one lane was maintained for two-way traffic, with flaggers, according to the following schedule.

```
06/15-06/17: 9:30am - 5:30pm Tue-Thu.
```

# Flushing Bridge

From July 31 to August 6, there were intermittent closings one of three lanes in each direction during off-peak hours.

# Roosevelt Avenue Bridge

From July 10 to July 16, one of two lanes in each direction was closed round-the-clock.

# Roosevelt Island Bridge

From January 1 to January 16, only one lane was maintained in each direction daily from 10:00am to 3:00pm, and from 7:00pm to 6:00am.

From January 17 to December 31, only one lane was maintained in each direction at all times.

#### Fresh Kills Bridge

From June 19 to October 1, there were intermittent weekday closures of one of three southbound lanes between 7:00am -2:00pm, and one of three northbound lanes between 7:00am -3:00pm.

# Whitestone Expressway Bridge

Throughout 2004, intermittent lane closures were in effect on the Whitestone Expressway between the Whitestone Expressway Bridge and the Bronx-Whitestone Bridge according to the following schedule.

```
01/01-12/31: 10:00am - 3:00pm Mon-Fri 1 lane closed intermittently each way. 10:00pm Fri - 6:00am Sat 10:00pm Sat - 11:00am Sun 1:00am - 5:00am Tue-Fri way. 1:00am - 6:00am Sat 1:00am - 9:00am Sun 2:00am - 9:00am Sun 2 lanes closed intermittently each way. 2 lanes closed intermittently each way.
```

# **Brooklyn-Battery Tunnel**

Throughout 2004, 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 completely closed according to the following schedule.

```
01/01-03/26: 9:00pm - 5:00am
                                    Sunday nights to Friday mornings.
              One tube closed.
              Two-way traffic maintained in the other tube.
03/27-08/20:
              9:00pm - 5:00am
                                    Sunday nights to Friday mornings.
              One tube closed intermittently.
              Two-way traffic maintained in the other tube during these closures.
08/21-12/10:
              9:00pm - 5:00am
                                    Sunday nights to Friday mornings,
              12:01am - 8:00am
                                    Saturdays.
              One tube closed intermittently.
              Two-way traffic maintained in the other tube during these closures.
12/11-12/31:
              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.

# Henry Hudson Bridge

**Northbound** (upper level) lane closures were in effect during 2004 according to the following schedule.

All 2004: Round-the-clock All days 1 of 3 northbound lanes closed.

Southbound (lower level) lane closures were in effect during 2004 according to the following schedule.

All 2004: Round-the-clock All days 1 of 4 southbound lanes closed.

# **Queens-Midtown Tunnel**

One lane was closed intermittently according to the following schedule.

09/11-12/12: 11:00pm - 6:00am weeknights.

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

10/09-10/10: 6:00am Sat. - 6:00pm Sunday.

One tube closed, two-way traffic maintained in the other tube.

# Triborough Bridge

Lane closures were in effect on the Triborough Bridge according to the following schedule.

01/01-09/17: Round-the-clock. All days 1 lane closed.

4 lanes maintained during peak hours, 3 lanes off-peak.

01/01-09/17: 7:00am Monday - 2:30pm Friday

One lane closed on the Harlem River lift span leaving Manhattan for

Queens/Bronx.

01/01-09/17: 10:00am - 2:30pm 1 Manhattan-bound lane closed. Mon-Fri

09/18-12/31: 9:30am - 3:00pm Mon-Fri

One lane closed on the Harlem River lift span Manhattan-bound.

09/18-12/31: Round-the-clock. All Days

One lane closed on the Harlem River lift span Bronx-and-Queens-

bound.

9:30pm Thursday - 5:30am Friday & 1:00am - 7:00am Saturday. 09/30-10/02:

Traffic to and from Manhattan reduced to one lane in each direction.

On Tuesday, May 11, 2004, from 12:01am to 5:00am, the Triborough Bridge was closed to and from Queens for installation of a truss pin. Travel between The Bronx, Manhattan, and Randall's Island was not affected.

As of November 20, one of two lanes on the southbound Bruckner Expressway approach to the bridge was closed round-the-clock.

# **Bronx-Whitestone Bridge**

Queens-bound lane closures were in effect as follows:

10/04-10/08: 10:00pm - 11:00pm Mon-Fri 1 Queens-bound lane closed.

11:00pm - Midnight Mon-Fri 2 Queens-bound lanes closed. Midnight - 6:00am All Queens-bound lanes closed. Mon-Fri

Tue-Wed 1 Queens-bound lane closed

10/12-10/13: 10:00pm - 11:00pm

intermittently.

11:00pm - 6:00amTue-Wed 2 Queens-bound lanes closed.

intermittently.

Bronx-bound lane closures were in effect as follows:

| 10/04-10/08: | 10:00pm - 11:00pm | Mon-Fri | 1 Bronx-bound lane closed intermittently.  |
|--------------|-------------------|---------|--|
|              | 11:00pm - 6:00am  | Mon-Fri | 2 Bronx-bound lanes closed intermittently. |
| 10/14-10/15: | 10:00pm - 11:00pm | Thu-Fri | 1 Bronx-bound lane closed intermittently.  |
|              | 11:00pm - 6:00am  | Thu-Fri | 2 Bronx-bound lanes closed intermittently. |

Throughout 2004, there were additional intermittent closures of single lanes on the Bronx-Whitestone Bridge during off-peak hours.

# Marine Parkway Bridge

Throughout 2004, one lane in each direction was closed round-the-clock, and wide loads were prohibited from the bridge.

# Throgs Neck Bridge

Throughout 2004, there were intermittent closures of single lanes on the Throgs Neck Bridge during off-peak hours.

# Verrazano-Narrows Bridge

Throughout 2004, **trucks** were required to use the upper level.

**Westbound lane closures** were in effect on the Verrazano-Narrows Bridge according to the following schedule.

| 04/02-07/02: | Round-the-clock<br>Off-peak hours | All days<br>All Days | 1 w/b lane closed, lower level,<br>2 w/b lanes closed, lower level.             |
|--------------|-----------------------------------|----------------------|---|
| 08/07-12/31: | 7:00am - 2:00pm                   | Mon-Thu              | 2 w/b lower level lanes and 1 w/b upper level lane closed intermittently.       |
|              | 7:00am - 1:00pm                   | Fri                  | 2 w/b lower level lanes and<br>1 w/b upper level lane closed<br>intermittently. |

Throughout 2004, there were also intermittent closures of single lanes in both directions on the Verrazano-Narrows Bridge roadways during off-peak hours.

# George Washington Bridge

Throughout 2004, **trucks** were required to use the upper level.

Three of four lanes in each direction on the upper level were closed from 10:00pm Friday, July 16 to 10:00am Saturday, July 17, and from 10:00pm Saturday, July 17 to 10:00am Sunday, July 18. During these times, full roadway closures also occurred intermittently.

Throughout 2004, there were also intermittent closures of single lanes on the various George Washington Bridge roadways and ramps during off-peak hours.

#### Holland Tunnel

From January 1 to August 1, two-axle and three-axle single unit trucks were permitted eastbound to Manhattan. Tractor trailers, and single unit trucks with more than three axles, were not permitted.

As of August 2, all eastbound (to Manhattan) commercial traffic was banned from the tunnel.

Throughout 2004, 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.

Eastbound (to Manhattan) lane closures were in effect in the Holland Tunnel as follows.

```
01/01-10/22: 10:00pm - 5:00am Mon-Fri, 1 e/b lane closed. 11:59pm Fri - 7:00am Sat. 1 e/b lane closed.
```

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

```
01/01-04/09: 11:00pm - 5:00am Sun-Fri. 1 w/b lane closed intermittently. 10/23-12/31: 10:30pm - 5:30am Mon-Fri, 1:00am - 7:00am Sat. 1 w/b lane closed. 1 w/b lane closed.
```

#### Lincoln Tunnel

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

```
01/01-09/17: 11:00pm - 5:00am Sun-Wed. 1:00am - 9:00am Sat-Sun.

Two tubes open, providing two traffic lanes in each direction.

Two tubes open, providing two traffic lanes in each direction.

Two tubes open, providing two traffic lanes in each direction.
```

# Bayonne Bridge

Throughout 2004, one lane in each direction was closed intermittently on weekdays between 6:30am and 4:00pm.

# Goethals Bridge

Throughout 2004, the pedestrian walk was closed.

The Goethals Bridge was completely **closed westbound to New Jersey** according to the following schedule.

```
04/19-11/26: 9:30pm - 5:00am Mon-Fri, No closures on Sunday nights 11:59am - 8:00am Fri-Sun. No closures on Sunday nights
```

Throughout 2004, there were intermittent closures of one of two lanes in either or both directions during off-peak hours.

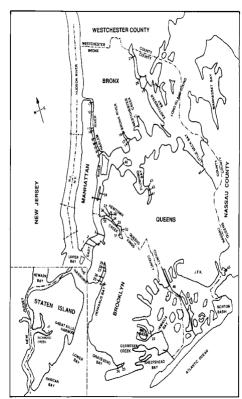
# Outerbridge Crossing

From April 10 to April 16, one lane in each direction was closed intermittently on weeknights between 9:00pm and 5:00am, and from 11:00pm Friday to 8:00am Saturday.

From April 17 to December 10, one eastbound lane (to Staten Island) was closed intermittently on weeknights between 9:00pm and 5:00am, and from 11:00pm Friday to 8:00am Saturday.

# Bridges Maintained by the New York City Department of Transportation

| Number     | Bridge Name                                  | Borough            | Water Crossing                      |
|------------|--|--------------------|-------------------------------------|
| 1.         | Brooklyn Bridge                              | Manhattan-Brooklyn | East River                          |
| 2.         | Manhattan Bridge                             | Manhattan-Brooklyn | East River                          |
| 3.         | Williamsburg Bridge                          | Manhattan-Brooklyn | East River                          |
| 4.         | Queensboro Bridge                            | Manhattan-Queens   | East River                          |
| 5.         | Willis Avenue Bridge                         | Manhattan-Bronx    | Harlem River                        |
| 6.         | Third Avenue Bridge                          | Manhattan-Bronx    | Harlem River                        |
| 7.         | Madison Avenue Bridge                        | Manhattan-Bronx    | Harlem River                        |
| 8.         | 145th Street Bridge                          | Manhattan-Bronx    | Harlem River                        |
| 9.         | Macombs Dam Bridge                           | Manhattan-Bronx    | Harlem River                        |
| 10.        | Alexander Hamilton Bridge                    | Manhattan-Bronx    | Harlem River                        |
| 11.        | Washington Bridge                            | Manhattan-Bronx    | Harlem River                        |
| 12.        | University Heights Bridge                    | Manhattan-Bronx    | Harlem River                        |
| 13.        | Broadway Bridge                              | Manhattan-Bronx    | Harlem River                        |
| 14.        | Eastern Boulevard Bridge                     | Bronx              | Bronx River                         |
| 15.        | Westchester Avenue Bridge                    | Bronx              | Bronx River                         |
| 16.        | East 174th Street Bridge                     | Bronx              | Bronx River                         |
| 17.        | Unionport Bridge                             | Bronx              | Westchester Creek                   |
| 18.        | City Island Bridge                           | Bronx              | Pelham Bay Narrows                  |
| 19.        | Pelham Bridge                                | Bronx              | Eastchester Creek                   |
| 20.        | Hutchinson River Parkway Bridge              | Bronx              | Eastchester Creek                   |
| 21.        | Eastchester Bridge                           | Bronx              | Eastchester Creek                   |
| 22.        | Mill Basin Bridge                            | Brooklyn           | Mill Basin                          |
| 23.        | Stillwell Avenue Bridge                      | Brooklyn           | Coney Island Creek                  |
| 24.        | Cropsey Avenue Bridge                        | Brooklyn           | Coney Island Creek                  |
| 25.        | Hamilton Avenue Bridge                       | Brooklyn           | Gowanus Canal                       |
| 26.        | Ninth Street Bridge                          | Brooklyn           | Gowanus Canal                       |
| 27.        | Third Street Bridge                          | Brooklyn           | Gowanus Canal                       |
| 28.        | Carroll Street Bridge                        | Brooklyn           | Gowanus Canal                       |
| 29.        | Union Street Bridge                          | Brooklyn           | Gowanus Canal                       |
| 30.        | Third Avenue Bridge                          | Brooklyn           | Fifth Street Basin                  |
| 31.        | Metropolitan Avenue Bridge                   | Brooklyn           | English Kills                       |
| 32.        | Grand Street Bridge                          | Brooklyn-Queens    | Newtown Creek                       |
| 33.        | Kosciuszko Bridge                            | Brooklyn-Queens    | Newtown Creek                       |
| 34.        | Greenpoint Avenue Bridge                     | Brooklyn-Queens    | Newtown Creek                       |
| 35.        | Pulaski Bridge                               | Brooklyn-Queens    | Newtown Creek                       |
| 36.        | Borden Avenue Bridge                         | Queens             | Dutch Kills                         |
| 37.        | Midtown Highway Bridge                       | Queens             | Dutch Kills                         |
| 38.        | Hunters Point Avenue Bridge                  | Queens             | Dutch Kills East River East Channel |
| 39.<br>40. | Roosevelt Island Bridge                      | Queens             | Rikers Island Channel               |
| 40.<br>41. | Rikers Island Bridge Roosevelt Avenue Bridge | Queens<br>Queens   | Flushing River                      |
| 41.<br>42. | Flushing Bridge                              | Queens             | Flushing Channel                    |
| 42.<br>43. | Whitestone Expressway Bridge                 | Queens             | Flushing Channel                    |
| 43.<br>44. | , , ,  | Queens             | Alley Creek                         |
| 44.<br>45. | Little Neck Bridge<br>Hook Creek Bridge      | Queens             | Hook Creek                          |
| 45.<br>46. | North Channel Bridge                         | Queens             | Jamaica Bay                         |
| 46.<br>47. | Fresh Kills Bridge                           | Staten Island      | Richmond Creek                      |
| 77.        | i roon miis briage                           | Ciatori Island     | Monimoria Orock                     |



# Total NYC Toll Free Bridges Average Daily Traffic Volumes 1948 - 2004

| Year         | East<br>River      | Harlem<br>River    | Brooklyn-<br>Queens | Bronx              |
|--------------|--------------------|--------------------|---------------------|--------------------|
| 1948         | 254,068            | 207,177            | 76,884              | 141,247            |
| 1949         | 260,933            | 193,510            | 65,778              | 135,682            |
| 1950         | 240,227            | 222,671            | 78,998              | 150,973            |
| 1951<br>1952 | 269,352<br>261,704 | 249,199<br>222,196 | 95,480<br>108,369   | 145,227<br>183,453 |
| 1953         | 292,726            | 248,629            | 108,718             | 177,999            |
| 1954         | 297,903            | 236,056            | 118,199             | 183,057            |
| 1955         | 293,633            | 250,239            | 116,018             | 180,249            |
| 1956         | 297,866            | 266,781            | 120,881             | 197,809            |
| 1957         | 297,028            | 316,530            | 137,610             | 184,031            |
| 1958         | 304,470            | 329,747            | 110,097             | 196,948            |
| 1959         | 312,431            | 342,349            | 144,137             | 188,531            |
| 1960         | 322,660            | 345,199            | 135,059             | 205,757            |
| 1961<br>1962 | 316,813<br>318,170 | 333,463<br>313,230 | 145,861<br>160,540  | 259,905<br>263,020 |
| 1963         | 333,880            | 309,090            | 160,400             | 291,240            |
| 1964         | 341,030            | 407,680            | 172,570             | 328,190            |
| 1965         | 353,518            | 401,259            | 171,379             | 351,358            |
| 1966         | 355,745            | 402,487            | 198,884             | 354,029            |
| 1967         | 352,936            | 427,744            | 197,695             | 337,982            |
| 1968         | 357,232            | 362,095            | 147,024             | 389,519            |
| 1969         | 379,416            | 412,992            | 199,029             | 378,854            |
| 1970         | 371,743            | 429,690            | 194,709             | 366,604            |
| 1971         | 364,070            | 432,195            | 200,624             | 391,040            |
| 1972<br>1973 | 390,292<br>394,290 | 422,364<br>449,670 | 200,199<br>168,037  | 345,542<br>272,116 |
| 1974         | 394,631            | 439,112            | 180,771             | 282,009            |
| 1975         | 404,379            | 440,354            | 194,534             | 284,772            |
| 1976         | 398,248            | 429,629            | 190,701             | 280,315            |
| 1977         | 398,140            | 442,200            | 192,432             | 268,480            |
| 1978         | 400,146            | 450,758            | 194,721             | 301,248            |
| 1979         | 382,028            | 427,816            | 201,314             | 277,666            |
| 1980         | 392,460            | 446,292            | 196,019             | 284,383            |
| 1981<br>1982 | 395,125<br>414,984 | 448,323<br>470,785 | 201,487<br>179,788  | 287,933            |
| 1983         | 413,152            | 470,785<br>491,153 | 221,703             | 291,600<br>301,686 |
| 1984         | 428,541            | 496,949            | 224,209             | 306,019            |
| 1985         | 476,032            | 538,263            | 225,050             | 311,072            |
| 1986         | 469,711            | 546,896            | 224,816             | 356,257            |
| 1987         | 460,092            | 530,228            | 238,975             | 362,490            |
| 1988         | 460,858            | 520,282            | 222,871             | 364,570            |
| 1989         | 461,102            | 539,381            | 239,889             | 354,927            |
| 1990         | 448,713            | 539,563            | 243,408             | 343,574            |
| 1991<br>1992 | 447,969<br>443,145 | 533,368<br>537,353 | 236,472<br>231,197  | 338,921<br>343,744 |
| 1993         | 431,874            | 542,306            | 230,020             | 336,776            |
| 1994         | 448,263            | 526,044            | 231,657             | 340,515            |
| 1995         | 464,903            | 521,882            | 237,305             | 348,009            |
| 1996         | 463,482            | 530,950            | 239,752             | 361,505            |
| 1997         | 511,410            | 546,750            | 258,585             | 362,846            |
| 1998         | 523,690            | 560,062            | 268,324             | 392,771            |
| 1999         | 516,507            | 563,182            | 266,762             | 403,934            |
| 2000         | 514,767            | 578,770<br>568,750 | 279,944             | 424,946            |
| 2001<br>2002 | 427,321<br>467,080 | 568,759<br>551,831 | 276,288<br>262,121  | 439,239<br>437,363 |
| 2002         | 493,418            | 549,510            | 275,737             | 437,363<br>448,186 |
| 2004         | 507,589            | 552,421            | 275,654             | 453,006            |
|              | ,                  | •                  | •                   | •                  |

# Total NYC Toll Free Bridges (cont'd) Average Daily Traffic Volumes 1948 - 2004

|              |                    |                    | Staten           |                        |
|--------------|--------------------|--------------------|------------------|------------------------|
| Year         | Brooklyn           | Queens             | Island           | Totals                 |
| 1948         | 91,917             | 147,106            | 5,597            | 923,996                |
| 1949         | 111,439            | 173,925            | 5,759            | 947,026                |
| 1950         | 122,058            | 180,610            | 6,250            | 1,001,787              |
| 1951         | 140,124            | 200,163            | 8,023            | 1,107,568              |
| 1952<br>1953 | 127,050            | 212,687            | 7,891<br>7,858   | 1,123,350<br>1,198,524 |
| 1954         | 141,728<br>154,877 | 220,866<br>221,700 | 9,098            | 1,220,890              |
| 1955         | 140,907            | 218,696            | 9,841            | 1,209,583              |
| 1956         | 157,758            | 265,239            | 9,415            | 1,315,749              |
| 1957         | 153,756            | 261,111            | 9,897            | 1,359,963              |
| 1958         | 179,537            | 256,536            | 10,121           | 1,387,456              |
| 1959         | 176,508            | 264,201            | 8,573            | 1,436,730              |
| 1960<br>1961 | 181,995<br>207,273 | 259,348            | 8,147<br>10,270  | 1,458,165              |
| 1962         | 217,232            | 265,848<br>257,140 | 9,400            | 1,539,433<br>1,538,732 |
| 1963         | 210,610            | 288,190            | 12,450           | 1,605,860              |
| 1964         | 213,469            | 312,090            | 15,010           | 1,790,039              |
| 1965         | 241,570            | 310,588            | 15,539           | 1,845,211              |
| 1966         | 223,516            | 313,379            | 17,175           | 1,865,215              |
| 1967         | 211,307            | 354,637            | 17,309           | 1,899,610              |
| 1968         | 248,667            | 387,512<br>387,146 | 19,789<br>22,379 | 1,911,838              |
| 1969<br>1970 | 251,115<br>238,020 | 400,381            | 21,631           | 2,030,931<br>2,022,778 |
| 1971         | 241,116            | 402,853            | 26,744           | 2,058,642              |
| 1972         | 240,091            | 387,808            | 28,455           | 2,014,751              |
| 1973         | 226,608            | 407,538            | 37,213           | 1,955,472              |
| 1974         | 240,762            | 403,573            | 36,207           | 1,977,065              |
| 1975         | 234,623            | 390,507            | 38,684           | 1,987,853              |
| 1976         | 237,416            | 387,662            | 34,675           | 1,958,646              |
| 1977<br>1978 | 228,117<br>226,627 | 387,403<br>410,037 | 30,295<br>34,467 | 1,947,067<br>2,018,004 |
| 1979         | 247,018            | 393,749            | 36,806           | 1,966,397              |
| 1980         | 242,682            | 384,581            | 41,604           | 1,988,021              |
| 1981         | 240,109            | 432,886            | 46,947           | 2,052,810              |
| 1982         | 258,284            | 439,128            | 68,481           | 2,123,050              |
| 1983         | 253,358            | 446,926            | 46,450           | 2,174,428              |
| 1984<br>1985 | 274,583<br>275,566 | 449,118<br>450,396 | 50,341<br>53,590 | 2,229,760<br>2,329,969 |
| 1986         | 273,300            | 456,171            | 44,230           | 2,369,899              |
| 1987         | 271,080            | 466,965            | 50,372           | 2,380,202              |
| 1988         | 281,731            | 473,735            | 50,385           | 2,374,432              |
| 1989         | 299,865            | 461,819            | 36,550           | 2,393,533              |
| 1990         | 320,122            | 450,319            | 53,442           | 2,399,141              |
| 1991         | 273,185            | 466,539            | 49,197           | 2,345,651              |
| 1992<br>1993 | 310,084<br>308,495 | 484,835<br>467,195 | 48,507<br>49,969 | 2,398,865<br>2,366,635 |
| 1994         | 302,135            | 478,793            | 48,562           | 2,375,969              |
| 1995         | 300,832            | 474,342            | 47,132           | 2,394,405              |
| 1996         | 315,395            | 495,873            | 49,740           | 2,456,697              |
| 1997         | 318,101            | 503,323            | 51,738           | 2,552,753              |
| 1998         | 322,057            | 522,899            | 53,770           | 2,643,573              |
| 1999         | 338,261            | 541,114            | 65,577           | 2,695,337              |
| 2000<br>2001 | 331,090<br>335,404 | 551,329<br>551,116 | 66,980<br>67,465 | 2,747,826<br>2,665,592 |
| 2002         | 329,749            | 554,458            | 64,563           | 2,667,165              |
| 2003         | 331,805            | 562,107            | 66,155           | 2,726,918              |
| 2004         | 335,921            | 549,619            | 64,705           | 2,738,915              |
|              |                    |                    |                  |                        |

# NYC Tolled Facilities Average Daily Traffic Volumes 1948 - 2004

| Year         | MTABT<br>Manhattan | PANYNJ<br>Manhattan | MTABT<br>Outer Boro | PANYNJ<br>Staten Is | Total                  |
|--------------|--------------------|---------------------|---------------------|---------------------|------------------------|
| 1948         | 92,977             | 115,785             | 80,977              | 13,214              | 302,953                |
| 1949         | 110,071            | 129,943             | 97,117              | 14,628              | 351,759                |
| 1950         | 161,856            | 146,653             | 109,454             | 16,431              | 434,394                |
| 1951         | 180,272            | 166,150             | 124,391             | 18,335              | 489,148                |
| 1952         | 194,327            | 181,253             | 133,747             | 19,143              | 528,470                |
| 1953         | 200,535            | 194,577             | 143,873             | 20,598              | 559,583                |
| 1954         | 204,616            | 202,394             | 153,811             | 21,554              | 582,375                |
| 1955         | 216,835            | 211,926             | 167,176             | 22,685              | 618,622                |
| 1956<br>1957 | 231,535            | 213,088             | 176,644<br>176,042  | 22,202<br>22,614    | 643,469<br>653,622     |
| 1957         | 236,343<br>232,413 | 218,623<br>221,494  | 174,187             | 21,953              | 650,047                |
| 1959         | 231,501            | 237,021             | 183,224             | 22,978              | 674,724                |
| 1960         | 230,768            | 239,620             | 184,606             | 22,856              | 677,850                |
| 1961         | 227,241            | 236,833             | 144,600             | 25,374              | 634,048                |
| 1962         | 233,010            | 250,646             | 199,418             | 26,338              | 709,412                |
| 1963         | 225,100            | 265,603             | 213,940             | 27,398              | 732,041                |
| 1964         | 236,513            | 285,824             | 236,709             | 29,980              | 789,026                |
| 1965         | 240,949            | 293,339             | 301,459             | 44,828              | 880,575                |
| 1966         | 243,107            | 303,981             | 316,984             | 50,978              | 915,050                |
| 1967         | 244,038            | 308,153             | 329,918             | 54,051              | 936,160                |
| 1968         | 247,924            | 320,292             | 352,823             | 58,654              | 979,693                |
| 1969         | 254,863            | 329,123             | 365,734             | 63,053              | 1,012,773              |
| 1970         | 271,063            | 347,838             | 384,121             | 68,920              | 1,071,942              |
| 1971<br>1972 | 286,692            | 362,063             | 401,495             | 74,758<br>77,018    | 1,125,008              |
| 1972         | 252,871<br>251,593 | 378,620<br>397,203  | 388,743<br>402,096  | 81,034              | 1,097,252<br>1,131,926 |
| 1974         | 242,846            | 376,547             | 395,168             | 80,544              | 1,095,105              |
| 1975         | 214,120            | 374,707             | 381,450             | 81,060              | 1,051,337              |
| 1976         | 217,207            | 381,250             | 382,313             | 80,864              | 1,061,634              |
| 1977         | 229,766            | 385,013             | 384,470             | 85,536              | 1,084,785              |
| 1978         | 241,125            | 399,512             | 398,634             | 88,998              | 1,128,269              |
| 1979         | 251,544            | 393,724             | 395,516             | 92,164              | 1,132,948              |
| 1980         | 255,858            | 404,734             | 399,855             | 97,774              | 1,158,221              |
| 1981         | 269,854            | 427,381             | 417,974             | 101,644             | 1,216,853              |
| 1982         | 253,499            | 433,744             | 432,273             | 106,672             | 1,226,188              |
| 1983         | 263,510            | 441,164             | 446,596             | 113,786             | 1,265,056              |
| 1984         | 262,985            | 453,775             | 457,565             | 118,928             | 1,293,253              |
| 1985         | 275,858            | 468,452             | 475,782             | 126,466             | 1,346,558              |
| 1986<br>1987 | 274,693<br>289,642 | 485,751<br>486,639  | 475,218<br>482,429  | 138,436<br>139,734  | 1,374,098<br>1,398,444 |
| 1988         | 293,550            | 490,179             | 494,073             | 143,062             | 1,420,864              |
| 1989         | 275,358            | 487,693             | 475,447             | 140,051             | 1,378,549              |
| 1990         | 289,066            | 482,243             | 488,042             | 138,340             | 1,397,691              |
| 1991         | 295,265            | 467,501             | 488,953             | 141,454             | 1,393,173              |
| 1992         | 300,203            | 476,872             | 491,171             | 145,380             | 1,413,626              |
| 1993         | 282,159            | 473,069             | 478,703             | 140,775             | 1,374,706              |
| 1994         | 263,351            | 473,799             | 490,288             | 143,875             | 1,371,313              |
| 1995         | 293,574            | 482,098             | 498,104             | 143,657             | 1,417,433              |
| 1996         | 281,116            | 493,194             | 493,813             | 146,565             | 1,414,688              |
| 1997         | 283,686            | 504,788             | 488,923             | 151,578             | 1,428,975              |
| 1998         | 293,990            | 522,512             | 515,970             | 156,786             | 1,489,258              |
| 1999         | 303,966            | 549,352             | 522,677             | 166,890             | 1,542,885              |
| 2000         | 313,504            | 548,465             | 537,334             | 164,668             | 1,563,971              |
| 2001<br>2002 | 257,937<br>305 300 | 458,944<br>532,830  | 551,948<br>554,237  | 177,251<br>179,140  | 1,446,080<br>1,571,516 |
| 2002         | 305,300<br>307,034 | 532,839<br>547,449  | 554,237<br>547,068  | 179,140<br>174,582  | 1,571,516<br>1,576,133 |
| 2003         | 312,159            | 536,396             | 547,068<br>559,962  | 174,362             | 1,576,133<br>1,582,785 |
| 2007         | 012,100            | 000,000             | 000,002             | 17-7,200            | 1,002,700              |

PANYNJ one-way tolls initiated 8/12/1970

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

# N.Y.C. Bridges 2004 7am-7pm Vehicle Classification Both Directions page 1 of 2

| EAST RIVER BRIDGES      | Autos                | Buses | Commuter<br>Vans | Trucks | Commercial<br>Vans | Total   |  |  |
|-------------------------|----------------------|-------|------------------|--------|--------------------|---------|--|--|
| Brooklyn                | 75,630               | 260   | 2,900            | 52     | 3,220              | 82,062  |  |  |
| Manhattan               | 22,947               | 1,179 | 4,779            | 11,653 | 8,107              | 48,665  |  |  |
| Queensboro              | 82,118               | 2,286 | 5,759            | 5,784  | 10,098             | 106,045 |  |  |
| Williamsburg            | 42,714               | 1,217 | 10,224           | 6,585  | 5,235              | 65,975  |  |  |
| Total East River        | 223,409              | 4,942 | 23,662           | 24,074 | 26,660             | 302,747 |  |  |
| HARLEM RIVER BRIDGE     | HARLEM RIVER BRIDGES |       |                  |        |                    |         |  |  |
| Alexander Hamilton      | 84,969               | 271   | 2,208            | 14,677 | 3,210              | 105,335 |  |  |
| Broadway                | 22,451               | 707   | 358              | 698    | 876                | 25,090  |  |  |
| Macombs Dam             | 23,323               | 353   | 286              | 1,155  | 2,042              | 27,159  |  |  |
| Madison Avenue          | 25,535               | 1,388 | 1,262            | 1,503  | 1,909              | 31,597  |  |  |
| Third Avenue            | 22,518               | 578   | 1,809            | 2,106  | 1,977              | 28,988  |  |  |
| University Heights      | 26,949               | 356   | 985              | 1,063  | 1,629              | 30,982  |  |  |
| Washington              | 34,289               | 1,008 | 915              | 1,128  | 1,570              | 38,910  |  |  |
| Willis Avenue           | 38,917               | 748   | 1,260            | 2,687  | 3,227              | 46,839  |  |  |
| 145th Street            | 15,493               | 452   | 623              | 837    | 731                | 18,136  |  |  |
| Total Harlem River      | 294,444              | 5,861 | 9,706            | 25,854 | 17,171             | 353,036 |  |  |
| BROOKLYN-QUEENS BRIDGES |                      |       |                  |        |                    |         |  |  |
| Grand Street            | 7,471                | 206   | 367              | 1,814  | 520                | 10,378  |  |  |
| Greenpoint Avenue       | 14,834               | 243   | 750              | 3,653  | 1,576              | 21,056  |  |  |
| Kosciuszko              | 99,615               | 428   | 2,051            | 8,915  | 7,337              | 118,346 |  |  |
| Pulaski                 | 21,670               | 376   | 856              | 3,771  | 2,897              | 29,570  |  |  |
| Total Brooklyn-Queens   | 143,590              | 1,253 | 4,024            | 18,153 | 12,330             | 179,350 |  |  |
| BRONX BRIDGES           |                      |       |                  |        |                    |         |  |  |
| City Island             | 9,400                | 156   | 113              | 208    | 485                | 10,362  |  |  |
| East 174th Street       | 7,790                | 458   | 251              | 302    | 405                | 9,206   |  |  |
| Eastchester             | 15,010               | 274   | 153              | 1,087  | 615                | 17,139  |  |  |
| Eastern Boulevard       | 107,344              | 1,314 | 1,616            | 6,515  | 3,703              | 120,492 |  |  |
| Hutchinson River Pky    | 78,625               | 67    | 1,007            | 1,426  | 1,590              | 82,715  |  |  |
| Pelham                  | 10,616               | 243   | 148              | 476    | 489                | 11,972  |  |  |
| Unionport               | 39,422               | 592   | 483              | 2,195  | 1,593              | 44,285  |  |  |
| Westchester Avenue      | 17,577               | 794   | 109              | 523    | 882                | 19,885  |  |  |
| Total Bronx             | 285,784              | 3,898 | 3,880            | 12,732 | 9,762              | 316,056 |  |  |

East River bridges based on 1996 classification data All other bridges based on 1989 classification data

# N.Y.C. Bridges 2004 7am-7pm Vehicle Classification Both Directions page 2 of 2

| BROOKLYN BRIDGES    | Autos         | Buses | Commuter<br>Vans | Trucks | Commercial<br>Vans | Total   |  |
|---------------------|---------------|-------|------------------|--------|--------------------|---------|--|
| Carroll Street      | 446           | 3     | 81               | 181    | 160                | 871     |  |
| Cropsey Avenue      | 21,452        | 1,243 | 29               | 1,074  | 1,475              | 25,273  |  |
| Hamilton Avenue     | 33,127        | 650   | 1,497            | 5,111  | 4,197              | 44,582  |  |
| Metropolitan Avenue | 20,196        | 472   | 830              | 3,867  | 1,786              | 27,151  |  |
| Mill Basin          | 92,890        | 624   | 299              | 1,434  | 4,282              | 99,529  |  |
| Ninth Street        | 5,682         | 343   | 123              | 862    | 456                | 7,466   |  |
| Stillwell Avenue    | 6,313         | 657   | 0                | 1,248  | 0                  | 8,218   |  |
| Third Avenue        | 12,395        | 203   | 5                | 1,545  | 1,258              | 15,406  |  |
| Third Street        | 6,725         | 82    | 136              | 563    | 468                | 7,974   |  |
| Union Street        | 2,833         | 46    | 0                | 210    | 250                | 3,339   |  |
| Total Brooklyn      | 202,059       | 4,323 | 3,000            | 16,095 | 14,332             | 239,809 |  |
| QUEENS BRIDGES      |               |       |                  |        |                    |         |  |
| Borden Avenue       | 8,832         | 237   | 222              | 1,516  | 773                | 11,580  |  |
| Flushing            | 35,838        | 383   | 680              | 2,028  | 3,636              | 42,565  |  |
| Hook Creek          | 47,265        | 220   | 1,164            | 1,933  | 1,386              | 51,968  |  |
| Hunters Point       | 4,011         | 63    | 141              | 501    | 554                | 5,270   |  |
| Little Neck         | 37,683        | 487   | 634              | 1,281  | 1,494              | 41,579  |  |
| Midtown Highway     | 47,538        | 1,262 | 1,375            | 2,228  | 3,387              | 55,790  |  |
| North Channel       | 13,261        | 366   | 149              | 735    | 1,043              | 15,554  |  |
| Rikers Island       | 8,171         | 388   | 248              | 396    | 401                | 9,604   |  |
| Roosevelt Avenue    | 12,026        | 411   | 212              | 551    | 678                | 13,878  |  |
| Roosevelt Island    | 5,620         | 178   | 147              | 225    | 162                | 6,332   |  |
| Whitestone Expwy    | 108,463       | 1,176 | 3,461            | 7,566  | 6,207              | 126,873 |  |
| Total Queens        | 328,708       | 5,171 | 8,433            | 18,960 | 19,721             | 380,993 |  |
| STATEN ISLAND       | STATEN ISLAND |       |                  |        |                    |         |  |
| Fresh Kills Bridge  | 39,198        | 1,535 | 2,245            | 4,107  | 1,534              | 48,619  |  |
| Total Staten Island | 39,198        | 1,535 | 2,245            | 4,107  | 1,534              | 48,619  |  |

| ODAND TOTALO | 4 547 400 | 22.222 | E 4 0 E 0 | 440.075 | 404 540 | 4 000 040 |
|--------------|-----------|--------|-----------|---------|---------|-----------|
| GRAND TOTALS | 1,517,192 | 26,983 | 54,950    | 119,975 | 101,510 | 1,820,610 |

#### 2003-2004 Traffic Volume Trends N.Y.C. Bridges and Tunnels Both Directions page 1 of 3

| EAST RIVER BRIDGES      | Highway Functional Classification | 2003    | 2004    | Percent<br>Change |
|-------------------------|-----------------------------------|---------|---------|-------------------|
| Brooklyn                | Principal Arterial                | 134,444 | 137,563 | 2.3 %             |
| Manhattan               | Principal Arterial                | 73,767  | 79,129  | 7.3 %             |
| Queensboro              | Principal Arterial                | 184,964 | 180,369 | - 2.5 %           |
| Williamsburg            | Principal Arterial                | 100,243 | 110,528 | 10.3 %            |
| Total East River        |                                   | 493,418 | 507,589 | 2.9 %             |
|                         |                                   |         |         |                   |
| HARLEM RIVER BRIDGES    |                                   |         |         |                   |
| Alexander Hamilton      | Interstate                        | 182,704 | 175,323 | - 4.0 %           |
| Broadway                | Principal Arterial                | 36,888  | 35,190  | - 4.6 %           |
| Macombs Dam             | Principal Arterial                | 42,254  | 40,558  | - 4.0 %           |
| Madison Avenue          | Principal Arterial                | 41,575  | 48,723  | 17.2 %            |
| Third Avenue            | Principal Arterial                | 43,065  | 47,053  | 9.3 %             |
| University Heights      | Principal Arterial                | 50,126  | 47,350  | - 5.5 %           |
| Washington              | Minor Arterial                    | 63,154  | 57,530  | - 8.9 %           |
| Willis Avenue           | Principal Arterial                | 66,710  | 74,700  | 12.0 %            |
| 145th Street            | Minor Arterial                    | 23,034  | 25,994  | 12.9 %            |
| Total Harlem River      |                                   | 549,510 | 552,421 | 0.5 %             |
| BROOKLYN-QUEENS BRIDGES |                                   |         |         |                   |
| Grand Street            | Principal Arterial                | 14,139  | 13,459  | - 4.8 %           |
| Greenpoint Avenue       | Principal Arterial                | 28,755  | 28,437  | - 1.1 %           |
| Kosciuszko              | Interstate                        | 194,497 | 193,612 | - 0.5 %           |
| Pulaski                 | Principal Arterial                | 38,346  | 40,146  | 4.7 %             |
| Total Brooklyn-Queens   |                                   | 275,737 | 275,654 | - 0.0 %           |
| BRONX BRIDGES           |                                   |         |         |                   |
| City Island             | Minor Arterial                    | 14,617  | 14,528  | - 0.6 %           |
| East 174th Street       | Minor Arterial                    | 14,229  | 12,184  | - 14.4 %          |
| Eastchester             | Principal Arterial                | 24,193  | 22,480  | - 7.1 %           |
| Eastern Boulevard       | Interstate                        | 170,735 | 178,724 | 4.7 %             |
| Hutchinson River        | Principal Arterial                | 117,195 | 119,029 | 1.6 %             |
| Pelham                  | Minor Arterial                    | 18,023  | 18,292  | 1.5 %             |
| Unionport               | Principal Arterial                | 60,993  | 60,908  | - 0.1 %           |
| Westchester Avenue      | Principal Arterial                | 28,201  | 26,861  | - 4.8 %           |
| Total Bronx             |                                   | 448,186 | 453,006 | 1.1 %             |

#### 2003-2004 Traffic Volume Trends N.Y.C. Bridges and Tunnels Both Directions page 2 of 3

| BROOKLYN BRIDGES       | Highway Functional Classification | 2003      | 2004      | Percent<br>Change |
|------------------------|-----------------------------------|-----------|-----------|-------------------|
| Carroll Street         | Local                             | 1,150     | 1,099     | - 4.4 %           |
| Cropsey Avenue         | Principal Arterial                | 35,137    | 35,104    | - 0.1 %           |
| Hamilton Avenue        | Principal Arterial                | 59,108    | 60,240    | 1.9 %             |
| Metropolitan Avenue    | Principal Arterial                | 40,284    | 38,529    | - 4.4 %           |
| Mill Basin             | Principal Arterial                | 141,212   | 145,760   | 3.2 %             |
| Ninth Street           | Minor Arterial                    | 9,406     | 10,216    | 8.6 %             |
| Stillwell Avenue       | Principal Arterial                | 10,138    | 10,436    | 2.9 %             |
| Third Avenue           | Principal Arterial                | 20,517    | 20,292    | - 1.1 %           |
| Third Street           | Minor Arterial                    | 10,010    | 9,846     | - 1.6 %           |
| Union Street           | Minor Arterial                    | 4,843     | 4,399     | - 9.2 %           |
| Total Brooklyn         |                                   | 331,805   | 335,921   | 1.2 %             |
| QUEENS BRIDGES         |                                   |           |           |                   |
| Borden Avenue          | Minor Arterial                    | 16,035    | 15,765    | - 1.7 %           |
| Flushing               | Principal Arterial                | 62,644    | 61,685    | - 1.5 %           |
| Hook Creek             | Principal Arterial                | 72,562    | 73,932    | 1.9 %             |
| Hunters Point          | Collector                         | 7,412     | 6,885     | - 7.1 %           |
| Little Neck            | Principal Arterial                | 60,033    | 54,165    | - 9.8 %           |
| Midtown Highway        | Interstate                        | 84,243    | 82,732    | - 1.8 %           |
| North Channel          | Principal Arterial                | 23,958    | 21,855    | - 8.8 %           |
| Rikers Island          | Collector                         | 16,966    | 14,979    | - 11.7 %          |
| Roosevelt Avenue       | Principal Arterial                | 20,281    | 19,652    | - 3.1 %           |
| Roosevelt Island       | Collector                         | 9,203     | 9,100     | - 1.1 %           |
| Whitestone Expwy       | Interstate                        | 188,770   | 188,869   | 0.1 %             |
| Total Queens           |                                   | 562,107   | 549,619   | - 2.2 %           |
| STATEN ISLAND          |                                   |           |           |                   |
| Fresh Kills            | Principal Arterial                | 66,155    | 64,705    | - 2.2 %           |
|                        |                                   |           |           |                   |
| TOLL-FREE GRAND TOTALS |                                   | 2,726,918 | 2,738,915 | 0.4 %             |

#### 2003-2004 Traffic Volume Trends N.Y.C. Bridges and Tunnels Both Directions page 3 of 3

| MTABT Manhattan Facilities        | Highway Functional Classification | 2003    | 2004    | Percent<br>Change |
|-----------------------------------|-----------------------------------|---------|---------|-------------------|
| Brooklyn-Battery Tunnel           | Interstate                        | 56,271  | 54,488  | - 3.2 %           |
| Henry Hudson Bridge               | Principal Arterial                | 72,209  | 73,114  | 1.3 %             |
| Queens-Midtown Tunnel             | Interstate                        | 85,377  | 86,599  | 1.4 %             |
| Triborough Bridge Manhattan Plaza | Principal Arterial                | 93,177  | 97,958  | 5.1 %             |
| Total MTABT Manhattan             |                                   | 307,034 | 312,159 | 1.7 %             |
| PANYNJ Manhattan Facilities       |                                   |         |         |                   |
| George Washington Bridge          | Interstate                        | 319,029 | 315,066 | - 1.2 %           |
| Holland Tunnel                    | Interstate                        | 101,097 | 96,171  | - 4.9 %           |
| Lincoln Tunnel                    | Principal Arterial                | 127,323 | 125,159 | - 1.7 %           |
| Total Manhattan - New Jersey      |                                   | 547,449 | 536,396 | - 2.0 %           |
| MTABT Outer Borough Bridges       |                                   |         |         |                   |
| Bronx-Whitestone                  | Interstate                        | 113,441 | 117,591 | 3.7 %             |
| Cross Bay                         | Minor Arterial                    | 20,233  | 20,460  | 1.1 %             |
| Marine Parkway                    | Minor Arterial                    | 21,745  | 21,556  | - 0.9 %           |
| Throgs Neck                       | Interstate                        | 111,092 | 112,001 | 0.8 %             |
| Triborough Bridge Bronx Plaza     | Interstate                        | 74,113  | 82,810  | 11.7 %            |
| Verrazano-Narrows                 | Interstate                        | 206,444 | 205,544 | - 0.4 %           |
| Total MTABT Outer Boroughs        |                                   | 547,068 | 559,962 | 2.4 %             |
| PANYNJ Staten Island Bridges      |                                   |         |         |                   |
| Bayonne                           | Principal Arterial                | 20,208  | 22,510  | 11.4 %            |
| Goethals                          | Interstate                        | 75,724  | 71,532  | - 5.5 %           |
| Outerbridge Crossing              | Principal Arterial                | 78,650  | 80,226  | 2.0 %             |
| Total Staten Island - New Jersey  |                                   | 174,582 | 174,268 | - 0.2 %           |

#### 10-Year Traffic Growth Rate Trends N.Y.C. Bridges 1954-2004

Page 1 of 3

| East River Bridges      | 1954-1964        | 1964-1974    | 1974-1984    | 1984-1994 | 1994-2004 |
|-------------------------|------------------|--------------|--------------|-----------|-----------|
| Brooklyn                | 8.0%             | 2.8%         | 1.1%         | 1.5%      | - 0.7%    |
| Manhattan               | - 3.4%           | 1.4%         | 2.3%         | - 2.0%    | - 0.8%    |
| Queensboro              | 2.4%             | 1.4%         | - 1.1%       | - 0.5%    | 1.4%      |
| Williamsburg            | 0.0%             | - 0.1%       | 1.0%         | - 1.3%    | 1.4%      |
| Total                   | 1.5%             | 1.4%         | 0.5%         | - 0.4%    | 0.5%      |
| Harlem River Bridges    |                  |              |              |           |           |
| Alexander Hamilton      | Opened Jan. 1963 | 3.7%         | 1.5%         | 0.7%      | - 0.1%    |
| Broadway                | 3.4%             | 1.2%         | 1.8%         | 1.6%      | - 0.0%    |
| Macombs Dam             | 1.2%             | 1.8%         | 2.1%         | - 2.6%    | - 2.1%    |
| Madison Avenue          | - 2.6%           | 0.8%         | 0.5%         | - 2.4%    | 9.8%      |
| Third Avenue            | 5.7%             | - 1.5%       | 0.7%         | 1.4%      | - 3.0%    |
| University Heights      | 4.1%             | 1.7%         | 0.0%         | - 0.1%    | 4.8%      |
| Washington              | 2.7%             | 1.8%         | 1.0%         | 1.5%      | 1.1%      |
| Willis Avenue           | 3.8%             | - 1.7%       | 1.6%         | 0.1%      | 0.5%      |
| 145th Street            | 0.0%             | - 2.4%       | 1.3%         | - 0.5%    | 1.5%      |
| Total                   | 3.8%             | 1.1%         | 1.3%         | 0.3%      | 0.6%      |
| Brooklyn-Queens Bridges |                  | 4.007        | <b>5</b> 40/ | 4.007     | 0.007     |
| Grand Street            | 5.6%             | - 1.3%       | 5.4%         | 1.0%      | 0.6%      |
| Greenpoint Avenue       | - 3.6%           | 2.3%         | - 1.5%       | 6.4%      | 0.7%      |
| Kosciuszko              | 7.2%             | 0.6%         | 2.0%         | - 0.1%    | 1.5%      |
| Pulaski                 | 1.7%             | - 0.9%       | - 0.5%       | - 2.9%    | 4.3%      |
| Total                   | 4.1%             | 0.4%         | 1.4%         | 0.4%      | 1.7%      |
| Bronx Bridges           |                  |              |              |           |           |
| City Island             | 8.1%             | 2.3%         | 0.5%         | 2.3%      | 1.5%      |
| East 174th Street       | 0.9%             | - 0.2%       | - 1.0%       | 4.5%      | 0.2%      |
| Eastchester             | - 5.3%           | 9.1%         | - 0.2%       | - 0.6%    | 1.9%      |
| Eastern Blvd            | 3.5%             | 4.6%         | 0.9%         | - 1.8%    | 3.9%      |
| Hutchinson River Pkwy   | 2.1%             | 0.8%         | 3.2%         | 1.5%      | 4.3%      |
| Pelham                  | 7.3%             | 1.4%         | 0.3%         | 6.3%      | - 3.3%    |
| Unionport               | 17.3%            | - 9.5%       | 2.0%         | - 0.9%    | 3.7%      |
| Westchester Avenue      | 4.2%             | 0.7%         | n/a          | n/a       | 2.9%      |
|                         | 1.270            | <b>0</b> / 0 | π,α          | 11,4      | 2.070     |

#### 10-Year Traffic Growth Rate Trends N.Y.C. Bridges 1954-2004

Page 2 of 3

| Brooklyn Bridges      | 1954-1964         | 1964-1974 | 1974-1984 | 1984-1994 | 1994-2004 |
|-----------------------|-------------------|-----------|-----------|-----------|-----------|
| Carroll Street        | 8.2%              | -13.5%    | 3.4%      | - 3.6%    | - 0.1%    |
| Cropsey Avenue        | 2.3%              | 2.8%      | 3.2%      | - 1.9%    | 2.8%      |
| Hamilton Avenue       | 4.2%              | - 1.0%    | 2.0%      | 0.6%      | 0.5%      |
| Metropolitan Avenue   | 5.1%              | 1.9%      | 5.1%      | - 0.9%    | 0.7%      |
| Mill Basin            | 5.8%              | 1.8%      | 0.7%      | 2.3%      | 0.8%      |
| Ninth Street          | 5.1%              | - 1.7%    | 2.7%      | - 0.9%    | 1.0%      |
| Stillwell Avenue      | 2.6%              | 0.7%      | n/a       | n/a       | 0.8%      |
| Third Avenue          | 0.7%              | - 1.4%    | 2.4%      | 3.3%      | - 0.7%    |
| Third Street          | 9.6%              | - 0.6%    | n/a       | n/a       | 1.1%      |
| Union Street          | 2.3%              | - 1.9%    | 1.4%      | - 8.4%    | 0.1%      |
| Total                 | 4.5%              | 0.7%      | 1.3%      | 1.3%      | 1.1%      |
| Queens Bridges        |                   |           |           |           |           |
| Borden Avenue         | 7.8%              | 0.3%      | 3.5%      | - 2.0%    | 0.9%      |
| Flushing              | - 0.6%            | 3.4%      | 0.5%      | - 0.6%    | 0.7%      |
| Hook Creek            | 7.9%              | 3.5%      | 0.2%      | 2.0%      | 1.4%      |
| Hunters Point Avenue  | 1.3%              | 1.8%      | n/a       | 7.4%      | 0.4%      |
| Little Neck Pkwy      | - 3.6%            | 3.4%      | 1.5%      | 0.5%      | 1.7%      |
| Midtown Highway       | 5.4%              | 1.3%      | 4.3%      | - 1.8%    | 2.7%      |
| North Channel         | 7.7%              | 0.6%      | - 1.5%    | - 0.2%    | 3.5%      |
| Rikers Island         | Opened 11/22/1966 |           | 7.7%      | 5.9%      | 2.5%      |
| Roosevelt Avenue      | 2.4%              | 0.8%      | - 0.8%    | 1.6%      | - 1.6%    |
| Roosevelt Island      | Opened 05/18/1955 | 9.4%      | 1.9%      | 1.4%      | - 0.4%    |
| Whitestone Expwy      | 1.3%              | 4.0%      | 1.0%      | 1.1%      | 2.3%      |
| Total                 | 2.5%              | 3.0%      | 1.5%      | 0.5%      | 1.8%      |
| Staten Island Bridges |                   |           |           |           |           |
| Fresh Kills           | 3.5%              | 11.0%     | 5.5%      | - 0.2%    | 3.9%      |
| TOLL FREE GRAND TOTA  | <b>L</b> 3.6%     | 1.1%      | 1.2%      | 0.4%      | 1.4%      |

#### 10-Year Traffic Growth Rate Trends N.Y.C. Tolled Facilities 1954-2004

Page 3 of 3

|  | 1051 1001                             | 400440=4                       | 40=4 4004                        | 4004 4004                        | 4004 0004                    |
|--|---------------------------------------|--------------------------------|----------------------------------|----------------------------------|------------------------------|
| Manhattan MTABT Facilities   | 1954-1964                             | 1964-1974                      | 1974-1984                        | 1984-1994                        | 1994-2004                    |
| Brooklyn-Battery Tunnel  | 0.5%                                  | - 0.9%                         | 2.4%                             | - 0.4%                           | - 1.9%                       |
| Henry Hudson Bridge  | - 3.1%                                | - 1.1%                         | - 0.2%                           | 3.8%                             | 2.5%                         |
| Queens-Midtown Tunnel  | 5.2%                                  | 1.4%                           | 1.3%                             | 0.1%                             | 1.9%                         |
| Triborough (Manhattan Plz)   | 0.8%                                  | 2.5%                           | 2.8%                             | - 0.7%                           | 1.1%                         |
| Total  | 0.7%                                  | 0.8%                           | 1.9%                             | 0.4%                             | 1.1%                         |
| Manhattan PANYNJ Facilities  |                                       |                                |                                  |                                  |                              |
| George Washington Bridge   | 3.9%                                  | 4.5%                           | 2.2%                             | - 0.6%                           | 2.1%                         |
| Holland Tunnel   | 0.7%                                  | 1.5%                           | 1.8%                             | 2.8%                             | - 1.0%                       |
| Lincoln Tunnel   | 4.1%                                  | 2.4%                           | 1.9%                             | - 0.2%                           | 0.4%                         |
| Total  | 3.2%                                  | 3.4%                           | 2.0%                             | 0.1%                             | 1.1%                         |
| Outer Borough MTABT Bridge Bronx-Whitestone Cross Bay Marine Parkway Throgs Neck | - 4.0%<br>0.6%<br>1.1%<br>Opened 1961 | 2.2%<br>- 0.0%<br>1.2%<br>1.9% | 1.8%<br>- 1.6%<br>- 0.3%<br>0.6% | - 0.4%<br>- 0.3%<br>0.3%<br>1.0% | 1.7%<br>4.2%<br>0.5%<br>1.4% |
| Triborough (Bronx Plz)   | 0.6%                                  | 2.1%                           | 1.1%                             | - 1.2%                           | 0.7%                         |
| Verrazano-Narrows Ope  | ened 11/21/1964                       |                                | 3.8%                             | 1.4%                             | 1.7%                         |
| Total  | 3.1%                                  | 4.2%                           | 1.8%                             | 0.4%                             | 1.5%                         |
| Staten Island PANYNJ Bridges Bayonne   | 0.6%                                  | 4.4%                           | 2.0%                             | - 1.1%                           | 5.4%                         |
| Goethals   | 5.0%                                  | 10.8%                          | - 0.2%                           | 0.7%                             | 2.4%                         |
| Outerbridge Crossing   | 2.7%                                  | 4.4%                           | 14.2%                            | 2.6%                             | 1.9%                         |
| Total  | 3.1%                                  | 8.5%                           | 4.4%                             | 1.3%                             | 2.5%                         |

East River Bridges

#### East River Bridges Average Daily Traffic Volumes 1948 - 2004

| Year         | Brooklyn<br>Bridge | Manhattan<br>Bridge | Queensboro<br>Bridge | Williamsburg<br>Bridge | Totals             |
|--------------|--------------------|---------------------|----------------------|------------------------|--------------------|
| 1948<br>1949 | 37,011<br>37,244   | 86,717<br>80,420    | 83,201<br>88,821     | 47,139<br>54,448       | 254,068<br>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             |                     |                      |                        | 341,030            |
|              |                    | 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            |
| 2004         | .57,555            | . 0, 120            | . 55,555             | 5,525                  | 33.,000            |

#### Houry Vehicular Volumes Brooklyn Bridge - 2004

astbound to Brooklyn Westbound to Manhattan

|          |        | Eas   | tbound to | Brookly | า        |          |        | Wes   | stbound to | ) Manhatt | an       |          |          |
|----------|--------|-------|-----------|---------|----------|----------|--------|-------|------------|-----------|----------|----------|----------|
| _        |        | C     | commuter  | С       | ommercia | I        |        | (     | Commuter   | С         | ommercia | al .     | 2-Way    |
|          | Autos  | Buses | Vans      | Trucks  | Vans     | Totals   | Autos  | Buses | Vans       | Trucks    | Vans     | Totals   | Totals   |
| 12-1am   |        |       |           |         |          | 2,808    |        |       |            |           |          | 1,447    | 4,255    |
| 1-2am    |        |       |           |         |          | 1,718    |        |       |            |           |          | 844      | 2,562    |
| 2-3am    |        |       |           |         |          | 1,094    |        |       |            |           |          | 548      | 1,642    |
| 3-4am    |        |       |           |         |          | 745      |        |       |            |           |          | 530      | 1,275    |
| 4-5am    |        |       |           |         |          | 791      |        |       |            |           |          | 942      | 1,733    |
| 5-6am    |        |       |           |         |          | 1,196    |        |       |            |           |          | 2,370    | 3,566    |
| 6-7am    |        |       |           |         |          | 2,316    |        |       |            |           |          | 3,969    | 6,285    |
| 7-8am    | 2,672  | 2     | 114       | 1       | 70       | 2,859    | 3,803  | 19    | 38         | 3         | 264      | 4,127    | 6,986    |
| 8-9am    | 2,740  | 31    | 130       | 0       | 92       | 2,993    | 4,127  | 7     | 67         | 9         | 250      | 4,460 ** | 7,453    |
| 9-10am   | 2,533  | 21    | 83        | 2       | 148      | 2,787    | 3,547  | 6     | 67         | 5         | 341      | 3,966    | 6,753    |
| 10-11am  | 2,289  | 4     | 92        | 0       | 138      | 2,523    | 3,013  | 3     | 138        | 8         | 167      | 3,329    | 5,852    |
| 11-12am  | 2,392  | 1     | 98        | 0       | 75       | 2,566    | 2,722  | 7     | 152        | 4         | 170      | 3,055    | 5,621    |
| 12-1pm   | 2,393  | 1     | 118       | 3       | 119      | 2,634    | 2,751  | 0     | 124        | 3         | 124      | 3,002    | 5,636    |
| 1-2pm    | 2,569  | 1     | 151       | 0       | 108      | 2,829    | 2,915  | 60    | 145        | 3         | 157      | 3,280    | 6,109    |
| 2-3pm    | 3,113  | 11    | 91        | 1       | 119      | 3,335    | 3,398  | 6     | 213        | 1         | 139      | 3,757    | 7,092    |
| 3-4pm    | 3,561  | 21    | 64        | 0       | 75       | 3,721    | 3,529  | 12    | 155        | 0         | 144      | 3,840    | 7,561    |
| 4-5pm    | 3,540  | 11    | 91        | 0       | 37       | 3,679    | 3,490  | 7     | 252        | 1         | 119      | 3,869    | 7,548    |
| 5-6pm    | 3,859  | 4     | 99        | 1       | 25       | 3,988 ** | 3,605  | 18    | 189        | 1         | 177      | 3,990    | 7,978 ** |
| 6-7pm    | 3,642  | 3     | 74        | 5       | 43       | 3,767    | 3,427  | 4     | 155        | 1         | 119      | 3,706    | 7,473    |
| 7-8pm    |        |       |           |         |          | 3,645    |        |       |            |           |          | 3,607    | 7,252    |
| 8-9pm    |        |       |           |         |          | 3,698    |        |       |            |           |          | 3,546    | 7,244    |
| 9-10pm   |        |       |           |         |          | 3,559    |        |       |            |           |          | 3,513    | 7,072    |
| 10-11pm  |        |       |           |         |          | 3,380    |        |       |            |           |          | 3,456    | 6,836    |
| 11-12pm  |        |       |           |         |          | 3,116    |        |       |            |           |          | 2,663    | 5,779    |
| Totals   |        |       |           |         |          | 65,747   |        |       |            |           |          | 71,816   | 137,563  |
| 7-10am   | 7,945  | 54    | 327       | 3       | 310      | 8,639    | 11,477 | 32    | 172        | 17        | 855      | 12,553   | 21,192   |
| 10am-1pm | 7,074  | 6     | 308       | 3       | 332      | 7,723    | 8,486  | 10    | 414        | 15        | 461      | 9,386    | 17,109   |
| 1-4pm    | 9,243  | 33    | 306       | 1       | 302      | 9,885    | 9,842  | 78    | 513        | 4         | 440      | 10,877   | 20,762   |
| 4-7pm    | 11,041 | 18    | 264       | 6       | 105      | 11,434   | 10,522 | 29    | 596        | 3         | 415      | 11,565   | 22,999   |
| 7am-7pm  | 35,303 | 111   | 1,205     | 13      | 1,049    | 37,681   | 40,327 | 149   | 1,695      | 39        | 2,171    | 44,381   | 82,062   |

Based on October 1996 Classification Survey Data

#### **Houry Vehicular Volumes** Manhattan Bridge - 2004

Eastbound to Brooklyn Westbound to Manhattan

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|---------|--------|-------|------------|---------|------------|----------|--------|---------------------|-----------|-----------|---------|----------|--------|
| _       |        | (     | Commuter   | С       | Commercial |          |        | Commuter Commercial |           |           |         |          | 2-Way  |
|         | Autos  | Buses | Vans       | Trucks  | Vans       | Totals   | Autos  | Buses               | Vans      | Trucks    | Vans    | Totals   | Totals |
| 12-1am  |        |       |            |         |            | 1,636    |        |                     |           |           |         | 1,057    | 2,693  |
| 1-2am   |        |       |            |         |            | 1,023    |        |                     |           |           |         | 734      | 1,757  |
| 2-3am   |        |       |            |         |            | 708      |        |                     |           |           |         | 557      | 1,265  |
| 3-4am   |        |       |            |         |            | 543      |        |                     |           |           |         | 494      | 1,037  |
| 4-5am   |        |       |            |         |            | 572      |        |                     |           |           |         | 572      | 1,144  |
| 5-6am   |        |       |            |         |            | 733      |        |                     |           |           |         | 1,366    | 2,099  |
| 6-7am   |        |       |            |         |            | 1,274    |        |                     |           |           |         | 2,339    | 3,613  |
| 7-8am   | 774    | 63    | 156        | 453     | 153        | 1,599    | 1,535  | 99                  | 224       | 461       | 409     | 2,728 ** | 4,327  |
| 8-9am   | 839    | 152   | 150        | 510     | 173        | 1,824    | 1,394  | 41                  | 232       | 507       | 519     | 2,693    | 4,517  |
| 9-10am  | 611    | 96    | 186        | 554     | 211        | 1,658    | 1,058  | 37                  | 175       | 642       | 504     | 2,416    | 4,074  |
| 10-11am | 603    | 26    | 169        | 540     | 244        | 1,582    | 843    | 37                  | 176       | 784       | 436     | 2,276    | 3,858  |
| l1-12am | 628    | 27    | 163        | 537     | 259        | 1,614    | 861    | 37                  | 190       | 678       | 437     | 2,203    | 3,817  |
| 12-1pm  | 587    | 22    | 111        | 495     | 341        | 1,556    | 927    | 44                  | 235       | 598       | 241     | 2,045    | 3,601  |
| 1-2pm   | 550    | 26    | 199        | 469     | 341        | 1,585    | 941    | 50                  | 198       | 642       | 239     | 2,070    | 3,655  |
| 2-3pm   | 631    | 18    | 209        | 425     | 323        | 1,606    | 1,011  | 35                  | 142       | 500       | 403     | 2,091    | 3,697  |
| 3-4pm   | 1,036  | 80    | 327        | 573     | 442        | 2,458    | 822    | 44                  | 181       | 291       | 247     | 1,585    | 4,043  |
| 4-5pm   | 1,310  | 65    | 301        | 515     | 607        | 2,798    | 920    | 25                  | 107       | 279       | 238     | 1,569    | 4,367  |
| 5-6pm   | 1,483  | 49    | 283        | 454     | 614        | 2,883 ** | 1,012  | 39                  | 165       | 212       | 183     | 1,611    | 4,494  |
| 6-7pm   | 1,434  | 43    | 369        | 388     | 392        | 2,626    | 1,137  | 24                  | 131       | 146       | 151     | 1,589    | 4,215  |
| 7-8pm   | ´      |       |            |         |            | 2,358    | ,      |                     |           |           |         | 1,451    | 3,809  |
| 8-9pm   |        |       |            |         |            | 2,106    |        |                     |           |           |         | 1,320    | 3,426  |
| 9-10pm  |        |       |            |         |            | 1,979    |        |                     |           |           |         | 1,311    | 3,290  |
| 10-11pm |        |       |            |         |            | 1,932    |        |                     |           |           |         | 1,344    | 3,276  |
| I1-12pm |        |       |            |         |            | 1,823    |        |                     |           |           |         | 1,232    | 3,055  |
| otals   |        |       |            |         |            | 40,476   |        |                     |           |           |         | 38,653   | 79,129 |
| 7-10am  | 2,224  | 311   | 492        | 1,517   | 537        | 5,081    | 3,987  | 177                 | 631       | 1,610     | 1,432   | 7,837    | 12,918 |
| 0am-1pm | 1,818  | 75    | 443        | 1,572   | 844        | 4,752    | 2,631  | 118                 | 601       | 2,060     | 1,114   | 6,524    | 11,276 |
| 1-4pm   | 2,217  | 124   | 735        | 1,467   | 1,106      | 5,649    | 2,774  | 129                 | 521       | 1,433     | 889     | 5,746    | 11,395 |
| 4-7pm   | 4,227  | 157   | 953        | 1,357   | 1,613      | 8,307    | 3,069  | 88                  | 403       | 637       | 572     | 4,769    | 13,076 |
| 7am-7pm | 10,486 | 667   | 2,623      | 5,913   | 4,100      | 23,789   | 12,461 | 512                 | 2,156     | 5,740     | 4,007   | 24,876   | 48,665 |

Based on October 1996 Classification Survey Data

#### Houry Vehicular Volumes Queensboro Bridge - 2004

Eastbound to Queens Westbound to Manhattan

Commuter Commercial Commuter Commer

| _        |        |       |          |        |           |          |        | •     | rootboarn |        |          |          |          |
|----------|--------|-------|----------|--------|-----------|----------|--------|-------|-----------|--------|----------|----------|----------|
| _        |        |       | Commuter | С      | ommercial |          |        | (     | Commuter  | С      | ommercia | ·I       | 2-Way    |
|          | Autos  | Buses | Vans     | Trucks | Vans      | Totals   | Autos  | Buses | Vans      | Trucks | Vans     | Totals   | Totals   |
| 12-1am   |        |       |          |        |           | 4,072    |        |       |           |        |          | 1,952    | 6,024    |
| 1-2am    |        |       |          |        |           | 2,967    |        |       |           |        |          | 1,335    | 4,302    |
| 2-3am    |        |       |          |        |           | 1,906    |        |       |           |        |          | 1,125    | 3,031    |
| 3-4am    |        |       |          |        |           | 1,490    |        |       |           |        |          | 1,318    | 2,808    |
| 4-5am    |        |       |          |        |           | 1,641    |        |       |           |        |          | 2,096    | 3,737    |
| 5-6am    |        |       |          |        |           | 2,106    |        |       |           |        |          | 4,150    | 6,256    |
| 6-7am    |        |       |          |        |           | 3,009    |        |       |           |        |          | 6,338    | 9,347    |
| 7-8am    | 2,513  | 117   | 246      | 102    | 168       | 3,146    | 5,165  | 108   | 287       | 289    | 740      | 6,589 ** | 9,735    |
| 8-9am    | 2,290  | 173   | 248      | 173    | 152       | 3,036    | 4,106  | 64    | 283       | 344    | 860      | 5,657    | 8,693    |
| 9-10am   | 1,809  | 168   | 207      | 219    | 179       | 2,582    | 3,476  | 57    | 353       | 293    | 690      | 4,869    | 7,451    |
| 10-11am  | 2,616  | 83    | 194      | 239    | 329       | 3,461    | 2,731  | 55    | 245       | 342    | 524      | 3,897    | 7,358    |
| 11-12am  | 2,517  | 75    | 276      | 225    | 441       | 3,534    | 2,659  | 80    | 281       | 277    | 418      | 3,715    | 7,249    |
| 12-1pm   | 2,909  | 91    | 209      | 202    | 483       | 3,894    | 2,973  | 46    | 236       | 217    | 318      | 3,790    | 7,684    |
| 1-2pm    | 2,820  | 69    | 344      | 310    | 536       | 4,079    | 3,007  | 94    | 231       | 235    | 264      | 3,831    | 7,910    |
| 2-3pm    | 3,608  | 74    | 221      | 402    | 533       | 4,838    | 3,282  | 69    | 245       | 196    | 438      | 4,230    | 9,068    |
| 3-4pm    | 4,418  | 145   | 164      | 427    | 582       | 5,736    | 3,704  | 42    | 278       | 149    | 313      | 4,486    | 10,222   |
| 4-5pm    | 5,097  | 184   | 194      | 455    | 656       | 6,586 ** | 3,671  | 36    | 216       | 122    | 224      | 4,269    | 10,855 * |
| 5-6pm    | 4,857  | 208   | 190      | 341    | 564       | 6,160    | 4,143  | 34    | 160       | 58     | 163      | 4,558    | 10,718   |
| 6-7pm    | 4,329  | 163   | 239      | 101    | 359       | 5,191    | 3,418  | 51    | 212       | 66     | 164      | 3,911    | 9,102    |
| 7-8pm    |        |       |          |        |           | 4,854    |        |       |           |        |          | 3,865    | 8,719    |
| 8-9pm    |        |       |          |        |           | 4,959    |        |       |           |        |          | 3,471    | 8,430    |
| 9-10pm   |        |       |          |        |           | 4,597    |        |       |           |        |          | 3,094    | 7,691    |
| 10-11pm  |        |       |          |        |           | 4,336    |        |       |           |        |          | 2,834    | 7,170    |
| 11-12pm  |        |       |          |        |           | 4,250    |        |       |           |        |          | 2,559    | 6,809    |
| Totals   |        |       |          |        |           | 92,430   |        |       |           |        |          | 87,939   | 180,369  |
| 7-10am   | 6,612  | 458   | 701      | 494    | 499       | 8,764    | 12,747 | 229   | 923       | 926    | 2,290    | 17,115   | 25,879   |
| 10am-1pm | 8,042  | 249   | 679      | 666    | 1,253     | 10,889   | 8,363  | 181   | 762       | 836    | 1,260    | 11,402   | 22,291   |
| 1-4pm    | 10,846 | 288   | 729      | 1,139  | 1,651     | 14,653   | 9,993  | 205   | 754       | 580    | 1,015    | 12,547   | 27,200   |
| 4-7pm    | 14,283 | 555   | 623      | 897    | 1,579     | 17,937   | 11,232 | 121   | 588       | 246    | 551      | 12,738   | 30,675   |
| 7am-7pm  | 39,783 | 1,550 | 2,732    | 3,196  | 4,982     | 52,243   | 42,335 | 736   | 3,027     | 2,588  | 5,116    | 53,802   | 106,045  |

Based on October 1996 Classification Survey Data

# Houry Vehicular Volumes Williamsburg Bridge - 2004

Eastbound to Brooklyn

Westbound to Manhattan

| _        |        | Eas   | stbouna to | Brookiy | n         |          | _ |        | V     | vestbound | i to Manr | iattan     |          |          |
|----------|--------|-------|------------|---------|-----------|----------|---|--------|-------|-----------|-----------|------------|----------|----------|
|          |        | (     | Commuter   | C       | ommercial |          |   |        | (     | Commuter  | C         | Commercial |          | 2-Way    |
|          | Autos  | Buses | Vans       | Trucks  | Vans      | Totals   |   | Autos  | Buses | Vans      | Trucks    | Vans       | Totals   | Totals   |
| 12-1am   |        |       |            |         |           | 2,663    |   |        |       |           |           |            | 1,599    | 4,262    |
| 1-2am    |        |       |            |         |           | 1,534    |   |        |       |           |           |            | 1,128    | 2,662    |
| 2-3am    |        |       |            |         |           | 1,039    |   |        |       |           |           |            | 718      | 1,757    |
| 3-4am    |        |       |            |         |           | 777      |   |        |       |           |           |            | 708      | 1,485    |
| 4-5am    |        |       |            |         |           | 762      |   |        |       |           |           |            | 952      | 1,714    |
| 5-6am    |        |       |            |         |           | 1,110    |   |        |       |           |           |            | 2,063    | 3,173    |
| 6-7am    |        |       |            |         |           | 1,827    |   |        |       |           |           |            | 3,180    | 5,007    |
| 7-8am    | 1,573  | 25    | 257        | 193     | 118       | 2,166    |   | 2,245  | 104   | 493       | 348       | 373        | 3,563    | 5,729    |
| 8-9am    | 1,527  | 134   | 265        | 220     | 168       | 2,314    |   | 2,179  | 46    | 551       | 321       | 470        | 3,567 ** | 5,881    |
| 9-10am   | 1,227  | 92    | 359        | 220     | 146       | 2,044    |   | 2,021  | 43    | 494       | 306       | 327        | 3,191    | 5,235    |
| 10-11am  | 1,246  | 48    | 297        | 461     | 86        | 2,138    |   | 1,732  | 33    | 467       | 280       | 263        | 2,775    | 4,913    |
| 11-12am  | 1,226  | 24    | 310        | 456     | 121       | 2,137    |   | 1,497  | 32    | 440       | 283       | 276        | 2,528    | 4,665    |
| 12-1pm   | 1,323  | 15    | 374        | 332     | 185       | 2,229    |   | 1,486  | 31    | 396       | 219       | 270        | 2,402    | 4,631    |
| 1-2pm    | 1,453  | 26    | 383        | 379     | 178       | 2,419    |   | 1,386  | 67    | 539       | 236       | 209        | 2,437    | 4,856    |
| 2-3pm    | 1,731  | 36    | 534        | 401     | 71        | 2,773    |   | 1,856  | 42    | 449       | 179       | 230        | 2,756    | 5,529    |
| 3-4pm    | 2,164  | 78    | 485        | 399     | 188       | 3,314    |   | 2,015  | 36    | 390       | 191       | 241        | 2,873    | 6,187    |
| 4-5pm    | 2,390  | 98    | 447        | 380     | 214       | 3,529 ** |   | 1,867  | 35    | 450       | 122       | 206        | 2,680    | 6,209 ** |
| 5-6pm    | 2,377  | 73    | 449        | 271     | 255       | 3,425    |   | 1,932  | 39    | 456       | 130       | 217        | 2,774    | 6,199    |
| 6-7pm    | 2,397  | 26    | 394        | 139     | 197       | 3,153    |   | 1,864  | 34    | 545       | 119       | 226        | 2,788    | 5,941    |
| 7-8pm    |        |       |            |         |           | 3,032    |   |        |       |           |           |            | 2,600    | 5,632    |
| 8-9pm    |        |       |            |         |           | 2,967    |   |        |       |           |           |            | 2,196    | 5,163    |
| 9-10pm   |        |       |            |         |           | 2,611    |   |        |       |           |           |            | 2,121    | 4,732    |
| 10-11pm  |        |       |            |         |           | 2,435    |   |        |       |           |           |            | 2,137    | 4,572    |
| 11-12pm  |        |       |            |         |           | 2,488    |   |        |       |           |           |            | 1,906    | 4,394    |
| Totals   |        |       |            |         |           | 54,886   |   |        |       |           |           |            | 55,642   | 110,528  |
| 7-10am   | 4,327  | 251   | 881        | 633     | 432       | 6,524    |   | 6,445  | 193   | 1,538     | 975       | 1,170      | 10,321   | 16,845   |
| 10am-1pm | 3,795  | 87    | 981        | 1,249   | 392       | 6,504    |   | 4,715  | 96    | 1,303     | 782       | 809        | 7,705    | 14,209   |
| 1-4pm    | 5,348  | 140   | 1,402      | 1,179   | 437       | 8,506    |   | 5,257  | 145   | 1,378     | 606       | 680        | 8,066    | 16,572   |
| 4-7pm    | 7,164  | 197   | 1,290      | 790     | 666       | 10,107   |   | 5,663  | 108   | 1,451     | 371       | 649        | 8,242    | 18,349   |
| 7am-7pm  | 20,634 | 675   | 4,554      | 3,851   | 1,927     | 31,641   |   | 22,080 | 542   | 5,670     | 2,734     | 3,308      | 34,334   | 65,975   |



#### Harlem River Bridges Average Daily Traffic Volumes 1948 - 2004

|              | Alexander          |                  | Macombs          | Madison          | Third            |
|--------------|--------------------|------------------|------------------|------------------|------------------|
| Year         | Hamilton           | Broadway         | Dam              | Avenue           | Avenue           |
| 1948         |                    | 16,020           | 33,608           | 27,222           | 31,403           |
| 1949         |                    | 17,369           | 23,854           | 17,363           | 20,024           |
| 1950         | D                  | 15,462           | 28,641           | 27,933           | 34,984           |
| 1951         | Bridge             | 16,374           | 31,072           | 33,576           | 51,478           |
| 1952         | Opened             | 17,412           | 36,100           | 27,468           | 34,023           |
| 1953<br>1954 | Jan. 1963          | 16,821<br>15,958 | 35,331<br>27,911 | 24,382<br>23,408 | 37,593<br>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         | 07 040             | 23,110           | 43,450           | 27,090           | 63,840           |
| 1964<br>1965 | 87,840<br>125,133  | 25,020<br>17,555 | 31,050<br>37,451 | 31,170<br>26,315 | 63,250<br>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<br>1975 | 144,909<br>134,013 | 21,825<br>30,638 | 40,934<br>38,995 | 30,425<br>29,823 | 54,770<br>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<br>1985 | 164,734<br>171,602 | 28,338<br>33,086 | 46,870<br>52,497 | 33,101<br>37,956 | 56,706<br>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<br>1995 | 178,522<br>175,279 | 32,833<br>42,555 | 39,876<br>41,571 | 22,923<br>22,739 | 66,104<br>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           |

# Harlem River Bridges (cont'd) Average Daily Traffic Volumes 1948 - 2004

| Year         | University<br>Heights | Washington       | Willis<br>Avenue | 145th<br>Street  | Totals             |
|--------------|-----------------------|------------------|------------------|------------------|--------------------|
|              | _                     | _                |                  |                  |                    |
| 1948         | 21,706                | 29,374           | 29,648           | 18,196           | 207,177            |
| 1949         | 14,098                | 32,122           | 42,772           | 25,908           | 193,510            |
| 1950         | 24,986                | 29,541           | 38,708           | 22,416           | 222,671            |
| 1951<br>1952 | 25,270<br>21,527      | 28,599           | 35,958           | 26,872<br>24,189 | 249,199            |
| 1952         | 21,527<br>29,240      | 28,270<br>37,298 | 33,207           | 29,385           | 222,196<br>248,629 |
| 1954         | 29,240                | 37,296<br>39,339 | 38,579<br>46,675 | 29,363<br>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<br>429,690 |
| 1970<br>1971 | 26,718<br>29,622      | 33,661<br>38,522 | 61,433<br>53,609 | 23,580<br>24,401 | 432,195            |
| 1971         | 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<br>1987 | 36,192<br>37,223      | 54,935<br>46,094 | 66,824<br>67,559 | 26,181<br>24,895 | 546,896            |
| 4000         |                       | 40.00=           | 67,558<br>64,862 | 25,818           | 530,228            |
| 1988<br>1989 | 38,542<br>42,246      | 48,025<br>49,092 | 64,862<br>66,012 | 23,317           | 520,282<br>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            |

## Hourly Vehicular Volumes Alexander Hamilton Bridge - 2004

Eastbound to Bronx Westbound to Manhattan Commercial 2-Way Commuter Commuter Commercial Autos **Buses** Vans Trucks Vans Totals Autos Buses Vans Trucks Vans Totals **Totals** 12-1am 2,128 2,428 4,556 1-2am 1.778 1.930 3,708 2-3am 1,569 1,487 3,056 ---------------3-4am 1,685 1,470 3,155 ---------------------4-5am 2,120 1,896 4,016 ---------------5-6am 3,233 3,015 6,248 ------------------------6-7am 4,698 4,543 9,241 9,510 7-8am 12 216 4,791 3,991 9 85 210 4,719 3,741 714 108 424 32 8-9am 3,207 209 806 187 4,413 3,916 32 455 144 4,579 8,992 4,200 29 8,666 9-10am 2,939 4 188 963 106 3,433 49 754 201 4,466 3.747 293 4.174 3.704 8,455 10-11am 3 89 42 26 16 400 135 4,281 11-12am 2,948 9 212 655 108 3,932 3,030 13 19 945 269 4,276 8,208 3,968 3,832 8,492 12-1pm 3,441 0 97 388 42 11 10 535 136 4,524 7 1-2pm 2.954 141 705 70 3.877 3.403 12 24 884 231 4.554 8,431 5 3,324 177 690 98 4,294 3,461 19 42 928 8,930 2-3pm 186 4,636 3,868 7 302 85 4,340 4,030 22 16 474 4,628 8,968 3-4pm 78 86 4-5pm 3,660 5 137 458 105 4,365 3,399 3 39 857 207 4,505 8,870 5-6pm 3,723 5 105 350 87 4,270 3,547 2 29 791 155 4,524 8,794 6-7pm 3,730 9 428 75 4,437 3 23 478 4,582 195 3,941 137 9,019 8,637 4,332 7-8pm 4,305 ------------------------3,766 3,705 8-9pm 7,471 ------------------------------3.485 9-10pm 3,651 7,136 ------------10-11pm 3,174 3,712 6,886 ------11-12pm 2,867 3,011 5,878 **Totals** 85,896 89,427 175,323 7-10am 9,887 20 613 2,483 401 13,404 11,340 90 146 1,633 555 13,764 27,168 10am-1pm 10,136 12 398 1,336 192 12,074 10,566 50 45 1,880 540 13,081 25,155 1,697 1-4pm 10,146 19 396 253 12,511 10,894 53 82 2,286 503 13,818 26,329 8 11,113 19 1,236 499 4-7pm 437 267 13,072 10,887 91 2,126 13,611 26,683

43,687

201

364

7,925

2,097

54,274

70

1,844

41,282

7am-7pm

6,752

1,113

51,061

105,335

Based on 1989 Classification Survey Data

#### Hourly Vehicular Volumes Broadway Bridge - 2004

|          |           | Noi   | thboun  | d to Bron | 1X      |          |        | So    | uthboui | nd to Mar | hattan  |          |          |
|----------|-----------|-------|---------|-----------|---------|----------|--------|-------|---------|-----------|---------|----------|----------|
| _        |           | C     | Commute | er Co     | ommerci | al       |        | (     | Commute | er Co     | ommerci | al       | 2-Way    |
|          | Autos     | Buses | Vans    | Trucks    | Vans    | Totals   | Autos  | Buses | Vans    | Trucks    | Vans    | Totals   | Totals   |
| 12-1am   |           |       |         |           |         | 291      |        |       |         |           |         | 265      | 556      |
| 1-2am    |           |       |         |           |         | 160      |        |       |         |           |         | 182      | 342      |
| 2-3am    |           |       |         |           |         | 106      |        |       |         |           |         | 95       | 201      |
| 3-4am    |           |       |         |           |         | 73       |        |       |         |           |         | 97       | 170      |
| 4-5am    |           |       |         |           |         | 102      |        |       |         |           |         | 147      | 249      |
| 5-6am    |           |       |         |           |         | 213      |        |       |         |           |         | 364      | 577      |
| 6-7am    |           |       |         |           |         | 459      |        |       |         |           |         | 843      | 1,302    |
| 7-8am    | 628       | 35    | 19      | 63        | 26      | 771      | 1,226  | 56    | 39      | 28        | 41      | 1,390 ** | 2,161    |
| 8-9am    | 761       | 55    | 19      | 33        | 26      | 894      | 1,212  | 42    | 28      | 43        | 42      | 1,367    | 2,261    |
| 9-10am   | 620       | 21    | 3       | 25        | 55      | 724      | 814    | 31    | 24      | 48        | 37      | 954      | 1,678    |
| 10-11am  | 658       | 16    | 2       | 33        | 23      | 732      | 747    | 20    | 11      | 34        | 9       | 821      | 1,553    |
| 11-12am  | 670       | 20    | 8       | 27        | 41      | 766      | 693    | 23    | 23      | 49        | 50      | 838      | 1,604    |
| 12-1pm   | 748       | 21    | 6       | 21        | 23      | 819      | 870    | 22    | 4       | 18        | 11      | 925      | 1,744    |
| 1-2pm    | 825       | 25    | 3       | 28        | 29      | 910      | 892    | 25    | 9       | 21        | 17      | 964      | 1,874    |
| 2-3pm    | 891       | 25    | 1       | 38        | 76      | 1,031    | 961    | 30    | 23      | 34        | 17      | 1,065    | 2,096    |
| 3-4pm    | 1,082     | 26    | 9       | 14        | 36      | 1,167    | 1,177  | 33    | 14      | 19        | 11      | 1,254    | 2,421    |
| 4-5pm    | 1,204     | 42    | 29      | 25        | 59      | 1,359    | 1,140  | 30    | 21      | 36        | 35      | 1,262    | 2,621 ** |
| 5-6pm    | 1,256     | 29    | 8       | 12        | 65      | 1,370 ** | 1,131  | 29    | 30      | 18        | 23      | 1,231    | 2,601    |
| 6-7pm    | 1,185     | 23    | 0       | 13        | 116     | 1,337    | 1,060  | 28    | 25      | 18        | 8       | 1,139    | 2,476    |
| 7-8pm    | , <b></b> |       |         |           |         | 1,084    | ,      |       |         |           |         | 1,010    | 2,094    |
| 8-9pm    |           |       |         |           |         | 788      |        |       |         |           |         | 758      | 1,546    |
| 9-10pm   |           |       |         |           |         | 648      |        |       |         |           |         | 648      | 1,296    |
| 10-11pm  |           |       |         |           |         | 493      |        |       |         |           |         | 480      | 973      |
| 11-12pm  |           |       |         |           |         | 400      |        |       |         |           |         | 394      | 794      |
| Totals   |           |       |         |           |         | 16,697   |        |       |         |           |         | 18,493   | 35,190   |
| 7-10am   | 2,009     | 111   | 41      | 121       | 107     | 2,389    | 3,252  | 129   | 91      | 119       | 120     | 3,711    | 6,100    |
| 10am-1pm | 2,076     | 57    | 16      | 81        | 87      | 2,317    | 2,310  | 65    | 38      | 101       | 70      | 2,584    | 4,901    |
| 1-4pm    | 2,798     | 76    | 13      | 80        | 141     | 3,108    | 3,030  | 88    | 46      | 74        | 45      | 3,283    | 6,391    |
| 4-7pm    | 3,645     | 94    | 37      | 50        | 240     | 4,066    | 3,331  | 87    | 76      | 72        | 66      | 3,632    | 7,698    |
| 7am-7pm  | 10,528    | 338   | 107     | 332       | 575     | 11,880   | 11,923 | 369   | 251     | 366       | 301     | 13,210   | 25,090   |

### Hourly Vehicular Volumes Macombs Dam Bridge - 2004

Eastbound to Bronx Westbound to Manhattan Commercial Commercial 2-Way Commuter Commuter Vans **Totals** Autos **Buses** Vans Trucks Totals Autos Buses Vans Trucks Vans Totals 12-1am 381 376 757 1-2am 238 220 458 321 2-3am 167 154 ---------3-4am 138 138 276 ------------------4-5am 145 162 307 ---------5-6am 259 345 604 ------------------------6-7am 549 901 1,450 2,366 7-8am 751 30 914 1,120 36 5 79 212 1,452 19 46 68 1,543 \*\* 2,562 2 52 1,019 8-9am 852 12 15 88 1,254 11 99 177 859 2,089 9-10am 736 16 12 46 49 918 19 13 106 174 1,230 10-11am 2 29 747 7 1,750 674 6 36 895 8 39 54 1.003 11-12am 701 9 11 58 68 847 904 7 14 79 89 1,093 1,940 807 26 36 885 21 2,019 12-1pm 10 6 1.044 19 4 46 1.134 25 870 8 1-2pm 815 2 23 1.008 20 22 81 1.139 2,009 972 807 12 64 69 1,143 25 17 56 1,339 2,311 2-3pm 20 98 978 20 9 53 62 1,122 1,312 40 11 25 49 1,437 2,559 3-4pm 4-5pm 925 8 30 79 150 1,192 1,170 10 32 42 78 1,332 2,524 1,258 2,469 5-6pm 1,017 9 14 36 135 1,211 1,153 13 10 19 63 1,228 \*\* 2,561 6-7pm 1,145 3 7 27 46 8 13 27 1,333 1,194 91 2,424 1,134 7-8pm 1,290 ---------------------1,055 2,140 8-9pm 1,085 ------------------------------9-10pm 926 925 1,851 ------------10-11pm 763 800 1,563 ---638 1,248 11-12pm 610 Totals 18,259 22,299 40,558 7-10am 2,339 58 46 144 205 2,792 3,292 66 20 284 563 4,225 7,017 10am-1pm 2,182 25 19 113 140 2,479 2,843 34 25 139 189 3,230 5,709 2,600 1-4pm 34 34 142 154 2,964 3,463 85 36 103 228 3,915 6,879 4-7pm 3,087 20 51 232 3,923 142 331 3,631 3,517 31 55 88 7,554

13,115

136

216

1,212

15,293

614

830

11,866

137

150

541

10,208

7am-7pm

27,159

Based on 1989 Classification Survey Data

### Hourly Vehicular Volumes Madison Avenue Bridge - 2004

Eastbound to Bronx Westbound to Manhattan Commuter Commercial Commuter Commercial 2-Wav Buses Vans Trucks Vans Totals **Buses** Vans Trucks Vans **Totals Totals** Autos Autos 12-1am 949 375 1,324 1-2am 662 240 902 ------2-3am 402 189 591 ------288 3-4am 150 438 4-5am 242 248 490 ------------------------------5-6am 317 606 923 ------------------------------6-7am 837 1,484 2,321 ---------------------------1,865 2,878 7-8am 1,013 790 39 87 51 46 1,527 122 17 62 137 2,914 1,077 8-9am 845 58 75 44 55 1,455 121 34 77 150 1,837 9-10am 676 60 87 72 45 940 1,079 77 43 1,528 2,468 187 142 10-11am 744 34 45 33 41 897 915 76 25 25 82 1,123 2,020 11-12am 84 958 35 47 647 26 105 96 917 90 115 1,204 2,162 12-1pm 837 28 33 40 43 981 967 43 32 39 70 1.151 2,132 33 1.062 72 37 1-2pm 902 31 46 50 1.068 20 57 1.254 2,316 2-3pm 863 33 76 105 1.183 1,166 98 40 2,643 106 44 112 1.460 3-4pm 1,343 27 42 76 70 1,558 1,242 86 25 33 56 1,442 3,000 1,713 \*\* 34 4-5pm 1,276 32 144 119 142 1,285 79 31 57 1,486 3,199 5-6pm 1,223 33 105 86 1,528 1,361 43 34 52 1,551 3,079 81 61 1,162 1,413 28 25 1,373 6-7pm 68 46 59 78 1,245 49 26 2,786 2,593 7-8pm 1,391 1,202 ------------------8-9pm 1,273 1,042 2,315 9-10pm 1,088 894 1,982 ------------952 10-11pm ---837 1,789 ---------825 11-12pm 633 1,458 ---------------Totals 23.549 25,174 48.723 ------7-10am 2,311 157 249 167 146 3,030 4,061 320 94 326 429 5,230 8,260 10am-1pm 2,228 88 162 178 180 2,836 2,799 154 104 154 267 3,478 6,314 227 226 3,803 3,476 1-4pm 3,108 91 151 256 102 97 225 4,156 7,959 3,661 295 264 301 4,654 3,891 189 90 135 4,410 9,064 4-7pm 133 105

14,227

919

405

667

1,056

17,274

469

857

836

853

14,323

11,308

7am-7pm

31,597

Based on 1989 Classification Survey Data

#### Hourly Vehicular Volumes Third Avenue Bridge - 2004

|          |       | No     | rthboun  | d to Bron | ıx       |        |        | Sc    | outhbou | nd to Ma | nhattan |          |          |
|----------|-------|--------|----------|-----------|----------|--------|--------|-------|---------|----------|---------|----------|----------|
| _        |       | (      | Commute  | er Co     | ommercia |        |        |       | Commute | er C     | ommerci | ial      | 2-Way    |
|          | Autos | Buses  | Vans     | Trucks    | Vans     | Totals | Autos  | Buses | Vans    | Trucks   | Vans    | Totals   | Totals   |
| 12-1am   |       |        |          |           |          |        |        |       |         |          |         | 1,001    | 1,001    |
| 1-2am    |       |        |          |           |          |        |        |       |         |          |         | 657      | 657      |
| 2-3am    |       |        |          |           |          |        |        |       |         |          |         | 558      | 558      |
| 3-4am    |       |        |          |           |          |        |        |       |         |          |         | 624      | 624      |
| 4-5am    |       | Bridge | is 1-way | y southb  | ouna     |        |        |       |         |          |         | 1,002    | 1,002    |
| 5-6am    |       |        | to Mani  | hattan    |          |        |        |       |         |          |         | 1,843    | 1,843    |
| 6-7am    |       |        |          |           |          |        |        |       |         |          |         | 2,407    | 2,407    |
| 7-8am    |       |        |          |           |          |        | 1,570  | 32    | 242     | 327      | 270     | 2,441    | 2,441    |
| 8-9am    |       |        |          |           |          |        | 1,449  | 21    | 143     | 293      | 305     | 2,211    | 2,211    |
| 9-10am   |       |        |          |           |          |        | 1,557  | 26    | 205     | 304      | 240     | 2,332    | 2,332    |
| 10-11am  |       |        |          |           |          |        | 1,945  | 24    | 129     | 125      | 103     | 2,326    | 2,326    |
| 11-12am  |       |        |          |           |          |        | 1,478  | 41    | 240     | 284      | 175     | 2,218    | 2,218    |
| 12-1pm   |       |        |          |           |          |        | 1,974  | 59    | 102     | 114      | 88      | 2,337    | 2,337    |
| 1-2pm    |       |        |          |           |          |        | 1,786  | 81    | 156     | 136      | 233     | 2,392    | 2,392    |
| 2-3pm    |       |        |          |           |          |        | 1,651  | 82    | 206     | 203      | 238     | 2,380    | 2,380    |
| 3-4pm    |       |        |          |           |          |        | 2,314  | 69    | 80      | 65       | 58      | 2,586    | 2,586    |
| 4-5pm    |       |        |          |           |          |        | 2,175  | 50    | 117     | 112      | 130     | 2,584    | 2,584    |
| 5-6pm    |       |        |          |           |          |        | 2,325  | 46    | 96      | 81       | 69      | 2,617 ** | 2,617 ** |
| 6-7pm    |       |        |          |           |          |        | 2,294  | 47    | 93      | 62       | 68      | 2,564    | 2,564    |
| 7-8pm    |       |        |          |           |          |        |        |       |         |          |         | 2,340    | 2,340    |
| 8-9pm    |       |        |          |           |          |        |        |       |         |          |         | 2,083    | 2,083    |
| 9-10pm   |       |        |          |           |          |        |        |       |         |          |         | 1,964    | 1,964    |
| 10-11pm  |       |        |          |           |          |        |        |       |         |          |         | 1,975    | 1,975    |
| 11-12pm  |       |        |          |           |          |        |        |       |         |          |         | 1,611    | 1,611    |
| Totals   |       |        |          |           |          |        |        |       |         |          |         | 47,053   | 47,053   |
| 7-10am   |       |        |          |           |          |        | 4,576  | 79    | 590     | 924      | 815     | 6,984    | 6,984    |
| 10am-1pm |       |        |          |           |          |        | 5,397  | 124   | 471     | 523      | 366     | 6,881    | 6,881    |
| 1-4pm    |       |        |          |           |          |        | 5,751  | 232   | 442     | 404      | 529     | 7,358    | 7,358    |
| 4-7pm    |       |        |          |           |          |        | 6,794  | 143   | 306     | 255      | 267     | 7,765    | 7,765    |
| 7am-7pm  |       |        |          |           |          |        | 22,518 | 578   | 1,809   | 2,106    | 1,977   | 28,988   | 28,988   |

#### Hourly Vehicular Volumes University Heights Bridge - 2004

| _        |        | Eas   | stbound | d to Bron | x      |          |        | W     | estboun | d to Man | hattan  |          |          |
|----------|--------|-------|---------|-----------|--------|----------|--------|-------|---------|----------|---------|----------|----------|
| _        |        | C     | Commute | er Co     | mmerci | al       |        | (     | Commute | er C     | ommerci | al       | 2-Way    |
|          | Autos  | Buses | Vans    | Trucks    | Vans   | Totals   | Autos  | Buses | Vans    | Trucks   | Vans    | Totals   | Totals   |
| 12-1am   |        |       |         |           |        | 540      |        |       |         |          |         | 434      | 974      |
| 1-2am    |        |       |         |           |        | 339      |        |       |         |          |         | 296      | 635      |
| 2-3am    |        |       |         |           |        | 270      |        |       |         |          |         | 200      | 470      |
| 3-4am    |        |       |         |           |        | 184      |        |       |         |          |         | 186      | 370      |
| 4-5am    |        |       |         |           |        | 231      |        |       |         |          |         | 295      | 526      |
| 5-6am    |        |       |         |           |        | 342      |        |       |         |          |         | 714      | 1,056    |
| 6-7am    |        |       |         |           |        | 663      |        |       |         |          |         | 1,245    | 1,908    |
| 7-8am    | 751    | 53    | 96      | 46        | 48     | 994      | 1,427  | 23    | 37      | 41       | 117     | 1,645 ** | 2,639    |
| 8-9am    | 897    | 10    | 95      | 68        | 87     | 1,157    | 1,266  | 13    | 27      | 51       | 103     | 1,460    | 2,617    |
| 9-10am   | 768    | 10    | 76      | 88        | 89     | 1,031    | 1,082  | 14    | 17      | 55       | 109     | 1,277    | 2,308    |
| 10-11am  | 842    | 4     | 43      | 41        | 33     | 963      | 1,128  | 4     | 4       | 31       | 68      | 1,235    | 2,198    |
| 11-12am  | 833    | 10    | 86      | 101       | 51     | 1,081    | 1,049  | 8     | 15      | 66       | 94      | 1,232    | 2,313    |
| 12-1pm   | 1,004  | 17    | 31      | 34        | 29     | 1,115    | 1,229  | 2     | 6       | 34       | 59      | 1,330    | 2,445    |
| 1-2pm    | 1,047  | 52    | 51      | 40        | 31     | 1,221    | 1,280  | 4     | 5       | 24       | 43      | 1,356    | 2,577    |
| 2-3pm    | 1,088  | 17    | 92      | 67        | 64     | 1,328 ** | 1,285  | 12    | 25      | 57       | 122     | 1,501    | 2,829    |
| 3-4pm    | 1,099  | 19    | 25      | 32        | 31     | 1,206    | 1,384  | 48    | 7       | 30       | 61      | 1,530    | 2,736    |
| 4-5pm    | 972    | 5     | 60      | 45        | 34     | 1,116    | 1,405  | 22    | 19      | 29       | 104     | 1,579    | 2,695    |
| 5-6pm    | 1,069  | 0     | 67      | 32        | 49     | 1,217    | 1,438  | 1     | 17      | 15       | 63      | 1,534    | 2,751    |
| 6-7pm    | 1,147  | 0     | 71      | 24        | 72     | 1,314    | 1,459  | 8     | 13      | 12       | 68      | 1,560    | 2,874 ** |
| 7-8pm    |        |       |         |           |        | 1,318    |        |       |         |          |         | 1,391    | 2,709    |
| 8-9pm    |        |       |         |           |        | 1,117    |        |       |         |          |         | 1,218    | 2,335    |
| 9-10pm   |        |       |         |           |        | 995      |        |       |         |          |         | 1,063    | 2,058    |
| 10-11pm  |        |       |         |           |        | 845      |        |       |         |          |         | 958      | 1,803    |
| 11-12pm  |        |       |         |           |        | 718      |        |       |         |          |         | 806      | 1,524    |
| Totals   |        |       |         |           |        | 21,305   |        |       |         |          |         | 26,045   | 47,350   |
| 7-10am   | 2,416  | 73    | 267     | 202       | 224    | 3,182    | 3,775  | 50    | 81      | 147      | 329     | 4,382    | 7,564    |
| 10am-1pm | 2,679  | 31    | 160     | 176       | 113    | 3,159    | 3,406  | 14    | 25      | 131      | 221     | 3,797    | 6,956    |
| 1-4pm    | 3,234  | 88    | 168     | 139       | 126    | 3,755    | 3,949  | 64    | 37      | 111      | 226     | 4,387    | 8,142    |
| 4-7pm    | 3,188  | 5     | 198     | 101       | 155    | 3,647    | 4,302  | 31    | 49      | 56       | 235     | 4,673    | 8,320    |
| 7am-7pm  | 11,517 | 197   | 793     | 618       | 618    | 13,743   | 15,432 | 159   | 192     | 445      | 1,011   | 17,239   | 30,982   |

# Hourly Vehicular Volumes Washington Bridge - 2004

| _        |        | Eas   | stbound | to Bro | ıx      |          |        | W     | estboun | d to Man | hattan |          |          |
|----------|--------|-------|---------|--------|---------|----------|--------|-------|---------|----------|--------|----------|----------|
| _        |        | C     | Commute | er C   | ommerci | al       | •      | (     | Commute | er Co    | mmerci | al       | 2-Way    |
|          | Autos  | Buses | Vans    | Trucks | Vans    | Totals   | Autos  | Buses | Vans    | Trucks   | Vans   | Totals   | Totals   |
| 12-1am   |        |       |         |        |         | 668      |        |       |         |          |        | 459      | 1,127    |
| 1-2am    |        |       |         |        |         | 405      |        |       |         |          |        | 290      | 695      |
| 2-3am    |        |       |         |        |         | 294      |        |       |         |          |        | 233      | 527      |
| 3-4am    |        |       |         |        |         | 234      |        |       |         |          |        | 228      | 462      |
| 4-5am    |        |       |         |        |         | 264      |        |       |         |          |        | 281      | 545      |
| 5-6am    |        |       |         |        |         | 413      |        |       |         |          |        | 590      | 1,003    |
| 6-7am    |        |       |         |        |         | 1,029    |        |       |         |          |        | 1,175    | 2,204    |
| 7-8am    | 1,571  | 60    | 34      | 54     | 115     | 1,834    | 1,230  | 57    | 109     | 36       | 25     | 1,457    | 3,291    |
| 8-9am    | 1,566  | 48    | 28      | 84     | 143     | 1,869    | 1,265  | 69    | 77      | 58       | 31     | 1,500    | 3,369    |
| 9-10am   | 1,204  | 39    | 26      | 95     | 91      | 1,455    | 1,023  | 35    | 52      | 40       | 27     | 1,177    | 2,632    |
| 10-11am  | 1,164  | 34    | 8       | 32     | 43      | 1,281    | 993    | 35    | 11      | 27       | 22     | 1,088    | 2,369    |
| 11-12am  | 1,187  | 28    | 17      | 65     | 75      | 1,372    | 1,011  | 48    | 30      | 32       | 38     | 1,159    | 2,531    |
| 12-1pm   | 1,246  | 42    | 19      | 25     | 60      | 1,392    | 1,219  | 32    | 11      | 23       | 18     | 1,303    | 2,695    |
| 1-2pm    | 1,450  | 35    | 6       | 37     | 56      | 1,584    | 1,278  | 32    | 18      | 21       | 15     | 1,364    | 2,948    |
| 2-3pm    | 1,462  | 36    | 27      | 71     | 84      | 1,680    | 1,268  | 60    | 45      | 54       | 42     | 1,469    | 3,149    |
| 3-4pm    | 1,907  | 45    | 13      | 37     | 96      | 2,098    | 1,462  | 46    | 46      | 46       | 22     | 1,622    | 3,720    |
| 4-5pm    | 2,077  | 49    | 63      | 76     | 231     | 2,496    | 1,409  | 40    | 71      | 87       | 48     | 1,655    | 4,151    |
| 5-6pm    | 2,370  | 44    | 66      | 47     | 125     | 2,652 ** | 1,545  | 31    | 47      | 35       | 44     | 1,702 ** | 4,354 ** |
| 6-7pm    | 2,018  | 26    | 36      | 27     | 89      | 2,196    | 1,364  | 37    | 55      | 19       | 30     | 1,505    | 3,701    |
| 7-8pm    |        |       |         |        |         | 1,839    |        |       |         |          |        | 1,351    | 3,190    |
| 8-9pm    |        |       |         |        |         | 1,629    |        |       |         |          |        | 1,175    | 2,804    |
| 9-10pm   |        |       |         |        |         | 1,403    |        |       |         |          |        | 1,001    | 2,404    |
| 10-11pm  |        |       |         |        |         | 1,154    |        |       |         |          |        | 887      | 2,041    |
| 11-12pm  |        |       |         |        |         | 926      |        |       |         |          |        | 692      | 1,618    |
| Totals   |        |       |         |        |         | 32,167   |        |       |         |          |        | 25,363   | 57,530   |
| 7-10am   | 4,341  | 147   | 88      | 233    | 349     | 5,158    | 3,518  | 161   | 238     | 134      | 83     | 4,134    | 9,292    |
| 10am-1pm | 3,597  | 104   | 44      | 122    | 178     | 4,045    | 3,223  | 115   | 52      | 82       | 78     | 3,550    | 7,595    |
| 1-4pm    | 4,819  | 116   | 46      | 145    | 236     | 5,362    | 4,008  | 138   | 109     | 121      | 79     | 4,455    | 9,817    |
| 4-7pm    | 6,465  | 119   | 165     | 150    | 445     | 7,344    | 4,318  | 108   | 173     | 141      | 122    | 4,862    | 12,206   |
| 7am-7pm  | 19,222 | 486   | 343     | 650    | 1,208   | 21,909   | 15,067 | 522   | 572     | 478      | 362    | 17,001   | 38,910   |

# Hourly Vehicular Volumes Willis Avenue Bridge - 2004

| _        |        | No    | rthboun | d to Bro | nx      |          |            | So         | uthbour   | nd to Man | hattan  |         |          |
|----------|--------|-------|---------|----------|---------|----------|------------|------------|-----------|-----------|---------|---------|----------|
| _        |        | (     | Commute | er C     | ommerci | al       |            | (          | Commute   | er Co     | mmercia | <u></u> | 2-Way    |
|          | Autos  | Buses | Vans    | Trucks   | Vans    | Totals   | Autos      | Buses      | Vans      | Trucks    | Vans    | Totals  | Totals   |
| 12-1am   |        |       |         |          |         | 2,165    |            |            |           |           |         | 0       | 2,165    |
| 1-2am    |        |       |         |          |         | 1,194    |            |            |           |           |         | 0       | 1,194    |
| 2-3am    |        |       |         |          |         | 820      |            |            |           |           |         | 0       | 820      |
| 3-4am    |        |       |         |          |         | 795      | This brid  | ge is nor  | mally 1-  | way       |         | 0       | 795      |
| 4-5am    |        |       |         |          |         | 924      | northbou   | nd to The  | e Bronx.  |           |         | 0       | 924      |
| 5-6am    |        |       |         |          |         | 1,536    |            |            |           |           |         | 0       | 1,536    |
| 6-7am    |        |       |         |          |         | 2,623    | 761        | 0          | 0         | 0         | 0       | 761     | 3,384    |
| 7-8am    | 2,636  | 78    | 123     | 153      | 106     | 3,096    | 803        | 0          | 0         | 0         | 0       | 803 **  | 3,899    |
| 8-9am    | 2,521  | 107   | 94      | 182      | 221     | 3,125    | 784        | 0          | 0         | 0         | 0       | 784     | 3,909    |
| 9-10am   | 2,163  | 127   | 106     | 259      | 239     | 2,894    | 486        | 0          | 0         | 0         | 0       | 486     | 3,380    |
| 10-11am  | 2,430  | 56    | 78      | 182      | 172     | 2,918    |            |            |           |           |         | 0       | 2,918    |
| 11-12am  | 2,123  | 37    | 125     | 305      | 282     | 2,872    |            |            |           |           |         | 0       | 2,872    |
| 12-1pm   | 2,757  | 47    | 58      | 170      | 116     | 3,148    | In 2004, c | ne lane v  | vas reve  | ersed to  |         | 0       | 3,148    |
| 1-2pm    | 2,936  | 27    | 45      | 123      | 156     | 3,287    | southbou   | ınd 6-10a  | m week    | days (for |         | 0       | 3,287    |
| 2-3pm    | 2,788  | 34    | 137     | 401      | 405     | 3,765    | passenge   | er cars or | nly) in o | rder tc   |         | 0       | 3,765    |
| 3-4pm    | 3,896  | 71    | 67      | 187      | 182     | 4,403    | compens    | ate for re | constru   | ction lan | E       | 0       | 4,403    |
| 4-5pm    | 3,824  | 44    | 147     | 327      | 514     | 4,856    | closures   | on the TI  | hird Ave  | nue Brid  | ge      | 0       | 4,856    |
| 5-6pm    | 4,369  | 78    | 146     | 243      | 537     | 5,373 ** |            |            |           |           |         | 0       | 5,373 ** |
| 6-7pm    | 4,401  | 42    | 134     | 155      | 297     | 5,029    |            |            |           |           |         | 0       | 5,029    |
| 7-8pm    |        |       |         |          |         | 4,099    |            |            |           |           |         | 0       | 4,099    |
| 8-9pm    |        |       |         |          |         | 3,745    |            |            |           |           |         | 0       | 3,745    |
| 9-10pm   |        |       |         |          |         | 3,488    |            |            |           |           |         | 0       | 3,488    |
| 10-11pm  |        |       |         |          |         | 3,087    |            |            |           |           |         | 0       | 3,087    |
| 11-12pm  |        |       |         |          |         | 2,624    |            |            |           |           |         | 0       | 2,624    |
| Totals   |        |       |         |          |         | 71,866   |            |            |           |           |         | 2,834   | 74,700   |
| 7-10am   | 7,320  | 312   | 323     | 594      | 566     | 9,115    | 2,073      | 0          | 0         | 0         | 0       | 2,073   | 11,188   |
| 10am-1pm | 7,310  | 140   | 261     | 657      | 570     | 8,938    | 0          | 0          | 0         | 0         | 0       | 0       | 8,938    |
| 1-4pm    | 9,620  | 132   | 249     | 711      | 743     | 11,455   | 0          | 0          | 0         | 0         | 0       | 0       | 11,455   |
| 4-7pm    | 12,594 | 164   | 427     | 725      | 1,348   | 15,258   | 0          | 0          | 0         | 0         | 0       | 0       | 15,258   |
| 7am-7pm  | 36,844 | 748   | 1,260   | 2,687    | 3,227   | 44,766   | 2,073      | 0          | 0         | 0         | 0       | 2,073   | 46,839   |

#### Hourly Vehicular Volumes 145th Street Bridge - 2004

|          |       | Eas   | stbound | to Bron | x      |          |       | We    | estboun | d to Man | hattan  |          |          |
|----------|-------|-------|---------|---------|--------|----------|-------|-------|---------|----------|---------|----------|----------|
| _        |       | C     | commute | er Co   | mmerci | al       |       | (     | Commute | er Co    | mmercia | al       | 2-Way    |
|          | Autos | Buses | Vans    | Trucks  | Vans   | Totals   | Autos | Buses | Vans    | Trucks   | Vans    | Totals   | Totals   |
| 12-1am   |       |       |         |         |        | 257      |       |       |         |          |         | 222      | 479      |
| 1-2am    |       |       |         |         |        | 174      |       |       |         |          |         | 137      | 311      |
| 2-3am    |       |       |         |         |        | 127      |       |       |         |          |         | 104      | 231      |
| 3-4am    |       |       |         |         |        | 99       |       |       |         |          |         | 106      | 205      |
| 4-5am    |       |       |         |         |        | 106      |       |       |         |          |         | 119      | 225      |
| 5-6am    |       |       |         |         |        | 152      |       |       |         |          |         | 235      | 387      |
| 6-7am    |       |       |         |         |        | 292      |       |       |         |          |         | 592      | 884      |
| 7-8am    | 492   | 24    | 32      | 32      | 8      | 588      | 941   | 43    | 19      | 41       | 37      | 1,081 ** | 1,669    |
| 8-9am    | 624   | 22    | 38      | 41      | 24     | 749      | 885   | 30    | 35      | 29       | 54      | 1,033    | 1,782    |
| 9-10am   | 512   | 12    | 35      | 55      | 22     | 636      | 565   | 19    | 34      | 26       | 60      | 704      | 1,340    |
| 10-11am  | 518   | 9     | 14      | 24      | 25     | 590      | 427   | 15    | 29      | 22       | 43      | 536      | 1,126    |
| 11-12am  | 324   | 10    | 19      | 44      | 28     | 425      | 358   | 9     | 36      | 37       | 43      | 483      | 908      |
| 12-1pm   | 562   | 12    | 17      | 40      | 17     | 648      | 596   | 11    | 11      | 9        | 15      | 642      | 1,290    |
| 1-2pm    | 587   | 12    | 33      | 31      | 17     | 680      | 605   | 30    | 11      | 15       | 9       | 670      | 1,350    |
| 2-3pm    | 609   | 18    | 33      | 104     | 44     | 808      | 618   | 24    | 29      | 28       | 41      | 740      | 1,548    |
| 3-4pm    | 832   | 21    | 23      | 40      | 28     | 944      | 704   | 27    | 8       | 7        | 10      | 756      | 1,700    |
| 4-5pm    | 873   | 14    | 57      | 97      | 54     | 1,095 ** | 738   | 16    | 14      | 8        | 20      | 796      | 1,891    |
| 5-6pm    | 886   | 10    | 50      | 73      | 66     | 1,085    | 769   | 17    | 13      | 9        | 12      | 820      | 1,905 ** |
| 6-7pm    | 816   | 26    | 28      | 22      | 45     | 937      | 652   | 21    | 5       | 3        | 9       | 690      | 1,627    |
| 7-8pm    |       |       |         |         |        | 856      |       |       |         |          |         | 617      | 1,473    |
| 8-9pm    |       |       |         |         |        | 727      |       |       |         |          |         | 487      | 1,214    |
| 9-10pm   |       |       |         |         |        | 636      |       |       |         |          |         | 417      | 1,053    |
| 10-11pm  |       |       |         |         |        | 375      |       |       |         |          |         | 392      | 767      |
| 11-12pm  |       |       |         |         |        | 306      |       |       |         |          |         | 323      | 629      |
| Totals   |       |       |         |         |        | 13,292   |       |       |         |          |         | 12,702   | 25,994   |
| 7-10am   | 1,628 | 58    | 105     | 128     | 54     | 1,973    | 2,391 | 92    | 88      | 96       | 151     | 2,818    | 4,791    |
| 10am-1pm | 1,404 | 31    | 50      | 108     | 70     | 1,663    | 1,381 | 35    | 76      | 68       | 101     | 1,661    | 3,324    |
| 1-4pm    | 2,028 | 51    | 89      | 175     | 89     | 2,432    | 1,927 | 81    | 48      | 50       | 60      | 2,166    | 4,598    |
| 4-7pm    | 2,575 | 50    | 135     | 192     | 165    | 3,117    | 2,159 | 54    | 32      | 20       | 41      | 2,306    | 5,423    |
| 7am-7pm  | 7,635 | 190   | 379     | 603     | 378    | 9,185    | 7,858 | 262   | 244     | 234      | 353     | 8,951    | 18,136   |



#### Brooklyn - Queens Bridges Average Daily Traffic Volumes 1948 - 2004

| Year         | Grand<br>Street  | Greenpoint<br>Avenue | Kosciuszko         | Pulaski          | Totals             |
|--------------|------------------|----------------------|--------------------|------------------|--------------------|
| 1948         | 5,447            | 15,314               | 32,761             | 23,362           | 76,884             |
| 1949         | 6,007            | 14,499               | 30,827             | 14,445           | 65,778             |
| 1950         | 6,455            | 17,822               | 40,782             | 13,939           | 78,998             |
| 1951         | 6,295            | 21,594               | 44,886             | 22,705           | 95,480             |
| 1952         | 7,053            | 22,862               | 49,738             | 28,716           | 108,369            |
| 1953         | 7,685            | 24,360               | 53,213             | 23,460           | 108,718            |
| 1954         | 8,467            | 24,680               | 65,154             | 19,898           | 118,199            |
| 1955         | 8,040            | 22,055               | 53,563             | 32,360           | 116,018            |
| 1956         | 7,043            | 22,393               | 66,932             | 24,513           | 120,881            |
| 1957         | 6,408            | 23,801               | 78,216             | 29,185           | 137,610            |
| 1958         | 13,537           | 33,276               | 39,093             | 24,191           | 110,097            |
| 1959         | 11,373           | 18,702               | 92,192             | 21,870           | 144,137            |
| 1960         | 9,209            | 18,914               | 86,322             | 20,614           | 135,059            |
| 1961         | 10,843           | 18,028               | 93,055             | 23,935           | 145,861            |
| 1962         | 11,520           | 17,450               | 103,530            | 28,040           | 160,540            |
| 1963         | 12,020           | 17,630               | 102,190            | 28,560           | 160,400            |
| 1964         | 13,570           | 19,180               | 106,790            | 33,030           | 172,570            |
| 1965         | 8,065            | 21,965               | 110,764            | 30,585           | 171,379            |
| 1966<br>1967 | 14,333<br>13,437 | 21,806<br>23,827     | 131,298<br>132,586 | 31,447<br>27,845 | 198,884<br>197,695 |
| 1968         | 18,703           | 20,890               | 71,500             | 35,931           | 147,024            |
| 1969         | 14,148           | 24,549               | 126,858            | 33,474           | 199,029            |
| 1970         | 12,121           | 20,998               | 136,335            | 25,255           | 194,709            |
| 1971         | 11,710           | 19,189               | 139,912            | 29,813           | 200,624            |
| 1972         | 14,564           | 34,562               | 121,443            | 29,630           | 200,199            |
| 1973         | 11,723           | 26,798               | 99,044             | 30,472           | 168,037            |
| 1974         | 8,889            | 21,195               | 120,949            | 29,738           | 180,771            |
| 1975         | 4,271            | 19,669               | 140,882            | 29,712           | 194,534            |
| 1976         | 7,280            | 19,171               | 140,407            | 23,843           | 190,701            |
| 1977         | 8,052            | 16,513               | 142,185            | 25,682           | 192,432            |
| 1978         | 7,206            | 18,708               | 144,408            | 24,399           | 194,721            |
| 1979         | 8,912            | 17,914               | 141,154            | 33,334           | 201,314            |
| 1980         | 10,062           | 18,681               | 142,513            | 24,763           | 196,019            |
| 1981         | 8,898            | 15,470               | 153,985            | 23,134           | 201,487            |
| 1982         | 9,203            | 17,898               | 129,553            | 23,134           | 179,788            |
| 1983         | 10,787           | 16,528               | 165,958            | 28,430           | 221,703            |
| 1984         | 11,378           | 18,668               | 164,865            | 29,298           | 224,209            |
| 1985         | 13,791           | Closea               | 168,680            | 42,579           | 225,050            |
| 1986         | 11,413           | 14,338               | 168,314            | 30,751           | 224,816            |
| 1987         | 12,838           | 14,066               | 181,056            | 31,015           | 238,975            |
| 1988<br>1989 | 12,845<br>13,041 | 18,478<br>17,473     | 158,978<br>176,288 | 32,570           | 222,871<br>239,889 |
| 1990         | 13,880           | 20,295               | 176,288            | 33,087<br>32,293 | 243,408            |
| 1991         | 13,940           | 24,375               | 166,340            | 31,817           | 236,472            |
| 1992         | 13,900           | 24,093               | 166,980            | 26,224           | 231,197            |
| 1993         | 12,448           | 25,701               | 166,592            | 25,279           | 230,020            |
| 1994         | 13,175           | 26,329               | 166,354            | 25,799           | 231,657            |
| 1995         | 13,250           | 26,936               | 168,639            | 28,480           | 237,305            |
| 1996         | 12,382           | 26,528               | 170,504            | 30,338           | 239,752            |
| 1997         | 12,875           | 24,937               | 189,210            | 31,563           | 258,585            |
| 1998         | 15,328           | 25,604               | 195,192            | 32,200           | 268,324            |
| 1999         | 14,390           | 26,613               | 194,784            | 30,975           | 266,762            |
| 2000         | 15,508           | 26,143               | 200,872            | 37,421           | 279,944            |
| 2001         | 13,895           | 26,766               | 196,565            | 39,062           | 276,288            |
| 2002         | 13,088           | 26,306               | 184,379            | 38,348           | 262,121            |
| 2003         | 14,139           | 28,755               | 194,497            | 38,346           | 275,737            |
| 2004         | 13,459           | 28,437               | 193,612            | 40,146           | 275,654            |
|              |                  |                      |                    |                  |                    |

#### Hourly Vehicular Volumes Grand Street Bridge - 2004

Eastbound to Queens Westbound to Brooklyn 2-Way Commuter Commercial Commuter Commercial Totals Buses Vans Trucks **Totals** Autos **Buses** Vans Trucks Vans Autos Vans **Totals** 12-1am ---------1-2am ------------------------------2-3am 3-4am 4-5am 5-6am ------------------6-7am ---------705 \*\* 7-8am 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 3-4pm 4-5pm 1,127 5-6pm 1.169 6-7pm 7-8pm ---------------8-9pm 9-10pm 10-11pm ---------------------11-12pm ---------------------------Totals 5,994 7,465 13,459 ------------------7-10am 1,053 1,755 2,538 10am-1pm 1,293 2,186 1-4pm 1,170 1,318 2,488 1,783 4-7pm 1.428 1,064 1,383 3,166 4,629 7am-7pm 3,501 3,970 1,105 5,749 10,378

<sup>\*\*</sup> Peak Volumes

### Hourly Vehicular Volumes Greenpoint Avenue Bridge - 2004

Eastbound to Queens Westbound to Brooklyn Commuter Commercial Commuter 2-Way Commercial Autos Buses Vans Trucks Vans Totals Autos **Buses** Vans Trucks Vans Totals **Totals** 12-1am 1-2am 2-3am 3-4am ---4-5am ---------------5-6am ------6-7am 1,019 1,853 7-8am 1,044 1,942 8-9am 1,866 9-10am 1,565 10-11am 1,377 11-12am 1,334 12-1pm 1,416 1-2pm 1,444 2-3pm 1,655 3-4pm 1,047 1,210 2,098 1.202 4-5pm 1.070 2,272 1,261 \*\* 5-6pm 1,085 2,346 6-7pm 1,741 7-8pm 1,180 ------------------------------8-9pm ------------------------------9-10pm ---------10-11pm 11-12pm Totals 14,928 13,509 28,437 ---7-10am 1.644 2,494 2,879 5,373 1,779 10am-1pm 1,567 2,103 1,258 2.024 4,127 2,910 1,355 2.287 1-4pm 2,294 5,197 4-7pm 2,654 3,441 2,283 2,918 6,359

6,675

1,961

10,108

Based on 1989 Classification Survey Data

1,692

10,948

8,159

7am-7pm

21,056

<sup>\*\*</sup> Peak Volumes

#### Hourly Vehicular Volumes Kosciuszko Bridge - 2004

Eastbound to Queens Westbound to Brooklyn Commuter Commercial Commuter Commercial 2-Way Vans Trucks Totals Autos **Buses** Vans Trucks Vans Autos Buses Vans Totals **Totals** 12-1am 2,656 4,627 1,971 ---------1-2am 1,866 1,252 3,118 ------------------------------2-3am 1,400 2,453 1,053 ---3-4am 1,295 1,097 2,392 4-5am 1.805 1,799 3,604 5-6am 3,149 3,721 6,870 ------------------------------6-7am 5,032 ---5.365 10,397 ---------7-8am 4,253 56 115 446 288 5,158 4,478 13 60 354 335 5,240 10,398 4,427 5.406 8-9am 20 141 491 327 3,970 13 34 375 328 4,720 10,126 9-10am 3.930 39 113 430 332 4.844 4.021 15 63 525 374 4.998 9.842 3,646 242 4,199 4,145 7 35 8,791 10-11am 20 101 190 244 161 4,592 11-12am 527 381 4,236 7 69 555 295 3,147 11 170 3,597 4,523 8,759 12-1pm 4,734 12 81 302 212 5,341 4,072 7 70 325 163 4,637 9,978 1-2pm 3,809 39 428 4,909 3,596 85 587 9,578 119 514 10 391 4,669 4,225 2-3pm 23 180 546 487 5,461 3,854 15 79 576 399 4,923 10,384 5,059 17 82 239 4,400 24 235 3-4pm 117 5,514 18 170 4,847 10,361 5,585 \*\* 4-5pm 4,740 25 134 243 443 3,953 64 318 257 10,193 16 4,608 5-6pm 4,698 19 92 331 293 5,433 4.191 8 48 323 303 4,873 10,306 6-7pm 4,570 11 74 102 273 5,030 4,100 7 18 207 268 4,600 9,630 5.333 4.365 9,698 7-8pm ------------8-9pm 5,119 3,922 9,041 ------9-10pm 4.602 3,862 8,464 10-11pm 4.073 3,851 7,924 ---------------------------11-12pm 3,610 3,068 6,678 ---------------------------Totals 101,056 92,556 193,612 ---------7-10am 12,610 1,367 947 15,408 12,469 1,254 14,958 30,366 115 369 41 157 1,037 10am-1pm 11,527 43 352 1,071 783 13,776 11,814 21 174 1,124 619 13,752 27,528 11,850 1-4pm 13,093 79 381 1,177 1,154 15,884 43 188 1,398 960 14,439 30,323 14,008 676 12,244 4-7pm 55 300 1.009 16.048 31 130 848 828 14,081 30,129

48,377

136

Based on 1989 Classification Survey Data

292

1,402

4,291

3,893

61,116

51,238

7am-7pm

118,346

4.624

3,444

57,230

649

<sup>\*\*</sup> Peak Volumes

#### **Hourly Vehicular Volumes** Pulaski Bridge - 2004

Northbound to Queens Southbound to Brooklyn Commuter Commercial Commercial 2-Way Commuter **Buses** Totals Buses Vans Trucks Totals Autos Vans Trucks Vans Autos Vans Totals 12-1am 201 388 589 1-2am 135 254 389 ---------2-3am 164 282 118 ------------------------------3-4am 143 183 326 236 4-5am 198 434 ---5-6am 571 406 977 ------6-7am 1.341 758 2,099 1,315 1.779 27 2,807 7-8am 28 62 201 682 14 1.028 173 190 115 8-9am 1,194 21 47 221 168 1,651 809 15 41 227 180 1,272 2,923 9-10am 732 17 46 211 148 1,154 584 16 26 189 145 960 2,114 10-11am 800 26 119 86 1,045 729 11 20 95 921 1,966 14 66 11-12am 574 11 46 233 162 1,026 535 14 38 213 138 938 1,964 21 12-1pm 836 10 117 89 1,073 798 12 17 103 994 2,067 64 1-2pm 833 22 29 131 94 1,109 809 21 30 58 2,133 106 1,024 711 19 42 227 1,169 2,389 2-3pm 170 724 16 41 320 119 1,220 1,056 23 18 1,298 1,299 23 30 125 1,571 2,869 3-4pm 114 87 94 4-5pm 999 11 43 128 148 1.329 1.400 14 57 194 163 1.828 3.157 3,042 5-6pm 1,102 10 50 49 129 1,340 1,399 11 38 124 130 1,702 63 967 25 6-7pm 764 13 36 91 986 10 71 1.172 2,139 80 7-8pm 757 795 1,552 ------------------------8-9pm 543 660 1,203 ---------------------9-10pm 450 562 1.012 ---------10-11pm 419 461 880 ---------369 464 11-12pm ---833 ---Totals 20,223 19,923 40,146 ------------------------7-10am 3,241 66 155 633 489 4,584 2,075 45 94 606 440 3,260 7,844 10am-1pm 2,210 35 93 469 337 3.144 2.062 37 75 411 268 2.853 5,997 2,600 472 2,832 1-4pm 64 89 351 3,576 60 101 551 271 3,815 7,391 4-7pm 2,865 34 129 240 368 3,636 3,785 35 120 389 373 4,702 8,338 1,352

10,754

390

177

1,957

Based on 1989 Classification Survey Data

199

466

1,814

1,545

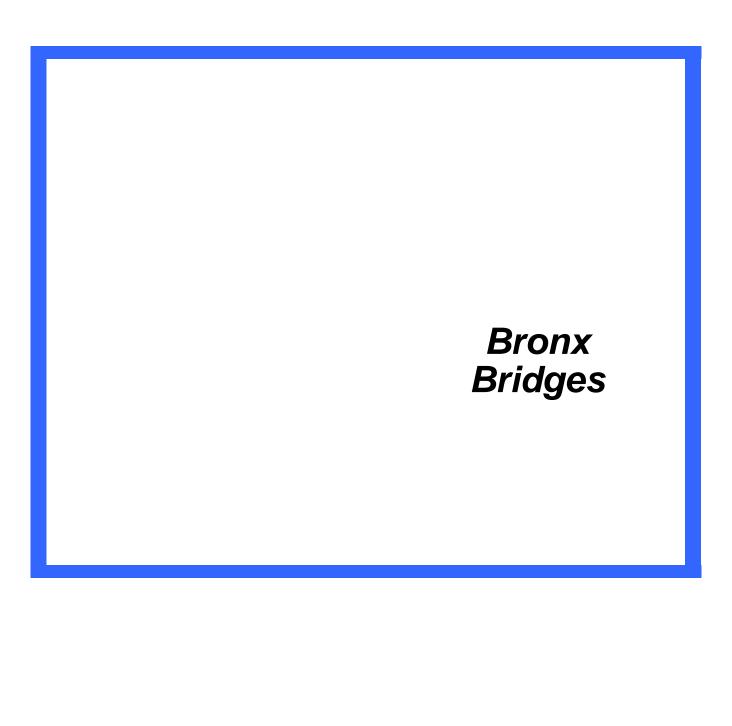
14,940

10,916

7am-7pm

29,570

14,630



#### Bronx Bridges Average Daily Traffic Volumes 1948 - 2004

| Year         | City<br>Island | East 174th<br>Street | Eastchester      | Eastern<br>Boulevard | Hutchinson<br>River Pky |
|--------------|----------------|----------------------|------------------|----------------------|-------------------------|
| 1948<br>1949 | 4,249<br>4,078 | 8,995<br>8,287       | 15,012<br>11,322 | 44,563<br>42,615     | 15,085<br>20,087        |
| 1950         | 3,712          | 10,607               | 13,715           | 48,184               | 21,513                  |
| 1951         | 3,588          | 11,187               | 14,992           | 46,804               | 21,237                  |
| 1952         | 3,474          | 11,588               | 15,964           | 68,245               | 24,247                  |
| 1953         | 4,850          | 9,996                | 14,341           | 58,492               | 32,805                  |
| 1954         | 3,969          | 11,299               | 15,079           | 78,010               | 24,706                  |
| 1955         | 3,855          | 11,533               | 14,087           | 60,892               | 27,337                  |
| 1956         | 5,377          | 8,329                | 14,715           | 63,449               | 37,155                  |
| 1957         | 5,301          | 8,873                | 13,163           | 60,323               | 33,533                  |
| 1958         | 3,925          | 6,927                | 11,192           | 56,647               | 34,067                  |
| 1959         | 4,442          | 8,539                | 11,728           | 50,787               | 31,559                  |
| 1960         | 6,071          | 9,259                | 9,527            | 67,082               | 33,048                  |
| 1961         | 7,167          | 12,863               | 5,491            | 71,734               | 34,858                  |
| 1962         | 6,030          | 12,420               | 8,590            | 85,070               | 28,330                  |
| 1963         | 7,210          | 9,190                | 10,840           | 80,840               | 35,690                  |
| 1964         | 8,930          | 10,540               | 11,480           | 94,660               | 37,790                  |
| 1965         | 9,909          | 10,272               | 12,853           | 94,167               | 48,870                  |
| 1966         | 7,512          | 10,867               | 12,000           | 88,510               | 52,483                  |
| 1967         | 8,269          | 12,583               | 12,000           | 70,612               | 47,693                  |
| 1968         | 8,508          | 12,296               | 11,472           | 82,581               | 50,427                  |
| 1969         | 9,267          | 11,034               | 13,940           | 93,850               | 48,629                  |
| 1970         | 8,996          | 10,924               | 15,977           | 106,685              | 42,887                  |
| 1971         | 8,724          | 10,473               | 26,743           | 126,757              | 49,136                  |
| 1972         | 9,433          | 10,676               | 22,801           | 145,755              | 47,487                  |
| 1973         | 12,481         | 11,909               | 21,800           | 104,293              | 51,137                  |
| 1974         | 10,009         | 9,994                | 20,724           | 124,668              | 47,737                  |
| 1975         | 11,836         | 9,356                | 20,599           | 123,389              | 51,629                  |
| 1976         | 10,112         | 9,632                | 17,351           | 124,087              | 52,498                  |
| 1977         | 10,073         | 7,493                | 17,935           | 114,478              | 51,613                  |
| 1978         | 10,559         | 7,967                | 19,595           | 122,745              | 68,239                  |
| 1979         | 10,355         | 6,203                | 16,893           | 128,836              | 47,187                  |
| 1980         | 9,922          | 6,328                | 17,644           | 126,040              | 57,192                  |
| 1981         | 10,216         | 6,037                | 17,723           | 125,133              | 59,824                  |
| 1982         | 10,447         | 6,641                | 18,848           | 125,945              | 69,091                  |
| 1983         | 11,056         | 10,252               | 18,162           | 130,492              | 59,615                  |
| 1984         | 11,715         | 10,134               | 21,448           | 136,387              | 69,925                  |
| 1985         | 10,180         | Closed               | 20,955           | 138,725              | 59,455                  |
| 1986         | 14,063         | 9,632                | 20,571           | 147,789              | 78,211                  |
| 1987         | 12,639         | 10,489               | 22,870           | 154,741              | 79,179                  |
| 1988         | 13,444         | 10,659               | 23,275           | 154,385              | 80,904                  |
| 1989         | 13,843         | 11,574               | 19,307           | 136,008              | 85,410                  |
| 1990         | 16,240         | 13,702               | 20,559           | 117,384              | 91,280                  |
| 1991         | 15,299         | 14,587               | 20,520           | 122,414              | 76,794                  |
| 1992         | 13,960         | 15,558               | 20,783           | 123,097              | 76,641                  |
| 1993         | 13,938         | 13,734               | 20,825           | 128,713              | 78,053                  |
| 1994         | 13,867         | 12,876               | 19,997           | 125,592              | 80,773                  |
| 1995         | 14,911         | 12,428               | 18,872           | 130,647              | 85,985                  |
| 1996         | 14,062         | 12,719               | 20,172           | 133,517              | 84,158                  |
| 1997         | 14,264         | 11,955               | 21,001           | 133,278              | 85,703                  |
| 1998         | 14,954         | 13,758               | 21,415           | 151,238              | 93,304                  |
| 1999         | 16,863         | 5,667                | 21,510           | 157,987              | 98,700                  |
| 2000         | 18,844         | 11,838               | 22,583           | 163,954              | 105,792                 |
| 2001         | 20,012         | 12,093               | 22,810           | 169,437              | 108,191                 |
| 2002         | 16,637         | 12,786               | 22,255           | 178,983              | 110,141                 |
| 2003         | 14,617         | 14,229               | 24,193           | 170,735              | 117,195                 |
| 2004         | 14,528         | 12,184               | 22,480           | 178,724              | 119,029                 |

#### Bronx Bridges (cont'd) Average Daily Traffic Volumes 1948 - 2004

|              |                  |                    | Westchester      |                    |
|--------------|------------------|--------------------|------------------|--------------------|
| Year         | Pelham           | Unionport          | Avenue           | Totals             |
| 1948         | 5,084            | 37,359             | 10,900           | 141,247            |
| 1949         | 5,252            | 30,278             | 13,763           | 135,682            |
| 1950         | 5,872            | 32,969             | 14,401           | 150,973            |
| 1951         | 4,357            | 30,100             | 12,962           | 145,227            |
| 1952         | 4,511            | 40,854             | 14,570           | 183,453            |
| 1953<br>1954 | 4,331<br>5,998   | 38,468<br>28,890   | 14,716<br>15,106 | 177,999<br>183,057 |
| 1955         | 4,122            | 45,292             | 13,131           | 180,249            |
| 1956         | 6,908            | 47,992             | 13,884           | 197,809            |
| 1957         | 6,824            | 45,010             | 11,004           | 184,031            |
| 1958         | 5,599            | 69,044             | 9,547            | 196,948            |
| 1959         | 5,731            | 62,198             | 13,547           | 188,531            |
| 1960         | 6,844            | 59,433             | 14,493           | 205,757            |
| 1961         | 9,857            | 107,115            | 10,820           | 259,905            |
| 1962         | 6,410            | 104,820            | 11,350           | 263,020            |
| 1963         | 9,780            | 113,680            | 24,010           | 291,240            |
| 1964<br>1965 | 11,010<br>13,345 | 134,200<br>139,724 | 19,580<br>22,218 | 328,190<br>351,358 |
| 1966         | 10,064           | 149,176            | 23,417           | 354,029            |
| 1967         | 11,025           | 149,032            | 26,768           | 337,982            |
| 1968         | 15,521           | 177,024            | 31,690           | 389,519            |
| 1969         | 11,624           | 168,297            | 22,213           | 378,854            |
| 1970         | 11,320           | 146,748            | 23,067           | 366,604            |
| 1971         | 13,098           | 135,254            | 20,855           | 391,040            |
| 1972         | 16,440           | 70,659             | 22,291           | 345,542            |
| 1973         | 10,852           | 30,459             | 29,185           | 272,116            |
| 1974         | 12,963           | 33,528             | 22,386           | 282,009            |
| 1975         | 12,992           | 34,648             | 20,323           | 284,772            |
| 1976<br>1977 | 13,284<br>12,177 | 29,903<br>33,289   | 23,448<br>21,422 | 280,315<br>268,480 |
| 1978         | 14,866           | 36,515             | 20,762           | 301,248            |
| 1979         | 12,978           | 34,574             | 20,640           | 277,666            |
| 1980         | 16,327           | 28,702             | 22,228           | 284,383            |
| 1981         | 13,210           | 34,492             | 21,298           | 287,933            |
| 1982         | Closed           | 37,935             | 22,693           | 291,600            |
| 1983         | 10,740           | 38,676             | 22,693           | 301,686            |
| 1984         | 14,862           | 41,548             | Closed           | 306,019            |
| 1985         | 12,603           | 42,915             | 26,239           | 311,072            |
| 1986<br>1987 | 15,753<br>14,498 | 45,382<br>45,450   | 24,856<br>22,624 | 356,257<br>362,490 |
| 1988         | 15,144           | 41,573             | 25,186           | 364,570            |
| 1989         | 15,644           | 43,696             | 29,445           | 354,927            |
| 1990         | 18,728           | 38,541             | 27,140           | 343,574            |
| 1991         | 20,917           | 37,842             | 30,548           | 338,921            |
| 1992         | 23,895           | 40,348             | 29,462           | 343,744            |
| 1993         | 20,235           | 40,385             | 20,893           | 336,776            |
| 1994         | 23,960           | 41,910             | 21,540           | 340,515            |
| 1995         | 23,598           | 39,811             | 21,757           | 348,009            |
| 1996<br>1007 | 24,807           | 47,953<br>47,941   | 24,117<br>25.741 | 361,505            |
| 1997<br>1998 | 22,963<br>23,264 | 47,941<br>48,975   | 25,741<br>25,863 | 362,846<br>392,771 |
| 1999         | 21,430           | 50,563             | 31,214           | 403,934            |
| 2000         | 23,007           | 49,006             | 29,922           | 424,946            |
| 2001         | 22,694           | 52,418             | 31,584           | 439,239            |
| 2002         | 15,663           | 51,347             | 29,551           | 437,363            |
| 2003         | 18,023           | 60,993             | 28,201           | 448,186            |
| 2004         | 18,292           | 60,908             | 26,861           | 453,006            |
|              |                  |                    |                  |                    |

#### Hourly Vehicular Volumes City Island Bridge - 2004

|          |       |       | Eastb   | ound   |         |        |       |       | Westk   | ound   |           |        |         |
|----------|-------|-------|---------|--------|---------|--------|-------|-------|---------|--------|-----------|--------|---------|
| _        |       | (     | Commute | er Co  | mmercia | l      |       | (     | Commute | er Co  | ommercial |        | 2-Way   |
|          | Autos | Buses |         | Trucks | Vans    | Totals | Autos | Buses | Vans    | Trucks | Vans      | Totals | Totals  |
| 12-1am   |       |       |         |        |         | 76     |       |       |         |        |           | 84     | 160     |
| 1-2am    |       |       |         |        |         | 43     |       |       |         |        |           | 34     | 77      |
| 2-3am    |       |       |         |        |         | 23     |       |       |         |        |           | 34     | 57      |
| 3-4am    |       |       |         |        |         | 15     |       |       |         |        |           | 22     | 37      |
| 4-5am    |       |       |         |        |         | 23     |       |       |         |        |           | 27     | 50      |
| 5-6am    |       |       |         |        |         | 36     |       |       |         |        |           | 89     | 125     |
| 6-7am    |       |       |         |        |         | 119    |       |       |         |        |           | 280    | 399     |
| 7-8am    | 249   | 10    | 14      | 6      | 21      | 300    | 530   | 12    | 0       | 22     | 23        | 587 ** | 887     |
| 8-9am    | 234   | 14    | 11      | 7      | 34      | 300    | 457   | 16    | 0       | 16     | 36        | 525    | 825     |
| 9-10am   | 207   | 4     | 4       | 7      | 26      | 248    | 313   | 4     | 0       | 9      | 19        | 345    | 593     |
| 10-11am  | 259   | 0     | 4       | 6      | 8       | 277    | 278   | 3     | 1       | 7      | 2         | 291    | 568     |
| 11-12am  | 329   | 5     | 10      | 6      | 34      | 384    | 295   | 5     | 0       | 2      | 3         | 305    | 689     |
| 12-1pm   | 402   | 2     | 8       | 3      | 20      | 435    | 366   | 9     | 0       | 4      | 2         | 381    | 816     |
| 1-2pm    | 405   | 2     | 1       | 6      | 19      | 433    | 399   | 2     | 0       | 6      | 19        | 426    | 859     |
| 2-3pm    | 412   | 9     | 13      | 19     | 39      | 492    | 400   | 10    | 2       | 21     | 30        | 463    | 955     |
| 3-4pm    | 489   | 10    | 5       | 7      | 12      | 523    | 451   | 14    | 0       | 5      | 9         | 479    | 1,002   |
| 4-5pm    | 516   | 2     | 22      | 10     | 41      | 591    | 401   | 2     | 0       | 7      | 24        | 434    | 1,025   |
| 5-6pm    | 584   | 6     | 12      | 7      | 21      | 630    | 413   | 4     | 0       | 9      | 17        | 443    | 1,073 * |
| 6-7pm    | 621   | 5     | 6       | 9      | 17      | 658 ** | 390   | 6     | 0       | 7      | 9         | 412    | 1,070   |
| 7-8pm    |       |       |         |        |         | 537    |       |       |         |        |           | 399    | 936     |
| 8-9pm    |       |       |         |        |         | 440    |       |       |         |        |           | 384    | 824     |
| 9-10pm   |       |       |         |        |         | 337    |       |       |         |        |           | 346    | 683     |
| 10-11pm  |       |       |         |        |         | 219    |       |       |         |        |           | 279    | 498     |
| 11-12pm  |       |       |         |        |         | 132    |       |       |         |        |           | 188    | 320     |
| Totals   |       |       |         |        |         | 7,271  |       |       |         |        |           | 7,257  | 14,528  |
| 7-10am   | 690   | 28    | 29      | 20     | 81      | 848    | 1,300 | 32    | 0       | 47     | 78        | 1,457  | 2,305   |
| 10am-1pm | 990   | 7     | 22      | 15     | 62      | 1,096  | 939   | 17    | 1       | 13     | 7         | 977    | 2,073   |
| 1-4pm    | 1,306 | 21    | 19      | 32     | 70      | 1,448  | 1,250 | 26    | 2       | 32     | 58        | 1,368  | 2,816   |
| 4-7pm    | 1,721 | 13    | 40      | 26     | 79      | 1,879  | 1,204 | 12    | 0       | 23     | 50        | 1,289  | 3,168   |
| 7am-7pm  | 4,707 | 69    | 110     | 93     | 292     | 5,271  | 4,693 | 87    | 3       | 115    | 193       | 5,091  | 10,362  |

<sup>\*\*</sup> Peak Volumes

### Hourly Vehicular Volumes East 174th Street Bridge - 2004

Eastbound Westbound 2-Way Commuter Commercial Commuter Commercial Totals Vans Trucks **Totals** Autos **Buses** Vans Trucks Vans Autos Buses Vans **Totals** 12-1am ---------1-2am ------------------------2-3am 3-4am 4-5am 5-6am ------------------------6-7am ---------------554 \*\* 7-8am 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 3-4pm 4-5pm 5-6pm 6-7pm 7-8pm ------------------8-9pm 9-10pm 10-11pm ---------------------11-12pm ---------------------------6,422 Totals 5,762 12,184 ------------------7-10am 1,062 1,176 1,389 2,451 10am-1pm 1,683 1-4pm 1,083 1,291 1,169 2,460 1.279 2.612 4-7pm 1,467 1,012 1,145 4,694 7am-7pm 3,910 3,880 4,512 9,206

<sup>\*\*</sup> Peak Volumes

# Hourly Vehicular Volumes Eastchester Bridge - 2004

|          |       |       | North   | bound  |         |        |       |       | Sou     | thbound |         |          |          |
|----------|-------|-------|---------|--------|---------|--------|-------|-------|---------|---------|---------|----------|----------|
| _        |       | (     | Commute | er Co  | mmercia | al     |       | (     | Commute | er Co   | ommerci | al       | 2-Way    |
|          | Autos | Buses | Vans    | Trucks | Vans    | Totals | Autos | Buses | Vans    | Trucks  | Vans    | Totals   | Totals   |
| 12-1am   |       |       |         |        |         | 88     |       |       |         |         |         | 100      | 188      |
| 1-2am    |       |       |         |        |         | 61     |       |       |         |         |         | 56       | 117      |
| 2-3am    |       |       |         |        |         | 48     |       |       |         |         |         | 44       | 92       |
| 3-4am    |       |       |         |        |         | 53     |       |       |         |         |         | 47       | 100      |
| 4-5am    |       |       |         |        |         | 56     |       |       |         |         |         | 77       | 133      |
| 5-6am    |       |       |         |        |         | 141    |       |       |         |         |         | 174      | 315      |
| 6-7am    |       |       |         |        |         | 340    |       |       |         |         |         | 365      | 705      |
| 7-8am    | 514   | 17    | 0       | 30     | 23      | 584    | 567   | 10    | 10      | 78      | 22      | 687      | 1,271    |
| 8-9am    | 607   | 15    | 0       | 53     | 42      | 717    | 536   | 14    | 16      | 88      | 29      | 683      | 1,400    |
| 9-10am   | 444   | 15    | 0       | 37     | 30      | 526    | 399   | 19    | 20      | 124     | 44      | 606      | 1,132    |
| 10-11am  | 508   | 7     | 0       | 22     | 18      | 555    | 528   | 8     | 15      | 38      | 20      | 609      | 1,164    |
| 11-12am  | 530   | 5     | 0       | 33     | 38      | 606    | 506   | 9     | 17      | 87      | 40      | 659      | 1,265    |
| 12-1pm   | 660   | 8     | 0       | 13     | 23      | 704    | 669   | 8     | 6       | 32      | 19      | 734      | 1,438    |
| 1-2pm    | 670   | 8     | 0       | 13     | 19      | 710    | 680   | 8     | 4       | 40      | 12      | 744      | 1,454    |
| 2-3pm    | 653   | 15    | 0       | 34     | 23      | 725    | 616   | 11    | 15      | 114     | 30      | 786      | 1,511    |
| 3-4pm    | 737   | 13    | 0       | 20     | 19      | 789 ** | 702   | 16    | 9       | 44      | 12      | 783      | 1,572    |
| 4-5pm    | 704   | 9     | 0       | 23     | 36      | 772    | 756   | 9     | 16      | 42      | 21      | 844      | 1,616    |
| 5-6pm    | 708   | 9     | 0       | 25     | 37      | 779    | 902   | 11    | 15      | 46      | 34      | 1,008 ** | 1,787 ** |
| 6-7pm    | 642   | 11    | 0       | 13     | 14      | 680    | 772   | 19    | 10      | 38      | 10      | 849      | 1,529    |
| 7-8pm    |       |       |         |        |         | 552    |       |       |         |         |         | 677      | 1,229    |
| 8-9pm    |       |       |         |        |         | 365    |       |       |         |         |         | 498      | 863      |
| 9-10pm   |       |       |         |        |         | 274    |       |       |         |         |         | 395      | 669      |
| 10-11pm  |       |       |         |        |         | 238    |       |       |         |         |         | 311      | 549      |
| 11-12pm  |       |       |         |        |         | 153    |       |       |         |         |         | 228      | 381      |
| Totals   |       |       |         |        |         | 10,516 |       |       |         |         |         | 11,964   | 22,480   |
| 7-10am   | 1,565 | 47    | 0       | 120    | 95      | 1,827  | 1,502 | 43    | 46      | 290     | 95      | 1,976    | 3,803    |
| 10am-1pm | 1,698 | 20    | 0       | 68     | 79      | 1,865  | 1,703 | 25    | 38      | 157     | 79      | 2,002    | 3,867    |
| 1-4pm    | 2,060 | 36    | 0       | 67     | 61      | 2,224  | 1,998 | 35    | 28      | 198     | 54      | 2,313    | 4,537    |
| 4-7pm    | 2,054 | 29    | 0       | 61     | 87      | 2,231  | 2,430 | 39    | 41      | 126     | 65      | 2,701    | 4,932    |
| 7am-7pm  | 7,377 | 132   | 0       | 316    | 322     | 8,147  | 7,633 | 142   | 153     | 771     | 293     | 8,992    | 17,139   |

<sup>\*\*</sup> Peak Volumes

# Hourly Vehicular Volumes Eastern Boulevard Bridge - 2004

Eastbound Westbound Commuter Commercial Commuter Commercial 2-Way **Buses** Vans Totals **Buses** Vans Trucks **Totals** Autos Vans Trucks Autos Vans **Totals** 12-1am 2,212 1,404 3,616 1-2am 1,354 957 ---2,311 ------2-3am 861 640 1,501 ------------------------------3-4am 710 691 1.401 817 4-5am 1,079 1,896 5-6am 1,295 2.640 3,935 6-7am 2,699 5.649 8,348 4,004 6,844 7-8am 3,386 51 63 380 5.944 108 129 382 281 10,848 124 8-9am 3,675 107 99 521 220 4,622 5,358 76 143 456 293 6,326 10,948 4.045 9-10am 3,112 98 112 521 202 4,490 46 84 327 238 5,185 9,230 10-11am 3,393 24 50 278 106 3,851 4,077 35 53 161 96 4,422 8,273 11-12am 3,068 15 139 410 247 3,879 3,772 26 105 292 205 4,400 8,279 209 4,222 27 12-1pm 3,803 4,129 33 173 8,683 21 68 121 99 4,461 1-2pm 4,298 28 151 4,564 4,178 54 57 170 4,519 9,083 86 60 42 4,289 93 355 2-3pm 4,692 0 264 194 5,192 117 136 4,990 10,182 6,028 43 0 161 6,333 4,792 69 43 186 11,476 3-4pm 101 53 5,143 4-5pm 5.969 39 0 315 198 6,521 \*\* 4.436 108 128 295 173 5.140 11.661 5-6pm 6,110 63 0 96 177 6,446 4,458 34 135 172 86 4,885 11,331 5,755 6-7pm 5,416 44 0 150 39 81 90 62 4,743 10,498 145 4,471 7-8pm 4,964 4,054 9,018 ---------8-9pm 4,348 3,288 7,636 ------------9-10pm 3.988 3,038 7.026 6,535 10-11pm 3,856 2,679 ------11-12pm 2,888 ---2,121 5,009 89,298 Totals 89,426 178,724 ------------------------7-10am 10,173 256 274 1,422 546 12,671 15,792 230 356 1,165 812 18,355 31,026 897 11,978 10am-1pm 10,264 60 257 474 11,952 88 191 626 400 13,283 25,235 15,018 576 16,089 13,259 240 14,652 1-4pm 113 381 193 711 249 30,741 1 4-7pm 17,495 146 0 561 520 18,722 13,365 181 344 557 321 14,768 33,490 52,950 575 532 3,456 1,921 59,434 54,394 739 1,084 3,059 1,782 61,058 120,492 7am-7pm

Based on 1989 Classification Survey Data

<sup>\*\*</sup> Peak Volumes

## Hourly Vehicular Volumes Hutchinson River Parkway Bridge - 2004

Northbound Southbound Commuter Commercial Commuter Commercial 2-Way Vans Trucks Vans Totals Vans Trucks **Totals Buses** Buses Vans Totals Autos Autos 12-1am 1,043 674 1,717 ------------1-2am 547 319 866 2-3am 272 199 471 ---------------------------3-4am 202 181 383 266 532 4-5am 798 ------863 2.288 5-6am 1.425 ------6-7am 2.616 5,479 2,863 ------------------3,998 4.328 8 3,574 7,902 7-8am 4 103 149 74 3,453 1 17 95 4,365 7 8-9am 4,088 7 73 141 56 3,445 2 5 68 3,527 7,892 7 12 2,914 9-10am 2,875 80 102 65 3,123 2,801 11 6,037 83 3 6 10-11am 2,599 3 36 60 33 2,731 2,623 6 28 2,666 5,397 2,620 0 9 11-12am 2,344 0 107 103 66 2,583 11 122 2,725 5,345 12-1pm 2,425 0 30 51 24 2,530 2,760 0 3 3 39 2,805 5,335 6 8 1-2pm 2,553 6 47 65 30 2,701 2,963 0 64 3,041 5,742 2-3pm 2,918 4 115 163 63 3,263 3,263 6 14 6 113 3,402 6,665 3,733 3 56 72 35 3,899 3,871 12 3 3 3,962 7,861 3-4pm 73 4,447 \*\* 4-5pm 3,476 1 82 218 77 3,854 4,348 0 19 0 8,301 60 3,885 4,262 0 11 9 8,263 5-6pm 3,609 1 81 134 96 4,378 6-7pm 3,529 0 73 101 60 3,763 4,106 0 17 3 4,212 7,975 86 7-8pm 3,405 3,484 6,889 ---------------8-9pm 2,804 2,744 5,548 ---2,468 2,396 4,864 9-10pm ---------------------2,277 1,965 4,242 10-11pm 1,571 11-12pm 1,198 2,769 ---------------------------Totals 59,396 59,633 119,029 ---------------------------7-10am 10.961 10.015 12 256 392 195 11.816 9.699 10 34 26 246 21.831 7,368 7.881 3 8,196 10am-1pm 3 173 214 123 7,966 18 20 189 16,077 9,204 9.863 10.097 9 1-4pm 13 218 300 128 24 25 250 10,405 20,268 2 453 0 12 4-7pm 10,614 236 197 11,502 12,716 47 262 13,037 24,539 7am-7pm 38,147 30 883 1,359 643 41,062 40,478 37 124 67 947 41,653 82,715

Based on 1989 Classification Survey Data

<sup>\*\*</sup> Peak Volumes

#### Hourly Vehicular Volumes Pelham Bridge - 2004

Northbound Southbound Commuter Commercial Commuter Commercial 2-Way **Buses** Vans Trucks Vans Totals **Buses** Vans Trucks Vans **Totals Totals** Autos Autos 12-1am 1-2am ------------------2-3am ---------3-4am ---4-5am 5-6am ---6-7am ---------------------------7-8am 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 1,056 2-3pm 1,148 696 \*\* 1,345 3-4pm 1,226 4-5pm 749 \*\* 5-6pm 1,429 6-7pm 1,361 7-8pm 1,271 ---8-9pm 1,177 ---------1,045 9-10pm 10-11pm ---11-12pm ---------------------Totals 8,391 9,901 18,292 7-10am 1,073 1,291 2,171 10am-1pm 1,103 1,133 2,236 1-4pm 1,592 1,763 1,607 1,786 3,549 4-7pm 1,898 2,066 1,769 1,950 4,016 5,201 11,972 7am-7pm 5,812 5,415 6,160

Based on 1989 Classification Survey Data

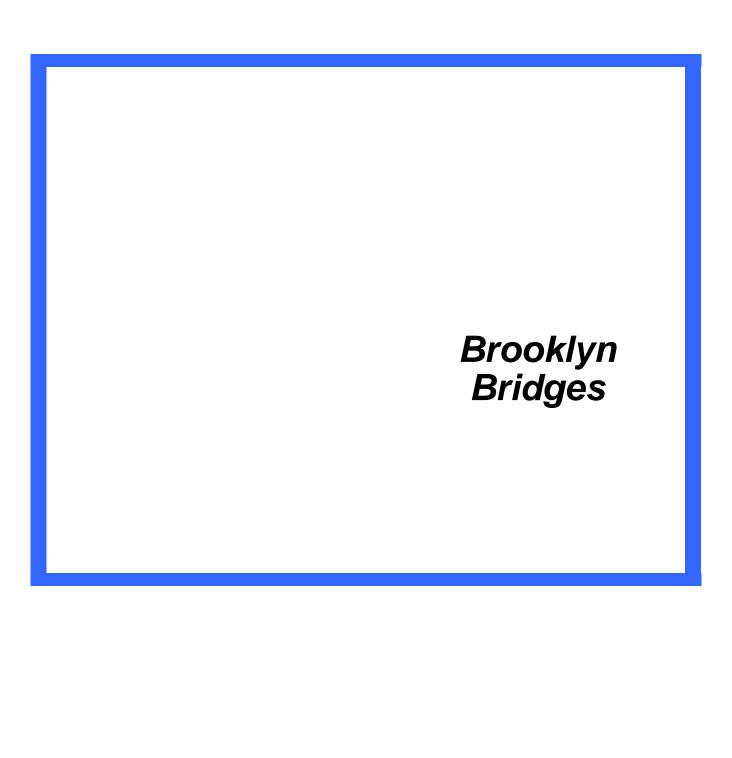
#### Hourly Vehicular Volumes Unionport Bridge - 2004

Eastbound Westbound Commuter Commercial Commuter Commercial 2-Way **Buses** Vans Trucks Vans Totals Buses Vans Trucks Vans **Totals Totals** Autos Autos 381 12-1am 321 702 1-2am 230 202 432 ------------------300 2-3am 153 147 ---------------3-4am 184 147 331 ------223 4-5am 241 464 5-6am 455 722 1,177 ---6-7am 1,031 1,705 2,736 ------------------------------2,670 \*\* 7-8am 1,494 39 22 125 41 1,721 2,491 48 3 53 75 4,391 8-9am 1,605 39 50 72 1,903 2,242 28 0 78 56 4,307 137 2,404 1,205 9-10am 965 26 48 102 1,499 20 0 44 58 1,621 2,826 64 0 10-11am 17 1,228 17 2,682 1,085 16 70 40 1,368 19 50 1,454 11-12am 56 153 74 1,378 1,315 0 85 102 1,518 2,896 1,081 14 16 0 29 33 12-1pm 1,314 14 83 38 1,478 1,451 10 29 1,523 3,001 1-2pm 1,247 41 149 81 1,529 1,401 21 1 101 1,625 3,154 11 101 52 2,035 0 3,991 2-3pm 1,742 19 158 64 1,719 28 103 106 1,956 4,428 \*\* 2,169 21 2,323 0 2,105 3-4pm 17 73 43 1,941 48 47 69 0 4-5pm 2,006 20 42 160 78 2,306 1,858 29 70 139 2,096 4,402 2.359 \*\* 5-6pm 2,083 27 53 152 44 1.840 29 0 64 77 2,010 4,369 6-7pm 1.768 48 37 1.993 1.738 19 0 33 3,838 35 105 55 1.845 7-8pm 1.644 3,109 1,465 ---1,309 8-9pm 1,156 2,465 ---------------------1,090 2,109 9-10pm ---1,019 835 767 1,602 10-11pm ---587 11-12pm 609 1,196 ------------------------Totals 29,580 31,328 60,908 7-10am 4,064 104 120 364 177 4,829 6,232 96 3 175 189 6,695 11,524 10am-1pm 3,480 44 102 306 152 4,084 4,134 45 0 135 181 4,495 8,579 1 1-4pm 5,158 47 114 380 188 5,887 5,061 97 251 276 5,686 11,573 4-7pm 5,857 82 143 417 159 6,658 5,436 77 0 167 271 5,951 12,609 18,559 4 728 7am-7pm 277 479 1,467 676 21,458 20,863 315 917 22,827 44,285

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes Westchester Avenue Bridge - 2004

Eastbound Westbound Commercial Commuter Commuter Commercial 2-Way Buses Vans Trucks Vans Totals Buses Vans Trucks Vans **Totals Totals** Autos Autos 12-1am 1-2am ---------------2-3am ---------3-4am 4-5am 5-6am 6-7am ---------------------------7-8am 1,104 1,266 \*\* 2,007 2,042 8-9am 1,059 1,219 1,535 9-10am 10-11am 1,336 11-12am 1,408 12-1pm 1,480 1-2pm 1,526 1,747 2-3pm 1,795 3-4pm 4-5pm 1,818 1.000 \*\* 5-6pm 1,649 6-7pm 1,542 7-8pm 1,261 ---1,026 8-9pm ------9-10pm 10-11pm ---11-12pm ------------------Totals 14,179 12,682 26,861 7-10am 1,976 2,287 2,858 3,297 5,584 10am-1pm 2,005 2,233 1,741 1,991 4,224 1-4pm 2,293 2,606 2,211 2,462 5,068 4-7pm 2,669 2,926 1,824 2,083 5,009 19,885 7am-7pm 8,943 10,052 8,634 9,833



## Brooklyn Bridges Average Daily Traffic Volumes 1948 - 2004

| Year         | Carroll<br>Street   | Cropsey<br>Avenue | Hamilton<br>Avenue | Metropolitan<br>Avenue | Mill<br>Basin      |
|--------------|---------------------|-------------------|--------------------|------------------------|--------------------|
| 1948         | 1,401               | 11,745            | 12,135             | 8,739                  | 21,773             |
| 1949         | 4,805               | 12,913            | 16,071             | 12,476                 | 23,357             |
| 1950         | 1,203               | 15,024            | 20,149             | 14,285                 | 32,787             |
| 1951         | 1,444               | 10,362            | 24,893             | 15,496                 | 44,285             |
| 1952         | 1,192               | 11,495            | 23,642             | 15,150                 | 38,025             |
| 1953         | 2,951               | 12,278            | 33,379             | 13,843                 | 36,209             |
| 1954         | 1,962               | 13,945            | 36,121             | 18,208                 | 40,604             |
| 1955         | 2,831               | 13,184            | 24,415             | 15,536                 | 43,011             |
| 1956<br>1957 | 2,574<br>1,917      | 15,832<br>11,836  | 29,676<br>22,862   | 11,637<br>12,293       | 57,515             |
| 1957         | 1,805               | 17,462            | 31,543             | 25,777                 | 63,310<br>60,384   |
| 1959         | 1,706               | 15,671            | 35,085             | 15,507                 | 61,730             |
| 1960         | 2,553               | 15,417            | 42,584             | 18,892                 | 58,929             |
| 1961         | 7,628               | 16,968            | 43,232             | 20,446                 | 64,142             |
| 1962         | 6,360               | 18,060            | 41,380             | 21,120                 | 71,540             |
| 1963         | 2,120               | 17,620            | 36,530             | 24,130                 | 75,610             |
| 1964         | 2,959               | 15,240            | 39,970             | 23,850                 | 80,270             |
| 1965         | 3,798               | 21,902            | 35,795             | 22,742                 | 110,566            |
| 1966         | 6,364               | 17,443            | 42,426             | 21,634                 | 90,769             |
| 1967         | 1,948               | 20,440            | 40,733             | 25,101                 | 75,168             |
| 1968         | 2,762               | 18,774<br>22,292  | 42,869             | 31,457<br>28,604       | 105,979            |
| 1969<br>1970 | 1,965<br>2,671      | 20,257            | 42,400<br>38,078   | 29,977                 | 111,694<br>102,964 |
| 1971         | 1,939               | 21,147            | 33,847             | 27,803                 | 110,834            |
| 1972         | 1,207               | 23,597            | 39,219             | 31,130                 | 102,346            |
| 1973         | 1,191               | 22,986            | 36,136             | 23,374                 | 98,553             |
| 1974         | 1,224               | 22,755            | 37,097             | 27,719                 | 107,455            |
| 1975         | 1,108               | 21,808            | 39,784             | 22,148                 | 102,628            |
| 1976         | 1,245               | 19,503            | 39,321             | 23,287                 | 106,744            |
| 1977         | 1,382               | 21,040            | 34,602             | 26,732                 | 103,508            |
| 1978         | 1,126               | 22,068            | 36,443             | 21,457                 | 104,174            |
| 1979         | 1,565               | 21,254            | 38,412             | 24,152                 | 118,242            |
| 1980<br>1981 | <i>Closed</i> 1,112 | 21,462            | 36,084             | 29,717<br>30,190       | 109,782<br>106,378 |
| 1982         | 1,112               | 21,504<br>21,005  | 35,510<br>43,044   | 34,135                 | 114,600            |
| 1983         | 1,980               | 27,847            | 44,047             | 31,444                 | 112,211            |
| 1984         | 1,432               | 32,770            | 48,204             | 40,936                 | 110,458            |
| 1985         | 1,876               | 30,960            | 54,612             | 43,173                 | 108,974            |
| 1986         | Closed              | 31,998            | 48,274             | 35,372                 | 114,876            |
| 1987         | Closed              | 30,134            | 43,715             | 34,830                 | 122,013            |
| 1988         | Closed              | 32,341            | 51,721             | 37,682                 | 114,287            |
| 1989         | 606                 | 30,967            | 54,063             | 35,446                 | 134,708            |
| 1990         | 1,153               | 30,592            | 52,170             | 37,289                 | 142,142            |
| 1991         | 1,175               | 25,542            | 39,911             | 39,576                 | 134,410            |
| 1992<br>1993 | 1,387<br>1,125      | 28,230<br>27,878  | 56,227<br>56,655   | 37,510<br>36,538       | 130,737<br>130,805 |
| 1994         | 1,132               | 27,376<br>27,181  | 50,309             | 36,026                 | 134,605            |
| 1995         | 1,164               | 29,015            | 51,646             | 37,581                 | 134,540            |
| 1996         | 1,244               | 26,933            | 70,385             | 39,662                 | 132,853            |
| 1997         | 1,215               | 28,590            | 69,144             | 37,966                 | 135,482            |
| 1998         | 1,270               | 30,323            | 59,211             | 38,271                 | 146,940            |
| 1999         | 1,248               | 31,076            | 67,259             | 38,752                 | 147,347            |
| 2000         | 1,265               | 30,334            | 59,557             | 41,238                 | 145,070            |
| 2001         | 1,280               | 33,725            | 60,808             | 39,930                 | 146,602            |
| 2002         | 1,248               | 33,325            | 60,075<br>50,108   | 39,944                 | 142,105            |
| 2003<br>2004 | 1,150<br>1,099      | 35,137<br>35,104  | 59,108<br>60,240   | 40,284<br>38,529       | 141,212<br>145,760 |
| 2004         | 1,099               | 55,104            | 00,240             | 30,329                 | 140,100            |

## Brooklyn Bridges (cont'd) Average Daily Traffic Volumes 1948 - 2004

| Year         | Ninth<br>Street  | Stillwell<br>Avenue | Third<br>Avenue  | Third<br>Street | Union<br>Street | Totals             |
|--------------|------------------|---------------------|------------------|-----------------|-----------------|--------------------|
| 1948         | 6,006            | 4,295               | 17,220           | 3,438           | 5,165           | 91,917             |
| 1949         | 5,640            | 4,911               | 19,048           | 5,716           | 6,502           | 111,439            |
| 1950         | 6,895            | 5,832               | 13,068           | 4,976           | 7,839           | 122,058            |
| 1951         | 7,159            | 5,312               | 19,114           | 4,852           | 7,207           | 140,124            |
| 1952         | 7,376            | 5,094               | 14,303           | 3,711           | 7,062           | 127,050            |
| 1953         | 10,329           | 4,142               | 15,517           | 3,463           | 9,617           | 141,728            |
| 1954         | 9,904            | 4,788               | 17,630           | 3,215           | 8,500           | 154,877            |
| 1955         | 7,704            | 5,706               | 15,144           | 5,907           | 7,469           | 140,907            |
| 1956         | 8,715            | 5,418               | 14,112           | 4,401           | 7,878           | 157,758            |
| 1957         | 8,897            | 4,523               | 14,113           | 4,742           | 9,263           | 153,756            |
| 1958         | 8,347            | 4,903               | 15,098           | 5,814           | 8,404           | 179,537            |
| 1959         | 7,906            | 5,239               | 16,808           | 6,887           | 9,969           | 176,508            |
| 1960         | 7,465            | 5,511               | 14,821           | 6,227           | 9,596           | 181,995            |
| 1961         | 13,330           | 5,462               | 16,794           | 9,747           | 9,524           | 207,273            |
| 1962         | 14,170           | 6,340               | 15,260           | 13,550          | 9,452           | 217,232            |
| 1963         | 13,270           | 6,280               | 17,700           | 7,970           | 9,380           | 210,610            |
| 1964         | 11,430           | 6,410               | 16,230           | 6,850           | 10,260          | 213,469            |
| 1965         | 9,540            | 6,887               | 15,196           | 5,992           | 9,152           | 241,570            |
| 1966         | 9,418            | 6,874               | 14,008           | 5,682           | 8,898           | 223,516            |
| 1967         | 9,871            | 6,708               | 16,560           | 5,570           | 9,208           | 211,307            |
| 1968         | 12,484           | 6,661               | 13,141           | 5,680<br>5,537  | 8,860           | 248,667            |
| 1969<br>1970 | 9,363<br>8,855   | 7,070<br>7,091      | 13,798<br>14,413 | 5,527<br>5,650  | 8,402<br>8,064  | 251,115<br>238,020 |
| 1970         | 9,952            | 7,091               | 13,473           | 5,991           | 8,786           | 241,116            |
| 1971         | 9,581            | 6,577               | 12,794           | 5,806           | 7,834           | 240,091            |
| 1973         | 8,939            | 6,983               | 13,477           | 6,124           | 8,845           | 226,608            |
| 1974         | 8,752            | 7,245               | 15,000           | 5,792           | 7,723           | 240,762            |
| 1975         | 9,313            | 9,925               | 14,576           | 5,145           | 8,188           | 234,623            |
| 1976         | 9,634            | 9,568               | 14,752           | 5,361           | 8,001           | 237,416            |
| 1977         | 11,123           | 6,868               | 13,692           | 4,328           | 4,842           | 228,117            |
| 1978         | 8,892            | 7,591               | 14,743           | 5,425           | 4,708           | 226,627            |
| 1979         | 10,095           | 8,764               | 14,448           | 5,629           | 4,457           | 247,018            |
| 1980         | 11,485           | 7,629               | 14,444           | 6,420           | 5,659           | 242,682            |
| 1981         | 9,726            | 7,595               | 17,780           | 5,759           | 4,555           | 240,109            |
| 1982         | 11,350           | 7,541               | 16,865           | Closed          | 8,277           | 258,284            |
| 1983         | 10,893           | Closed              | 16,521           | Closed          | 8,415           | 253,358            |
| 1984         | 12,578           | Closea              | 18,787           | Closed          | 9,418           | 274,583            |
| 1985         | 9,438            | Closea              | 17,304           | Closed          | 9,229           | 275,566            |
| 1986         | 12,263           | Closed              | 15,235           | 2,426           | 11,374          | 271,818            |
| 1987         | 8,762            | Closea              | 20,029           | 5,626           | 5,971           | 271,080            |
| 1988         | 11,005           | Closea              | 20,971           | 7,189           | 6,535           | 281,731            |
| 1989         | 9,571            | Closea              | 22,230           | 6,232           | 6,042           | 299,865            |
| 1990         | 13,062           | 5,334               | 24,548           | 7,745           | 6,087           | 320,122            |
| 1991         | 11,444           | 8,574               | Closed           | 7,411           | 5,142           | 273,185            |
| 1992         | 11,059           | 8,730               | 23,610           | 6,972           | 5,622           | 310,084            |
| 1993         | 9,358            | 9,367               | 24,055           | 7,743           | 4,971           | 308,495            |
| 1994<br>1995 | 9,666<br>Closed  | 9,186<br>9,889      | 21,745           | 7,978<br>9,556  | 4,307<br>4,802  | 302,135<br>300,832 |
| 1995         | Closea<br>Closea | 9,889               | 22,639<br>21,664 | 9,556<br>9,048  | 4,802           |                    |
| 1990         | Closed           | 9,602               | 21,129           | 10,400          | 4,562<br>4,573  | 315,395<br>318,101 |
| 1997         | Closed           | 9,802               | 20,597           | 11,378          | 4,873<br>4,824  | 322,057            |
| 1999         | 5,544            | 9,478               | 21,647           | 10,849          | 5,061           | 338,261            |
| 2000         | 7,355            | 9,103               | 22.084           | 10,231          | 4,853           | 331,090            |
| 2001         | 7,898            | 9,246               | 21,461           | 9,855           | 4,599           | 335,404            |
| 2002         | 8,399            | 9,534               | 20,538           | 10,146          | 4,435           | 329,749            |
| 2002         | 9,406            | 10,138              | 20,538           | 10,010          | 4,843           | 331,805            |
| 2004         | 10,216           | 10,436              | 20,292           | 9,846           | 4,399           | 335,921            |
| 200 1        | 10,210           | 10,100              | 20,202           | 0,010           | 1,500           | 000,021            |

### Hourly Vehicular Volumes Carroll Street Bridge - 2004

Eastbound Westbound Commercial Commuter Commuter Commercial Grand Totals **Buses** Vans Trucks Vans Totals Buses Vans Trucks Vans **Totals** Autos Autos 12-1am 1-2am 2-3am 3-4am ---4-5am Bridge is 1-way eastbound 5-6am ------6-7am 7-8am 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 3-4pm 4-5pm 5-6pm 6-7pm 7-8pm 8-9pm 9-10pm ---10-11pm ---11-12pm 1,099 1,099 Totals ------------------7-10am 10am-1pm 1-4pm 4-7pm 7am-7pm 

Based on 1989 Classification Survey Data

## Hourly Vehicular Volumes Cropsey Avenue Bridge - 2004

| _        |        |       | North  | bound  |         |          | Southbound |       |         |        |         |          |          |
|----------|--------|-------|--------|--------|---------|----------|------------|-------|---------|--------|---------|----------|----------|
| •        |        | (     | Commut | er Co  | ommerci | al       |            | (     | Commute | er Co  | ommerci | al       | 2-Way    |
|          | Autos  | Buses | Vans   | Trucks | Vans    | Totals   | Autos      | Buses | Vans    | Trucks | Vans    | Totals   | Totals   |
| 12-1am   |        |       |        |        |         | 202      |            |       |         |        |         | 270      | 472      |
| 1-2am    |        |       |        |        |         | 116      |            |       |         |        |         | 153      | 269      |
| 2-3am    |        |       |        |        |         | 86       |            |       |         |        |         | 93       | 179      |
| 3-4am    |        |       |        |        |         | 76       |            |       |         |        |         | 94       | 170      |
| 4-5am    |        |       |        |        |         | 141      |            |       |         |        |         | 128      | 269      |
| 5-6am    |        |       |        |        |         | 374      |            |       |         |        |         | 561      | 935      |
| 6-7am    |        |       |        |        |         | 744      |            |       |         |        |         | 877      | 1,621    |
| 7-8am    | 911    | 80    | 2      | 48     | 89      | 1,130    | 979        | 105   | 0       | 57     | 40      | 1,181    | 2,311    |
| 8-9am    | 943    | 62    | 3      | 58     | 64      | 1,130    | 1,060      | 86    | 3       | 58     | 42      | 1,249 ** | 2,379    |
| 9-10am   | 738    | 49    | 1      | 49     | 87      | 924      | 707        | 84    | 3       | 50     | 68      | 912      | 1,836    |
| 10-11am  | 730    | 41    | 0      | 26     | 37      | 834      | 710        | 24    | 0       | 32     | 36      | 802      | 1,636    |
| 11-12am  | 724    | 25    | 0      | 66     | 59      | 874      | 702        | 26    | 1       | 73     | 79      | 881      | 1,755    |
| 12-1pm   | 840    | 45    | 0      | 31     | 40      | 956      | 873        | 30    | 0       | 27     | 23      | 953      | 1,909    |
| 1-2pm    | 849    | 63    | 0      | 32     | 44      | 988      | 979        | 37    | 1       | 25     | 42      | 1,084    | 2,072    |
| 2-3pm    | 923    | 89    | 3      | 70     | 83      | 1,168    | 1,021      | 58    | 0       | 69     | 85      | 1,233    | 2,401 ** |
| 3-4pm    | 1,031  | 97    | 1      | 33     | 42      | 1,204 ** | 994        | 79    | 2       | 26     | 55      | 1,156    | 2,360    |
| 4-5pm    | 1,009  | 46    | 0      | 61     | 76      | 1,192    | 1,014      | 57    | 0       | 28     | 95      | 1,194    | 2,386    |
| 5-6pm    | 970    | 12    | 0      | 61     | 74      | 1,117    | 998        | 21    | 9       | 46     | 103     | 1,177    | 2,294    |
| 6-7pm    | 807    | 20    | 0      | 33     | 44      | 904      | 940        | 7     | 0       | 15     | 68      | 1,030    | 1,934    |
| 7-8pm    |        |       |        |        |         | 774      |            |       |         |        |         | 929      | 1,703    |
| 8-9pm    |        |       |        |        |         | 594      |            |       |         |        |         | 796      | 1,390    |
| 9-10pm   |        |       |        |        |         | 500      |            |       |         |        |         | 652      | 1,152    |
| 10-11pm  |        |       |        |        |         | 445      |            |       |         |        |         | 503      | 948      |
| 11-12pm  |        |       |        |        |         | 327      |            |       |         |        |         | 396      | 723      |
| Totals   |        |       |        |        |         | 16,800   |            |       |         |        |         | 18,304   | 35,104   |
| 7-10am   | 2,592  | 191   | 6      | 155    | 240     | 3,184    | 2,746      | 275   | 6       | 165    | 150     | 3,342    | 6,526    |
| 10am-1pm | 2,294  | 111   | 0      | 123    | 136     | 2,664    | 2,285      | 80    | 1       | 132    | 138     | 2,636    | 5,300    |
| 1-4pm    | 2,803  | 249   | 4      | 135    | 169     | 3,360    | 2,994      | 174   | 3       | 120    | 182     | 3,473    | 6,833    |
| 4-7pm    | 2,786  | 78    | 0      | 155    | 194     | 3,213    | 2,952      | 85    | 9       | 89     | 266     | 3,401    | 6,614    |
| 7am-7pm  | 10,475 | 629   | 10     | 568    | 739     | 12,421   | 10,977     | 614   | 19      | 506    | 736     | 12,852   | 25,273   |

Based on 1989 Classification Survey Data

## Hourly Vehicular Volumes Hamilton Avenue Bridge - 2004

| _        | Northbound |       |         |        |         |          | Southbound |       |         |        |         |          |          |
|----------|------------|-------|---------|--------|---------|----------|------------|-------|---------|--------|---------|----------|----------|
| _        |            | (     | Commute | er C   | ommerci | al       |            |       | Commute | er C   | ommerci | al       | 2-Way    |
|          | Autos      | Buses | Vans    | Trucks | Vans    | Totals   | Autos      | Buses | Vans    | Trucks | Vans    | Totals   | Totals   |
| 12-1am   |            |       |         |        |         | 317      |            |       |         |        |         | 294      | 611      |
| 1-2am    |            |       |         |        |         | 200      |            |       |         |        |         | 167      | 367      |
| 2-3am    |            |       |         |        |         | 188      |            |       |         |        |         | 110      | 298      |
| 3-4am    |            |       |         |        |         | 179      |            |       |         |        |         | 91       | 270      |
| 4-5am    |            |       |         |        |         | 317      |            |       |         |        |         | 202      | 519      |
| 5-6am    |            |       |         |        |         | 1,479    |            |       |         |        |         | 421      | 1,900    |
| 6-7am    |            |       |         |        |         | 3,157    |            |       |         |        |         | 1,018    | 4,175    |
| 7-8am    | 2,810      | 40    | 51      | 259    | 306     | 3,466 ** | 505        | 52    | 212     | 434    | 219     | 1,422    | 4,888    |
| 8-9am    | 2,664      | 15    | 50      | 297    | 356     | 3,382    | 915        | 53    | 88      | 365    | 207     | 1,628    | 5,010 ** |
| 9-10am   | 2,264      | 33    | 40      | 302    | 301     | 2,940    | 736        | 69    | 128     | 619    | 251     | 1,803    | 4,743    |
| 10-11am  | 1,645      | 13    | 15      | 128    | 120     | 1,921    | 1,056      | 39    | 62      | 224    | 125     | 1,506    | 3,427    |
| 11-12am  | 1,416      | 16    | 20      | 199    | 194     | 1,845    | 512        | 20    | 119     | 309    | 224     | 1,184    | 3,029    |
| 12-1pm   | 1,689      | 10    | 10      | 87     | 77      | 1,873    | 863        | 6     | 56      | 124    | 85      | 1,134    | 3,007    |
| 1-2pm    | 1,622      | 25    | 10      | 123    | 80      | 1,860    | 769        | 12    | 43      | 145    | 93      | 1,062    | 2,922    |
| 2-3pm    | 1,444      | 51    | 21      | 224    | 208     | 1,948    | 453        | 12    | 105     | 269    | 234     | 1,073    | 3,021    |
| 3-4pm    | 1,727      | 66    | 10      | 126    | 109     | 2,038    | 1,126      | 15    | 66      | 106    | 90      | 1,403    | 3,441    |
| 4-5pm    | 1,512      | 50    | 14      | 157    | 166     | 1,899    | 1,398      | 13    | 143     | 185    | 190     | 1,929    | 3,828    |
| 5-6pm    | 1,596      | 16    | 14      | 168    | 138     | 1,932    | 1,643      | 9     | 105     | 112    | 188     | 2,057 ** | 3,989    |
| 6-7pm    | 1,313      | 6     | 12      | 71     | 124     | 1,526    | 1,449      | 9     | 103     | 78     | 112     | 1,751    | 3,277    |
| 7-8pm    |            |       |         |        |         | 1,449    |            |       |         |        |         | 1,080    | 2,529    |
| 8-9pm    |            |       |         |        |         | 1,015    |            |       |         |        |         | 671      | 1,686    |
| 9-10pm   |            |       |         |        |         | 780      |            |       |         |        |         | 477      | 1,257    |
| 10-11pm  |            |       |         |        |         | 658      |            |       |         |        |         | 453      | 1,111    |
| 11-12pm  |            |       |         |        |         | 495      |            |       |         |        |         | 440      | 935      |
| Totals   |            |       |         |        |         | 36,864   |            |       |         |        |         | 23,376   | 60,240   |
| 7-10am   | 7,738      | 88    | 141     | 858    | 963     | 9,788    | 2,156      | 174   | 428     | 1,418  | 677     | 4,853    | 14,641   |
| 10am-1pm | 4,750      | 39    | 45      | 414    | 391     | 5,639    | 2,431      | 65    | 237     | 657    | 434     | 3,824    | 9,463    |
| 1-4pm    | 4,793      | 142   | 41      | 473    | 397     | 5,846    | 2,348      | 39    | 214     | 520    | 417     | 3,538    | 9,384    |
| 4-7pm    | 4,421      | 72    | 40      | 396    | 428     | 5,357    | 4,490      | 31    | 351     | 375    | 490     | 5,737    | 11,094   |
| 7am-7pm  | 21,702     | 341   | 267     | 2,141  | 2,179   | 26,630   | 11,425     | 309   | 1,230   | 2,970  | 2,018   | 17,952   | 44,582   |

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes Metropolitan Avenue Bridge - 2004

Eastbound Westbound Commuter Commercial Commuter Commercial 2-Way **Buses** Vans Trucks Vans Totals **Buses** Vans Trucks Vans **Totals** Totals Autos Autos 12-1am 357 185 542 ------------1-2am 242 174 416 ------------------------2-3am 216 146 362 230 3-4am 153 383 4-5am 299 262 561 5-6am 501 595 1,096 ------------------------798 6-7am 1,253 2,051 ---------7-8am 655 17 17 141 45 875 1.074 31 60 205 82 1.452 2.327 1,474 \*\* 963 8-9am 621 18 25 200 99 1,035 16 48 264 111 2,437 9-10am 498 42 25 285 964 36 41 2.227 114 764 311 111 1.263 1,050 10-11am 824 9 13 115 44 1,005 871 19 26 100 34 2,055 15 75 17 45 11-12am 511 24 244 869 623 229 79 993 1,862 12-1pm 801 16 18 105 33 973 826 16 26 111 37 1,016 1,989 1-2pm 867 30 108 54 1,068 864 23 22 90 40 1,039 2,107 2-3pm 774 14 31 202 96 1,117 708 17 30 189 85 1,029 2,146 2,434 3-4pm 1,181 16 30 124 57 1,408 843 20 16 99 1,026 27 37 61 170 125 789 13 67 2,537 4-5pm 1,110 1,503 138 1,034 1,658 \*\* 1,258 15 79 135 9 51 986 2,644 5-6pm 171 771 84 71 6-7pm 1,222 14 67 136 102 1,541 706 12 39 46 42 845 2,386 1,201 689 1,890 7-8pm ---------8-9pm 833 545 1.378 9-10pm 643 431 1,074 10-11pm 534 369 903 ------------11-12pm 437 285 722 ---Totals 20,235 18,294 38,529 ------------------7-10am 1,774 2,802 304 6,991 77 67 626 258 2,873 83 149 780 4,189 2,136 464 152 2,847 2,320 52 97 10am-1pm 40 55 440 150 3,059 5,906 1-4pm 2,822 60 70 434 207 3,593 2,415 60 68 378 173 3,094 6,687 3,590 2,266 4-7pm 66 207 477 362 4.702 34 117 268 180 2.865 7,567 10,322 243 399 2,001 979 13,944 9,874 229 431 1,866 807 13,207 27,151 7am-7pm

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes Mill Basin Bridge - 2004

Eastbound Westbound Commuter Commercial Commuter Commercial 2-Way Vans Trucks Vans Vans Trucks Autos Buses Totals Autos **Buses** Vans Totals Totals 12-1am 1001 1023 2,024 1-2am 553 530 1,083 ---2-3am 387 373 760 3-4am 376 291 667 ---------------4-5am 628 518 1,146 5-6am 2.002 1.726 3,728 ---6-7am 4.112 3.870 7.982 ---4,597 5 250 4.941 \*\* 0 9,630 7-8am 65 24 4,367 20 136 166 4,689 8-9am 4,555 17 208 4.814 3,915 4,279 9,093 18 16 50 0 114 200 74 1 9-10am 3,544 9 17 24 253 3,847 3,802 115 196 4,188 8,035 8 0 10-11am 3,322 12 14 91 3,447 3,515 18 38 64 3,635 7,082 5 11-12am 3,061 5 67 31 298 3,462 3,138 0 166 165 3,474 6,936 5 0 12-1pm 3,422 21 15 119 3,582 3,273 0 76 125 3,474 7,056 1-2pm 3,376 93 14 12 112 3,607 3,583 11 0 40 83 3,717 7,324 2-3pm 3,673 38 25 15 300 4,051 3,775 7 0 115 176 4,073 8,124 3-4pm 4,496 26 17 6 162 4,707 4,222 76 0 82 116 4,496 9,203 7 2 4-5pm 4,148 13 40 248 4,456 4,444 44 139 210 4,839 9,295 5-6pm 4,244 6 18 14 205 4,487 4,143 31 3 134 166 4,477 8,964 6-7pm 3,996 4 16 5 204 4,225 4,279 3 1 114 165 4,562 8,787 7-8pm 3,718 4,138 7,856 8-9pm 3,374 3,382 6,756 ------------------------------9-10pm 2,983 2,920 5,903 10-11pm 2,320 2,531 4,851 ------11-12pm 1,655 1,820 3,475 Totals 72,735 73,025 145,760 7-10am 12,696 92 57 46 711 13,602 12,084 144 1 365 562 13,156 26,758 10am-1pm 9,805 18 100 60 508 10,491 9,926 18 5 280 354 10,583 21,074 1-4pm 11,545 157 56 33 574 12,365 11,580 94 0 237 375 12,286 24,651 4-7pm 12,388 23 74 26 657 13.168 12,866 78 6 387 541 13,878 27,046 7am-7pm 46.434 290 287 2.450 49.626 46.456 334 12 1.269 1.832 49.903 99,529

Based on 1989 Classification Survey Data

#### Hourly Vehicular Volumes Ninth Street Bridge - 2004

Eastbound Westbound Commercial 2-Way Commuter Commuter Commercial Vans Trucks Vans Trucks Autos **Buses** Vans Totals Autos Buses Vans Totals **Totals** 12-1am 1-2am 2-3am ---------------------3-4am 4-5am 5-6am 6-7am ---------------------7-8am 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 3-4pm 4-5pm 5-6pm 6-7pm 7-8pm ------------------8-9pm ---9-10pm 10-11pm 11-12pm ------Totals 3,672 6,544 10,216 ------7-10am 1.237 1.492 2,144 10am-1pm 1,095 1,705 1-4pm 1,151 1,863 4-7pm 1,063 1,754 1,845 7am-7pm 2.665 3,837 4,801 7,466

Based on 1989 Classification Survey Data

#### Hourly Vehicular Volumes Stillwell Avenue Bridge - 2004

**Northbound** Southbound Commercial 2-Way Commuter Commuter Commercial Vans Trucks Vans Trucks Autos **Buses** Vans Totals Autos Buses Vans Totals **Totals** 12-1am 1-2am 2-3am ---------------------3-4am 4-5am 5-6am 6-7am ---------------7-8am 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 422 \*\* 393 \*\* 3-4pm 4-5pm 5-6pm 6-7pm 7-8pm ---------------8-9pm ---9-10pm 10-11pm 11-12pm ------Totals 4,946 5,490 10,436 ---7-10am 2.047 1.091 10am-1pm 1,010 1,891 1-4pm 1,099 1,185 2,284 4-7pm 1,011 1,996

3,328

3.921

2,985

7am-7pm

8,218

4,297

Based on 1989 Classification Survey Data

### Hourly Vehicular Volumes Third Avenue Bridge - 2004

**Northbound** Southbound 2-Way Commuter Commercial Commuter Commercial Vans Trucks Vans Trucks Autos **Buses** Vans Totals Autos Buses Vans **Totals Totals** 12-1am 1-2am 2-3am ---------------------3-4am 4-5am 5-6am 6-7am ---------------------1,092 \*\* 7-8am 1,445 8-9am 1,049 1,485 9-10am 1,140 10-11am 1,070 11-12am 1,093 12-1pm 1,156 1-2pm 1,163 2-3pm 1,291 3-4pm 1,473 4-5pm 1,500 932 \*\* 5-6pm 1,460 6-7pm 1,130 7-8pm ---------------8-9pm 9-10pm 10-11pm 11-12pm ------Totals 20,292 10,183 10,109 ---7-10am 2,173 2.832 1.238 4,070 1,759 10am-1pm 1,466 1,286 1,560 3,319 1-4pm 1,360 1,796 1,787 2,131 3,927 4-7pm 1,239 1,486 2,191 2,604 4,090 7am-7pm 6,238 7,873 6,157 7,533 15,406

Based on 1989 Classification Survey Data

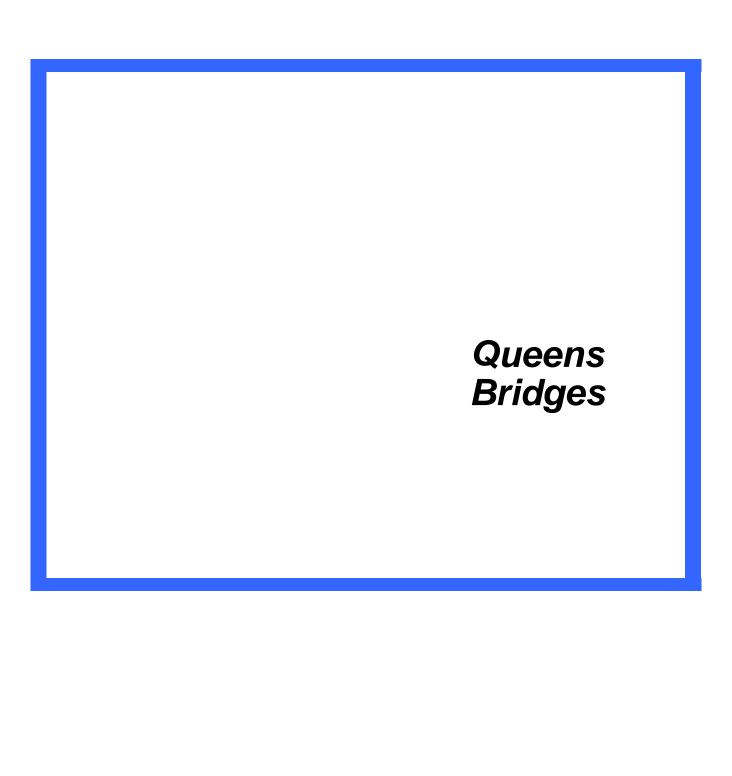
#### Hourly Vehicular Volumes Third Street Bridge - 2004

Eastbound Westbound Commercial 2-Way Commuter Commuter Commercial Vans Trucks Vans Trucks Autos **Buses** Vans Totals Autos Buses Vans Totals **Totals** 12-1am 1-2am 2-3am ---------------------3-4am 4-5am ---5-6am 6-7am ---------------7-8am 8-9am 1,133 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 3-4pm 4-5pm 5-6pm 6-7pm 7-8pm ------------8-9pm 9-10pm 10-11pm 11-12pm ------Totals 3,638 6,208 9,846 ------7-10am 1.949 1.665 2.630 10am-1pm 1,063 1,680 1-4pm 1,126 1,844 4-7pm 1,820 7am-7pm 2,619 2,960 4,106 5,014 7,974

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes Union Street Bridge - 2004

|          | Eastbound |       |         |        |          |        | Westbound |           |         |         |          |        |        |
|----------|-----------|-------|---------|--------|----------|--------|-----------|-----------|---------|---------|----------|--------|--------|
| _        |           | (     | Commute | er Co  | ommercia | ıl     |           | (         | Commute | r Co    | ommercia | al     | Grand  |
|          | Autos     | Buses | Vans    | Trucks | Vans     | Totals | Autos     | Buses     | Vans    | Trucks  | Vans     | Totals | Totals |
| 12-1am   |           |       |         |        |          | 75     |           |           |         |         |          |        | 75     |
| 1-2am    |           |       |         |        |          | 25     |           |           |         |         |          |        | 25     |
| 2-3am    |           |       |         |        |          | 21     |           |           |         |         |          |        | 21     |
| 3-4am    |           |       |         |        |          | 11     |           |           |         |         |          |        | 11     |
| 4-5am    |           |       |         |        |          | 20     | ı         | Bridge is | 1-way e | astboun | a        |        | 20     |
| 5-6am    |           |       |         |        |          | 27     |           |           |         |         |          |        | 27     |
| 6-7am    |           |       |         |        |          | 96     |           |           |         |         |          |        | 96     |
| 7-8am    | 146       | 8     | 0       | 15     | 15       | 184    |           |           |         |         |          |        | 184    |
| 8-9am    | 217       | 10    | 0       | 29     | 26       | 282    |           |           |         |         |          |        | 282    |
| 9-10am   | 174       | 4     | 0       | 19     | 37       | 234    |           |           |         |         |          |        | 234    |
| 10-11am  | 214       | 5     | 0       | 8      | 10       | 237    |           |           |         |         |          |        | 237    |
| 11-12am  | 172       | 2     | 0       | 19     | 21       | 214    |           |           |         |         |          |        | 214    |
| 12-1pm   | 224       | 1     | 0       | 10     | 21       | 256    |           |           |         |         |          |        | 256    |
| 1-2pm    | 222       | 5     | 0       | 14     | 14       | 255    |           |           |         |         |          |        | 255    |
| 2-3pm    | 211       | 4     | 0       | 38     | 28       | 281    |           |           |         |         |          |        | 281    |
| 3-4pm    | 306       | 3     | 0       | 15     | 12       | 336    |           |           |         |         |          |        | 336    |
| 4-5pm    | 324       | 2     | 0       | 21     | 27       | 374 ** |           |           |         |         |          |        | 374 ** |
| 5-6pm    | 341       | 1     | 0       | 7      | 18       | 367    |           |           |         |         |          |        | 367    |
| 6-7pm    | 282       | 1     | 0       | 15     | 21       | 319    |           |           |         |         |          |        | 319    |
| 7-8pm    |           |       |         |        |          | 236    |           |           |         |         |          |        | 236    |
| 8-9pm    |           |       |         |        |          | 179    |           |           |         |         |          |        | 179    |
| 9-10pm   |           |       |         |        |          | 148    |           |           |         |         |          |        | 148    |
| 10-11pm  |           |       |         |        |          | 128    |           |           |         |         |          |        | 128    |
| 11-12pm  |           |       |         |        |          | 94     |           |           |         |         |          |        | 94     |
| Totals   |           |       |         |        |          | 4,399  |           |           |         |         |          |        | 4,399  |
| 7-10am   | 537       | 22    | 0       | 63     | 78       | 700    |           |           |         |         |          |        | 700    |
| 10am-1pm | 610       | 8     | 0       | 37     | 52       | 707    |           |           |         |         |          |        | 707    |
| 1-4pm    | 739       | 12    | 0       | 67     | 54       | 872    |           |           |         |         |          |        | 872    |
| 4-7pm    | 947       | 4     | 0       | 43     | 66       | 1,060  |           |           |         |         |          |        | 1,060  |
| 7am-7pm  | 2,833     | 46    | 0       | 210    | 250      | 3,339  |           |           |         |         |          |        | 3,339  |



### Queens Bridges Average Daily Traffic Volumes 1948 - 2004

| Year         | Borden<br>Avenue | Flushing         | Hook<br>Creek    | Hunters<br>Point | Little<br>Neck   | Midtown<br>Highway |
|--------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| 1948         | 4,846            | 26,276           | 9,620            | 5,500            | 22,255           | 28,754             |
| 1949         | 11,052           | 29,949           | 14,969           | 9,482            | 21,190           | 27,963             |
| 1950         | 6,222            | 30,836           | 18,240           | 6,751            | 19,549           | 32,429             |
| 1951         | 5,930            | 50,918           | 16,064           | 6,000            | 30,873           | 31,812             |
| 1952         | 6,155            | 40,589           | 16,856           | 5,688            | 31,544           | 35,088             |
| 1953         | 7,473            | 46,952           | 17,218           | 6,575            | 29,266           | 34,513             |
| 1954         | 5,997            | 39,837           | 23,389           | 7,611            | 35,614           | 30,495             |
| 1955         | 6,793            | 34,201           | 19,481           | 2,984            | 30,428           | 39,650             |
| 1956         | 7,612            | 47,985           | 20,796           | 6,267            | 43,761           | 49,944             |
| 1957         | 7,759            | 53,836           | 18,691           | 7,018            | 38,387           | 47,481             |
| 1958         | 7,833            | 43,075           | 28,031           | 5,735            | 30,029           | 45,593             |
| 1959         | 9,992            | 28,616           | 30,663           | 7,603            | 27,072           | 55,665             |
| 1960         | 9,739            | 37,833           | 33,549           | 7,753            | 23,718           | 62,051             |
| 1961         | 9,030            | 36,383           | 34,598           | 7,337            | 24,851           | 62,520             |
| 1962         | 8,860            | 35,370           | 36,590           | 7,150            | 26,670           | 57,600             |
| 1963         | 9,480            | 46,210           | 37,450           | 7,170            | 30,040           | 57,770             |
| 1964         | 16,530           | 40,220           | 38,620           | 5,110            | 27,980           | 60,610             |
| 1965         | 8,026            | 40,484           | 35,185           | 6,652            | 33,504           | 60,973             |
| 1966<br>1967 | 9,461            | 42,613           | 38,742           | 6,882            | 33,383           | 68,752             |
| 1968         | 9,348<br>8,761   | 32,479<br>38,664 | 38,995<br>44,000 | 6,206<br>6,601   | 37,097<br>36,281 | 72,962<br>69,058   |
| 1969         | 11,083           | 47,945           | 51,067           | 7,073            | 38,901           | 62,712             |
| 1970         | 10,318           | 47,311           | 44,588           | 6,544            | 42,606           | 84,844             |
| 1971         | 11,721           | 48,238           | 44,185           | 7,072            | 44,528           | 75,706             |
| 1972         | 11,201           | 50,499           | 45,365           | 6,825            | 38,604           | 65,481             |
| 1973         | 11,276           | 54,597           | 50,681           | 8,515            | 44,193           | 73,292             |
| 1974         | 12,272           | 48,909           | 53,120           | 5,899            | 39,506           | 68,127             |
| 1975         | 17,135           | 53,431           | 48,089           | Closed           | 37,741           | 67,933             |
| 1976         | 17,883           | 47,569           | 55,722           | Closed           | 39,382           | 64,438             |
| 1977         | 17,072           | 49,420           | 44,370           | Closed           | 43,122           | 60,501             |
| 1978         | 16,769           | 48,491           | 47,286           | Closed           | 42,052           | 85,223             |
| 1979         | 16,055           | 35,518           | 52,650           | Closed           | 46,197           | 70,893             |
| 1980         | 15,068           | 48,856           | 45,169           | Closed           | 38,735           | 74,334             |
| 1981         | 18,630           | 42,040           | 50,566           | Closed           | 41,135           | 100,182            |
| 1982         | 21,793           | 54,661           | 52,193           | Closed           | 41,470           | 100,182            |
| 1983         | 22,123           | 51,237           | 54,087           | Closed           | 44,436           | 88,132             |
| 1984         | 18,724           | 54,323           | 50,681           | 4,044            | 47,623           | 89,000             |
| 1985         | 18,723           | 64,382           | 50,458           | 4,755            | 42,737           | 73,315             |
| 1986         | 14,714           | 64,371           | 56,735           | 5,870            | 44,125           | 71,938             |
| 1987<br>1988 | 15,067           | 62,811           | 57,634           | 5,938            | 45,069           | 70,079<br>71,761   |
| 1989         | 14,907<br>14,698 | 62,956<br>61,756 | 61,083<br>63,406 | 6,549<br>6,746   | 43,826<br>36,085 | 65,160             |
| 1990         | 18,430           | 61,248           | 57,660           | 10,849           | 28,746           | 66,269             |
| 1991         | 16,122           | 58,189           | 57,442           | 10,279           | 42,895           | 74,328             |
| 1992         | 13,146           | 61,306           | 64,502           | 10,997           | 48,388           | 72,144             |
| 1993         | 15,074           | 54,005           | 60,517           | 8,138            | 48,906           | 64,368             |
| 1994         | 14,412           | 58,837           | 64,545           | 6,804            | 48,314           | 66,633             |
| 1995         | 14,074           | 59,543           | 66,517           | 7,594            | 50,034           | 67,810             |
| 1996         | 16,661           | 61,211           | 66,151           | 7,781            | 49,640           | 69,394             |
| 1997         | 14,293           | 59,792           | 63,618           | 7,275            | 51,718           | 69,273             |
| 1998         | 15,182           | 60,864           | 66,123           | 7,024            | 52,876           | 70,486             |
| 1999         | 14,156           | 63,348           | 70,555           | 8,509            | 52,846           | 72,749             |
| 2000         | 15,063           | 66,243           | 74,130           | 8,475            | 49,504           | 79,662             |
| 2001         | 15,780           | 62,364           | 72,027           | 8,261            | 53,423           | 82,431             |
| 2002         | 15,788           | 64,301           | 69,963           | 7,822            | 58,529           | 81,392             |
| 2003         | 16,035           | 62,644           | 72,562           | 7,412            | 60,033           | 84,243             |
| 2004         | 15,765           | 61,685           | 73,932           | 6,885            | 54,165           | 82,732             |
|              |                  |                  |                  |                  |                  |                    |

## Queens Bridges (cont'd) Average Daily Traffic Volumes 1948 - 2004

| North Rikers Roosevelt Roosevelt Whites<br>Year Channel Island Avenue Island Express  |                          |
|---|--------------------------|
|   | _                        |
| 1948 8,521 <i>Bridge</i> 14,044 <i>Bridge</i> 27,29   |                          |
| 1949 8,855 opened 18,907 opened 31,55   | 58 173,925               |
| 1950 7,361 <i>11/22/1966</i> 20,451 <i>05/18/1955</i> 38,77<br>1951 9,868 9,330 39,36   | 71 180,610<br>68 200,163 |
| 1952 8,952 23,596 44,2°   | 19 212,687               |
| 1953 10,941 20,473 47,4   |                          |
| 1954 10,661 18,007 50,08  |                          |
| 1955 11,315 20,123 2,144 51,57  |                          |
| 1956 10,216 17,987 2,689 57,98  |                          |
| 1957 6,192 20,984 2,157 58,60   |                          |
| 1958 12,763 19,653 3,137 60,68  | 87 256,536               |
| <u>1959</u> 13,453 29,616 2,760 58,76   |                          |
| 1960 14,923 18,153 3,014 48,6°  |                          |
| 1961 13,165 21,475 2,947 53,54  |                          |
| 1962 15,900 24,440 3,220 41,34  |                          |
| 1963 19,730 29,500 3,220 47,62  |                          |
| 1964 18,020 18,110 3,440 83,45  |                          |
| 1965 20,629 20,143 3,791 81,20  | 01 310,588               |
| 1966 18,890 18,728 4,133 71,73<br>1067 17,749 1,073 24,403 5,073 140,33   | 95 313,379               |
| 1967 17,748 1,973 21,493 5,973 110,36<br>1968 18,258 2,809 21,352 4,987 136,74  |                          |
| 1968 18,258 2,809 21,352 4,987 136,74<br>1969 18,957 2,983 19,588 4,675 122,16  | 41 387,512<br>62 387,146 |
| 1909 16,937 2,963 19,566 4,673 122,10<br>1970 20,937 3,543 21,656 6,201 111,83  |                          |
| 1970 20,937 3,543 21,030 0,201 111,00<br>1971 22,426 3,594 21,587 6,182 117,6°  |                          |
| 1972 20,342 3,680 20,754 7,007 118,05   | 50 387,808               |
| 1973 17,885 4,850 20,910 7,944 113,39   |                          |
| 1974 19,541 4,794 19,545 8,656 123,20   |                          |
| 1975 18,971 4,784 19,256 6,417 116,78   |                          |
| 1976 15,231 4,891 17,351 7,031 118,16   |                          |
| 1977 16,228 4,423 18,776 7,809 125,68   |                          |
| 1978 18,456 4,728 19,058 6,851 121,12   |                          |
| 1979 19,004 5,491 19,980 6,838 121,12   |                          |
| 1980 19,156 6,066 19,090 7,501 110,60   |                          |
| 1981 15,931 6,085 17,911 8,383 132,02   |                          |
| 1982 15,931 6,946 16,944 8,064 120,9 <sup>4</sup>   |                          |
| 1983 15,392 7,807 15,051 8,940 139,72   |                          |
| 1984 16,323 9,487 20,292 8,787 129,83   |                          |
| 1985 21,619 6,019 25,548 8,190 134,65   |                          |
| 1986 18,480 8,056 23,219 9,199 139,40   |                          |
| 1987 16,620 12,386 19,567 8,754 153,04<br>1000 17,000 10,0000 |                          |
| 1988 17,032 12,070 22,567 10,207 150,77   | 77 473,735               |
| 1989 17,242 11,493 24,440 9,501 151,29<br>1990 18,115 11,195 23,285 9,275 145,24  |                          |
| 1991 19,267 12,491 23,466 10,236 141,82   |                          |
| 1992 19,666 15,579 23,687 9,751 145,66  |                          |
| 1993 17,699 14,206 28,012 9,830 146,44  |                          |
| 1994 16,516 12,494 24,631 9,638 155,96  |                          |
| 1995 17,388 12,213 22,758 9,382 147,02  |                          |
| 1996 17,519 11,906 22,543 9,489 163,57  |                          |
| 1997 18,991 12,461 24,566 9,302 172,03  |                          |
| 1998 19,114 15,672 22,994 10,048 182,5 <sup>-2</sup>  |                          |
| 1999 19,337 14,240 23,784 9,491 192,09  |                          |
| 2000 20,673 13,150 22,749 9,198 192,48  |                          |
| 2001 20,785 14,503 22,856 9,655 189,03  | 31 551,116               |
| 2002 22,779 13,447 22,235 9,444 188,75  | 58 554,458               |
| 2003 23,958 16,966 20,281 9,203 188,77  |                          |
| 2004 21,855 14,979 19,652 9,100 188,86  |                          |

## Hourly Vehicular Volumes Borden Avenue Bridge - 2004

|          | Eastbound |       |         |        |          |             | Westbound |       |         |        |         |          |        |
|----------|-----------|-------|---------|--------|----------|-------------|-----------|-------|---------|--------|---------|----------|--------|
| _        |           | (     | Commute | er Co  | ommercia | <del></del> |           | (     | Commute | er Co  | ommerci | al       | 2-Way  |
|          | Autos     | Buses | Vans    | Trucks | Vans     | Totals      | Autos     | Buses | Vans    | Trucks | Vans    | Totals   | Totals |
| 12-1am   |           |       |         |        |          | 41          |           |       |         |        |         | 109      | 150    |
| 1-2am    |           |       |         |        |          | 40          |           |       |         |        |         | 67       | 107    |
| 2-3am    |           |       |         |        |          | 30          |           |       |         |        |         | 91       | 121    |
| 3-4am    |           |       |         |        |          | 41          |           |       |         |        |         | 113      | 154    |
| 4-5am    |           |       |         |        |          | 37          |           |       |         |        |         | 171      | 208    |
| 5-6am    |           |       |         |        |          | 60          |           |       |         |        |         | 581      | 641    |
| 6-7am    |           |       |         |        |          | 135         |           |       |         |        |         | 1,107    | 1,242  |
| 7-8am    | 102       | 7     | 4       | 47     | 25       | 185         | 929       | 18    | 36      | 115    | 118     | 1,216 ** | 1,401  |
| 8-9am    | 106       | 6     | 5       | 67     | 32       | 216         | 949       | 10    | 14      | 91     | 40      | 1,104    | 1,320  |
| 9-10am   | 104       | 7     | 3       | 70     | 39       | 223         | 622       | 5     | 11      | 100    | 64      | 802      | 1,025  |
| 10-11am  | 160       | 4     | 8       | 43     | 19       | 234         | 588       | 10    | 5       | 52     | 17      | 672      | 906    |
| 11-12am  | 126       | 4     | 3       | 93     | 40       | 266         | 449       | 8     | 10      | 132    | 49      | 648      | 914    |
| 12-1pm   | 173       | 4     | 3       | 31     | 16       | 227         | 519       | 6     | 5       | 62     | 19      | 611      | 838    |
| 1-2pm    | 214       | 2     | 3       | 43     | 21       | 283         | 476       | 6     | 5       | 65     | 40      | 592      | 875    |
| 2-3pm    | 143       | 2     | 19      | 82     | 38       | 284         | 437       | 12    | 10      | 116    | 40      | 615      | 899    |
| 3-4pm    | 281       | 3     | 9       | 29     | 11       | 333         | 514       | 40    | 4       | 42     | 20      | 620      | 953    |
| 4-5pm    | 249       | 6     | 16      | 32     | 24       | 327         | 448       | 40    | 11      | 78     | 22      | 599      | 926    |
| 5-6pm    | 311       | 3     | 10      | 44     | 21       | 389 **      | 460       | 21    | 8       | 26     | 22      | 537      | 926    |
| 6-7pm    | 168       | 1     | 11      | 31     | 21       | 232         | 304       | 12    | 9       | 25     | 15      | 365      | 597    |
| 7-8pm    |           |       |         |        |          | 150         |           |       |         |        |         | 305      | 455    |
| 8-9pm    |           |       |         |        |          | 112         |           |       |         |        |         | 220      | 332    |
| 9-10pm   |           |       |         |        |          | 84          |           |       |         |        |         | 218      | 302    |
| 10-11pm  |           |       |         |        |          | 57          |           |       |         |        |         | 200      | 257    |
| 11-12pm  |           |       |         |        |          | 63          |           |       |         |        |         | 153      | 216    |
| Totals   |           |       |         |        |          | 4,049       |           |       |         |        |         | 11,716   | 15,765 |
| 7-10am   | 312       | 20    | 12      | 184    | 96       | 624         | 2,500     | 33    | 61      | 306    | 222     | 3,122    | 3,746  |
| 10am-1pm | 459       | 12    | 14      | 167    | 75       | 727         | 1,556     | 24    | 20      | 246    | 85      | 1,931    | 2,658  |
| 1-4pm .  | 638       | 7     | 31      | 154    | 70       | 900         | 1,427     | 58    | 19      | 223    | 100     | 1,827    | 2,727  |
| 4-7pm    | 728       | 10    | 37      | 107    | 66       | 948         | 1,212     | 73    | 28      | 129    | 59      | 1,501    | 2,449  |
| 7am-7pm  | 2,137     | 49    | 94      | 612    | 307      | 3,199       | 6,695     | 188   | 128     | 904    | 466     | 8,381    | 11,580 |

Based on 1989 Classification Survey Data

<sup>\*\*</sup> Peak Volumes

# Hourly Vehicular Volumes Flushing Bridge - 2004

Eastbound Westbound Commuter Commuter Commercial Commercial 2-Way Vans Trucks Vans **Buses** Vans Trucks Totals Autos **Buses** Totals Autos Vans Totals 12-1am 510 438 948 329 1-2am 286 615 ---------2-3am 224 213 437 ---3-4am 189 227 416 ------------------------------4-5am 244 311 555 ------------------------------5-6am 377 768 1,145 ---------------------------804 6-7am 1,827 2,631 7 234 2.538 \*\* 7-8am 951 42 82 113 1,195 2.135 13 54 102 3,733 8-9am 1,201 29 18 115 133 1,496 1,932 23 48 126 254 2.383 3,879 9-10am 1,212 13 30 131 95 1,481 1,452 10 58 149 242 1,911 3,392 1,350 70 1,539 1.544 10-11am 17 19 83 13 16 77 91 1,741 3,280 11-12am 1,187 8 46 117 200 1,558 1,349 2 26 127 163 1,667 3,225 6 1,492 8 26 95 1,682 1,450 6 75 1,629 3,311 12-1pm 61 92 1-2pm 1,420 20 17 65 134 1,656 1,568 24 71 1,721 3,377 14 2-3pm 1,311 29 35 139 348 1,862 1,447 22 58 112 101 1,740 3,602 32 24 1,713 20 18 53 1,993 1,713 3,866 3-4pm 189 56 48 1,873 4-5pm 1,582 14 30 62 281 1,969 1,465 11 32 60 90 1,658 3,627 1,704 2,032 \*\* 50 250 48 5-6pm 13 15 1,470 7 54 94 1,673 3,705 6-7pm 1.740 9 37 2,007 8 15 37 3,568 10 211 1,450 51 1,561 7-8pm 1.946 1.467 3,413 1,526 8-9pm ---------1,375 2,901 9-10pm 1.179 1.219 2,398 ---------------------1,095 10-11pm 1,049 2,144 ---------------------722 795 11-12pm 1,517 32,070 Totals 29,615 61,685 ------------------------------7-10am 3,364 328 341 4,172 5,519 730 6,832 11,004 84 55 46 160 377 248 378 21 10am-1pm 4,029 33 91 4,779 4,343 48 279 346 5,037 9,816 1-4pm 4,444 69 70 257 671 5,511 4,728 68 106 239 193 5,334 10,845 5,026 4,385 4-7pm 36 55 149 742 6,008 26 95 151 235 4,892 10,900 7am-7pm 16,863 222 271 982 2.132 20.470 18,975 161 409 1.046 1.504 22.095 42.565

Based on 1989 Classification Survey Data

## Hourly Vehicular Volumes Hook Creek Bridge - 2004

|          | Northbound |       |         |        |         |          | Southbound |       |         |        |         |          |          |
|----------|------------|-------|---------|--------|---------|----------|------------|-------|---------|--------|---------|----------|----------|
| _        |            | (     | Commute | er Co  | ommerci | al       |            | (     | Commute | er Co  | ommerci | al       | 2-Way    |
|          | Autos      | Buses | Vans    | Trucks | Vans    | Totals   | Autos      | Buses | Vans    | Trucks | Vans    | Totals   | TotaÍs   |
| 12-1am   |            |       |         |        |         | 312      |            |       |         |        |         | 643      | 955      |
| 1-2am    |            |       |         |        |         | 199      |            |       |         |        |         | 366      | 565      |
| 2-3am    |            |       |         |        |         | 147      |            |       |         |        |         | 264      | 411      |
| 3-4am    |            |       |         |        |         | 188      |            |       |         |        |         | 175      | 363      |
| 4-5am    |            |       |         |        |         | 359      |            |       |         |        |         | 233      | 592      |
| 5-6am    |            |       |         |        |         | 1,054    |            |       |         |        |         | 407      | 1,461    |
| 6-7am    |            |       |         |        |         | 2,253    |            |       |         |        |         | 1,345    | 3,598    |
| 7-8am    | 2,250      | 16    | 54      | 70     | 39      | 2,429 ** | 1,710      | 15    | 155     | 155    | 114     | 2,149    | 4,578    |
| 8-9am    | 2,109      | 17    | 78      | 113    | 65      | 2,382    | 1,817      | 10    | 138     | 160    | 91      | 2,216    | 4,598    |
| 9-10am   | 1,856      | 7     | 64      | 142    | 69      | 2,138    | 1,631      | 7     | 81      | 130    | 84      | 1,933    | 4,071    |
| 10-11am  | 1,763      | 2     | 13      | 50     | 42      | 1,870    | 1,655      | 2     | 12      | 57     | 47      | 1,773    | 3,643    |
| 11-12am  | 1,529      | 9     | 41      | 173    | 80      | 1,832    | 1,591      | 2     | 13      | 102    | 82      | 1,790    | 3,622    |
| 12-1pm   | 1,863      | 9     | 26      | 58     | 20      | 1,976    | 1,835      | 0     | 12      | 43     | 26      | 1,916    | 3,892    |
| 1-2pm    | 1,835      | 13    | 41      | 71     | 51      | 2,011    | 1,780      | 6     | 62      | 121    | 51      | 2,020    | 4,031    |
| 2-3pm    | 1,828      | 15    | 45      | 80     | 73      | 2,041    | 2,112      | 4     | 35      | 99     | 83      | 2,333    | 4,374    |
| 3-4pm    | 2,121      | 34    | 11      | 27     | 16      | 2,209    | 2,451      | 3     | 20      | 39     | 45      | 2,558    | 4,767    |
| 4-5pm    | 1,988      | 11    | 25      | 42     | 33      | 2,099    | 2,498      | 3     | 43      | 58     | 68      | 2,670    | 4,769    |
| 5-6pm    | 1,995      | 12    | 37      | 39     | 81      | 2,164    | 2,620      | 7     | 63      | 43     | 80      | 2,813 ** | 4,977 ** |
| 6-7pm    | 1,851      | 12    | 42      | 23     | 19      | 1,947    | 2,577      | 4     | 53      | 38     | 27      | 2,699    | 4,646    |
| 7-8pm    | ·          |       |         |        |         | 1,671    |            |       |         |        |         | 2,395    | 4,066    |
| 8-9pm    |            |       |         |        |         | 1,403    |            |       |         |        |         | 1,909    | 3,312    |
| 9-10pm   |            |       |         |        |         | 1,123    |            |       |         |        |         | 1,491    | 2,614    |
| 10-11pm  |            |       |         |        |         | 936      |            |       |         |        |         | 1,349    | 2,285    |
| 11-12pm  |            |       |         |        |         | 721      |            |       |         |        |         | 1,021    | 1,742    |
| Totals   |            |       |         |        |         | 35,464   |            |       |         |        |         | 38,468   | 73,932   |
| 7-10am   | 6,215      | 40    | 196     | 325    | 173     | 6,949    | 5,158      | 32    | 374     | 445    | 289     | 6,298    | 13,247   |
| 10am-1pm | 5,155      | 20    | 80      | 281    | 142     | 5,678    | 5,081      | 4     | 37      | 202    | 155     | 5,479    | 11,157   |
| 1-4pm    | 5,784      | 62    | 97      | 178    | 140     | 6,261    | 6,343      | 13    | 117     | 259    | 179     | 6,911    | 13,172   |
| 4-7pm    | 5,834      | 35    | 104     | 104    | 133     | 6,210    | 7,695      | 14    | 159     | 139    | 175     | 8,182    | 14,392   |
| 7am-7pm  | 22,988     | 157   | 477     | 888    | 588     | 25,098   | 24,277     | 63    | 687     | 1,045  | 798     | 26,870   | 51,968   |

Based on 1989 Classification Survey Data

#### Hourly Vehicular Volumes Hunters Point Bridge - 2004

Eastbound Westbound Commercial Commuter Commercial 2-Way Commuter Autos **Buses** Vans Trucks Vans Totals Buses Vans Trucks Vans **Totals** Totals Autos 12-1am ---1-2am ------------------2-3am 3-4am 4-5am 5-6am ---------------------6-7am 379 \*\* 7-8am 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 3-4pm 4-5pm 250 \*\* 5-6pm 6-7pm 7-8pm ---------8-9pm 9-10pm 10-11pm ------11-12pm ---2,728 Totals 4,157 6,885 ---------------7-10am 1,523 1,042 10am-1pm 1,228 1-4pm 1,313 1,206 4-7pm 1,585 2,191 2,426 3,079 5,270 7am-7pm

Based on 1989 Classification Survey Data

#### Hourly Vehicular Volumes Little Neck Bridge - 2004

Eastbound Westbound 2-Way Commuter Commercial Commuter Commercial Vans Trucks Vans Trucks Autos **Buses** Vans Totals Autos **Buses** Vans Totals **Totals** 12-1am 165 166 331 1-2am 86 83 169 2-3am 51 50 101 ---------------------3-4am 39 44 83 4-5am 71 88 159 ---184 537 5-6am 353 552 6-7am 1,357 1,909 ------------------------1,699 7 2,288 \*\* 7-8am 1,384 44 77 120 74 2,049 84 42 106 3,987 8-9am 1,889 29 88 79 59 2,144 1,828 51 3 38 79 1,999 4,143 9-10am 1,317 19 59 73 27 1,495 1,405 8 0 40 77 3,025 1,530 10-11am 1,240 10 30 48 32 1,360 1,356 12 0 30 37 1,435 2,795 11-12am 1,245 14 31 72 58 1,420 1,249 8 77 1,399 2,819 65 12-1pm 1,287 15 10 45 13 1,370 1,280 12 0 30 49 1,371 2,741 1-2pm 1,310 10 23 35 37 1,415 1,320 3 37 2,799 24 1,384 2-3pm 1,460 18 71 96 71 1,716 1,363 12 0 49 96 1,520 3,236 1,956 24 22 44 25 2,071 12 3,683 3-4pm 1,527 18 55 1,612 1,919 16 88 155 102 2,280 1,519 18 0 1,692 3,972 4-5pm 45 110 4,311 \*\* 2,372 \*\* 53 14 0 5-6pm 2,125 23 64 107 1,844 11 70 1,939 6-7pm 1,994 20 49 1,817 11 0 8 4,068 61 41 2,165 67 1,903 1,549 7-8pm ---1,610 3,159 ------------1,094 1,033 8-9pm ---2,127 ---9-10pm 804 1.003 1.807 10-11pm 586 844 1,430 11-12pm 327 447 774 ------Totals 26,954 27,211 54,165 ---------7-10am 4.590 272 5.817 92 224 160 5.338 5.282 143 10 120 262 11,155 10am-1pm 3,772 39 71 165 103 4,150 3,885 32 0 137 151 4,205 8,355 52 1-4pm 4,726 116 175 133 5,202 4,210 27 0 91 188 4,516 9,718 257 4-7pm 6,038 59 213 250 6,817 5,180 43 0 64 247 5,534 12,351 7am-7pm 19,126 242 624 869 646 21,507 18,557 245 10 412 848 20,072 41,579

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes Midtown Highway Bridge - 2004

Eastbound Westbound Commuter Commuter Commercial Commercial 2-Wav Vans Trucks Vans Buses Vans Trucks Autos Buses Totals Autos Vans Totals Totals 12-1am 1,116 388 1,504 1-2am 601 153 754 2-3am 395 87 482 ---------------------3-4am 286 99 385 4-5am 357 234 591 ---5-6am 619 815 1,434 6-7am 1,208 2,141 3,349 ---------------------1,095 7-8am 895 45 9 88 58 2,633 144 66 118 259 3,220 4,315 8-9am 689 56 8 60 45 858 2,934 68 67 136 271 3,476 4,334 9-10am 704 76 6 82 56 924 2,671 79 115 267 3,319 4,243 187 10-11am 1,671 59 3 53 70 1,856 2,171 27 31 63 86 2,378 4,234 1,977 11-12am 1,651 45 6 108 99 1,909 1,654 15 91 3,886 102 115 2,222 12-1pm 2,008 27 20 81 86 1,848 8 62 70 62 2,050 4,272 1-2pm 1,860 31 69 245 2,352 1,491 18 117 4,224 147 127 119 1,872 2-3pm 2,393 15 144 189 2,802 1,492 72 89 126 100 1,879 4,681 61 2,894 29 33 123 3,134 76 78 2,249 3-4pm 55 1,947 61 87 5,383 2,603 23 74 94 301 3,095 1,773 184 148 50 2,320 5,415 4-5pm 165 3,148 \*\* 22 54 5-6pm 2,798 24 250 1,951 100 112 102 107 2,372 5,520 2,788 10 30 65 3,058 2,019 31 58 55 2,225 6-7pm 165 62 5,283 7-8pm ------2,721 ---------1,873 4,594 ------2,715 1,383 8-9pm ------4,098 9-10pm 2.490 1.254 3.744 10-11pm 2.268 1,180 3,448 ---11-12pm 1.793 766 2.559 ------Totals 43,022 39,710 82.732 ------------7-10am 10.015 2.288 177 23 230 159 2.877 8.238 291 248 441 797 12.892 242 10am-1pm 5,330 131 29 255 5.987 5,673 50 184 235 263 6,405 12,392 1-4pm 7,147 75 163 346 557 8.288 4,930 166 284 314 306 6,000 14,288 4-7pm 8,189 57 126 213 716 9,301 5,743 315 318 207 334 6,917 16,218 7am-7pm 22,954 440 341 1.031 1.687 26.453 24,584 822 1.034 1.197 1,700 29,337 55,790

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes North Channel Bridge - 2004

**Northbound** Southbound 2-Way Commuter Commercial Commuter Commercial Vans Trucks Vans Trucks Autos **Buses** Vans Totals Autos Buses Vans **Totals Totals** 12-1am 1-2am 2-3am ---------------------3-4am 4-5am ---5-6am 6-7am 1,082 ---------------------1.141 \*\* 7-8am 1,043 1,610 8-9am 1,414 9-10am 1,086 10-11am 11-12am 12-1pm 1-2pm 1,147 2-3pm 1,438 1,630 3-4pm 4-5pm 1,478 950 \*\* 5-6pm 1,528 6-7pm 1,324 7-8pm ------------1,141 ---------8-9pm 9-10pm 10-11pm 11-12pm ------Totals 11,316 10,539 21,855 ---7-10am 2,396 2,755 1,355 4,110 1,598 10am-1pm 1,368 1,079 1,301 2,899 1-4pm 1,833 2.077 1,833 2,138 4,215 4-7pm 1,498 1,765 2,277 2,565 4,330 7am-7pm 7,095 8,195 6,166 7,359 15,554

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes Rikers Island Bridge - 2004

**Northbound** Southbound Commuter Commercial Commuter Commercial 2-Way Vans Trucks Vans Totals Buses Vans Trucks Autos Buses Autos Vans Totals Totals 12-1am 1-2am 2-3am ---------------------3-4am 4-5am ---5-6am 1,011 6-7am 1,232 ------------------7-8am 1,218 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 1,522 \*\* 1,236 3-4pm 4-5pm 5-6pm 6-7pm 7-8pm ------------------8-9pm 9-10pm 10-11pm 11-12pm ------Totals 7,416 7,563 14,979 ------7-10am 1.244 1.533 2,508 10am-1pm 1,014 1,749 1-4pm 1,270 1,448 2,013 2.242 3,690 4-7pm 1,159 1,283 1,657 3,612 7am-7pm 4.369 4.559 5,235 9,604

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes Roosevelt Avenue Bridge - 2004

Eastbound Westbound Commuter Commercial Commuter Commercial 2-Way **Buses** Vans Trucks Vans Totals **Buses** Vans Trucks Vans Totals **Totals** Autos Autos 12-1am 129 246 117 ---------------------------1-2am 93 79 172 ---2-3am 57 53 110 ------------3-4am 58 43 101 4-5am 93 154 61 ---------5-6am 124 152 276 6-7am 245 319 564 ------------7-8am 367 577 288 25 27 17 489 15 36 33 944 10 4 8-9am 377 724 \*\* 16 11 38 41 483 640 18 11 21 34 1,207 9-10am 387 7 490 459 572 1,062 40 46 49 10 25 29 10 9 10-11am 421 6 10 20 25 482 522 3 20 7 561 1,043 43 480 17 3 11-12am 381 10 10 36 471 20 10 521 1,001 12-1pm 478 6 8 15 13 520 545 11 2 4 4 566 1,086 3 9 13 0 2 5 529 1-2pm 480 30 21 543 509 1,072 2-3pm 462 31 15 53 47 608 551 9 3 15 13 591 1,199 3-4pm 580 12 9 26 31 658 491 68 9 10 579 1,237 4-5pm 496 9 27 48 77 657 578 14 4 10 11 617 1.274 760 \*\* 3 1,387 5-6pm 625 5 22 28 80 596 8 12 8 627 4 6-7pm 613 16 26 63 722 587 30 6 644 1,366 11 10 7-8pm 598 558 1,156 ------------------------8-9pm 519 408 927 348 9-10pm 420 768 ------------------------------299 10-11pm 549 848 225 227 11-12pm 452 ---------------9,880 Totals 9,772 19,652 ------------------------------7-10am 1,052 48 31 105 104 1,340 1,588 71 36 82 96 1,873 3,213 10am-1pm 1,280 22 28 71 81 1,482 1,538 37 8 44 21 1,648 3,130 1.522 27 88 99 1.809 90 4 3,508 1-4pm 73 1.551 26 28 1.699 1,734 65 102 1,761 52 13 4,027 4-7pm 18 220 2,139 33 29 1,888 7am-7pm 5,588 161 151 366 504 6,770 6,438 250 61 185 174 7,108 13,878

#### Hourly Vehicular Volumes Roosevelt Island Bridge - 2004

Eastbound Westbound Commuter Commercial Commuter Commercial 2-Way Vans Trucks Vans Totals Buses Vans Trucks Autos Buses Autos Vans Totals Totals 12-1am 1-2am 2-3am ---------------------3-4am 4-5am 5-6am 6-7am ---------551 \*\* 7-8am 8-9am 9-10am 10-11am 11-12am 12-1pm 1-2pm 2-3pm 3-4pm 4-5pm 5-6pm 6-7pm 7-8pm ------------8-9pm 9-10pm 10-11pm 11-12pm ------Totals 4,535 4,565 9,100 ------7-10am 1.024 1,135 1.887 10am-1pm 1,143 1-4pm 1,660 4-7pm 1,004 1,642 7am-7pm 2,912 3.299 2,708 3,033 6,332

Based on 1989 Classification Survey Data

# Hourly Vehicular Volumes Whitestone Expressway Bridge - 2004

Northbound Southbound Commuter Commercial Commuter Commercial 2-Wav Vans Trucks Vans Vans Trucks Autos Buses Totals Autos **Buses** Vans Totals Totals 12-1am 1.646 1.064 2,710 1-2am 908 677 1,585 2-3am 662 517 1,179 ---------------------3-4am 598 692 1,290 963 4-5am 1,399 2,362 5-6am 2.176 3.552 5,728 6-7am 4,378 6,484 10,862 ---------------------326 6.997 \*\* 7-8am 4,581 87 166 282 5,442 5,586 58 228 498 627 12,439 8-9am 4,990 77 297 397 245 6,006 5,343 69 182 454 388 6,436 12,442 9-10am 3,890 77 459 229 4,837 4,214 73 190 5,378 182 496 405 10,215 10-11am 3,770 39 89 257 157 4,312 4,001 19 99 187 107 8,725 4,413 11-12am 3,249 28 552 278 4,267 3,050 19 375 200 8,075 160 164 3,808 12-1pm 4,017 70 65 261 131 4.544 3,303 24 80 185 128 3,720 8,264 1-2pm 43 232 4,903 3,225 47 73 8,585 4,442 61 125 207 130 3,682 2-3pm 4,928 70 149 506 422 6,075 3,190 57 128 373 228 3,976 10,051 6,544 91 259 263 73 90 173 3-4pm 31 7,188 3,994 124 4,454 11,642 6,274 27 174 357 428 7,260 4,022 48 175 314 235 4,794 12,054 4-5pm 7,444 \*\* 283 22 12,496 \* 5-6pm 6,519 37 177 428 4,571 133 189 137 5,052 6,271 338 7,015 4,489 9 152 92 11,885 6-7pm 54 174 178 128 4,870 6,121 7-8pm ------------3,823 9,944 ------4,935 3,244 8-9pm ---8,179 9-10pm 4.468 2.863 7.331 10-11pm 3,950 2,448 6,398 ---11-12pm 2.682 1,746 4.428 Totals 102,780 86,089 188,869 ---7-10am 1,138 13.461 241 645 800 16.285 15.143 200 600 1.448 1.420 18.811 35.096 1,070 10am-1pm 11,036 137 314 566 13,123 10,354 62 343 747 435 11,941 25,064 1-4pm 15,914 162 283 997 810 18,166 10,409 177 291 753 482 12,112 30,278

79

518

460

1.694

595

3.543

500

2.837

14,716

57,580

13,082

48.988

118

658

525

1.767

818

4.023

1,194

3.370

21,719

69.293

19,064

59,475

4-7pm

7am-7pm

36,435

126,873

Based on 1989 Classification Survey Data



## Staten Island Bridges Average Daily Traffic Volumes 1948 - 2004

| Year         | Fresh<br>Kills   |
|--------------|------------------|
| 1948<br>1949 | 5,597<br>5,759   |
| 1950         | 6,250            |
| 1951         | 8,023            |
| 1952         | 7,891            |
| 1953         | 7,858            |
| 1954         | 9,098            |
| 1955         | 9,841            |
| 1956         | 9,415            |
| 1957         | 9,897            |
| 1958         | 10,121           |
| 1959         | 8,573            |
| 1960         | 8,147            |
| 1961         | 10,270           |
| 1962         | 9,400            |
| 1963         | 12,450           |
| 1964         | 15,010           |
| 1965         | 15,539           |
| 1966         | 17,175           |
| 1967         | 17,309           |
| 1968         | 19,789           |
| 1969         | 22,379           |
| 1970         | 21,631           |
| 1971<br>1972 | 26,744           |
| 1972         | 28,455<br>37,213 |
| 1973         | 36,207           |
| 1975         | 38,684           |
| 1976         | 34,675           |
| 1977         | 30,295           |
| 1978         | 34,467           |
| 1979         | 36,806           |
| 1980         | 41,604           |
| 1981         | 46,947           |
| 1982         | 68,481           |
| 1983         | 46,450           |
| 1984         | 50,341           |
| 1985         | 53,590           |
| 1986         | 44,230           |
| 1987         | 50,372           |
| 1988         | 50,385           |
| 1989         | 36,550           |
| 1990         | 53,442           |
| 1991         | 49,197           |
| 1992         | 48,507<br>49,969 |
| 1993<br>1994 | 48,562           |
| 1995         | 47,132           |
| 1996         | 49,740           |
| 1997         | 51,738           |
| 1998         | 53,770           |
| 1999         | 65,577           |
| 2000         | 66,980           |
| 2001         | 67,465           |
| 2002         | 64,563           |
| 2003         | 66,155           |
| 2004         | 64,705           |
| 2001         | 0 1,1 00         |

## Hourly Vehicular Volumes Fresh Kills Bridge - 2004

| _        | Northbound |       |         |        |         |          | Southbound |       |         |        |         |                  |          |
|----------|------------|-------|---------|--------|---------|----------|------------|-------|---------|--------|---------|------------------|----------|
| -        |            |       | Commute | er Co  | mmercia | al       |            | (     | Commute | er Co  | ommerci | al               | 2-Way    |
|          | Autos      | Buses | Vans    | Trucks | Vans    | Totals   | Autos      | Buses | Vans    | Trucks | Vans    | Totals           | Totals   |
| 12-1am   |            |       |         |        |         | 186      |            |       |         |        |         | 308              | 494      |
| 1-2am    |            |       |         |        |         | 112      |            |       |         |        |         | 166              | 278      |
| 2-3am    |            |       |         |        |         | 72       |            |       |         |        |         | 113              | 185      |
| 3-4am    |            |       |         |        |         | 87       |            |       |         |        |         | 75               | 162      |
| 4-5am    |            |       |         |        |         | 207      |            |       |         |        |         | 123              | 330      |
| 5-6am    |            |       |         |        |         | 676      |            |       |         |        |         | 412              | 1,088    |
| 6-7am    |            |       |         |        |         | 1,677    |            |       |         |        |         | 941              | 2,618    |
| 7-8am    | 1,344      | 140   | 406     | 450    | 214     | 2,554 ** | 1,349      | 91    | 9       | 54     | 45      | 1,548            | 4,102    |
| 8-9am    | 1,088      | 239   | 471     | 576    | 162     | 2,536    | 1,581      | 33    | 6       | 103    | 51      | 1,774            | 4,310    |
| 9-10am   | 1,546      | 27    | 227     | 306    | 57      | 2,163    | 1,309      | 23    | 5       | 107    | 52      | 1,496            | 3,659    |
| 10-11am  | 1,682      | 38    | 75      | 111    | 21      | 1,927    | 1,458      | 17    | 0       | 55     | 31      | 1,561            | 3,488    |
| 11-12am  | 1,447      | 76    | 183     | 287    | 37      | 2,030    | 1,469      | 15    | 2       | 134    | 71      | 1,691            | 3,721    |
| 12-1pm   | 1,671      | 28    | 91      | 177    | 33      | 2,000    | 1,623      | 36    | 0       | 90     | 47      | 1,796            | 3,796    |
| 1-2pm    | 1,701      | 51    | 67      | 79     | 39      | 1,937    | 1,817      | 76    | 0       | 70     | 28      | 1,991            | 3,928    |
| 2-3pm    | 1,515      | 87    | 145     | 231    | 25      | 2,003    | 1,779      | 63    | 0       | 203    | 106     | 2,151            | 4,154    |
| 3-4pm    | 1,871      | 94    | 87      | 92     | 14      | 2,158    | 2,028      | 36    | 5       | 83     | 75      | 2,227            | 4,385    |
| 4-5pm    | 1,641      | 46    | 126     | 152    | 34      | 1,999    | 2,107      | 25    | 3       | 153    | 97      | 2,385 **         | 4,384    |
| 5-6pm    | 1,601      | 93    | 165     | 147    | 24      | 2,030    | 2,030      | 30    | 3       | 186    | 123     | 2,372            | 4,402 ** |
| 6-7pm    | 1,573      | 143   | 156     | 113    | 35      | 2,020    | 1,968      | 28    | 13      | 148    | 113     | 2,270            | 4,290    |
| 7-8pm    | ,          |       |         |        |         | 1,706    | ´          |       |         |        |         | 2,051            | 3,757    |
| 8-9pm    |            |       |         |        |         | 1,184    |            |       |         |        |         | 1,697            | 2,881    |
| 9-10pm   |            |       |         |        |         | 820      |            |       |         |        |         | 1,231            | 2,051    |
| 10-11pm  |            |       |         |        |         | 569      |            |       |         |        |         | <sup>^</sup> 778 | 1,347    |
| 11-12pm  |            |       |         |        |         | 398      |            |       |         |        |         | 497              | 895      |
| Totals   |            |       |         |        |         | 33,051   |            |       |         |        |         | 31,654           | 64,705   |
| 7-10am   | 3,978      | 406   | 1,104   | 1,332  | 433     | 7,253    | 4,239      | 147   | 20      | 264    | 148     | 4,818            | 12,071   |
| 10am-1pm | 4,800      | 142   | 349     | 575    | 91      | 5,957    | 4,550      | 68    | 2       | 279    | 149     | 5,048            | 11,005   |
| 1-4pm '  | 5,087      | 232   | 299     | 402    | 78      | 6,098    | 5,624      | 175   | 5       | 356    | 209     | 6,369            | 12,467   |
| 4-7pm    | 4,815      | 282   | 447     | 412    | 93      | 6,049    | 6,105      | 83    | 19      | 487    | 333     | 7,027            | 13,076   |
| 7am-7pm  | 18,680     | 1,062 | 2,199   | 2,721  | 695     | 25,357   | 20,518     | 473   | 46      | 1,386  | 839     | 23,262           | 48,619   |



## Manhattan MTABT Facilities Average Daily Traffic Volumes 1948 - 2004

| V            | Brooklyn-<br>Battery | Henry<br>Hudson  | Queens-<br>Midtown | Triborough<br>Bridge | Manhattan          |  |
|--------------|----------------------|------------------|--------------------|----------------------|--------------------|--|
| Year         | Tunnel               | Bridge           | Tunnel             | Manh. Plz.           | Totals             |  |
| 1948         | Opened               | 40,050           | 26,462             | 26,465               | 92,977             |  |
| 1949         | 05/25/1950           | 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<br>1954 | 47,999<br>45,120     | 65,432<br>69,025 | 38,509<br>38,185   | 48,595<br>52,286     | 200,535<br>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<br>1976 | 45,636               | 30,603           | 65,315             | 72,566               | 214,120            |  |
| 1976         | 52,444<br>53,500     | 30,557<br>31,840 | 65,881<br>71,150   | 68,325<br>73,276     | 217,207<br>229,766 |  |
| 1978         | 58,252               | 33,605           | 71,130<br>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<br>57,013     | 54,650           | 77,288             | 92,660               | 282,159            |  |
| 1994<br>1995 | 57,013<br>61,097     | 58,291<br>62,899 | 68,511<br>73,882   | 79,536<br>95,696     | 263,351<br>293,574 |  |
| 1995         | 57,091               | 58,759           | 73,002             | 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            |  |

### Outer Borough MTABT Bridges Average Daily Traffic Volumes 1948 - 2004

| Year         | Bronx-<br>Whitestone | Cross<br>Bay     | Marine<br>Parkway | Throgs<br>Neck    | Triborough<br>Bronx Plz. | Verrazano-<br>Narrows | Totals             |
|--------------|----------------------|------------------|-------------------|-------------------|--------------------------|-----------------------|--------------------|
| 1948         | 33,343               | 11,421           | 10,216            | Opened            | 25,997                   | Opened                | 80,977             |
| 1949         | 41,485               | 12,579           | 11,743            | 01/11/1961        | 31,310                   | 11/21/1964            | 97,117             |
| 1950         | 47,900               | 13,002           | 12,971            |                   | 35,581                   |                       | 109,454            |
| 1951         | 54,565               | 13,443           | 13,449            |                   | 42,934                   |                       | 124,391            |
| 1952         | 59,269               | 13,706           | 13,995            |                   | 46,777                   |                       | 133,747            |
| 1953<br>1954 | 66,055<br>72,061     | 15,460<br>15,348 | 15,620<br>16,113  |                   | 46,738<br>50,289         |                       | 143,873<br>153,811 |
| 1955         | 77,352               | 15,630           | 16,571            |                   | 57,623                   |                       | 167,176            |
| 1956         | 82,643               | 15,557           | 16,277            |                   | 62,167                   |                       | 176,644            |
| 1957         | 82,199               | 15,465           | 16,172            |                   | 62,206                   |                       | 176,042            |
| 1958         | 83,022               | 14,895           | 15,694            |                   | 60,576                   |                       | 174,187            |
| 1959         | 88,731               | 15,589           | 16,975            |                   | 61,929                   |                       | 183,224            |
| 1960         | 91,956               | 15,175           | 16,605            |                   | 60,870                   |                       | 184,606            |
| 1961<br>1962 | 55,100<br>47,532     | 15,518<br>15,939 | 16,657<br>17,301  | 60,697            | 57,325<br>57,949         |                       | 144,600<br>199,418 |
| 1963         | 45,352               | 16,421           | 17,978            | 75,532            | 58,657                   |                       | 213,940            |
| 1964         | 64,573               | 16,594           | 18,145            | 76,245            | 61,152                   |                       | 236,709            |
| 1965         | 72,053               | 16,864           | 18,855            | 77,755            | 67,090                   | 48,842                | 301,459            |
| 1966         | 71,382               | 17,684           | 19,745            | 80,647            | 68,806                   | 58,720                | 316,984            |
| 1967         | 73,931               | 17,448           | 19,904            | 81,237            | 70,791                   | 66,607                | 329,918            |
| 1968         | 78,773               | 18,367           | 21,424            | 83,634            | 73,232                   | 77,393                | 352,823            |
| 1969<br>1970 | 79,416               | 17,608<br>17,908 | 21,406<br>22,076  | 85,708<br>83,734  | 75,482<br>81,868         | 86,114<br>96,953      | 365,734            |
| 1970         | 81,582<br>86,573     | 18,399           | 22,426            | 84,279            | 83,804                   | 106,014               | 384,121<br>401,495 |
| 1972         | 80,704               | 16,813           | 20,956            | 89,595            | 74,777                   | 105,898               | 388,743            |
| 1973         | 81,548               | 16,783           | 21,502            | 95,326            | 75,552                   | 111,385               | 402,096            |
| 1974         | 82,699               | 16,769           | 19,734            | 89,622            | 76,673                   | 109,671               | 395,168            |
| 1975         | 81,081               | 15,019           | 18,715            | 87,725            | 70,338                   | 108,572               | 381,450            |
| 1976         | 82,060               | 14,281           | 17,804            | 89,520            | 67,887                   | 110,761               | 382,313            |
| 1977         | 81,992               | 14,489           | 16,724            | 90,635            | 67,590                   | 113,040               | 384,470            |
| 1978<br>1979 | 86,537<br>90,394     | 13,955<br>13,690 | 17,750<br>17,404  | 89,847<br>86,315  | 64,746<br>63,046         | 125,799<br>124,667    | 398,634<br>395,516 |
| 1980         | 88,346               | 13,903           | 16,472            | 87,011            | 63,219                   | 130,904               | 399,855            |
| 1981         | 84,475               | 11,583           | 16,510            | 91,511            | 76,200                   | 137,695               | 417,974            |
| 1982         | 90,312               | 13,072           | 17,119            | 93,867            | 74,092                   | 143,811               | 432,273            |
| 1983         | 97,945               | 13,412           | 18,003            | 97,706            | 78,885                   | 140,645               | 446,596            |
| 1984         | 97,636               | 14,835           | 19,749            | 90,153            | 79,300                   | 155,892               | 457,565            |
| 1985         | 109,012              | 15,279           | 20,595            | 84,517            | 83,747                   | 162,632               | 475,782            |
| 1986<br>1987 | 102,567              | 15,162<br>14,289 | 19,965<br>20,512  | 94,395            | 80,703                   | 162,426               | 475,218            |
| 1988         | 102,115<br>98,235    | 14,269           | 21,098            | 93,770<br>102,333 | 81,424<br>83,002         | 170,319<br>174,416    | 482,429<br>494,073 |
| 1989         | 95,762               | 14,466           | 19,666            | 94,147            | 78,877                   | 172,529               | 475,447            |
| 1990         | 104,377              | 14,645           | 21,489            | 91,237            | 80,346                   | 175,948               | 488,042            |
| 1991         | 99,054               | 14,925           | 20,893            | 94,377            | 81,364                   | 178,340               | 488,953            |
| 1992         | 96,830               | 14,821           | 21,042            | 98,135            | 77,125                   | 183,218               | 491,171            |
| 1993         | 93,712               | 14,578           | 20,137            | 101,402           | 70,458                   | 178,416               | 478,703            |
| 1994         | 104,819              | 14,442           | 20,623            | 97,471            | 71,777                   | 181,156               | 490,288            |
| 1995<br>1996 | 108,185<br>101,048   | 15,423<br>14,845 | 20,568<br>21,212  | 97,282<br>97,629  | 72,012<br>74,522         | 184,634<br>184,557    | 498,104<br>493,813 |
| 1990         | 93,018               | 14,043           | 19,782            | 102,094           | 74,322<br>76,937         | 182,871               | 488,923            |
| 1998         | 104,125              | 16,286           | 19,583            | 99,471            | 81,913                   | 194,592               | 515,970            |
| 1999         | 120,170              | 16,975           | 19,904            | 90,986            | 80,019                   | 194,623               | 522,677            |
| 2000         | 117,583              | 17,962           | 21,609            | 98,357            | 79,243                   | 202,580               | 537,334            |
| 2001         | 111,764              | 19,626           | 19,527            | 104,429           | 77,631                   | 218,971               | 551,948            |
| 2002         | 123,258              | 20,010           | 21,684            | 104,535           | 72,259                   | 212,491               | 554,237            |
| 2003         | 113,441              | 20,233           | 21,745            | 111,092           | 74,113                   | 206,444               | 547,068            |
| 2004         | 117,591              | 20,460           | 21,556            | 112,001           | 82,810                   | 205,544               | 559,962            |

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.

# Hourly Vehicular Volumes Metropolitan Transportation Authority Bridges & Tunnels 2004

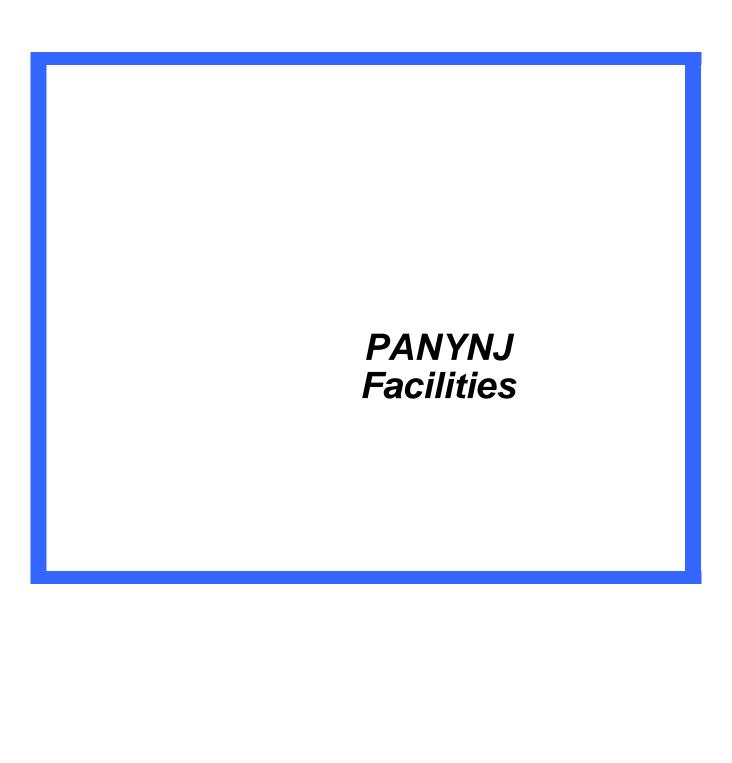
|          | Brooklyn-Battery<br>Tunnel |          | •        |          | •        | Queens-Midtown<br>Tunnel |          | gh Bridge<br>an Plaza) | Tot<br>Entering | als<br>Leaving |
|----------|----------------------------|----------|----------|----------|----------|--------------------------|----------|------------------------|-----------------|----------------|
|          | N/B                        | S/B      | S/B      | N/B      | W/B      | E/B                      | W/B      | E/B                    | Manhattan       | Manhattan      |
| 12-1am   | 179                        | 659      | 224      | 661      | 490      | 978                      | 729      | 669                    | 1,622           | 2,967          |
| 1-2am    | 102                        | 289      | 111      | 268      | 185      | 467                      | 274      | 314                    | 672             | 1,338          |
| 2-3am    | 65                         | 130      | 63       | 127      | 115      | 256                      | 146      | 145                    | 389             | 658            |
| 3-4am    | 63                         | 70       | 56       | 73       | 125      | 164                      | 128      | 159                    | 372             | 466            |
| 4-5am    | 194                        | 70       | 131      | 95       | 256      | 288                      | 240      | 421                    | 821             | 874            |
| 5-6am    | 734                        | 111      | 502      | 158      | 985      | 661                      | 971      | 1,068                  | 3,192           | 1,998          |
| 6-7am    | 2,231                      | 321      | 2,308    | 644      | 2,389    | 1,186                    | 3,076    | 1,955                  | 10,004          | 4,106          |
| 7-8am    | 3,173                      | 621      | 3,642 ** | 1,569    | 3,580    | 1,380                    | 4,481 ** | 2,362                  | 14,876          | 5,932          |
| 8-9am    | 3,498 **                   | 740      | 3,537    | 1,855    | 4,085 ** | 1,567                    | 4,346    | 2,401                  | 15,466 **       | 6,563          |
| 9-10am   | 2,951                      | 732      | 3,050    | 1,297    | 3,944    | 1,563                    | 3,528    | 2,328                  | 13,473          | 5,920          |
| 10-11am  | 1,909                      | 785      | 2,232    | 1,090    | 2,983    | 1,667                    | 3,078    | 2,012                  | 10,202          | 5,554          |
| 11-12am  | 1,545                      | 797      | 1,931    | 1,125    | 2,628    | 1,725                    | 2,825    | 1,975                  | 8,929           | 5,622          |
| 12-1pm   | 1,313                      | 1,004    | 1,741    | 1,245    | 2,439    | 1,985                    | 2,623    | 2,063                  | 8,116           | 6,297          |
| 1-2pm    | 1,301                      | 1,101    | 1,635    | 1,436    | 2,382    | 2,266                    | 2,555    | 2,294                  | 7,873           | 7,097          |
| 2-3pm    | 1,453                      | 1,458    | 1,840    | 1,883    | 2,281    | 2,632                    | 2,936    | 2,658                  | 8,510           | 8,631          |
| 3-4pm    | 1,468                      | 1,885    | 2,424    | 2,310    | 2,565    | 3,012                    | 3,211    | 3,048                  | 9,668           | 10,255         |
| 4-5pm    | 1,540                      | 2,415    | 2,667    | 2,725    | 2,646    | 3,048 **                 | 3,428    | 3,186 **               | 10,281          | 11,374         |
| 5-6pm    | 1,690                      | 2,670 ** | 3,075    | 3,134 ** | 2,814    | 2,978                    | 3,501    | 3,004                  | 11,080          | 11,786 **      |
| 6-7pm    | 1,371                      | 2,229    | 3,058    | 2,935    | 2,609    | 2,841                    | 3,387    | 2,743                  | 10,425          | 10,748         |
| 7-8pm    | 1,097                      | 1,802    | 2,069    | 2,874    | 2,038    | 2,381                    | 2,770    | 2,548                  | 7,974           | 9,605          |
| 8-9pm    | 776                        | 1,580    | 1,178    | 2,036    | 1,610    | 2,252                    | 2,035    | 2,078                  | 5,599           | 7,946          |
| 9-10pm   | 612                        | 1,284    | 879      | 1,749    | 1,324    | 2,091                    | 1,677    | 1,716                  | 4,492           | 6,840          |
| 10-11pm  | 482                        | 954      | 611      | 1,549    | 1,067    | 1,803                    | 1,433    | 1,404                  | 3,593           | 5,710          |
| 11-12pm  | 341                        | 693      | 369      | 943      | 727      | 1,141                    | 1,075    | 954                    | 2,512           | 3,731          |
| Totals   | 30,088                     | 24,400   | 39,333   | 33,781   | 46,267   | 40,332                   | 54,453   | 43,505                 | 170,141         | 142,018        |
| 7-10am   | 9,622                      | 2,093    | 10,229   | 4,721    | 11,609   | 4,510                    | 12,355   | 7,091                  | 43,815          | 18,415         |
| 10am-1pm | 4,767                      | 2,586    | 5,904    | 3,460    | 8,050    | 5,377                    | 8,526    | 6,050                  | 27,247          | 17,473         |
| 1-4pm    | 4,222                      | 4,444    | 5,899    | 5,629    | 7,228    | 7,910                    | 8,702    | 8,000                  | 26,051          | 25,983         |
| 4-7pm    | 4,601                      | 7,314    | 8,800    | 8,794    | 8,069    | 8,867                    | 10,316   | 8,933                  | 31,786          | 33,908         |
| 7am-7pm  | 23,212                     | 16,437   | 30,832   | 22,604   | 34,956   | 26,664                   | 39,899   | 30,074                 | 128,899         | 95,779         |

<sup>\*\*</sup> Peak Volumes

# Hourly Vehicular Volumes Metropolitan Transportation Authority Bridges & Tunnels 2004

|          |          | hitestone<br>dge | Cross<br>Brid | •      |          | Parkway<br>dge | _        | s Neck<br>idge |          | gh Bridge<br>x Plaza) | Verrazano<br>Brid |          |
|----------|----------|------------------|---------------|--------|----------|----------------|----------|----------------|----------|-----------------------|-------------------|----------|
|          | N/B      | S/B              | N/B           | S/B    | N/B      | S/B            | N/B      | S/B            | N/B      | S/B                   | E/B               | W/B      |
| 12-1am   | 870      | 883              | 78            | 166    | 55       | 140            | 631      | 1,252          | 672      | 1,212                 | 2,780             | 1,927    |
| 1-2am    | 462      | 560              | 47            | 85     | 23       | 64             | 433      | 644            | 432      | 646                   | 1,442             | 1,125    |
| 2-3am    | 301      | 354              | 42            | 56     | 20       | 45             | 351      | 374            | 276      | 275                   | 784               | 695      |
| 3-4am    | 272      | 358              | 45            | 35     | 23       | 24             | 362      | 367            | 274      | 325                   | 633               | 473      |
| 4-5am    | 449      | 768              | 126           | 48     | 55       | 27             | 665      | 585            | 401      | 555                   | 646               | 602      |
| 5-6am    | 1,303    | 1,864            | 366           | 91     | 259      | 80             | 2,082    | 1,084          | 842      | 1,163                 | 1,041             | 1,264    |
| 6-7am    | 3,418    | 3,374            | 874           | 282    | 769      | 300            | 4,640    | 2,462          | 1,847    | 2,652                 | 3,578             | 3,072    |
| 7-8am    | 4,646 ** | 3,728            | 1,201 **      | 526    | 1,588 ** | 460            | 4,820 ** | 3,082          | 2,851    | 2,506                 | 8,791             | 4,406    |
| 8-9am    | 4,635    | 3,632            | 950           | 514    | 1,172    | 493            | 4,191    | 3,092          | 3,100 ** | 2,363                 | 10,229 **         | 4,816    |
| 9-10am   | 3,310    | 3,100            | 564           | 441    | 819      | 403            | 3,621    | 2,624          | 2,557    | 2,230                 | 8,332             | 4,564    |
| 10-11am  | 2,784    | 2,499            | 506           | 398    | 586      | 362            | 3,052    | 2,555          | 2,119    | 2,058                 | 6,389             | 4,046    |
| 11-12am  | 2,296    | 2,520            | 526           | 390    | 516      | 376            | 2,651    | 2,322          | 1,946    | 1,968                 | 5,095             | 3,971    |
| 12-1pm   | 2,257    | 2,482            | 516           | 452    | 486      | 478            | 2,403    | 2,319          | 1,866    | 2,010                 | 4,500             | 4,092    |
| 1-2pm    | 2,464    | 2,747            | 507           | 500    | 482      | 516            | 2,557    | 2,803          | 1,919    | 2,121                 | 4,278             | 4,583    |
| 2-3pm    | 2,873    | 3,270            | 679           | 611    | 575      | 676            | 2,760    | 3,529          | 2,163    | 2,431                 | 4,507             | 6,132    |
| 3-4pm    | 3,294    | 4,122            | 707           | 766    | 675      | 897            | 2,891    | 4,413          | 2,501    | 2,796                 | 5,007             | 7,998    |
| 4-5pm    | 3,679    | 4,343 **         | 618           | 784    | 663      | 964            | 3,069    | 4,636 **       | 2,705    | 2,802 **              | 5,989             | 8,193 ** |
| 5-6pm    | 3,780    | 4,276            | 589           | 822 ** | 669      | 1,015 **       | 3,159    | 4,495          | 2,674    | 2,729                 | 6,388             | 8,125    |
| 6-7pm    | 3,519    | 4,104            | 492           | 808    | 527      | 890            | 3,202    | 3,978          | 2,602    | 2,165                 | 6,385             | 7,116    |
| 7-8pm    | 3,035    | 3,718            | 389           | 644    | 394      | 702            | 2,492    | 3,150          | 2,196    | 1,846                 | 5,638             | 6,089    |
| 8-9pm    | 2,400    | 2,640            | 270           | 485    | 252      | 562            | 1,827    | 2,284          | 1,616    | 1,520                 | 4,583             | 5,116    |
| 9-10pm   | 2,131    | 2,126            | 227           | 403    | 184      | 481            | 1,484    | 1,814          | 1,348    | 1,247                 | 3,717             | 3,998    |
| 10-11pm  | 1,751    | 1,672            | 194           | 306    | 150      | 307            | 1,306    | 1,390          | 1,136    | 1,170                 | 3,419             | 3,065    |
| 11-12pm  | 1,321    | 1,201            | 139           | 195    | 138      | 214            | 956      | 1,142          | 1,031    | 946                   | 3,349             | 2,576    |
| Totals   | 57,250   | 60,341           | 10,652        | 9,808  | 11,080   | 10,476         | 55,605   | 56,396         | 41,074   | 41,736                | 107,500           | 98,044   |
| 7-10am   | 12,591   | 10,460           | 2,715         | 1,481  | 3,579    | 1,356          | 12,632   | 8,798          | 8,508    | 7,099                 | 27,352            | 13,786   |
| 10am-1pm | 7,337    | 7,501            | 1,548         | 1,240  | 1,588    | 1,216          | 8,106    | 7,196          | 5,931    | 6,036                 | 15,984            | 12,109   |
| 1-4pm    | 8,631    | 10,139           | 1,893         | 1,877  | 1,732    | 2,089          | 8,208    | 10,745         | 6,583    | 7,348                 | 13,792            | 18,713   |
| 4-7pm    | 10,978   | 12,723           | 1,699         | 2,414  | 1,859    | 2,869          | 9,430    | 13,109         | 7,981    | 7,696                 | 18,762            | 23,434   |
| 7am-7pm  | 39,537   | 40,823           | 7,855         | 7,012  | 8,758    | 7,530          | 38,376   | 39,848         | 29,003   | 28,179                | 75,890            | 68,042   |

<sup>\*\*</sup> Peak Volumes



### PANYNJ Manhattan - New Jersey Facilities Average Daily Traffic Volumes 1948 - 2004

|              | George           |                  |                  |                    |
|--------------|------------------|------------------|------------------|--------------------|
|              | Washington       | Holland          | Lincoln          |                    |
| Year         | Bridge           | Tunnel           | Tunnel           | Totals             |
|              | 40.000           | 40.000           | 00.050           |                    |
| 1948<br>1949 | 42,306           | 42,623<br>45,467 | 30,856           | 115,785<br>129,943 |
| 1950         | 49,261<br>54,437 | 45,167<br>49,660 | 35,515<br>42,556 | 146,653            |
| 1951         |                  |                  | 42,556           | 166,150            |
| 1952         | 64,516<br>76,446 | 53,792<br>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            |
|              |                  |                  |                  |                    |

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

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

## PANYNJ Staten Island - New Jersey Bridges Average Daily Traffic Volumes 1948 - 2004

| Year             | Bayonne<br>Bridge | Goethals<br>Bridge | Outerbridge<br>Crossing | Totals             |
|------------------|-------------------|--------------------|-------------------------|--------------------|
| 1948             | 5,241             | 4,283              | 3,690                   | 13,214             |
| 1949             | 5,754             | 4,641              | 4,233                   | 14,628             |
| 1950             | 6,360             | 5,215              | 4,856                   | 16,431             |
| 1951             | 6,314             | 6,028              | 5,993                   | 18,335             |
| 1952             | 7,035             | 6,865              | 5,243                   | 19,143             |
| 1953             | 7,385             | 7,938              | 5,275                   | 20,598             |
| 1954             | 7,452             | 8,323              | 5,779                   | 21,554             |
| 1955             | 7,546             | 9,043              | 6,096                   | 22,685             |
| 1956             | 7,136             | 9,335              | 5,731                   | 22,202             |
| 1957             | 6,899             | 9,553              | 6,162                   | 22,614             |
| 1958             | 6,711             | 9,703              | 5,539<br>5,757          | 21,953             |
| 1959<br>1960     | 6,780<br>6,519    | 10,441<br>10,331   | 5,757<br>6,006          | 22,978<br>22,856   |
| 1961             | 6,986             | 12,028             | 6,360                   | 25,374             |
| 1962             | 7,532             | 11,973             | 6,833                   | 26,338             |
| 1963             | 7,806             | 12,478             | 7,114                   | 27,398             |
| 1964             | 8,012             | 14,182             | 7,786                   | 29,980             |
| 1965             | 8,333             | 27,239             | 9,256                   | 44,828             |
| 1966             | 9,349             | 32,007             | 9,622                   | 50,978             |
| 1967             | 9,897             | 34,870             | 9,284                   | 54,051             |
| 1968             | 10,349            | 38,564             | 9,741                   | 58,654             |
| 1969             | 10,807            | 41,838             | 10,408                  | 63,053             |
| 1970             | 11,034            | 47,949             | 9,937                   | 68,920             |
| 1971             | 11,304            | 52,862             | 10,592                  | 74,758             |
| 1972             | 11,704            | 54,574             | 10,740                  | 77,018             |
| 1973<br>1974     | 12,458<br>12,418  | 56,850<br>53,064   | 11,726<br>14,162        | 81,034             |
| 1974             | 11,860            | 53,964<br>53,206   | 15,994                  | 80,544<br>81,060   |
| 1976             | 11,418            | 51,554             | 17,892                  | 80,864             |
| 1977             | 11,704            | 45,816             | 28,016                  | 85,536             |
| 1978             | 11,508            | 44,748             | 32,742                  | 88,998             |
| 1979             | 11,926            | 44,910             | 35,328                  | 92,164             |
| 1980             | 12,984            | 46,352             | 38,438                  | 97,774             |
| 1981             | 13,166            | 46,962             | 41,516                  | 101,644            |
| 1982             | 13,622            | 48,310             | 44,740                  | 106,672            |
| 1983             | 13,924            | 51,350             | 48,512                  | 113,786            |
| 1984             | 14,058            | 53,962             | 50,908                  | 118,928            |
| 1985             | 14,490            | 57,708             | 54,268                  | 126,466            |
| 1986             | 15,906            | 64,634             | 57,896<br>50,303        | 138,436            |
| 1987<br>1988     | 14,890<br>14,676  | 65,452<br>66,136   | 59,392<br>62,250        | 139,734<br>143,062 |
| 1989             | 13,838            | 63,367             | 62,846                  | 140,051            |
| 1990             | 12,246            | 63,549             | 62,545                  | 138,340            |
| 1991             | 12,408            | 63,547             | 65,499                  | 141,454            |
| 1992             | 13,342            | 64,469             | 67,569                  | 145,380            |
| 1993             | 13,979            | 60,424             | 66,372                  | 140,775            |
| 1994             | 14,212            | 62,464             | 67,199                  | 143,875            |
| 1995             | 14,536            | 63,040             | 66,081                  | 143,657            |
| 1996             | 14,389            | 63,601             | 68,575                  | 146,565            |
| 1997             | 15,903            | 65,207             | 70,468                  | 151,578            |
| 1998             | 16,846            | 67,076             | 72,864                  | 156,786            |
| 1999             | 17,603            | 70,863             | 78,424                  | 166,890            |
| 2000             | 18,493            | 72,791             | 73,384                  | 164,668            |
| 2001<br>2002     | 23,631<br>21,327  | 78,196<br>81,384   | 75,424<br>76,429        | 177,251<br>170,140 |
| 2002             | 20,208            | 75,724             | 78,650                  | 179,140<br>174,582 |
| 2003             | 20,206<br>22,510  | 75,724<br>71,532   | 80,226                  | 174,268            |
| 200 <del>4</del> | 22,310            | 11,002             | 00,220                  | 177,200            |

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 2004

|          |                          |           |                |          |                |          | Totals    |           |  |
|----------|--------------------------|-----------|----------------|----------|----------------|----------|-----------|-----------|--|
|          | George Washington Bridge |           | Holland Tunnel |          | Lincoln Tunnel |          | Entering  | Leaving   |  |
|          | E/B                      | W/B       | E/B            | W/B      | E/B            | W/B      | Manhattan | Manhattan |  |
| 12-1am   | 1,961                    | 4,222     | 736            | 1,135    | 951            | 1,902    | 3,648     | 7,259     |  |
| 1-2am    | 1,361                    | 2,538     | 491            | 1,025    | 629            | 1,151    | 2,481     | 4,714     |  |
| 2-3am    | 1,117                    | 1,697     | 365            | 661      | 476            | 665      | 1,958     | 3,023     |  |
| 3-4am    | 1,268                    | 1,439     | 337            | 594      | 506            | 794      | 2,111     | 2,827     |  |
| 4-5am    | 2,099                    | 1,792     | 529            | 740      | 874            | 609      | 3,502     | 3,141     |  |
| 5-6am    | 5,557                    | 2,817     | 1,843          | 1,152    | 2,480          | 940      | 9,880     | 4,909     |  |
| 6-7am    | 11,238 **                | 5,483     | 3,203 **       | 2,029    | 5,202 **       | 1,634    | 19,643 ** | 9,146     |  |
| 7-8am    | 10,726                   | 7,874     | 2,968          | 2,722    | 4,946          | 2,322    | 18,640    | 12,918    |  |
| 8-9am    | 10,068                   | 8,058     | 2,973          | 2,797    | 4,665          | 2,407    | 17,706    | 13,262    |  |
| 9-10am   | 9,312                    | 6,746     | 2,816          | 2,419    | 4,670          | 2,208    | 16,798    | 11,373    |  |
| 10-11am  | 8,032                    | 6,115     | 2,454          | 2,127    | 3,981          | 2,248    | 14,467    | 10,490    |  |
| 11-12am  | 6,803                    | 6,033     | 2,084          | 2,091    | 3,416          | 2,326    | 12,303    | 10,450    |  |
| 12-1pm   | 6,564                    | 6,598     | 1,971          | 2,058    | 3,051          | 2,674    | 11,586    | 11,330    |  |
| 1-2pm    | 6,740                    | 7,302     | 1,977          | 2,401    | 2,892          | 3,009    | 11,609    | 12,712    |  |
| 2-3pm    | 7,110                    | 9,075     | 2,071          | 2,608    | 2,923          | 3,419    | 12,104    | 15,102    |  |
| 3-4pm    | 8,049                    | 10,805    | 2,335          | 2,833    | 3,089          | 3,691    | 13,473    | 17,329    |  |
| 4-5pm    | 9,119                    | 12,132    | 2,662          | 2,850 ** | 2,602          | 4,283    | 14,383    | 19,265    |  |
| 5-6pm    | 9,940                    | 12,272 ** | 2,847          | 2,764    | 2,093          | 4,393    | 14,880    | 19,429 ** |  |
| 6-7pm    | 9,616                    | 11,403    | 2,758          | 2,834    | 2,417          | 4,619 ** | 14,791    | 18,856    |  |
| 7-8pm    | 7,667                    | 10,734    | 2,508          | 2,769    | 2,672          | 4,290    | 12,847    | 17,793    |  |
| 8-9pm    | 5,674                    | 9,253     | 2,054          | 2,639    | 2,335          | 3,753    | 10,063    | 15,645    |  |
| 9-10pm   | 4,943                    | 6,928     | 1,908          | 2,519    | 2,074          | 3,329    | 8,925     | 12,776    |  |
| 10-11pm  | 4,244                    | 6,016     | 1,653          | 2,191    | 2,079          | 3,045    | 7,976     | 11,252    |  |
| 11-12pm  | 3,210                    | 5,316     | 1,263          | 1,407    | 1,803          | 2,622    | 6,276     | 9,345     |  |
| Totals   | 152,418                  | 162,648   | 46,806         | 49,365   | 62,826         | 62,333   | 262,050   | 274,346   |  |
| 7-10am   | 30,106                   | 22,678    | 8,757          | 7,938    | 14,281         | 6,937    | 53,144    | 37,553    |  |
| 10am-1pm | 21,399                   | 18,746    | 6,509          | 6,276    | 10,448         | 7,248    | 38,356    | 32,270    |  |
| 1-4pm    | 21,899                   | 27,182    | 6,383          | 7,842    | 8,904          | 10,119   | 37,186    | 45,143    |  |
| 4-7pm    | 28,675                   | 35,807    | 8,267          | 8,448    | 7,112          | 13,295   | 44,054    | 57,550    |  |
| 7am-7pm  | 102,079                  | 104,413   | 29,916         | 30,504   | 40,745         | 37,599   | 172,740   | 172,516   |  |

<sup>\*\*</sup> Peak Volumes

# Hourly Vehicular Volumes Port Authority of New York & New Jersey 2004

|          |                |          |          |           |           |             |               | tals       |
|----------|----------------|----------|----------|-----------|-----------|-------------|---------------|------------|
|          | Bayonne Bridge |          | Goetha   | ls Bridge | Outerbrid | ge Crossing | То            | To         |
|          | S/B            | N/B      | E/B      | W/B       | E/B       | W/B         | Staten Island | New Jersey |
| 12-1am   | 179            | 153      | 581      | 164       | 512       | 672         | 1,272         | 989        |
| 1-2am    | 131            | 115      | 397      | 118       | 363       | 413         | 891           | 646        |
| 2-3am    | 98             | 86       | 318      | 71        | 315       | 320         | 731           | 477        |
| 3-4am    | 79             | 113      | 294      | 82        | 358       | 323         | 731           | 518        |
| 4-5am    | 113            | 161      | 430      | 114       | 685       | 386         | 1,228         | 661        |
| 5-6am    | 228            | 304      | 1,049    | 809       | 1,880     | 599         | 3,157         | 1,712      |
| 6-7am    | 424            | 842      | 1,826    | 1,917     | 2,778     | 1,736       | 5,028         | 4,495      |
| 7-8am    | 510            | 1,354 ** | 1,696    | 2,989     | 2,635     | 2,503       | 4,841         | 6,846 **   |
| 8-9am    | 543            | 1,209    | 1,743    | 3,060 **  | 2,372     | 2,486       | 4,658         | 6,755      |
| 9-10am   | 478            | 594      | 1,837    | 2,124     | 2,212     | 1,967       | 4,527         | 4,685      |
| 10-11am  | 443            | 465      | 1,657    | 1,908     | 1,829     | 1,935       | 3,929         | 4,308      |
| 11-12am  | 465            | 393      | 1,616    | 1,759     | 1,700     | 1,909       | 3,781         | 4,061      |
| 12-1pm   | 485            | 370      | 1,700    | 1,650     | 1,729     | 1,932       | 3,914         | 3,952      |
| 1-2pm    | 557            | 402      | 1,796    | 1,698     | 1,896     | 1,839       | 4,249         | 3,939      |
| 2-3pm    | 728            | 447      | 2,010    | 1,864     | 2,140     | 2,310       | 4,878         | 4,621      |
| 3-4pm    | 927            | 449      | 2,374    | 2,224     | 2,256     | 2,623       | 5,557         | 5,296      |
| 4-5pm    | 1,074          | 495      | 2,706    | 2,514     | 2,569     | 2,729 **    | 6,349         | 5,738      |
| 5-6pm    | 1,423 **       | 453      | 3,108 ** | 2,185     | 2,969 **  | 2,610       | 7,500 **      | 5,248      |
| 6-7pm    | 1,195          | 366      | 2,822    | 1,920     | 2,558     | 2,519       | 6,575         | 4,805      |
| 7-8pm    | 717            | 324      | 2,268    | 1,578     | 2,075     | 2,106       | 5,060         | 4,008      |
| 8-9pm    | 486            | 265      | 1,797    | 1,439     | 1,694     | 1,761       | 3,977         | 3,465      |
| 9-10pm   | 390            | 296      | 1,490    | 706       | 1,463     | 1,407       | 3,343         | 2,409      |
| 10-11pm  | 335            | 336      | 1,114    | 613       | 1,158     | 1,207       | 2,607         | 2,156      |
| 11-12pm  | 267            | 243      | 930      | 467       | 872       | 916         | 2,069         | 1,626      |
| Totals   | 12,275         | 10,235   | 37,559   | 33,973    | 41,018    | 39,208      | 90,852        | 83,416     |
| 7-10am   | 1,531          | 3,157    | 5,276    | 8,173     | 7,219     | 6,956       | 14,026        | 18,286     |
| 10am-1pm | 1,393          | 1,228    | 4,973    | 5,317     | 5,258     | 5,776       | 11,624        | 12,321     |
| 1-4pm    | 2,212          | 1,298    | 6,180    | 5,786     | 6,292     | 6,772       | 14,684        | 13,856     |
| 4-7pm    | 3,692          | 1,314    | 8,636    | 6,619     | 8,096     | 7,858       | 20,424        | 15,791     |
| 7am-7pm  | 8,828          | 6,997    | 25,065   | 25,895    | 26,865    | 27,362      | 60,758        | 60,254     |

<sup>\*\*</sup> Peak Volumes