

# 2016 New York City Bridge Traffic Volumes



Bill de Blasio  
Mayor



Polly Trottenberg  
Commissioner

A member of the New York Metropolitan Transportation Council





# **2016 New York City Bridge Traffic Volumes**

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**2016**  
**NEW YORK CITY**  
**BRIDGE TRAFFIC VOLUMES**

**2,664,484**

vehicles per day used the 47 toll-free bridges monitored by the New York City Department of Transportation in 2016.

**0.1% Increase**

from the 2,661,105 daily vehicles recorded in 2015.

**5.9% Decrease**

In daily volume on the 4 bridges over Newtown Creek between Brooklyn and Queens, to 245,138 in 2016 from 260,529 in 2015.

**9.2% Decrease (-16,556 Daily Vehicles)**

**Kosciuszko Bridge over Newtown Creek**

Largest numerical decrease on bridges carrying more than 50,000 daily vehicles: 162,581 daily vehicles in 2016, down from 179,137 in 2015.

**4.4% Increase (+9,265 Daily Vehicles)**

**Whitestone Expressway Bridge over the Flushing River**

Largest numerical increase on bridges carrying more than 50,000 daily vehicles: 218,227 daily vehicles in 2016, up from 208,962 in 2015. This is the most heavily used of the 47 toll-free bridges monitored by the New York City Department of Transportation.



## **Ed Koch Queensboro Bridge over the East River**

**170,277 vehicles per day, the most heavily-utilized of the four East River bridges.**

## **Alexander Hamilton Bridge over Harlem River**

**177,853 vehicles per day, the most heavily-utilized of the nine Harlem River bridges.**

## **Kosciuszko Bridge over Newtown Creek**

**162,581 vehicles per day, the most heavily-utilized of the four bridges between Brooklyn and Queens.**

## **Eastern Boulevard Bridge over the Bronx River**

**183,090 vehicles per day, the most heavily-utilized of the eight bridges in The Bronx.**

## **Mill Basin Bridge along Belt Parkway**

**137,226 vehicles per day, the most heavily-utilized of the ten bridges in Brooklyn.**







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# Introduction



**Grand Street Bridge over Newtown Creek**





## INTRODUCTION

The *2016 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) under the Planning Program of the Moving Ahead for Progress (MAP-21) Act.

Since 1948, NYCDOT has monitored traffic flow on 47 water-crossing bridges throughout the five boroughs. This *2016 New York City Bridge Traffic Volumes* report summarizes vehicular volumes and classification data for each of these bridges. Information is also 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).

The 47 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 by vehicle type. In addition, changes in the traffic volumes for all facilities over the past 67 years are shown in graphical form.

Bridge and tunnel locations are shown on maps at the beginning of the sections on the various bridge groups, e.g., East River Bridges, Harlem River Bridges, Brooklyn-Queens Bridges, etc.

Note: NYCDOT uses the averages of vehicular volumes from selected representative weekdays. Publications from other sources may be based on alternative computation methodologies for some facilities, notably the tolled bridges and tunnels, possibly yielding different results for those facilities.

A more comprehensive analysis of bridges and tunnels serving Manhattan is presented in the *Manhattan River Crossings* report which also is published annually.

Each bridge and tunnel is classified under a highway functional classification system. Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service each roadway provides.

The five functional classifications are defined as follows:

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

5. Local Street - comprises all facilities not on one of the higher systems. Serves primarily to provide direct access to abutting land and access to the higher order systems. Offers the lowest level of mobility and usually contains no bus or truck routes.

# Summary



**The new City Island  
Bridge construction -  
2017**



## **SUMMARY**

### **2016 Volumes**

- In 2016, daily traffic on the 47 bridges monitored by the New York City Department of Transportation increased 0.1%, to 2,664,484 in 2016 from 2,661,105 in 2015.
- Daily traffic on the four East River bridges decreased 0.5%, to 466,685 in fall 2016 from 468,918 in fall 2015.
- Daily volume using the nine Harlem River bridges increased 1.9%, to 540,830 in fall 2016 from 530,808 in fall 2015.
- Daily traffic using the four bridges over Newtown Creek between Queens and Brooklyn decreased 5.9%, to 245,138 in 2016 from 260,529 in 2015.
- On the eight bridges in The Bronx, daily traffic increased 1.2%, to 467,807 in 2016 from 462,216 in 2015.
- On the ten bridges in Brooklyn, daily traffic decreased 2.0%, to 317,121 from 323,594.
- On the eleven bridges in Queens, daily traffic increased 1.6%, to 566,219 from 557,502.
- Daily traffic on the Fresh Kills Bridge in Staten Island increased 5.5%, to 60,684 from 57,538.

### **Most Heavily Used City-Operated Bridges in 2016**

- Whitestone Expressway Bridge over the Flushing River in Queens (218,227 vehicles per day).
- Kosciuszko Bridge over Newtown Creek between Brooklyn and Queens (162,581 vehicles per day).
- Alexander Hamilton Bridge over the Harlem River between Manhattan and The Bronx (177,853 vehicles per day).
- Eastern Boulevard Bridge over the Bronx River in The Bronx (183,090 vehicles per day).
- Ed Koch Queensboro Bridge over the East River between Manhattan and Queens (170,277 vehicles per day).
- Mill Basin Bridge along Belt Parkway in Brooklyn (137,226 vehicles per day).
- Hutchinson River Parkway Bridge over the Hutchinson River in The Bronx (126,171 vehicles per day).
- Williamsburg Bridge over the East River between Manhattan and Brooklyn (105,645 vehicles per day).
- Brooklyn Bridge over the East River between Manhattan and Brooklyn (105,679 vehicles per day).

## **Major Increases**

- Whitestone Expressway Bridge over the Flushing River in Queens: up 9,265 daily vehicles, to 218,227 in 2016 from 208,962 in 2015 (+4.4%).
- Eastern Boulevard Bridge over the Bronx River in The Bronx: up 5,091 daily vehicles, to 183,090 from 177,999 (+2.9%).
- Madison Avenue Bridge over the Harlem River between the Bronx and Manhattan: up 3,906 daily vehicles, to 44,338 from 40,432 (+9.7%).
- Washington Bridge over the Harlem River between Bronx and Manhattan: up 3,641 daily vehicles, to 57,647 from 54,006 (+6.7%).

## **Major Decreases**

- Ed Koch Queensboro Bridge over the East River between Queens and Manhattan: down 4,170 daily vehicles, to 170,277 in 2016 from 174,447 in 2015 (-2.4%).
- Kosciuszko Bridge on the Brooklyn-Queens Expressway over Newtown Creek between Brooklyn and Queens: down 16,556 daily vehicles, to 162,581 in 2016 from 179,137 in 2015 (-9.2%).
- Mill Basin Bridge over the Mill Basin in Brooklyn: down 4,077 daily vehicles, to 137,226 in 2016 from 141,303 in 2015 (-2.9%).
- Metropolitan Avenue Bridge over English Kills between in Brooklyn: down 2,504 daily vehicles, to 35,687 from 38,191 (-6.6%).

**2015-2016 Traffic Volume Trends  
N.Y.C. Bridges and Tunnels  
Both Directions**

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<b>EAST RIVER BRIDGES</b>	<b>Highway Functional Classification</b>	<b>2015</b>	<b>2016</b>	<b>Percent Change</b>	<b>Volume Changes</b>
Brooklyn Bridge	Principal Arterial	102,219	105,679	3.4 %	3,460
Ed Koch Queensboro Bridge *	Principal Arterial	174,447	170,277	- 2.4 %	4,170
Manhattan Bridge	Principal Arterial	87,046	85,084	- 2.3 %	1,962
Williamsburg Bridge	Principal Arterial	105,206	105,645	0.4 %	439
<b>Total, 4 East River Bridges</b>		<b>468,918</b>	<b>466,685</b>	<b>- 0.5 %</b>	<b>2,233</b>
<b>HARLEM RIVER BRIDGES</b>					
Alexander Hamilton Bridge	Interstate	178,407	177,853	- 0.3 %	554
Broadway Bridge	Principal Arterial	33,897	36,027	6.3 %	2,130
Macombs Dam Bridge	Principal Arterial	38,556	38,183	- 1.0 %	373
Madison Avenue Bridge	Principal Arterial	40,432	44,338	9.7 %	3,906
Third Avenue Bridge	Principal Arterial	55,988	55,096	- 1.6 %	892
University Heights Bridge	Principal Arterial	38,513	40,078	4.1 %	1,565
Washington Bridge	Minor Arterial	54,006	57,647	6.7 %	3,641
Willis Avenue Bridge	Principal Arterial	63,912	62,293	- 2.5 %	1,619
145th Street Bridge	Minor Arterial	27,097	29,315	8.2 %	2,218
<b>Total, 9 Harlem River Bridges</b>		<b>530,808</b>	<b>540,830</b>	<b>1.9 %</b>	<b>10,022</b>
<b>BROOKLYN-QUEENS BRIDGES</b>					
Grand Street Bridge	Principal Arterial	12,546	10,213	- 18.6 %	2,333
J.J. Byrne Memorial Bridge **	Principal Arterial	28,361	31,622	11.5 %	3,261
Kosciuszko Bridge	Interstate	179,137	162,581	- 9.2 %	16,556
Pulaski Bridge	Principal Arterial	40,485	40,722	0.6 %	237
<b>Total, 4 Brooklyn-Queens Bridges (Over Newtown Creek)</b>		<b>260,529</b>	<b>245,138</b>	<b>- 5.9 %</b>	<b>15,391</b>
<b>BRONX BRIDGES</b>					
City Island Bridge	Minor Arterial	15,292	14,473	- 5.4 %	819
East 174th Street Bridge	Minor Arterial	16,556	17,701	6.9 %	1,145
Eastchester Bridge	Principal Arterial	22,317	21,761	- 2.5 %	556
Eastern Boulevard Bridge	Interstate	177,999	183,090	2.9 %	5,091
Hutchinson River Parkway Bridge	Principal Arterial	124,390	126,171	1.4 %	1,781
Pelham Bridge	Minor Arterial	17,241	16,840	- 2.3 %	401
Unionport Bridge	Principal Arterial	62,410	63,024	1.0 %	614
Westchester Avenue Bridge	Principal Arterial	26,011	24,747	- 4.9 %	1,264
<b>Total, 8 Bronx Bridges</b>		<b>462,216</b>	<b>467,807</b>	<b>1.2 %</b>	<b>5,591</b>

\* Queensboro Bridge renamed April 11, 2011.

\*\* J.J. Byrne Memorial Bridge also known as Greenpoint Avenue Bridge.

**2015-2016 Traffic Volume Trends**  
**N.Y.C. Bridges and Tunnels**  
**Both Directions**  
**Page 2 of 3**

<b>BROOKLYN BRIDGES</b>	<b>Highway Functional Classification</b>	<b>2015</b>	<b>2016</b>	<b>Percent Change</b>	<b>Volume Changes</b>
Carroll Street Bridge	Local	1,238	1,142	- 7.8 %	96
Crosey Avenue Bridge	Principal Arterial	33,433	35,557	6.4 %	2,124
Hamilton Avenue Bridge	Principal Arterial	55,266	55,584	0.6 %	318
Metropolitan Avenue Bridge	Principal Arterial	38,191	35,687	- 6.6 %	2,504
Mill Basin Bridge	Principal Arterial	141,303	137,226	- 2.9 %	4,077
Ninth Street Bridge	Minor Arterial	11,549	10,441	- 9.6 %	1,108
Stillwell Avenue Bridge	Principal Arterial	8,917	9,353	4.9 %	436
Third Avenue Bridge	Principal Arterial	18,179	17,754	- 2.3 %	425
Third Street Bridge	Minor Arterial	11,160	10,467	- 6.2 %	693
Union Street Bridge	Minor Arterial	4,358	3,910	- 10.3 %	448
<b>Total, 10 Brooklyn Bridges</b>		<b>323,594</b>	<b>317,121</b>	<b>- 2.0 %</b>	<b>6,473</b>
<b>QUEENS BRIDGES</b>					
Borden Avenue Bridge	Minor Arterial	13,615	14,863	9.2 %	1,248
Flushing Bridge	Principal Arterial	53,778	53,025	- 1.4 %	753
Hook Creek Bridge	Principal Arterial	75,001	75,716	1.0 %	715
Hunters Point Bridge	Collector	7,598	8,044	5.9 %	446
Joseph P. Addabbo Bridge *	Principal Arterial	25,025	25,874	3.4 %	849
Little Neck Bridge	Principal Arterial	48,337	47,954	- 0.8 %	383
Midtown Highway Bridge	Interstate	84,989	83,342	- 1.9 %	1,647
Rikers Island Bridge	Collector	13,780	14,817	7.5 %	1,037
Roosevelt Avenue Bridge	Principal Arterial	17,834	15,964	- 10.5 %	1,870
Roosevelt Island Bridge	Collector	8,583	8,393	- 2.2 %	190
Whitestone Expwy Bridge	Interstate	208,962	218,227	4.4 %	9,265
<b>Total, 11 Queens Bridges</b>		<b>557,502</b>	<b>566,219</b>	<b>1.6 %</b>	<b>8,717</b>
<b>STATEN ISLAND</b>					
Fresh Kills Bridge	Principal Arterial	57,538	60,684	5.5 %	3,146
<b>TOLL-FREE GRAND TOTALS</b>		<b>2,661,105</b>	<b>2,664,484</b>	<b>0.1 %</b>	<b>3,379</b>

\* Joseph P. Addabbo Bridge also known as North Channel Bridge.



**2015-2016 Traffic Volume Trends  
N.Y.C. Bridges and Tunnels  
Both Directions**

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<i><b>MTABT Manhattan Facilities</b></i>	<b>Highway Functional Classification</b>	<b>2015</b>	<b>2016</b>	<b>Percent Change</b>	<b>Volume Changes</b>
Henry Hudson Bridge	Principal Arterial	62,554	62,648	0.2 %	94
Hugh L. Carey Tunnel *	Interstate	57,299	54,076	- 5.6 %	3,223
Queens-Midtown Tunnel	Interstate	86,217	73,470	- 14.8 %	12,747
R.F.K. Memorial Bridge Manhattan Plaza **	Principal Arterial	91,724	95,552	4.2 %	3,828
<b>Total, 4 MTABT Manhattan Crossings</b>		<b>297,794</b>	<b>285,746</b>	<b>- 4.0 %</b>	<b>12,048</b>

<i><b>PANYNJ Manhattan Facilities</b></i>					
George Washington Bridge	Interstate	295,120	289,827	- 1.8 %	5,293
Holland Tunnel	Interstate	89,367	89,792	0.5 %	425
Lincoln Tunnel	Principal Arterial	113,783	112,995	- 0.7 %	788
<b>Total, 3 PANYNJ Manhattan - New Jersey Crossings</b>		<b>498,270</b>	<b>492,614</b>	<b>- 1.1 %</b>	<b>5,656</b>

<i><b>MTABT Outer Borough Bridges</b></i>					
Bronx-Whitestone Bridge	Interstate	109,862	124,337	13.2 %	14,475
Cross Bay Veterans Memorial Bridge	Minor Arterial	23,393	24,150	3.2 %	757
Marine Parkway Gil Hodges Memorial Bridge	Minor Arterial	22,626	21,990	- 2.8 %	636
R.F.K. Memorial Bridge Bronx Plaza **	Interstate	84,220	83,053	- 1.4 %	1,167
Throgs Neck Bridge	Interstate	116,658	119,249	2.2 %	2,591
Verrazano-Narrows Bridge	Interstate	198,123	202,523	2.2 %	4,400
<b>Total, 6 MTABT Outer Borough Bridges</b>		<b>554,882</b>	<b>575,302</b>	<b>3.7 %</b>	<b>20,420</b>

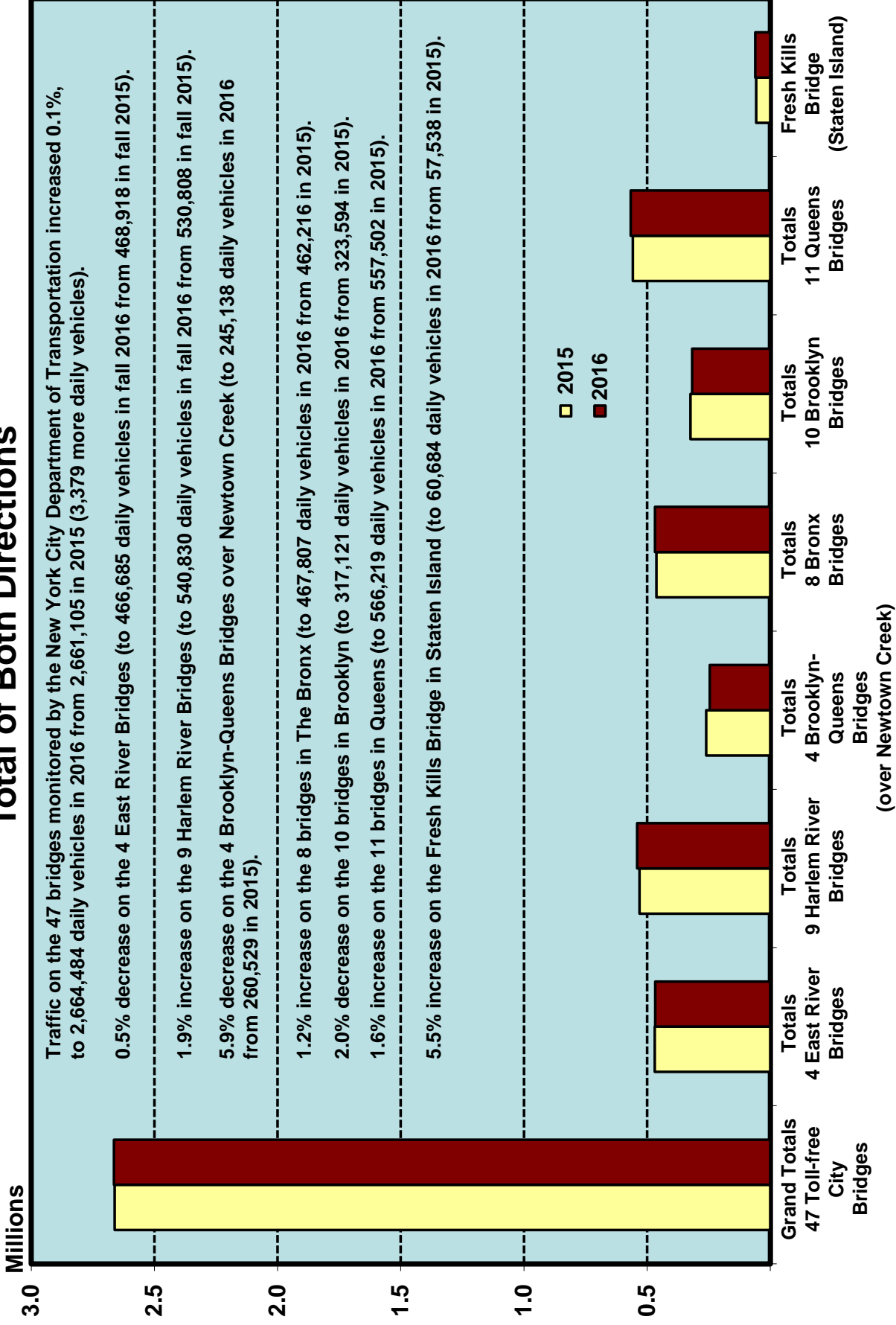
<i><b>PANYNJ Staten Island Bridges</b></i>					
Bayonne Bridge	Principal Arterial	10,840	9,025	- 16.7 %	1,815
Goethals Bridge	Interstate	78,605	82,852	5.4 %	4,247
Outerbridge Crossing	Principal Arterial	73,773	77,107	4.5 %	3,334
<b>Total, 3 PANYNJ Staten Island - New Jersey Bridges</b>		<b>163,218</b>	<b>168,984</b>	<b>3.5 %</b>	<b>5,766</b>

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

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

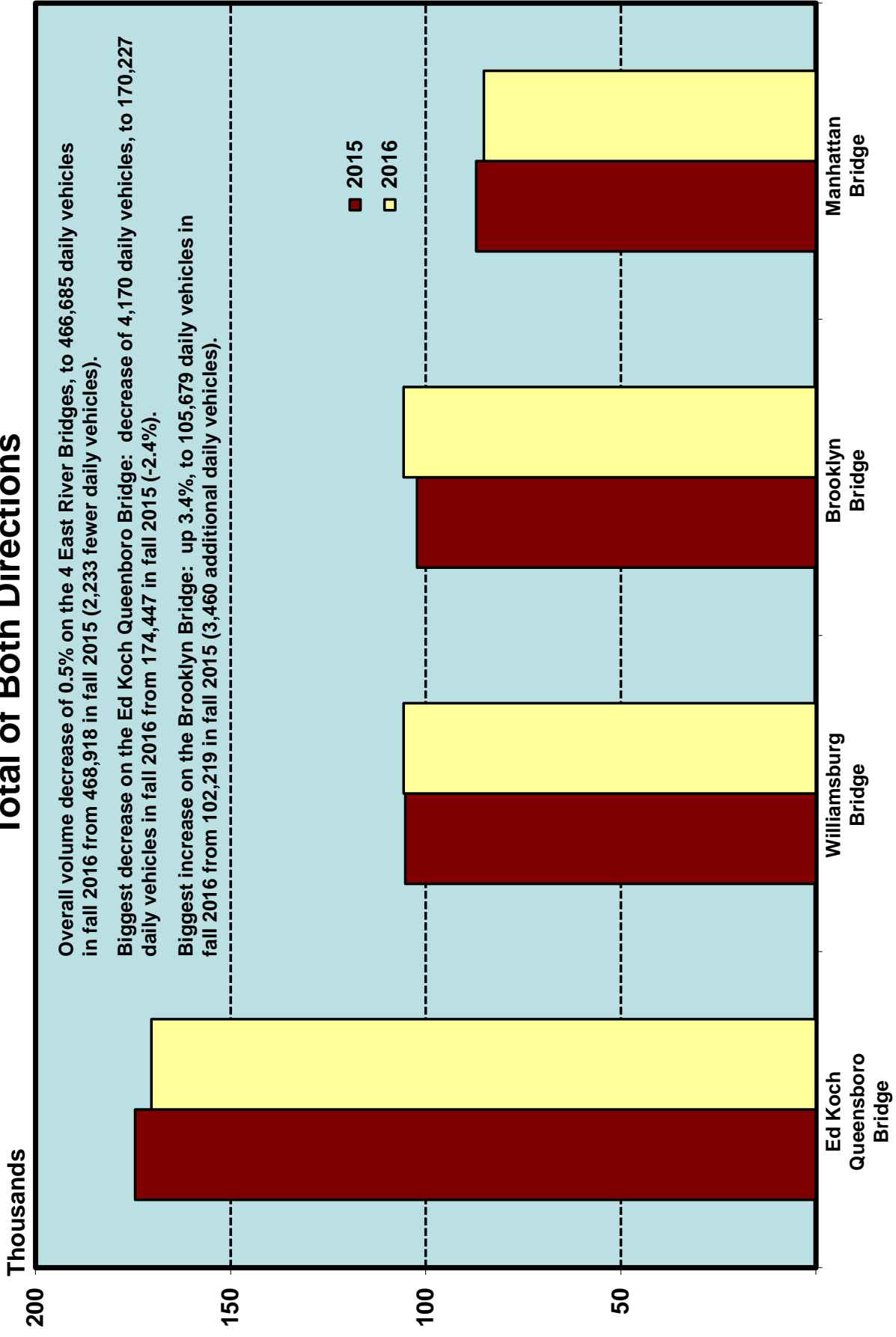
# New York City Toll-free Bridges Daily Volumes 2016 vs. 2015

## Total of Both Directions



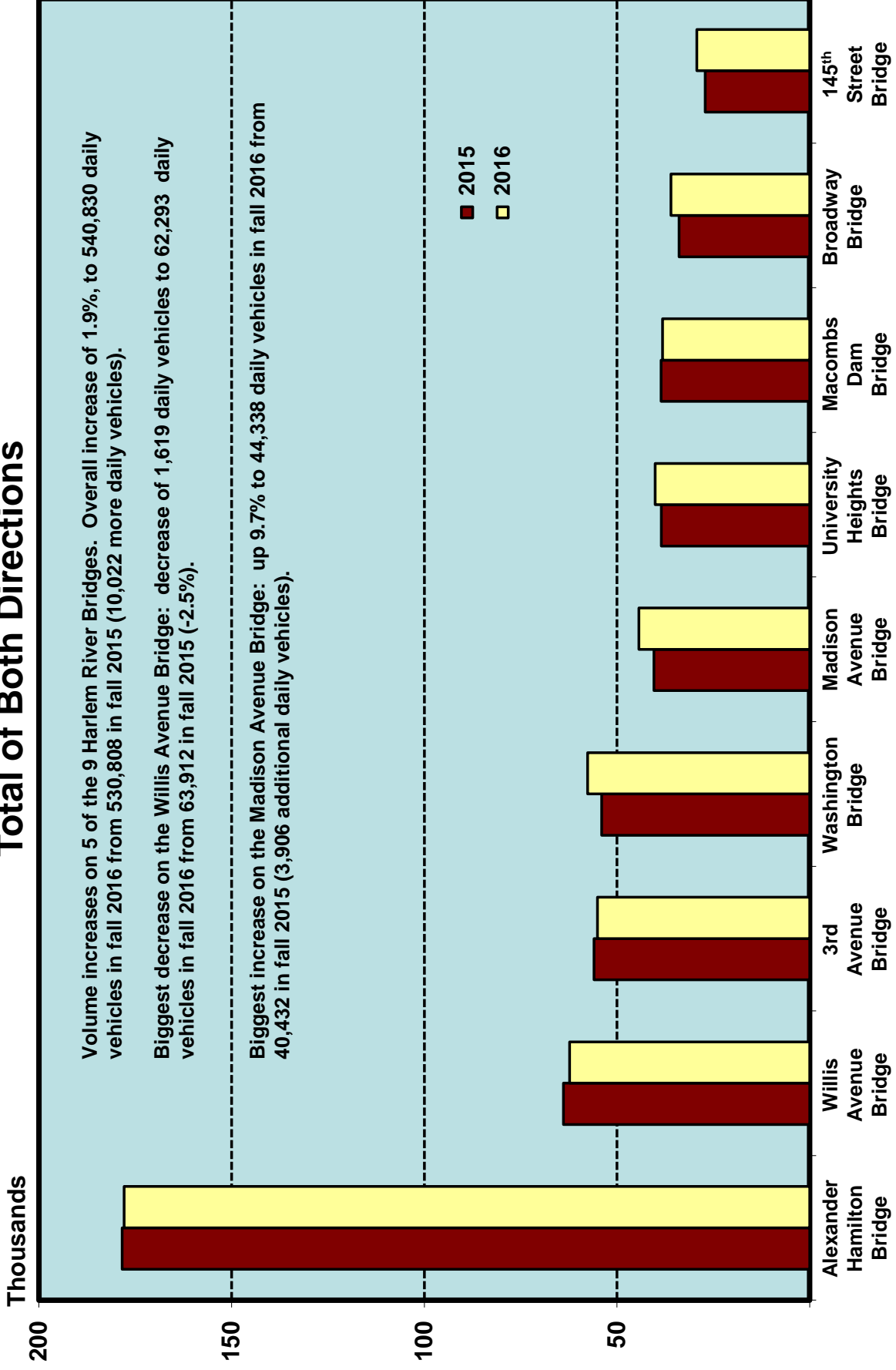
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## Total of Both Directions



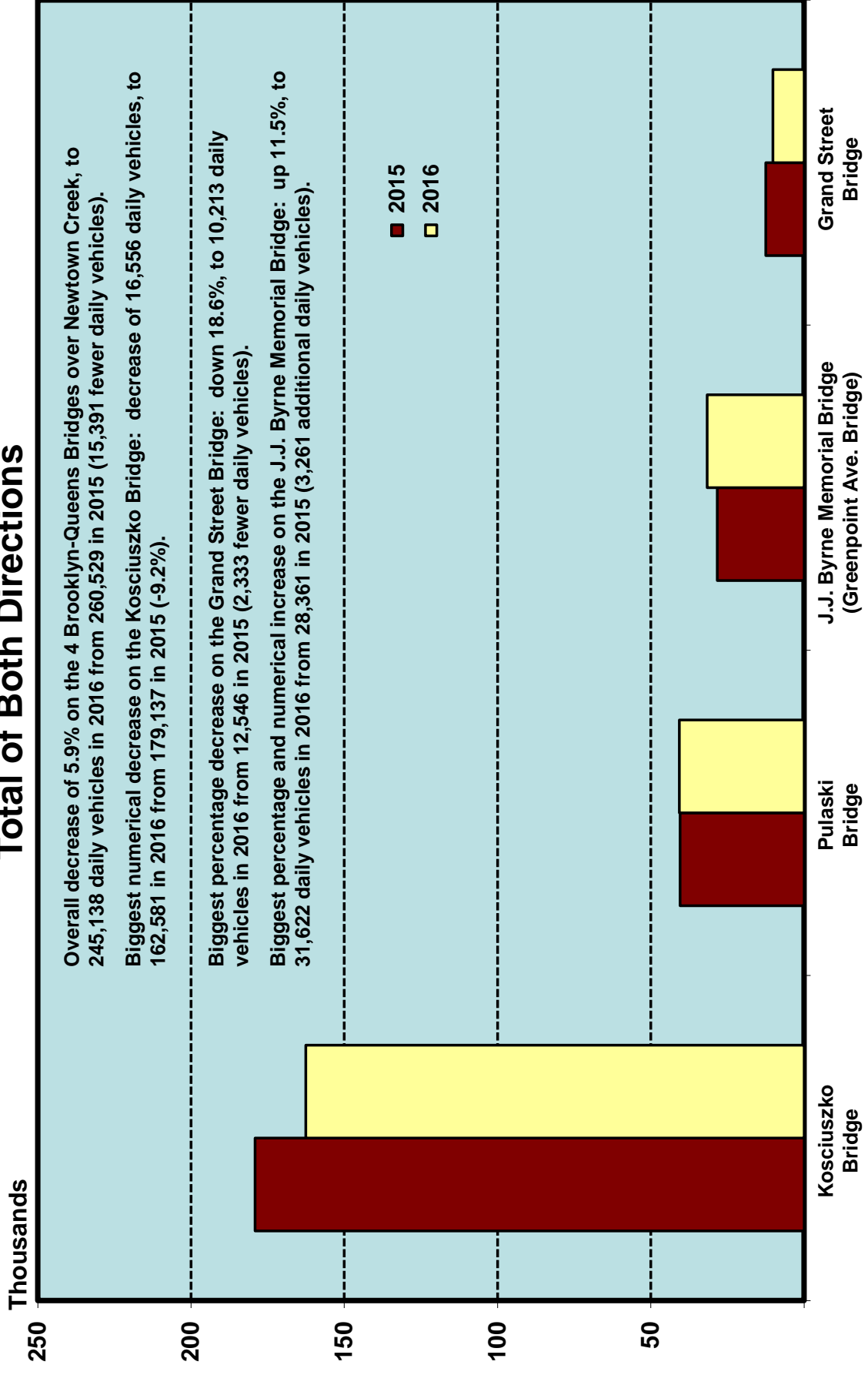
# Harlem River Bridges Daily Volumes 2016 vs. 2015

## Total of Both Directions



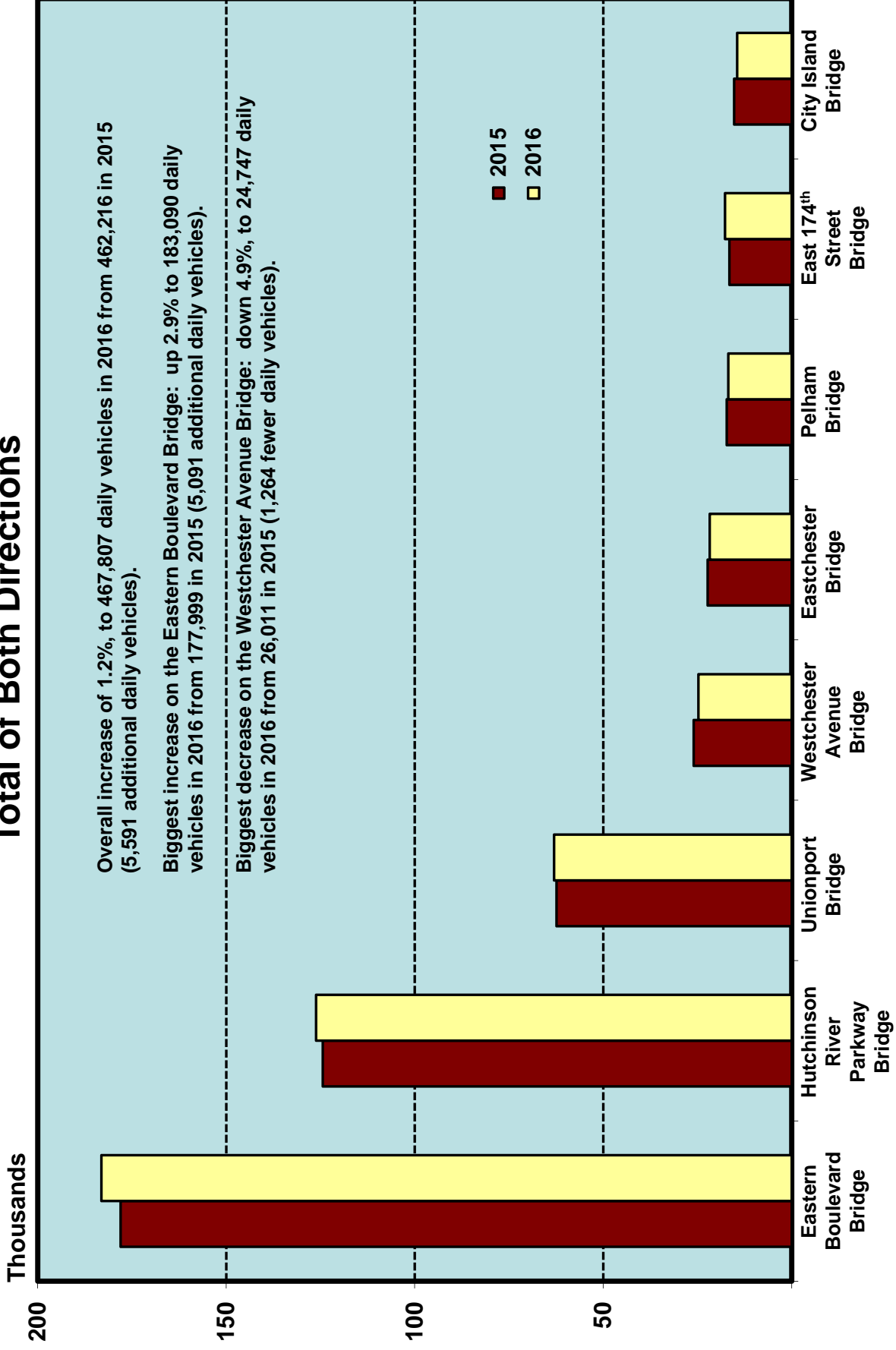
# Brooklyn-Queens (Newtown Creek) Bridges Daily Volumes 2016 vs. 2015

## Total of Both Directions



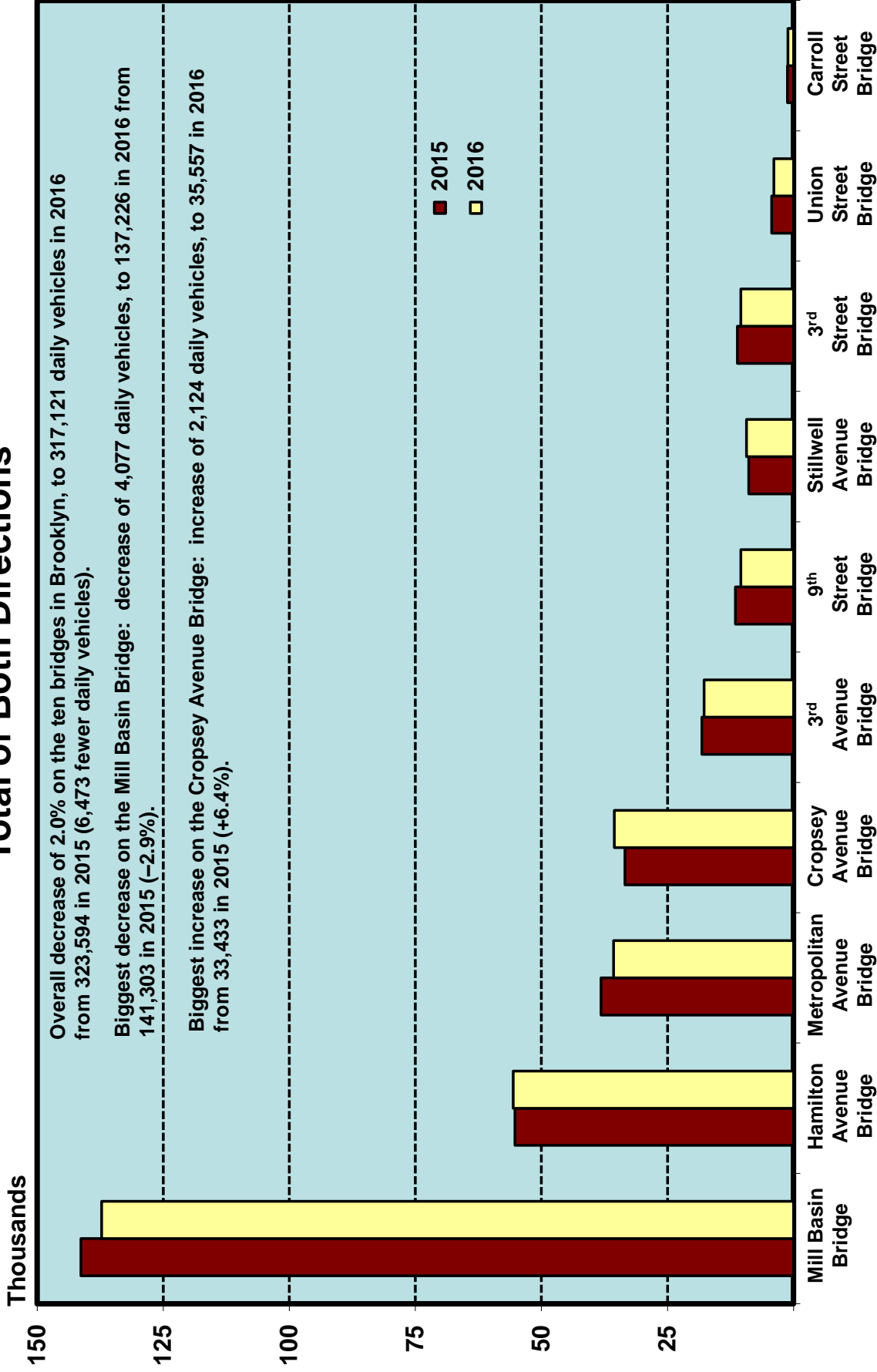
# Bronx Bridges Daily Volumes 2016 vs. 2015

## Total of Both Directions



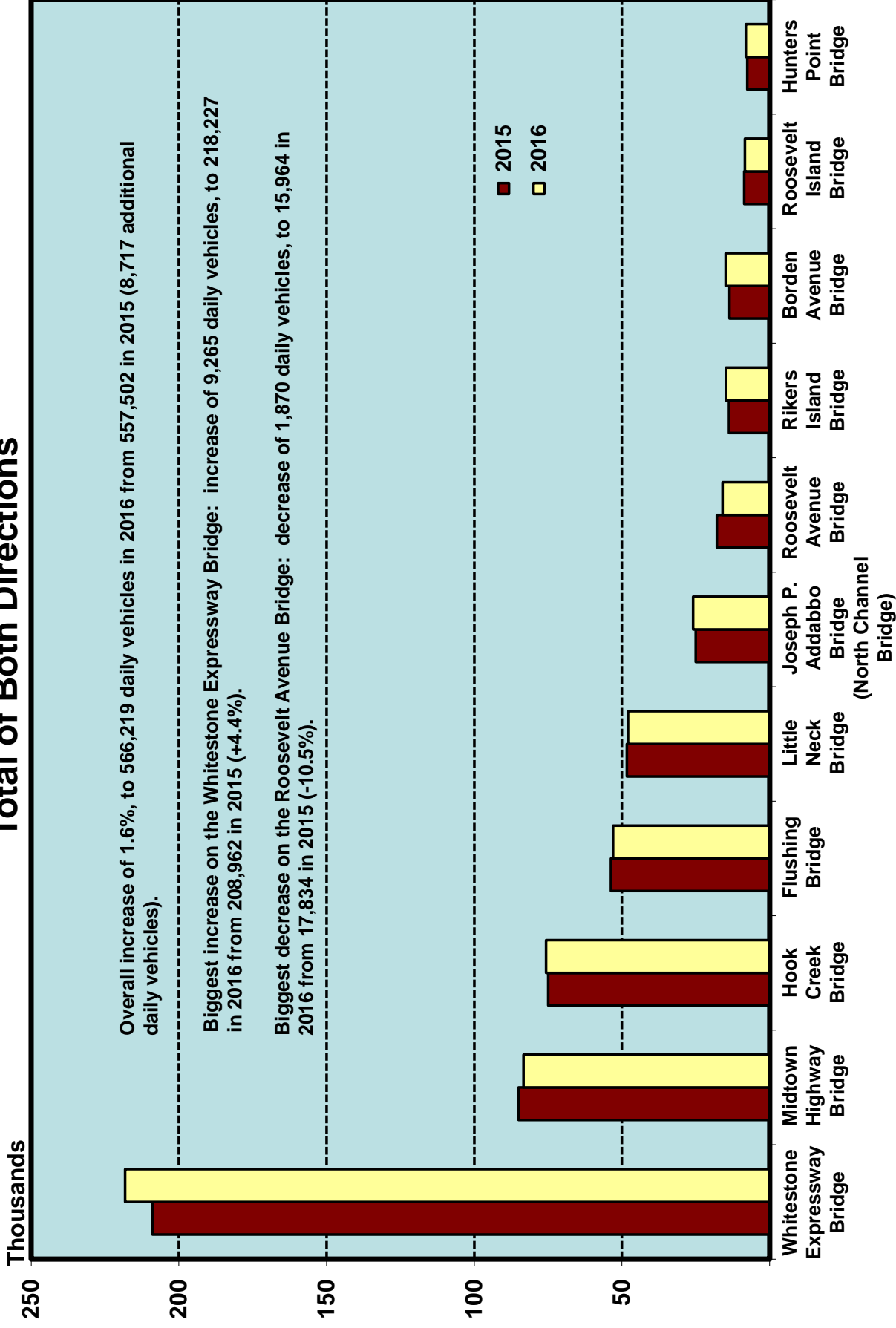
# Brooklyn Bridges Daily Volumes 2016 vs. 2015

## Total of Both Directions



# Queens Bridges Daily Volumes 2016 vs. 2015

## Total of Both Directions

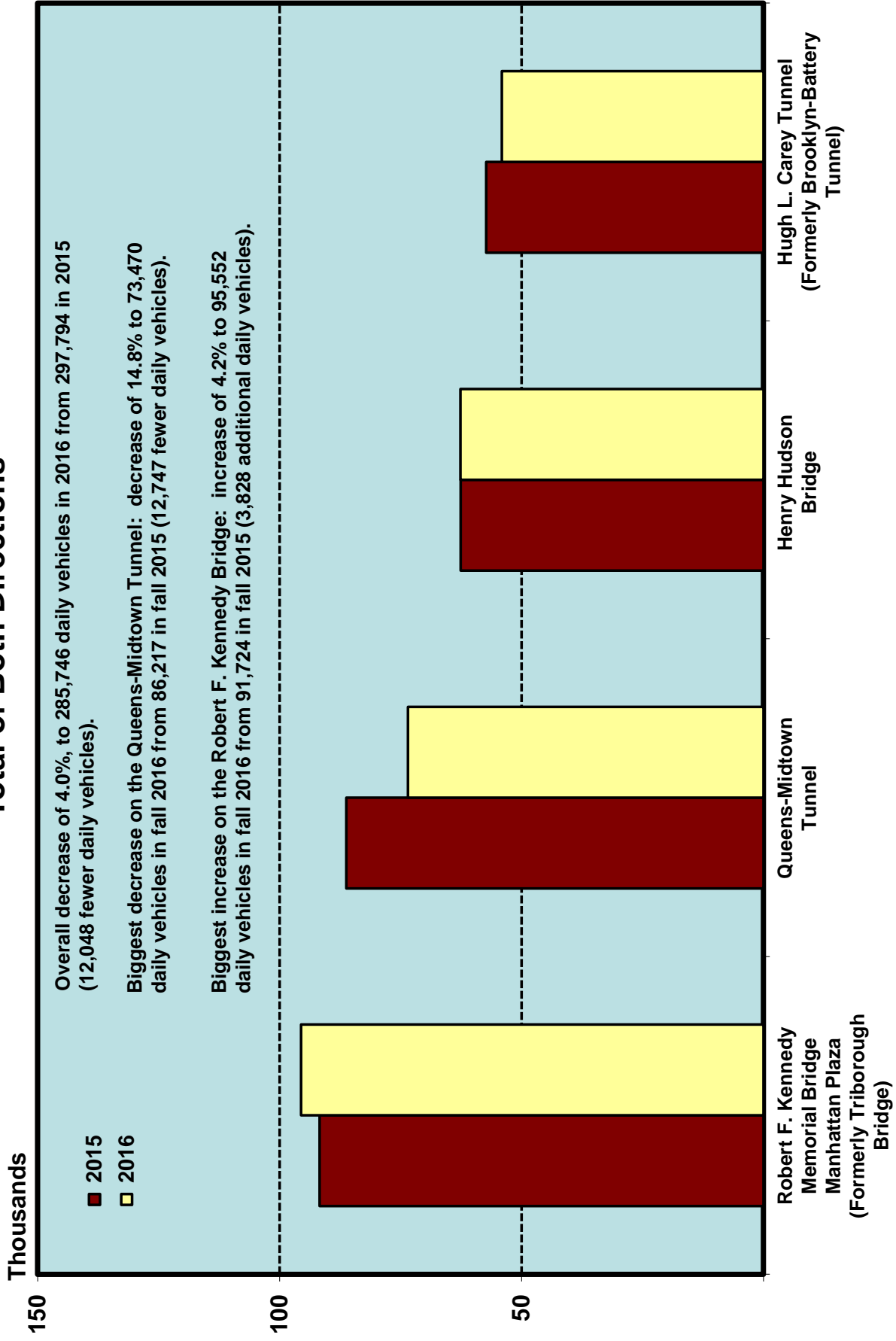




# Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Manhattan Facilities Daily Volumes

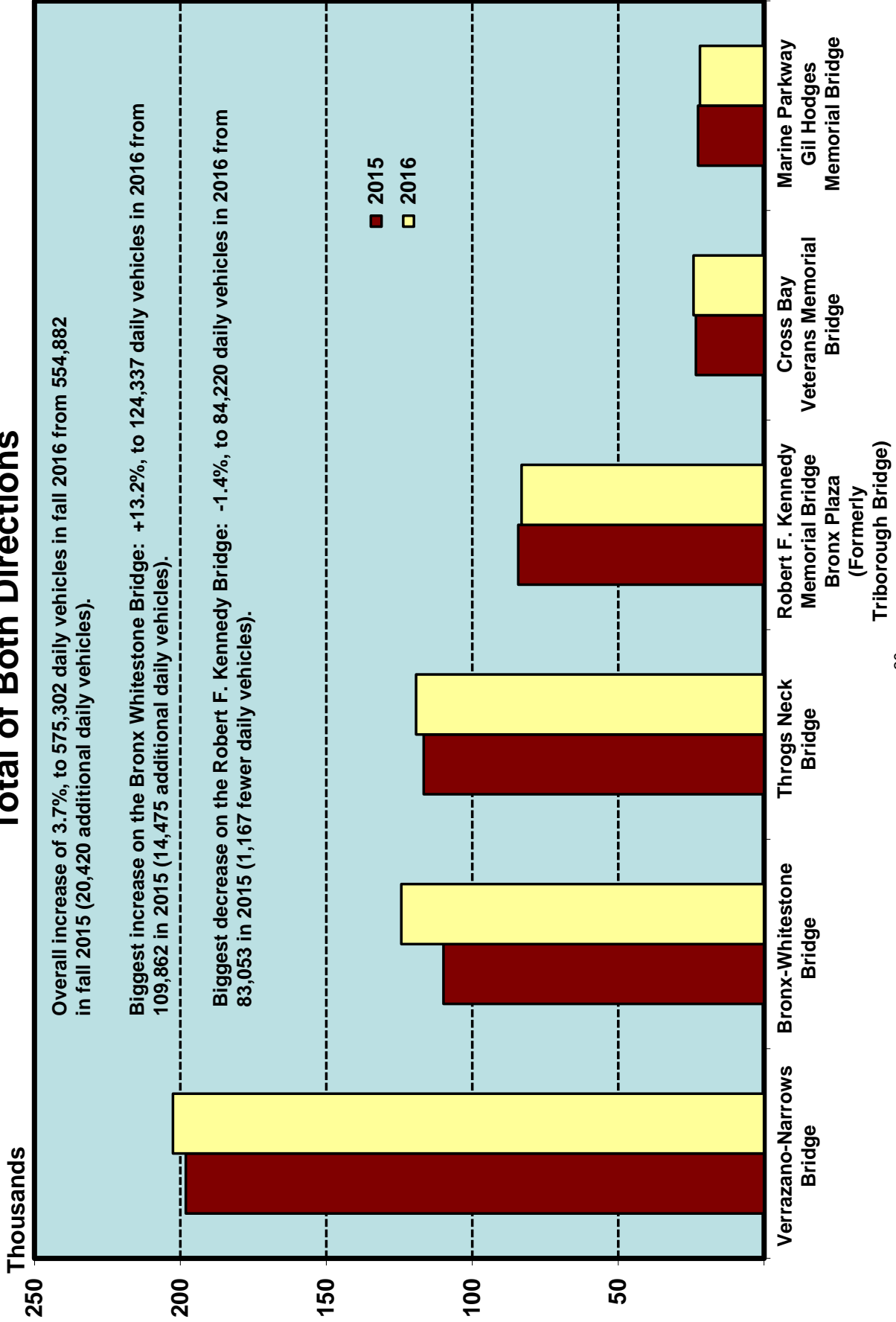
2016 vs. 2015

Total of Both Directions



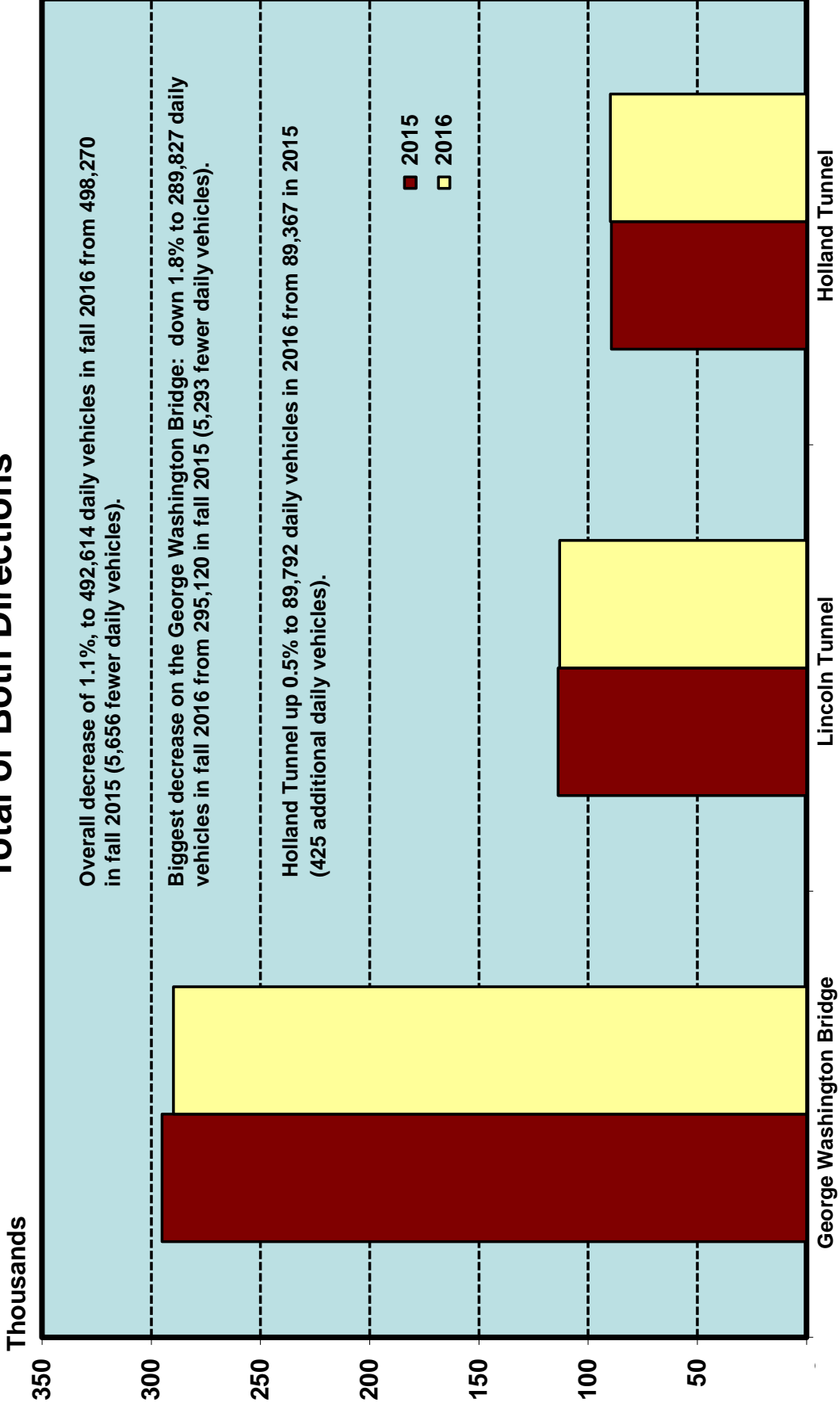
# Metropolitan Transportation Authority Bridges & Tunnels (MTABT) Outer Borough Bridges Daily Volumes 2016 vs. 2015

## Total of Both Directions



# Port Authority of New York & New Jersey (PANYNJ) Manhattan – N.J. Facilities Daily Volumes 2016 vs. 2015

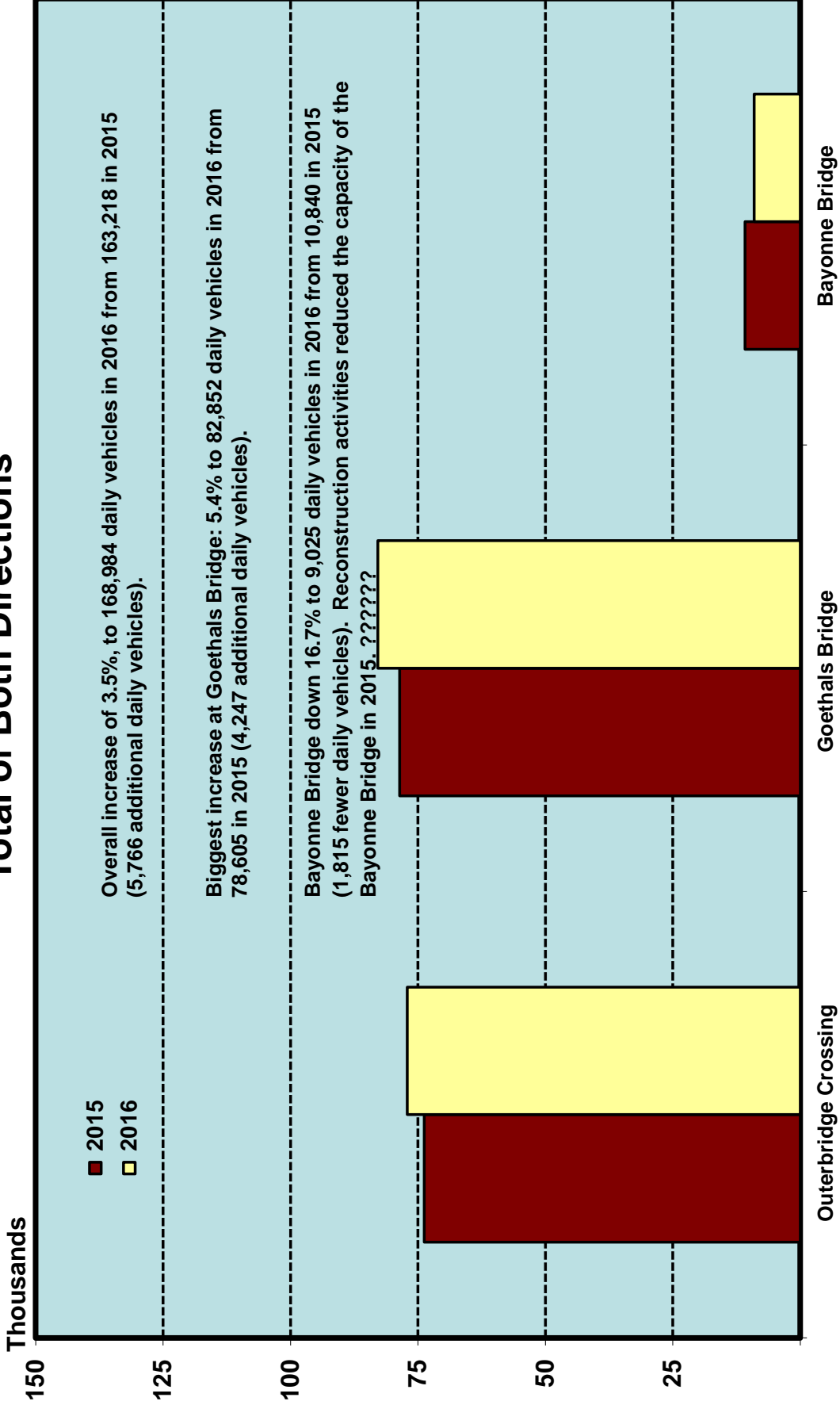
## Total of Both Directions



# Port Authority of New York & New Jersey (PANYNJ) Staten Island – N.J. Bridges Daily Volumes

2016 vs. 2015

## Total of Both Directions



# Ten-Year Trends 2006 - 2016



**Madison Avenue Bridge**



## Ten-Year Trends: 2006 - 2016

From 2006 to 2016, total traffic on the 47 bridges monitored by the New York City Department of Transportation decreased 2.0%, to 2,664,484 daily vehicles in 2016 from 2,719,454 in 2006 (54,970 fewer daily vehicles).

### East River Bridges

- Total traffic on the four East River Bridges decreased 5.6%, to 466,685 daily vehicles in 2016 from 494,576 in 2006 (27,891 fewer daily vehicles).
- Biggest percentage and numerical decrease on the Brooklyn Bridge: -16.7%, to 105,679 daily vehicles in fall 2016 from 126,805 in fall 2006 (21,126 fewer daily vehicles).
- Biggest percentage and numerical increase on the Manhattan Bridge: +14.0%, to 85,084 daily vehicles in fall 2016 from 74,621 in fall 2006 (10,463 additional daily vehicles).

### Harlem River Bridges

- Total traffic on the nine Harlem River Bridges decreased 2.9%, to 540,830 daily vehicles in fall 2016 from 557,043 in fall 2006 (16,213 fewer daily vehicles).
- Biggest decrease on Alexander Hamilton Bridge: to decrease of 12,330 daily vehicles, to 177,853 daily vehicles in fall 2016 from 190,183 in fall 2006 (+6.5%).
- Biggest percentage and numerical increase on the 145<sup>th</sup> Street Bridge: +34.9%, to 29,315 daily vehicles in fall 2016 from 21,733 in fall 2006 (7,582 additional daily vehicles).

### Brooklyn-Queens Bridges

- Total traffic on the four bridges over Newtown Creek between Brooklyn and Queens decreased 7.6%, to 245,138 daily vehicles in 2016 from 265,298 in 2006 (20,160 fewer daily vehicles).
- Biggest decrease on the Kosciuszko Bridge: -11.8%, to 162,581 daily vehicles in 2016 from 184,341 in 2006 (21,760 fewer daily vehicles).
- Biggest increase on the Pulaski Bridge: 6.5%, to 40,722 daily vehicles in 2016 from 38,224 in 2006 (2,498 additional daily vehicles).

### Bronx Bridges

- Total traffic on the eight bridges in The Bronx increased 2.6%, to 467,807 daily vehicles in 2016 from 456,001 in 2006 (11,806 additional daily vehicles).
- Biggest increase on the Hutchinson River Parkway Bridge: Increase of 5,572 daily vehicles, to 126,171 in 2016 from 120,599 in 2006 (+4.6%).
- Biggest decrease on the City Island Bridge: decrease of 866 daily vehicles, to 14,473 in 2016 from 15,339 in 2006 (-5.6%).

### Brooklyn Bridges

- Total traffic on the ten bridges in Brooklyn decreased -3.5%, to 317,121 daily vehicles in 2016 from 328,620 in 2006 (11,499 fewer daily vehicles).
- Biggest decrease on the Mill Basin Bridge: decrease of 6,691 daily vehicles, to 137,226 in 2016 from 143,917 in 2006 (-4.6%).
- Biggest increase on the Third Street Bridge: increase of 980 daily vehicles, to 10,467 in 2016 from 9,487 in 2006 (+10.3%).

## **Queens Bridges**

- Total traffic on the eleven bridges in Queens increased 2.5%, to 566,219 daily vehicles in 2016 from 552,642 in 2006 (13,577 fewer daily vehicles).
- Biggest decrease on the Flushing Bridge: decrease of 8,118 daily vehicles, to 53,025 in 2016 from 61,143 in 2006 (-13.3%).
- Biggest increase on the Whitestone Expressway Bridge: increase of 21,143 daily vehicles, to 218,227 in 2016 from 197,084 in 2006 (+10.7%).

## **Staten Island**

- Total traffic on the Fresh Kills Bridge decreased -7.0%, to 60,684 daily vehicles in 2016 from 65,274 in 2006 (4,590 fewer daily vehicles).

## **MTABT Facilities**

- Henry Hudson Bridge traffic decreased -12.7% to 62,648 daily vehicles in fall 2016 from 71,761 in fall 2006 (9,113 fewer daily vehicles).
- Traffic using the Bronx-Whitestone Bridge increased 12.3% to 124,337 daily vehicles in fall 2016 from 110,708 in fall 2006 (13,629 additional daily vehicles).
- The Queens Midtown Tunnel between Queens and Manhattan decreased -18.3% to 73,470 daily vehicles in 2016 from 89,972 in 2006 (16,502 additional daily vehicles).

## **PANYNJ Facilities**

- Lincoln Tunnel traffic decreased 11.2% to 112,995 daily vehicles in fall 2016 from 127,245 in fall 2006 (14,250 fewer daily vehicles).
- Bayonne Bridge traffic decreased 62.8% to 9,025 daily vehicles in fall 2016 from 24,230 in fall 2006 (15,205 fewer daily vehicles).
- Goethals Bridge traffic increased 26.7% to 82,852 daily vehicles in fall 2016 from 65,378 in fall 2006 (17,474 additional daily vehicles).
- Outerbridge Crossing traffic decreased 10.7% to 77,107 daily vehicles from 86,306 (9,199 fewer daily vehicles).



## 10-Year Traffic Volume Trends ~ 2006-2016

### N.Y.C. Bridges and Tunnels

#### Both Directions

Page 1 of 3

<b>EAST RIVER BRIDGES</b>	<b>Highway Functional Classification</b>	<b>2006</b>	<b>2016</b>	<b>Percent Change</b>	<b>Volume Changes</b>
Brooklyn Bridge	Principal Arterial	126,805	105,679	- 16.7 %	- 21,126
Ed Koch Queensboro Bridge *	Principal Arterial	186,110	170,277	- 8.5 %	- 15,833
Manhattan Bridge	Principal Arterial	74,621	85,084	14.0 %	10,463
Williamsburg Bridge	Principal Arterial	107,040	105,645	- 1.3 %	- 1,395
<b>Total, 4 East River Bridges</b>		<b>494,576</b>	<b>466,685</b>	<b>- 5.6 %</b>	<b>- 27,891</b>
<b>HARLEM RIVER BRIDGES</b>					
Alexander Hamilton Bridge	Interstate	190,183	177,853	- 6.5 %	- 12,330
Broadway Bridge	Principal Arterial	33,551	36,027	7.4 %	2,476
Macombs Dam Bridge	Principal Arterial	39,878	38,183	- 4.3 %	- 1,695
Madison Avenue Bridge	Principal Arterial	43,805	44,338	1.2 %	533
Third Avenue Bridge	Principal Arterial	61,874	55,096	- 11.0 %	- 6,778
University Heights Bridge	Principal Arterial	42,118	40,078	- 4.8 %	- 2,040
Washington Bridge	Minor Arterial	57,689	57,647	- 0.1 %	- 42
Willis Avenue Bridge	Principal Arterial	66,212	62,293	- 5.9 %	- 3,919
145th Street Bridge	Minor Arterial	21,733	29,315	34.9 %	7,582
<b>Total, 9 Harlem River Bridges</b>		<b>557,043</b>	<b>540,830</b>	<b>- 2.9 %</b>	<b>- 16,213</b>
<b>BROOKLYN-QUEENS BRIDGES</b>					
Grand Street Bridge	Principal Arterial	12,893	10,213	- 20.8 %	- 2,680
J.J. Byrne Memorial Bridge **	Principal Arterial	29,840	31,622	6.0 %	1,782
Kosciuszko Bridge	Interstate	184,341	162,581	- 11.8 %	- 21,760
Pulaski Bridge	Principal Arterial	38,224	40,722	6.5 %	2,498
<b>Total, 4 Brooklyn-Queens Bridges (Over Newtown Creek)</b>		<b>265,298</b>	<b>245,138</b>	<b>- 7.6 %</b>	<b>- 20,160</b>
<b>BRONX BRIDGES</b>					
City Island Bridge	Minor Arterial	15,339	14,473	- 5.6 %	- 866
East 174th Street Bridge	Minor Arterial	13,662	17,701	29.6 %	4,039
Eastchester Bridge	Principal Arterial	20,890	21,761	4.2 %	871
Eastern Boulevard Bridge	Interstate	182,579	183,090	0.3 %	511
Hutchinson River Parkway Bridge	Principal Arterial	120,599	126,171	4.6 %	5,572
Pelham Bridge	Minor Arterial	16,749	16,840	0.5 %	91
Unionport Bridge	Principal Arterial	61,262	63,024	2.9 %	1,762
Westchester Avenue Bridge	Principal Arterial	24,921	24,747	- 0.7 %	- 174
<b>Total, 8 Bronx Bridges</b>		<b>456,001</b>	<b>467,807</b>	<b>2.6 %</b>	<b>11,806</b>

\* Queensboro Bridge renamed April 11, 2011.

\*\* J.J. Byrne Memorial Bridge also known as Greenpoint Avenue Bridge.

**10-Year Traffic Volume Trends ~ 2006-2016**

**N.Y.C. Bridges and Tunnels**

**Both Directions**

Page 2 of 3

<b>BROOKLYN BRIDGES</b>	<b>Highway Functional Classification</b>	<b>2006</b>	<b>2016</b>	<b>Percent Change</b>	<b>Volume Changes</b>
Carroll Street Bridge	Local	1,068	1,142	6.9 %	74
Crosey Avenue Bridge	Principal Arterial	35,398	35,557	0.4 %	159
Hamilton Avenue Bridge	Principal Arterial	55,526	55,584	0.1 %	58
Metropolitan Avenue Bridge	Principal Arterial	38,130	35,687	- 6.4 %	- 2,443
Mill Basin Bridge	Principal Arterial	143,917	137,226	- 4.6 %	- 6,691
Ninth Street Bridge	Minor Arterial	11,143	10,441	- 6.3 %	- 702
Stillwell Avenue Bridge	Principal Arterial	11,158	9,353	- 16.2 %	- 1,805
Third Avenue Bridge	Principal Arterial	18,403	17,754	- 3.5 %	- 649
Third Street Bridge	Minor Arterial	9,487	10,467	10.3 %	980
Union Street Bridge	Minor Arterial	4,390	3,910	- 10.9 %	- 480
<b>Total, 10 Brooklyn Bridges</b>		<b>328,620</b>	<b>317,121</b>	<b>- 3.5 %</b>	<b>- 11,499</b>
<b>QUEENS BRIDGES</b>					
Borden Avenue Bridge	Minor Arterial	16,157	14,863	- 8.0 %	- 1,294
Flushing Bridge	Principal Arterial	61,143	53,025	- 13.3 %	- 8,118
Hook Creek Bridge	Principal Arterial	73,767	75,716	2.6 %	1,949
Hunters Point Bridge	Collector	7,262	8,044	10.8 %	782
Joseph P. Addabbo Bridge *	Principal Arterial	23,254	25,874	11.3 %	2,620
Little Neck Bridge	Principal Arterial	48,345	47,954	- 0.8 %	- 391
Midtown Highway Bridge	Interstate	83,379	83,342	- 0.0 %	- 37
Rikers Island Bridge	Collector	13,146	14,817	12.7 %	1,671
Roosevelt Avenue Bridge	Principal Arterial	19,420	15,964	- 17.8 %	- 3,456
Roosevelt Island Bridge	Collector	9,685	8,393	- 13.3 %	- 1,292
Whitestone Expwy Bridge	Interstate	197,084	218,227	10.7 %	21,143
<b>Total, 11 Queens Bridges</b>		<b>552,642</b>	<b>566,219</b>	<b>2.5 %</b>	<b>13,577</b>
<b>STATEN ISLAND</b>					
Fresh Kills Bridge	Principal Arterial	65,274	60,684	- 7.0 %	- 4,590
<b>TOLL-FREE GRAND TOTALS</b>		<b>2,719,454</b>	<b>2,664,484</b>	<b>- 2.0 %</b>	<b>- 54,970</b>

\* Joseph P. Addabbo Bridge also known as North Channel Bridge.

## 10-Year Traffic Volume Trends ~ 2006-2016

### N.Y.C. Bridges and Tunnels

#### Both Directions

Page 3 of 3

<i>MTABT Manhattan Facilities</i>	Highway Functional Classification	2006	2016	Percent Change	Volume Changes
Henry Hudson Bridge	Principal Arterial	71,761	62,648	- 12.7 %	- 9,113
Hugh L. Carey Tunnel *	Interstate	57,436	54,076	- 5.8 %	- 3,360
Queens-Midtown Tunnel	Interstate	89,972	73,470	- 18.3 %	- 16,502
R.F.K. Memorial Bridge Manhattan Plaza **	Principal Arterial	98,582	95,552	- 3.1 %	- 3,030
<b>Total, 4 MTABT Manhattan Crossings</b>		<b>317,751</b>	<b>285,746</b>	<b>- 10.1 %</b>	<b>- 32,005</b>
<i>PANYNJ Manhattan Facilities</i>					
George Washington Bridge	Interstate	312,078	289,827	- 7.1 %	- 22,251
Holland Tunnel	Interstate	98,425	89,792	- 8.8 %	- 8,633
Lincoln Tunnel	Principal Arterial	127,245	112,995	- 11.2 %	- 14,250
<b>Total, 3 PANYNJ Manhattan - New Jersey Crossings</b>		<b>537,748</b>	<b>492,614</b>	<b>- 8.4 %</b>	<b>- 45,134</b>
<i>MTABT Outer Borough Bridges</i>					
Bronx-Whitestone Bridge	Interstate	110,708	124,337	12.3 %	13,629
Cross Bay Veterans Memorial Bridge	Minor Arterial	22,036	24,150	9.6 %	2,114
Marine Parkway Gil Hodges Memorial Bridge	Minor Arterial	22,363	21,990	- 1.7 %	- 373
R.F.K. Memorial Bridge Bronx Plaza **	Interstate	81,840	83,053	1.5 %	1,213
Throgs Neck Bridge	Interstate	116,427	119,249	2.4 %	2,822
Verrazano-Narrows Bridge	Interstate	207,353	202,523	- 2.3 %	- 4,830
<b>Total, 6 MTABT Outer Borough Bridges</b>		<b>560,727</b>	<b>575,302</b>	<b>2.6 %</b>	<b>14,575</b>
<i>PANYNJ Staten Island Bridges</i>					
Bayonne Bridge	Principal Arterial	24,230	9,025	- 62.8 %	- 15,205
Goethals Bridge	Interstate	65,378	82,852	26.7 %	17,474
Outerbridge Crossing	Principal Arterial	86,306	77,107	- 10.7 %	- 9,199
<b>Total, 3 PANYNJ Staten Island - New Jersey Bridges</b>		<b>175,914</b>	<b>168,984</b>	<b>- 3.9 %</b>	<b>- 6,930</b>

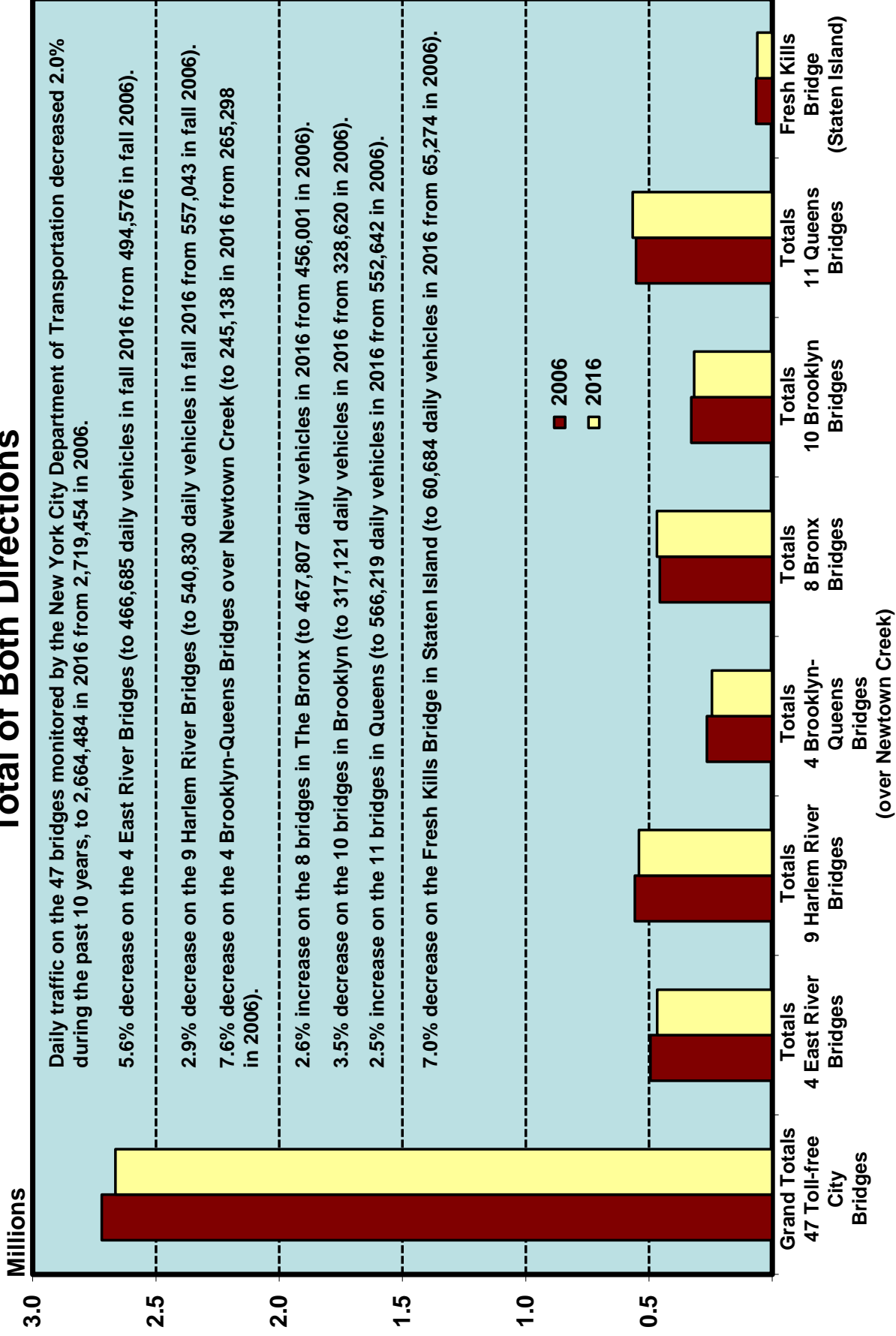
\* Formerly Brooklyn-Battery Tunnel, renamed October 22, 2012.

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

# 10-Year Volume Changes ~ 2006 – 2016

## New York City Toll-free Bridges Daily Volumes

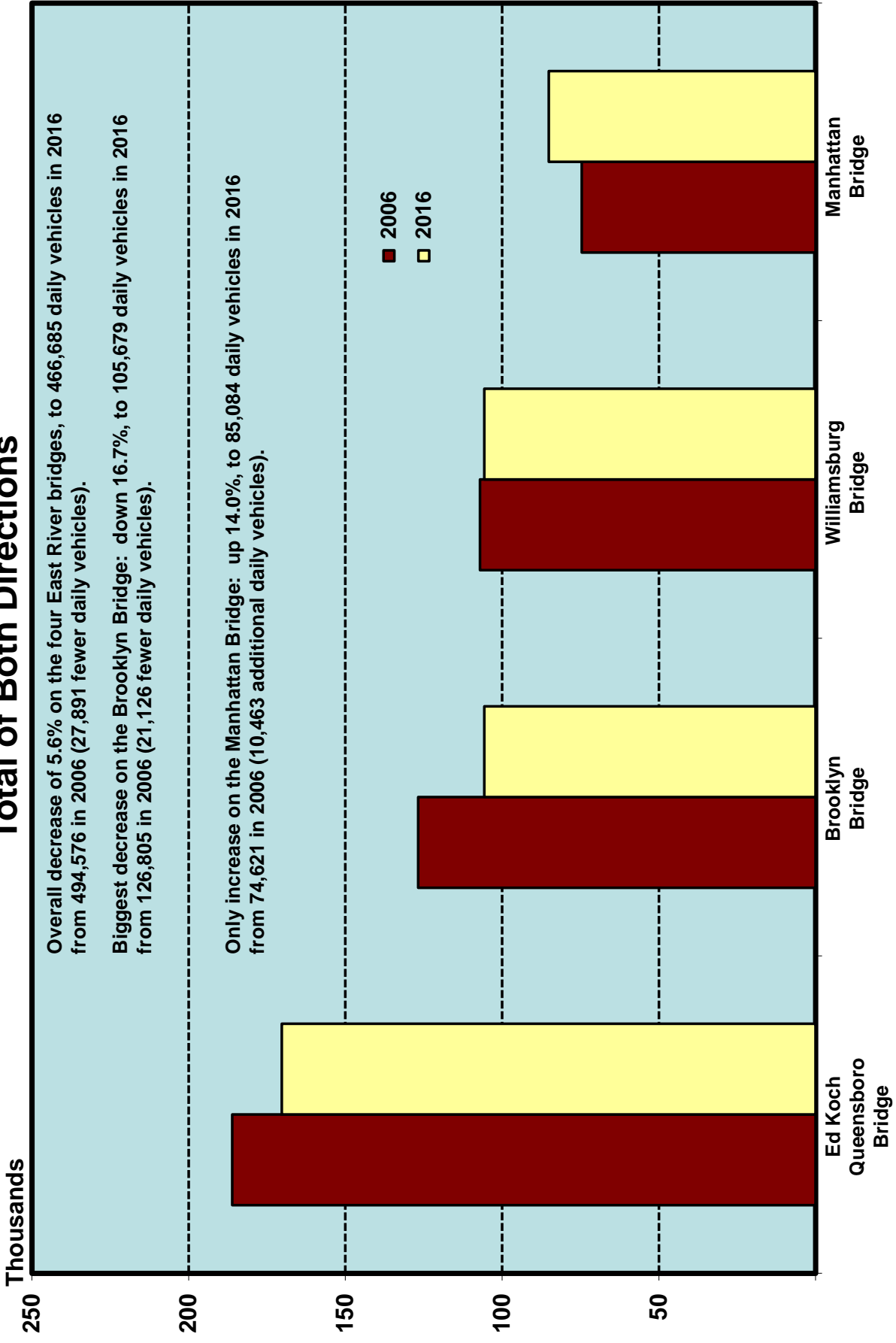
### Total of Both Directions



# 10-Year Volume Changes ~ 2006 – 2016

## East River Bridges Daily Volumes

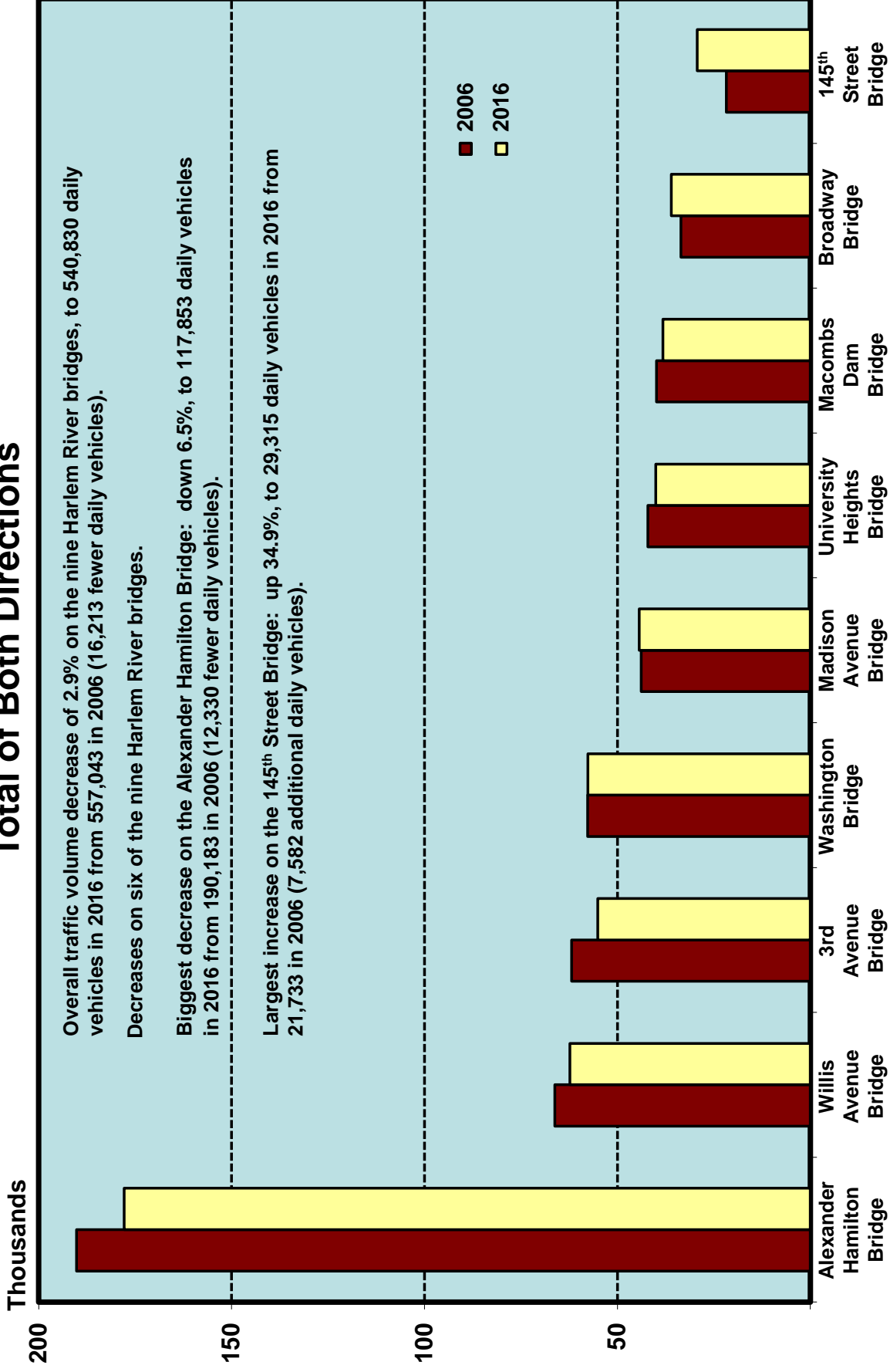
### Total of Both Directions



# 10-Year Volume Changes ~ 2006 – 2016

## Harlem River Bridges Daily Volumes

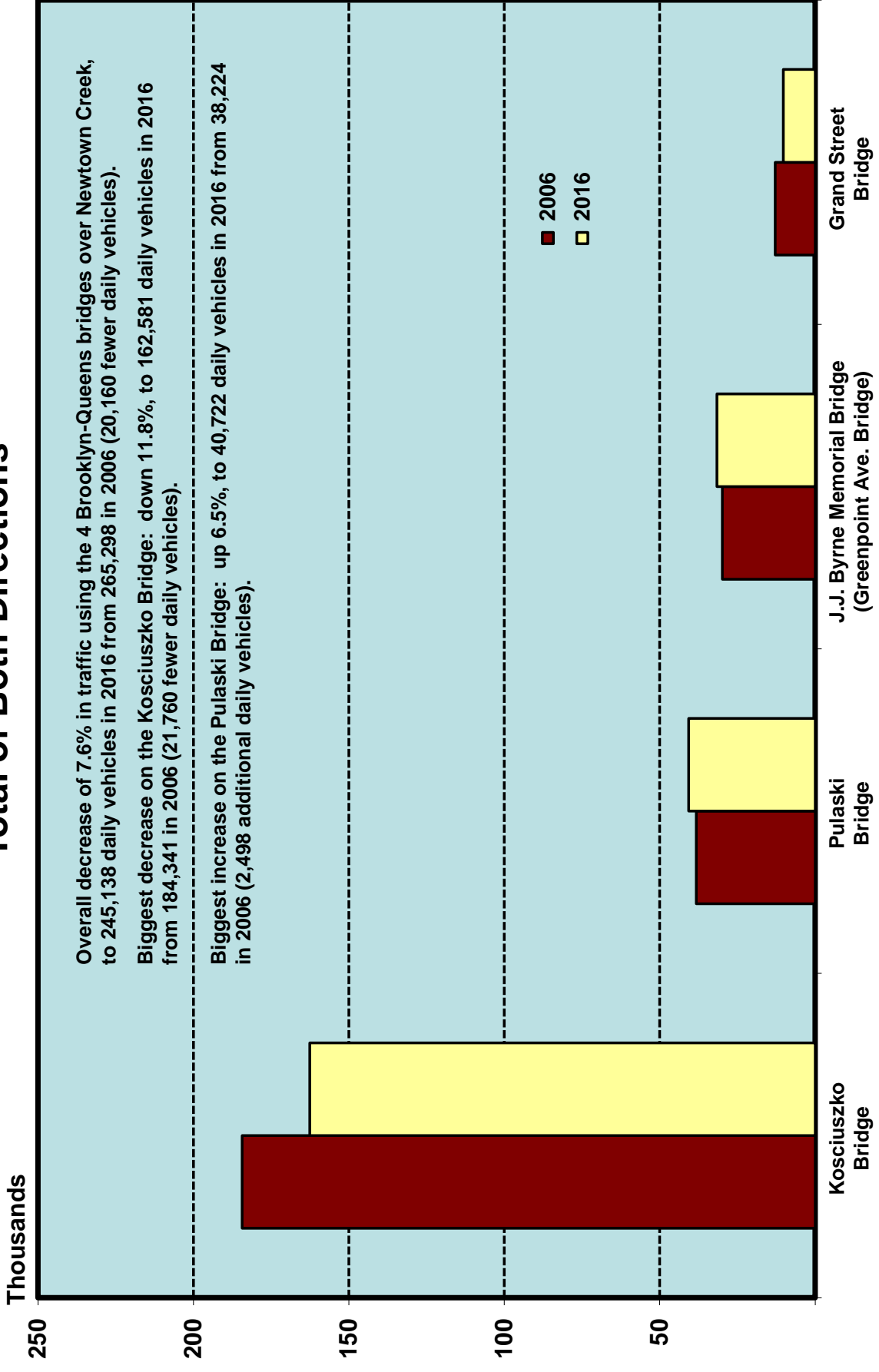
### Total of Both Directions



# 10-Year Volume Changes ~ 2006 – 2016

## Brooklyn-Queens (Newtown Creek) Bridges Daily Volumes

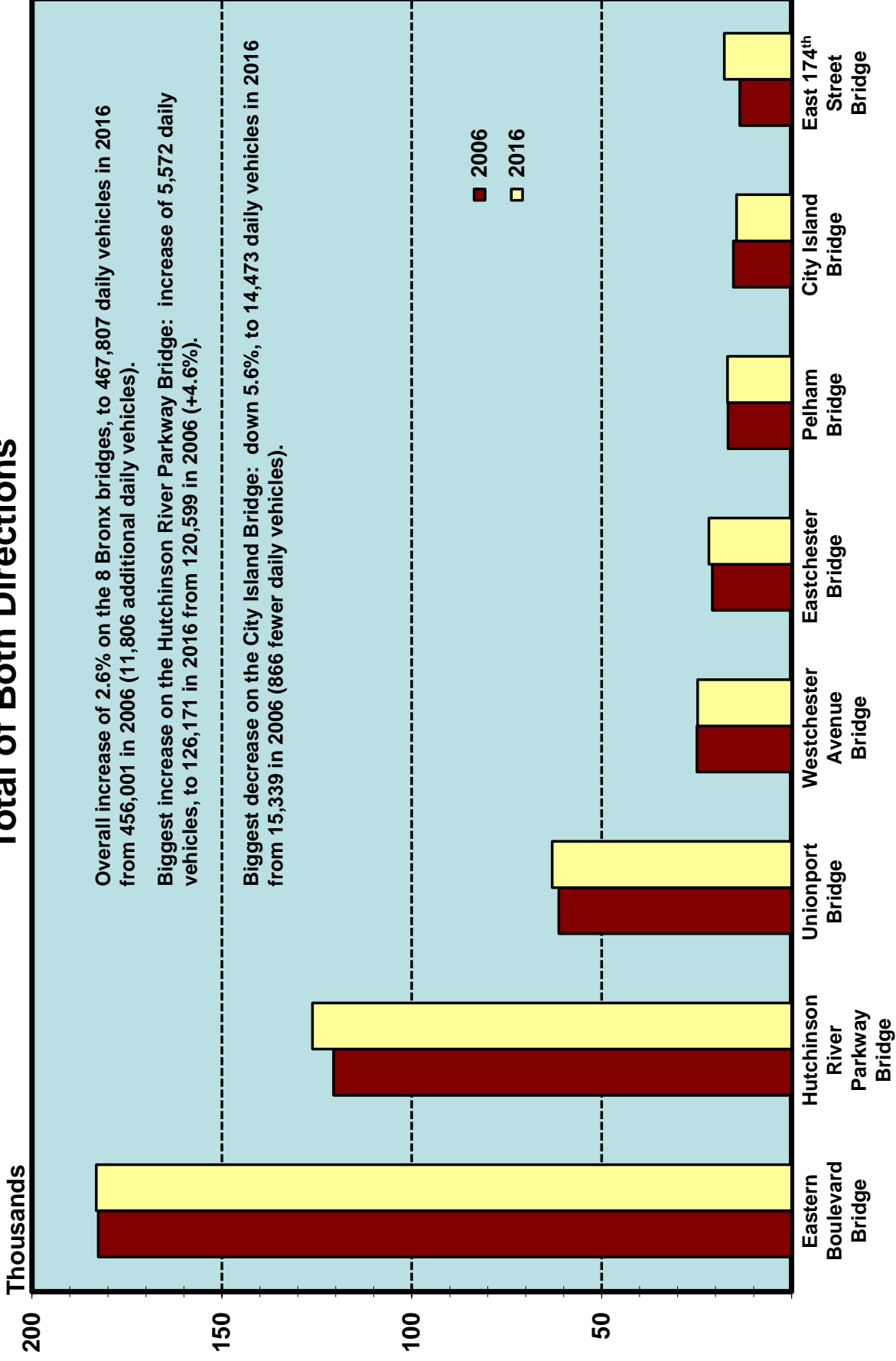
### Total of Both Directions



# 10-Year Volume Changes ~ 2006 – 2016

## Bronx Bridges Daily Volumes

### Total of Both Directions

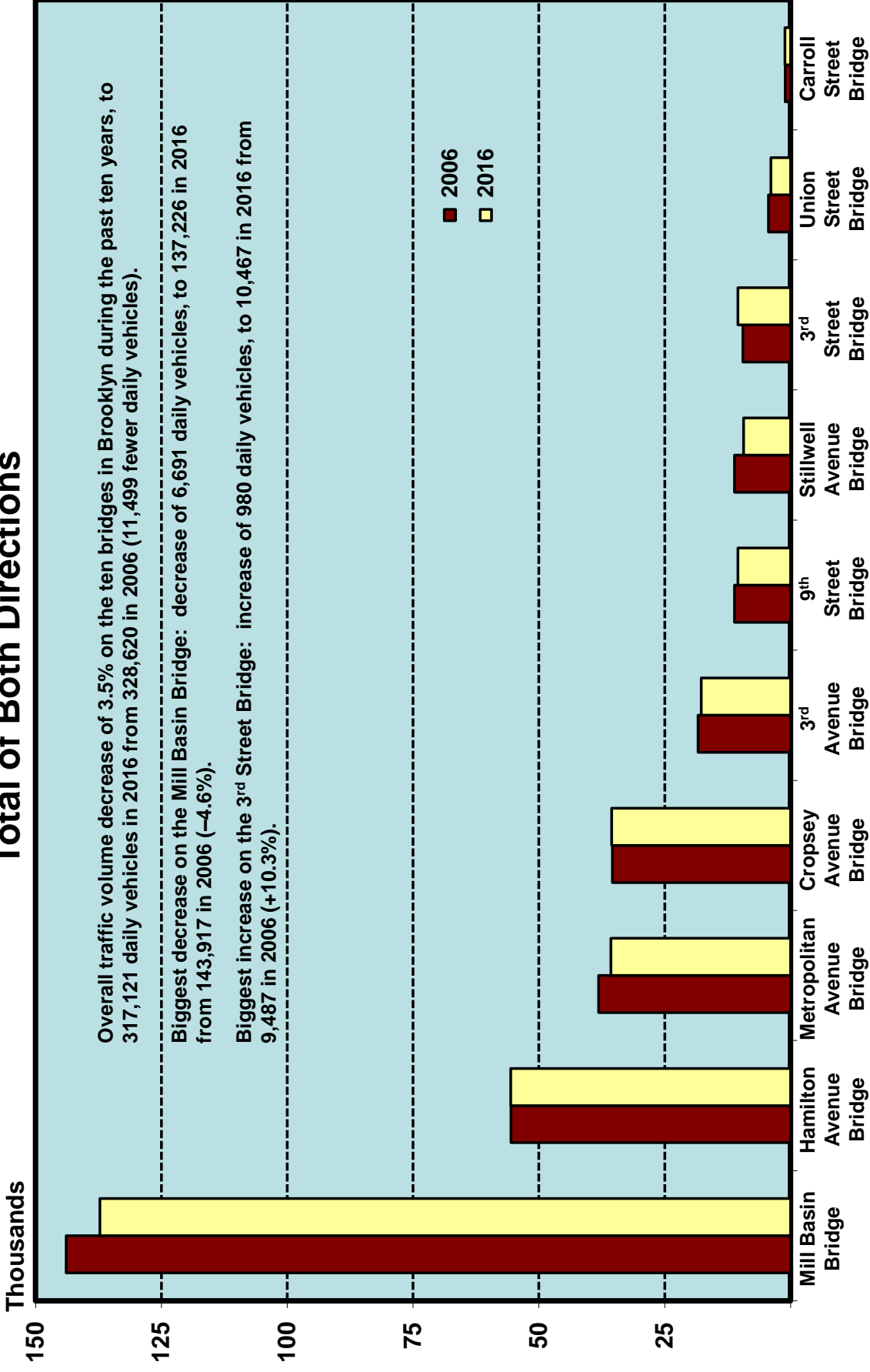




# 10-Year Volume Changes ~ 2006 – 2016

## Brooklyn Bridges Daily Volumes

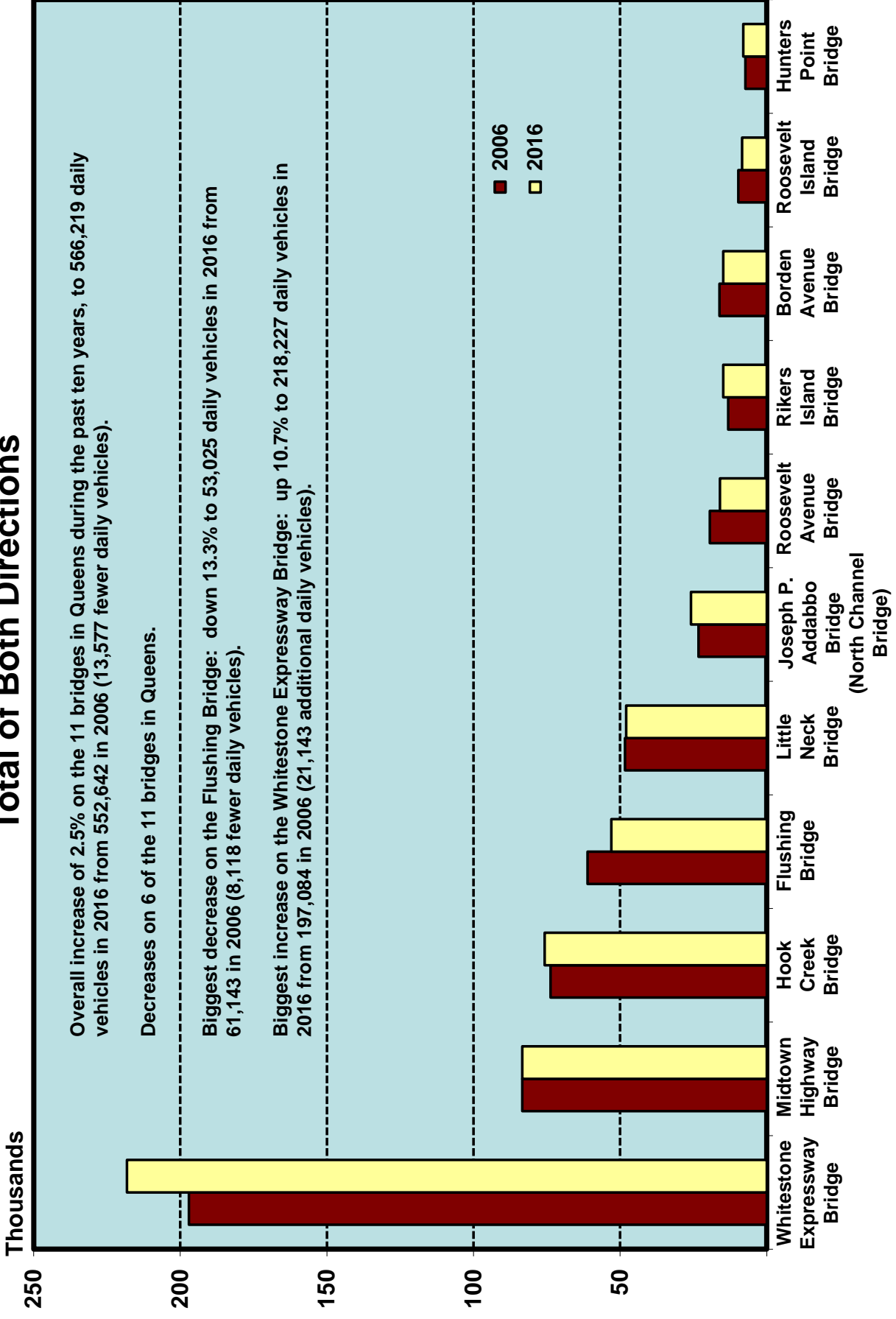
### Total of Both Directions



# 10-Year Volume Changes ~ 2006 – 2016

## Queens Bridges Daily Volumes

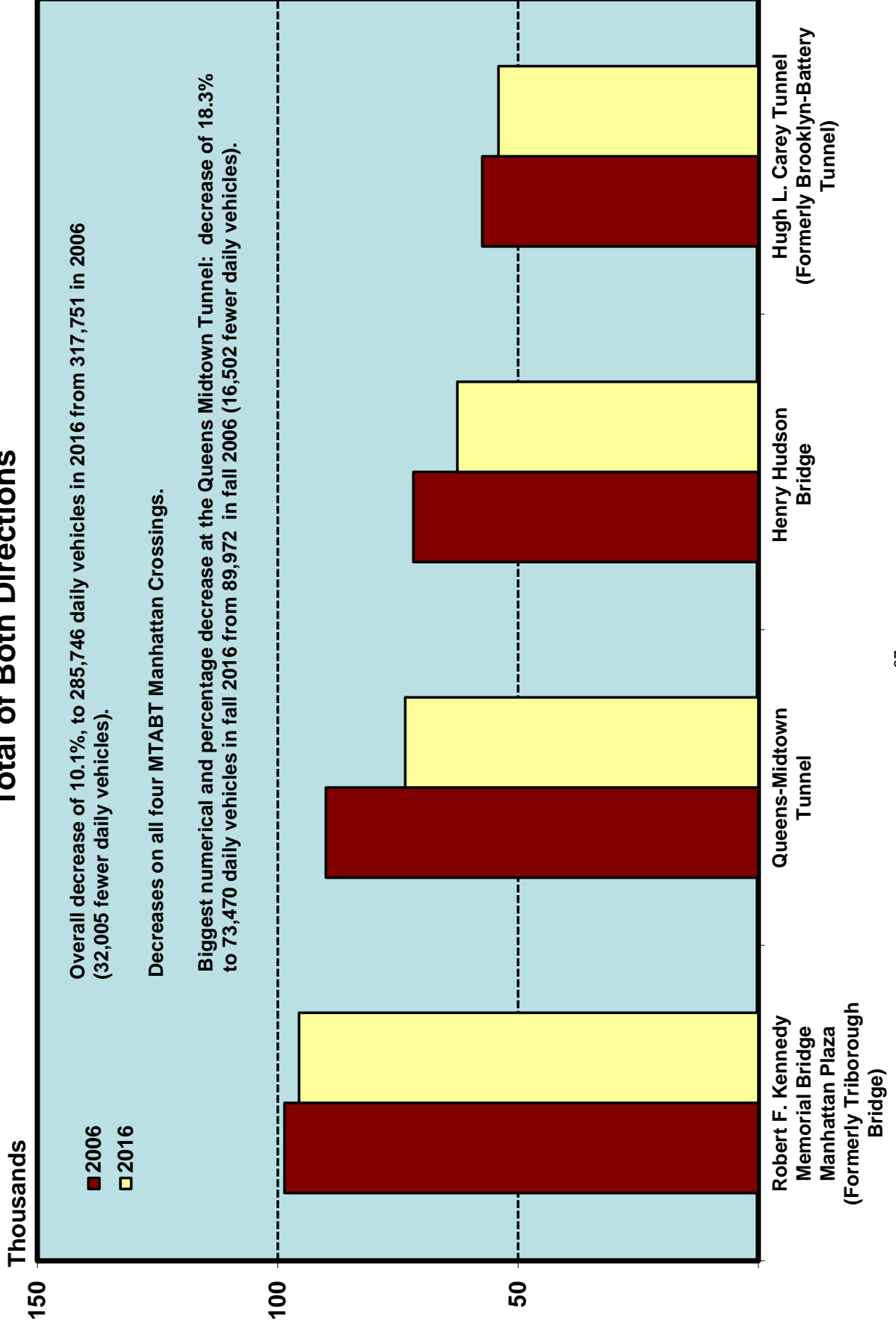
### Total of Both Directions



# 10-Year Volume Changes ~ 2006 – 2016

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

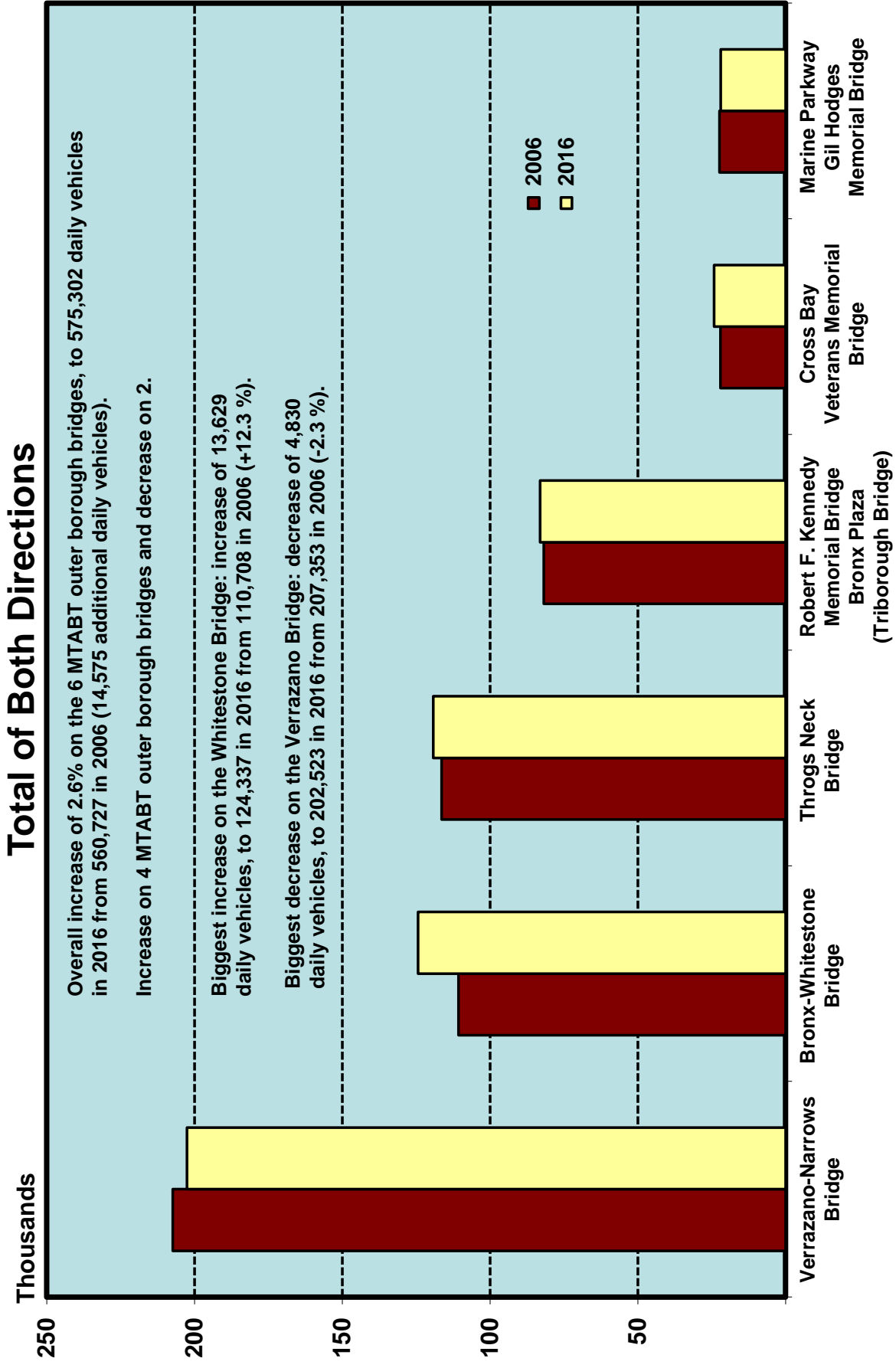
### Total of Both Directions



# 10-Year Volume Changes ~ 2006 – 2016

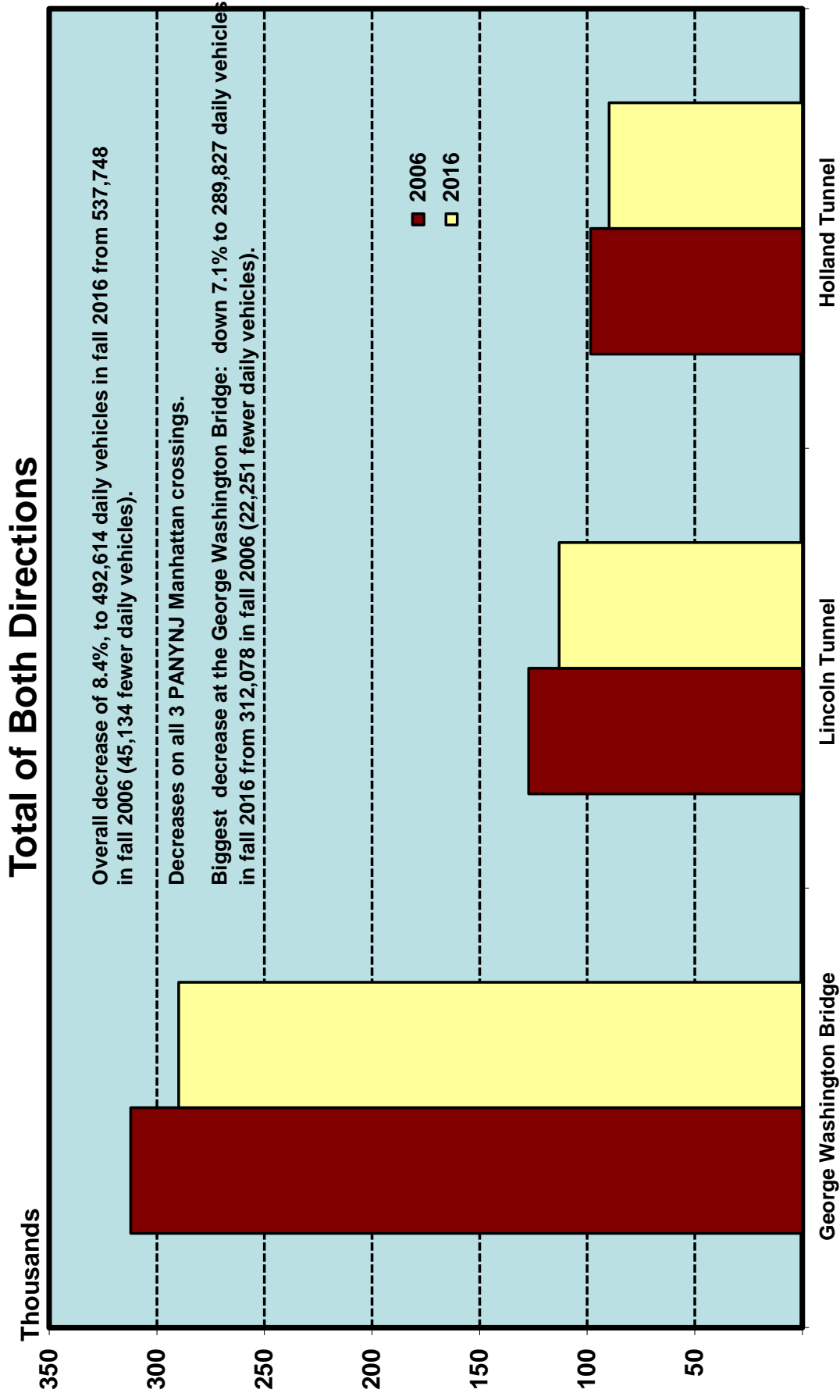
## Metropolitan Transportation Authority Bridges & Tunnels (MTABT)

### Outer Borough Bridges Daily Volumes



# 10-Year Volume Changes ~ 2006 – 2016

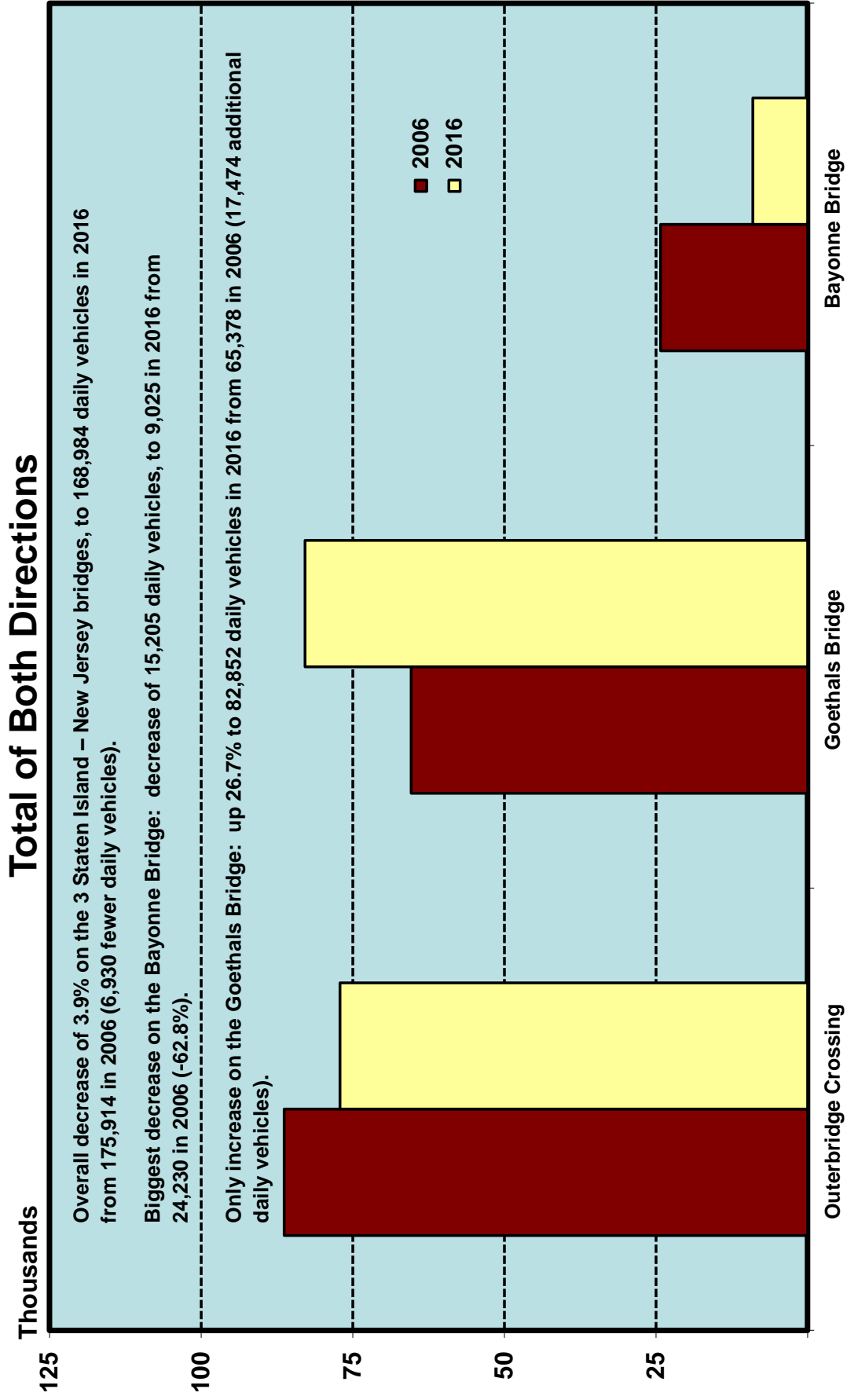
## Port Authority of New York & New Jersey (PANYNJ) Manhattan – N.J. Facilities Daily Volumes



# 10-Year Volume Changes ~ 2006 – 2016

## Port Authority of New York & New Jersey (PANYNJ)

### Staten Island – N.J. Bridges Daily Volumes



# Historic Trends



Eastchester Bridge





## Historic Trends

In 1948, traffic on the 47 bridges monitored by the New York City Department of Transportation was 923,996 daily trips. By 1968, that figure had more than doubled, to 1,911,838. In 2016, it stood at 2,664,484 daily trips, nearly three times the 1948 volume.

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 reached 125,133 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 2,058,642 vehicles per day. This was followed by a downward trend between 1971 and 1979. Daily bridge traffic in 1979 was 64,534 below the 1969 level. Thereafter, bridge traffic increased in most years, with 698,087 more daily vehicles crossing the 47 bridges in 2016 than in 1979.

### 1948 - 1965

- Between 1948 and 1965, bridge traffic increased 85.7% on the 44 monitored bridges open during that period, to 1,716,287 daily vehicles in 1965 from 923,996 in 1948 (792,291 additional daily vehicles).
- Large increases in daily traffic occurred at the following bridges:
  - Brooklyn Bridge over the East River between Manhattan and Brooklyn: up 127.3% to 84,141 daily vehicles in 1965 from 37,011 in 1948 (+47,130 daily vehicles).
  - Ed Koch Queensboro Bridge over the East River between Manhattan and Queens: up 41.3% to 117,588 daily vehicles from 83,201 (+34,387 daily vehicles).
  - Williamsburg Bridge over the East River between Manhattan and Brooklyn: up 70.9% to 80,567 from 47,139 (+33,428 daily vehicles).
  - 3<sup>rd</sup> Avenue Bridge over the Harlem River between The Bronx and Manhattan: up 77.2% to 55,644 from 31,403 (+24,241 daily vehicles).
  - Willis Avenue Bridge over the Harlem River between Manhattan and The Bronx: up 79.5% to 53,219 from 29,648 (+23,571 daily vehicles).
  - Kosciuszko Bridge along the Brooklyn-Queens Expressway over Newtown Creek: up 238.1% to 110,764 from 32,761 (+78,003 daily vehicles).
  - Eastern Boulevard Bridge along Bruckner Expressway (I-278) over the Bronx River in The Bronx: up 111.3% to 94,167 from 44,563 (+49,604 daily vehicles).
  - Hutchinson River Parkway Bridge over the Hutchinson River in The Bronx: up 224.0% to 48,870 from 15,085 (+33,785 daily vehicles).
  - Unionport Bridge along Bruckner Boulevard over Westchester Creek in The Bronx: up 274.0% to 139,724 from 37,359 (+102,365 daily vehicles).
  - Hamilton Avenue Bridge over Gowanus Canal in Brooklyn: up 195.0% to 35,795 from 12,135 (+23,660 daily vehicles).
  - Mill Basin Bridge along Belt Parkway in Brooklyn: up 407.8% to 110,566 from 21,773 (+88,793 daily vehicles).
  - Hook Creek Bridge along Rockaway Boulevard in Queens: up 265.7% to 35,185 from 9,620 (+25,565 daily vehicles).

- Midtown Highway Bridge on the Long Island Expressway over Dutch Kills in Queens: up 112.1% to 60,973 daily vehicles in 1965 from 28,754 in 1948 (+32,219 daily vehicles).
- Whitestone Expressway Bridge over the Flushing River in Queens: up 197.5% to 81,201 daily vehicles in 1965 from 27,290 in 1948 (+53,911 daily vehicles).
- The only major decrease from 1948 to 1965 occurred on the Manhattan Bridge over the East River between Manhattan and Brooklyn: down 17.9%, to 71,222 daily vehicles in 1965 from 86,717 in 1948 (15,495 fewer daily vehicles).

## **1965 - 1975**

- Between 1965 and 1975, bridge traffic increased 7.5% on the 46 monitored bridges open during that period, to 1,983,069 daily vehicles from 1,845,211 (137,858 additional daily vehicles).
- Significant increases in daily traffic occurred on the following bridges:
  - Brooklyn Bridge over the East River between Manhattan and Brooklyn: up 23.3% to 103,750 daily vehicles in 1975 from 84,141 in 1965 (+19,609 daily vehicles).
  - Ed Koch Queensboro Bridge over the East River between Manhattan and Queens: up 22.7% to 144,252 daily vehicles in 1975 from 117,588 in 1965 (+26,664 daily vehicles).
  - Kosciuszko Bridge over Newtown Creek between Brooklyn and Queens: up 27.2% to 140,882 daily vehicles from 110,764 (+30,118 daily vehicles).
  - Eastern Boulevard Bridge along Bruckner Expressway (I-278) over the Bronx River in The Bronx: up 31.0% to 123,389 daily vehicles from 94,167 (+29,222 daily vehicles).
  - Whitestone Expressway Bridge over the Flushing River in Queens: up 43.8% to 116,750 from 81,201 (+35,549 daily vehicles).
  - Fresh Kills Bridge over Richmond Creek in Staten Island: up 148.9% to 38,684 from 15,539 (+23,145 daily vehicles).
- The most significant decrease in daily traffic occurred on the Unionport Bridge in The Bronx: down 75.2% to 34,648 daily vehicles in 1975 from 139,724 in 1965 (105,076 fewer daily vehicles). The Bruckner Interchange was completed in 1972.

## **1975 - 1985**

- From 1975 to 1985, total traffic on the 47 bridges increased 17.2%, to 2,329,969 daily vehicles from 1,987,853 (342,116 additional daily vehicles).
- The most significant increases occurred on the following bridges:
  - Manhattan Bridge over the East River between Manhattan and Brooklyn: up 35.7% to 100,825 daily vehicles in 1985 from 74,320 in 1975 (+26,505 daily vehicles).
  - Williamsburg Bridge over the East River between Manhattan and Brooklyn: up 30.9% to 107,386 daily vehicles in 1985 from 82,057 in 1975 (+25,329 daily vehicles).
  - Alexander Hamilton Bridge over the Harlem River between Manhattan and The Bronx: up 28.0% to 171,602 daily vehicles in 1985 from 134,013 in 1975 (+37,589 daily vehicles).
  - Kosciuszko Bridge along the Brooklyn-Queens Expressway (I-278) over Newtown Creek: up 19.7% to 168,680 daily vehicles in 1985 from 140,882 in 1975 (+27,798 daily vehicles).

- Eastern Boulevard Bridge along Bruckner Expressway (I-278) over the Bronx River in The Bronx: up 12.4% to 138,725 daily vehicles from 123,389 (+15,336 daily vehicles).
  - Metropolitan Avenue Bridge over English Kills in Brooklyn: up 94.9% to 43,173 from 22,148 (+21,025 daily vehicles).
- There were no major decreases from 1975 to 1985.

## **1985 - 1995**

- From 1985 to 1995, daily traffic increased 2.8% on the 47 bridges, to 2,394,405 daily vehicles from 2,329,969 (64,436 additional daily vehicles).
- Significant increases in daily traffic occurred on the following bridges:
  - Brooklyn Bridge over the East River between Manhattan and Brooklyn: up 12.8% to 131,883 daily vehicles in 1995 from 116,929 in 1985 (+14,954 daily vehicles).
  - Hutchinson River Parkway Bridge over the Hutchinson River in The Bronx: up 44.6% to 85,985 from 59,455 (+26,530 daily vehicles).
  - Mill Basin Bridge along Belt Parkway in Brooklyn: up 23.5% to 134,540 daily vehicles in 1995 from 108,974 in 1985 (+25,566 daily vehicles).
  - Hook Creek Bridge along Rockaway Boulevard in Queens: up 31.8% to 66,517 from 50,458 (+16,059 daily vehicles).
- Significant decreases occurred on the following bridges:
  - Manhattan Bridge over the East River between Manhattan and Brooklyn: down 25.5% to 75,126 daily vehicles in 1995 from 100,825 in 1985 (25,699 fewer daily vehicles).
  - Madison Avenue Bridge over the Harlem River between Manhattan and The Bronx: down 40.1% to 22,739 daily vehicles in 1995 from 37,956 in 1985 (15,217 fewer daily vehicles). Reconstruction activities caused half this bridge to be closed round-the-clock in 1995.
  - University Heights Bridge over the Harlem River between Manhattan and The Bronx: down 43.4% to 21,238 daily vehicles in 1995 from 37,553 in 1985 (16,315 fewer daily vehicles). Reconstruction activities caused this bridge to be closed to Bronx-bound traffic round-the-clock in 1995.
  - Pulaski Bridge over Newtown Creek between Brooklyn and Queens: down 33.1% to 28,480 daily vehicles in 1995 from 42,579 in 1985 (14,099 fewer daily vehicles).

## **1995 - 2005**

- From 1995 to 2005, bridge traffic increased 15.2%, to 2,757,802 daily vehicles from 2,394,405 (363,397 additional daily vehicles).
- Significant increases in daily traffic occurred on the following bridges:
  - Ed Koch Queensboro Bridge over the East River: up 13.5% to 178,610 daily vehicles in 2005 from 157,306 in 1995 (+21,304 daily vehicles).
  - Madison Avenue Bridge over the Harlem River between Manhattan and The Bronx: up 112.8% to 48,397 daily vehicles in 2005 from 22,739 in 1995 (25,658 additional daily vehicles). Reconstruction activities had caused half this bridge to be closed round-the-clock in 1995.
  - University Heights Bridge over the Harlem River between Manhattan and The Bronx: up 111.6% to 44,938 daily vehicles in 2005 from 21,238 in 1995 (23,700 additional

daily vehicles). Reconstruction activities had caused this bridge to be closed to Bronx-bound traffic round-the-clock in 1995.

- Kosciuszko Bridge along the Brooklyn-Queens Expressway over Newtown Creek: up 17.9% to 198,813 daily vehicles in 2005 from 168,639 in 1995 (30,174 additional daily vehicles).
  - Eastern Boulevard Bridge on Bruckner Expressway over the Bronx River in The Bronx: up 40.6% to 183,743 daily vehicles in 2005 from 130,647 in 1995 (+53,096 daily vehicles).
  - Hutchinson River Parkway Bridge over the Hutchinson River in The Bronx: up 37.7% to 118,387 daily vehicles in 2005 from 85,985 in 1995 (+32,402 daily vehicles).
  - Unionport Bridge along Bruckner Boulevard over Westchester Creek in The Bronx: up 52.2% to 60,605 daily vehicles in 2005 from 39,811 in 1995 (+20,794 daily vehicles).
  - Midtown Highway Bridge (I-495) over Dutch Kills in Queens: up 32.1% to 89,559 daily vehicles in 2005 from 67,810 in 1995 (+21,749 daily vehicles).
  - Whitestone Expressway Bridge over the Flushing River in Queens: up 30.3% to 191,563 daily vehicles in 2005 from 147,029 in 1995 (+44,534 daily vehicles).
  - Fresh Kills Bridge along Richmond Avenue over Richmond Creek in Staten Island: up 41.8% to 66,816 daily vehicles in 2005 from 47,132 in 1995 (19,684 additional daily vehicles).
- There were no major decreases from 1995 to 2005.

## **1948 - 2016**

- During the 68 years from 1948 to 2016, total traffic on the 47 bridges increased 188.4% to 2,664,484 daily vehicles in 2016 from 923,996 in 1948 (1,740,488 additional daily vehicles).
- **East River Bridges**
  - Traffic using the four East River Bridges increased 83.7% to 466,685 daily vehicles in 2016 from 254,068 in 1948 (212,617 additional daily vehicles).
  - Brooklyn Bridge up 185.5% to 105,679 daily vehicles from 37,011 (+68,668 daily vehicles).
  - Ed Koch Queensboro Bridge up 104.7% to 170,277 daily vehicles from 83,201 (+87,076 daily vehicles).
  - Williamsburg Bridge up 124.1% to 105,645 daily vehicles from 47,139 (+58,506 daily vehicles).
- **Harlem River Bridges**
  - Traffic using the nine Harlem River Bridges increased 161.0% to 540,830 daily vehicles in 2016 from 207,177 in 1948 (333,653 additional daily vehicles). This includes the Alexander Hamilton Bridge which opened in January 1963.
  - Willis Avenue Bridge up 110.1% to 62,293 daily vehicles from 29,648 (+32,645 daily vehicles).
  - Broadway Bridge up 124.9%, to 36,027 daily vehicles from 16,020 (+20,007 daily vehicles).
  - Third Avenue Bridge up 75.4% to 55,096 daily vehicles from 31,403 (+23,693 daily vehicles).
  - Washington Bridge up 96.3% to 57,647 daily vehicles from 29,374 (+28,273 daily vehicles).

- **Brooklyn-Queens Bridges**

- Traffic using the four bridges over Newtown Creek increased 218.8% to 245,138 daily vehicles in 2016 from 76,884 in 1948 (168,254 additional daily vehicles).
- Kosciuszko Bridge up 396.3% to 162,581 daily vehicles in 2016 from 32,761 in 1948 (+129,820 daily vehicles).

- **Bronx Bridges**

- Traffic using the eight bridges in The Bronx increased 231.2% to 467,807 daily vehicles in 2016 from 141,247 in 1948 (326,560 additional daily vehicles).
- Hutchinson River Parkway Bridge up 736.4% to 126,171 daily vehicles from 15,085 (+111,086 daily vehicles).
- Eastern Boulevard Bridge up 310.9% to 183,090 daily vehicles from 44,563 (+138,527 daily vehicles).

- **Brooklyn Bridges**

- Traffic using the ten bridges in Brooklyn increased 245.0% to 317,121 daily vehicles in 2016 from 91,917 in 1948 (225,204 additional daily vehicles).
- Mill Basin Bridge up 530.3% to 137,226 daily vehicles in 2016 from 21,773 in 1948 (+115,453 daily vehicles).
- Hamilton Avenue Bridge up 358.0% to 55,584 daily vehicles in 2016 from 12,135 in 1948 (+43,449 daily vehicles).
- Metropolitan Avenue Bridge up 308.4% to 35,687 daily vehicles in 2016 from 8,739 in 1948 (+26,948 daily vehicles).

- **Queens Bridges**

- Traffic using the eleven bridges in Queens increased 284.9% to 566,219 daily vehicles in 2016 from 147,106 in 1948 (419,113 additional daily vehicles).
- Whitestone Expressway Bridge up 699.7% to 218,227 daily vehicles in 2016 from 27,290 in 1948 (+181,672 daily vehicles).
- Hook Creek Bridge up 687.1% to 75,716 daily vehicles from 9,620 (+66,096 daily vehicles).
- Midtown Highway Bridge up 189.8% to 83,342 daily vehicles from 28,754 (+54,588 daily vehicles).

- **Staten Island**

- Traffic volume on the Fresh Kills Bridge in Staten Island increased 984.2% to 60,684 daily vehicles in 2016 from 5,597 in 1948 (55,087 additional daily vehicles).

**Total NYC Toll Free Bridges  
Average Daily Traffic Volumes  
1948 - 2016**

<i>Year</i>	<i>East River</i>	<i>Harlem River</i>	<i>Brooklyn-Queens</i>	<i>Bronx</i>
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	269,352	249,199	95,480	145,227
1952	261,704	222,196	108,369	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	316,813	333,463	145,861	259,905
1962	318,170	313,230	160,540	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	390,292	422,364	200,199	345,542
1973	394,290	449,670	168,037	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	395,125	448,323	201,487	287,933
1982	414,984	470,785	179,788	291,600
1983	413,152	491,153	221,703	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	447,969	533,368	236,472	338,921
1992	443,145	537,353	231,197	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	279,944	424,946
2001	427,321	568,759	276,288	439,239
2002	467,080	551,831	262,121	437,363
2003	493,418	549,510	275,737	448,186
2004	507,589	552,421	275,654	453,006
2005	498,213	561,392	280,189	459,149
2006	494,576	557,043	265,298	456,001
2007	496,666	557,925	263,326	453,636
2008	477,211	539,434	258,759	454,313
2009	485,313	543,736	263,638	449,209
2010	487,301	549,574	267,112	461,072
2011	478,203	544,642	267,075	447,178
2012	480,259	547,207	272,058	447,813
2013	477,147	558,163	269,845	456,730
2014	469,907	537,888	265,928	460,392
2015	468,918	530,808	260,529	462,216
2016	466,685	540,830	245,138	467,807

**Total NYC Toll Free Bridges (continued)**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<b>Year</b>	<b>Brooklyn</b>	<b>Queens</b>	<b>Staten Island</b>	<b>Totals</b>
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	127,050	212,687	7,891	1,123,350
1953	141,728	220,866	7,858	1,198,524
1954	154,877	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	181,995	259,348	8,147	1,458,165
1961	207,273	265,848	10,270	1,539,433
1962	217,232	257,140	9,400	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	19,789	1,911,838
1969	251,115	387,146	22,379	2,030,931
1970	238,020	400,381	21,631	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	228,117	387,403	30,295	1,947,067
1978	226,627	410,037	34,467	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	274,583	449,118	50,341	2,229,760
1985	275,566	450,396	53,590	2,329,969
1986	271,818	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	310,084	484,835	48,507	2,398,865
1993	308,495	467,195	49,969	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	331,090	551,329	66,980	2,747,826
2001	335,404	551,116	67,465	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
2005	331,523	560,520	66,816	2,757,802
2006	328,620	552,642	65,274	2,719,454
2007	333,955	562,062	68,997	2,736,567
2008	327,644	544,089	64,724	2,666,174
2009	330,614	542,678	64,490	2,679,678
2010	327,984	538,197	65,612	2,696,852
2011	317,516	533,007	60,678	2,648,299
2012	322,259	555,713	58,026	2,683,335
2013	326,908	563,650	60,240	2,712,683
2014	322,391	550,764	59,602	2,666,872
2015	323,594	557,502	57,538	2,661,105
2016	317,121	566,219	60,684	2,664,484

**NYC Tolled Facilities  
Average Daily Traffic Volumes  
1948 - 2016**

<b>Year</b>	<b>MTABT Manhattan</b>	<b>PANYNJ Manhattan</b>	<b>MTABT Outer Boro</b>	<b>PANYNJ Staten Is</b>	<b>Total</b>
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	231,535	213,088	176,644	22,202	643,469
1957	236,343	218,623	176,042	22,614	653,622
1958	232,413	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	286,692	362,063	401,495	74,758	1,125,008
1972	252,871	378,620	388,743	77,018	1,097,252
1973	251,593	397,203	402,096	81,034	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	274,693	485,751	475,218	138,436	1,374,098
1987	289,642	486,639	482,429	139,734	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	257,937	458,944	551,948	177,251	1,446,080
2002	305,300	532,839	554,237	179,140	1,571,516
2003	307,034	547,449	547,068	174,582	1,576,133
2004	312,159	536,396	559,962	174,268	1,582,785
2005	297,411	527,717	530,284	171,653	1,527,065
2006	317,751	537,748	560,727	175,914	1,592,140
2007	312,253	513,974	548,552	170,228	1,545,007
2008	305,993	508,269	555,680	165,776	1,535,718
2009	294,156	504,860	544,642	165,504	1,509,162
2010	305,297	506,546	545,798	168,132	1,525,773
2011	294,293	491,109	526,428	169,536	1,481,366
2012	296,626	482,557	528,998	163,706	1,471,887
2013	292,355	479,819	530,329	158,267	1,460,770
2014	290,406	477,812	529,749	155,618	1,453,585
2015	297,794	498,270	554,882	163,218	1,514,164
2016	285,746	492,614	575,302	168,984	1,522,646

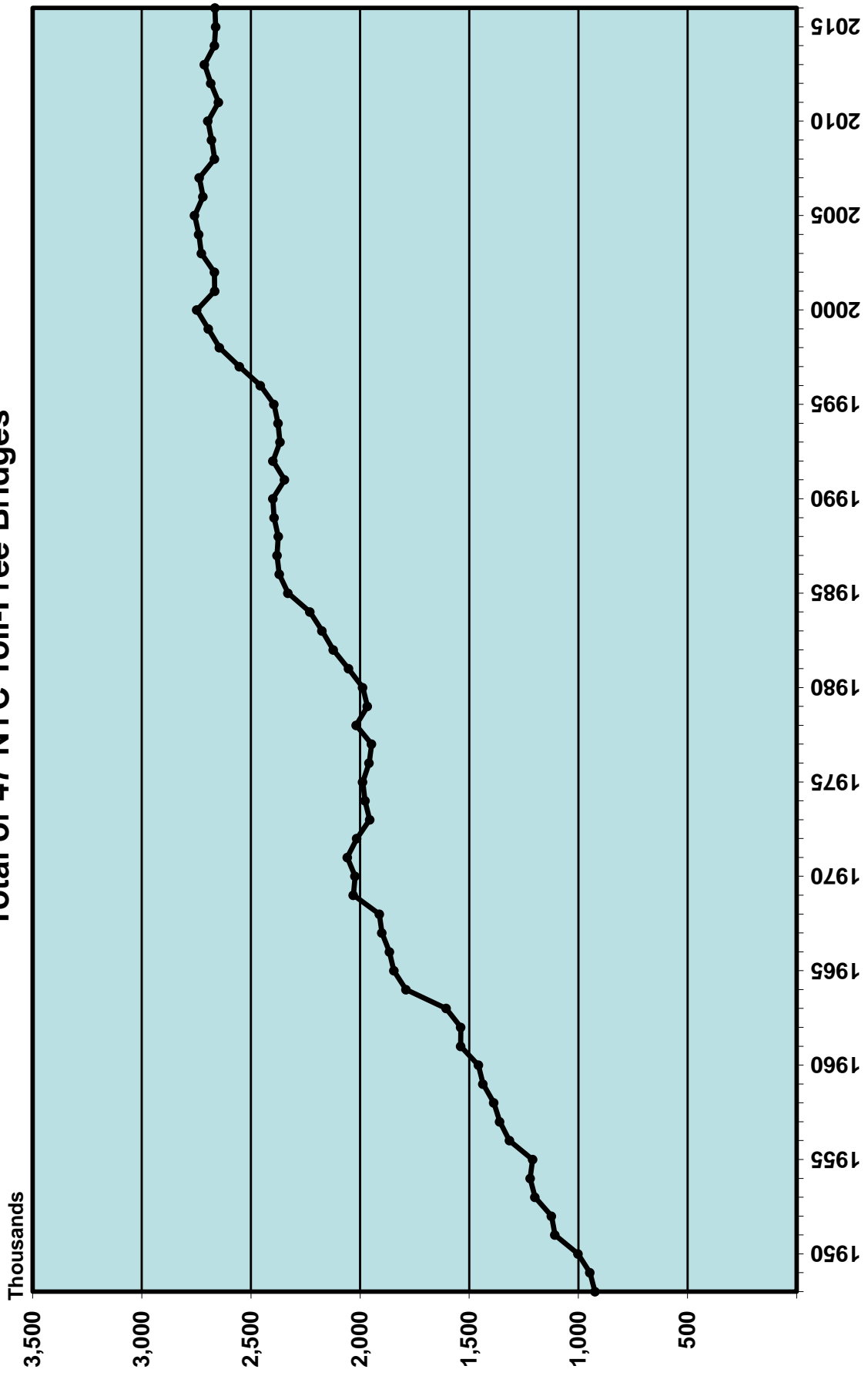
PANYNJ one-way tolls initiated 8/12/1970.

PANYNJ toll increases: 5/1975, 1/1984, 4/1987, 4/1991, 3/2001, 3/2008, 9/2011, 12/2012, 12/2013, 12/2014, & 12/2015.

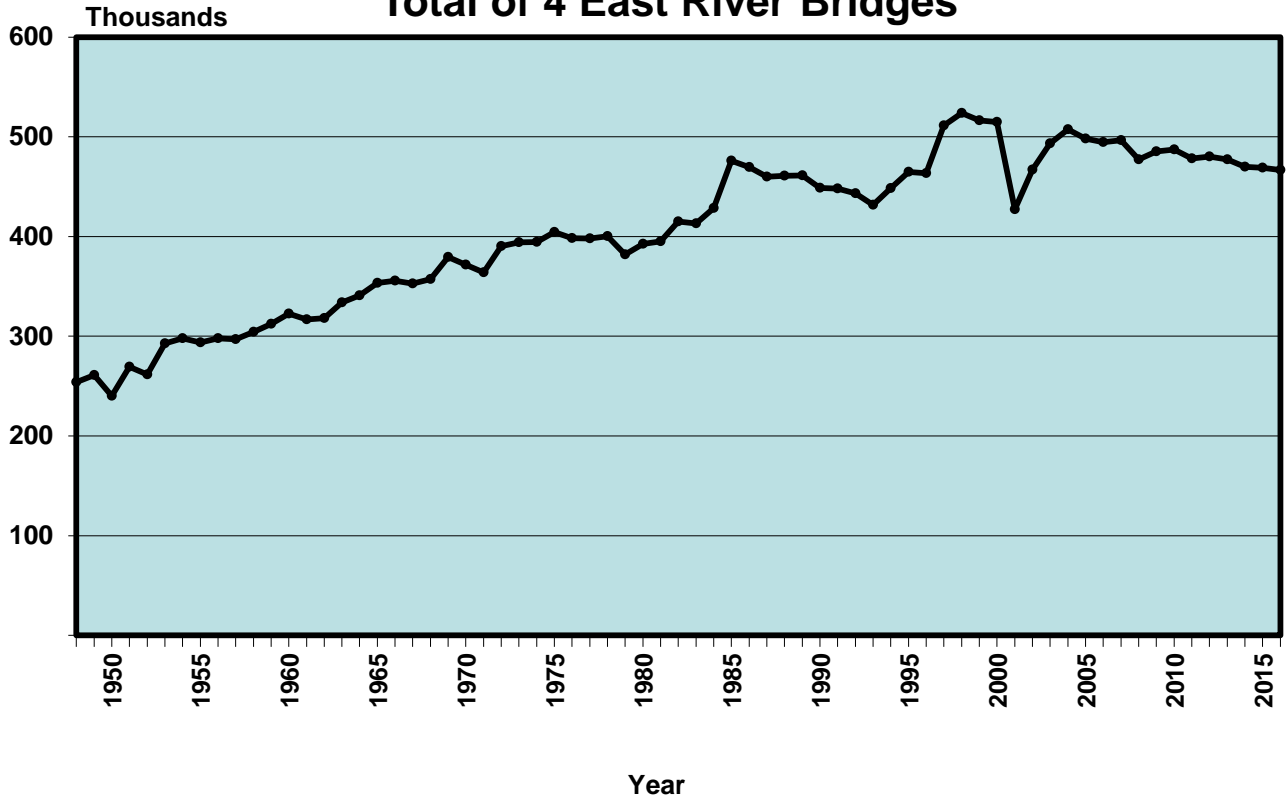
MTABT toll Increases: 1/1972, 9/1975, 5/1980, 4/1982, 1/1984, 1/1986, 2/1987, 7/1989, 1/1993, 3/1996, 5/2003, 3/2005, 3/2008, 7/2009, 12/2010, 3/2013, & 3/2015.



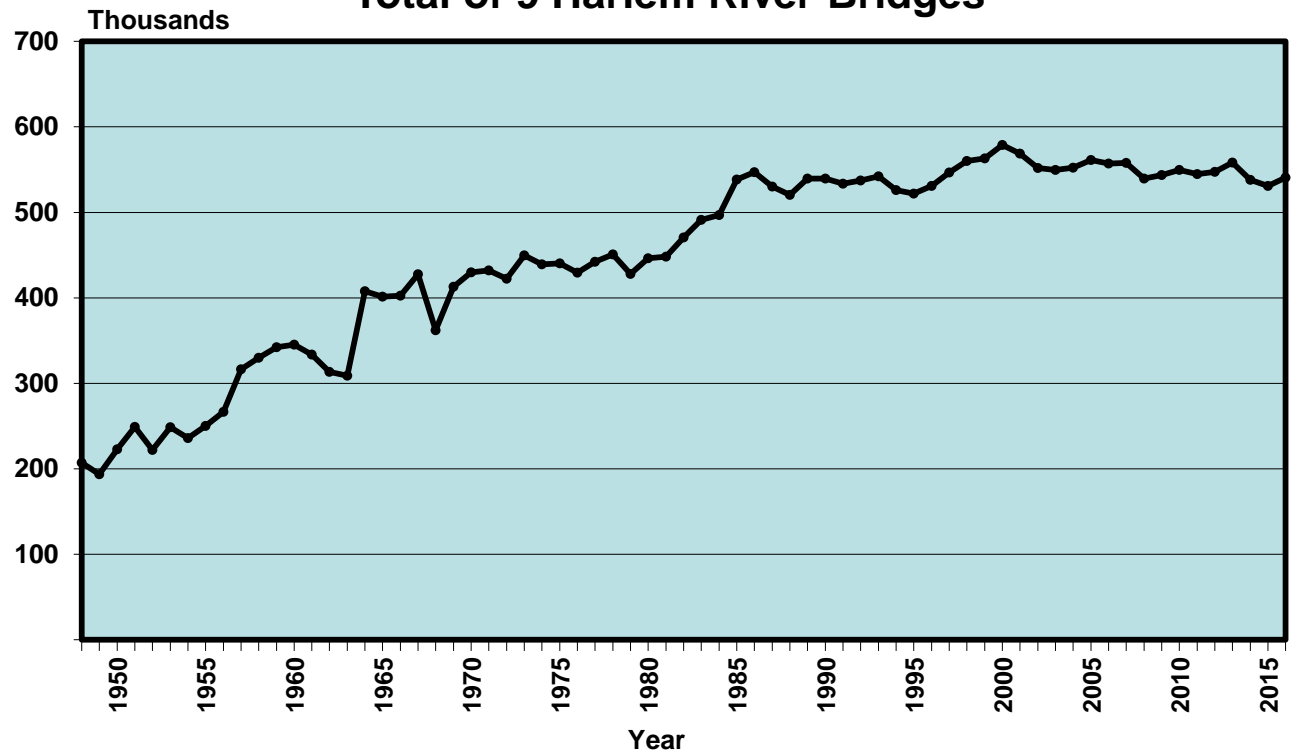
# Average Daily Traffic Volumes ~ Total of Both Directions Total of 47 NYC Toll-Free Bridges



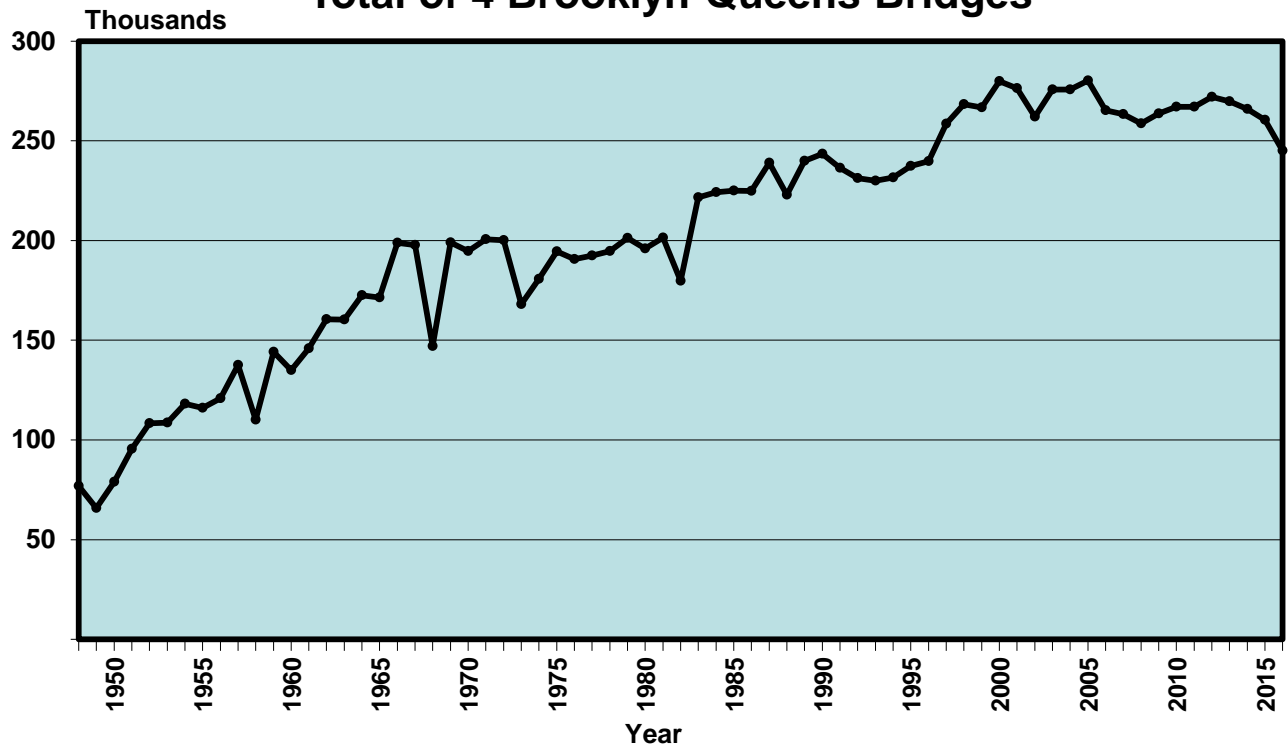
## Average Daily Traffic Volumes ~ Total of Both Directions Total of 4 East River Bridges



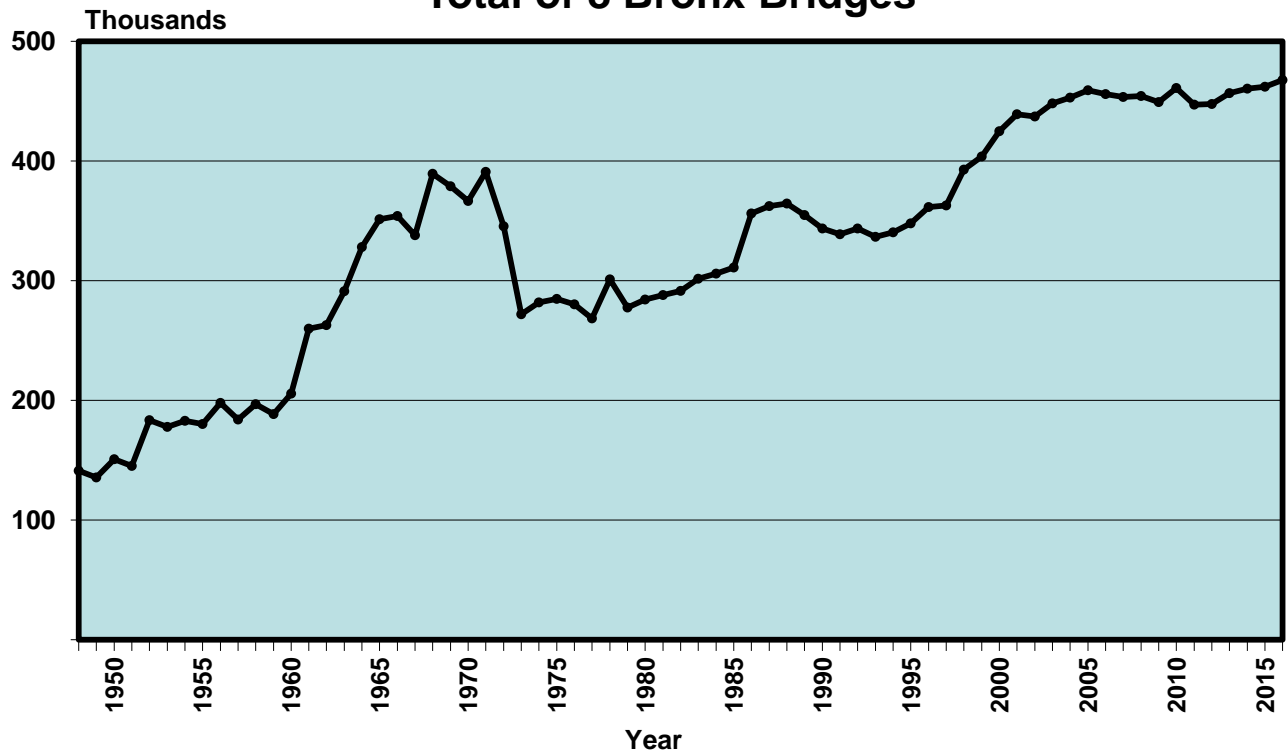
## Average Daily Traffic Volumes ~ Total of Both Directions Total of 9 Harlem River Bridges



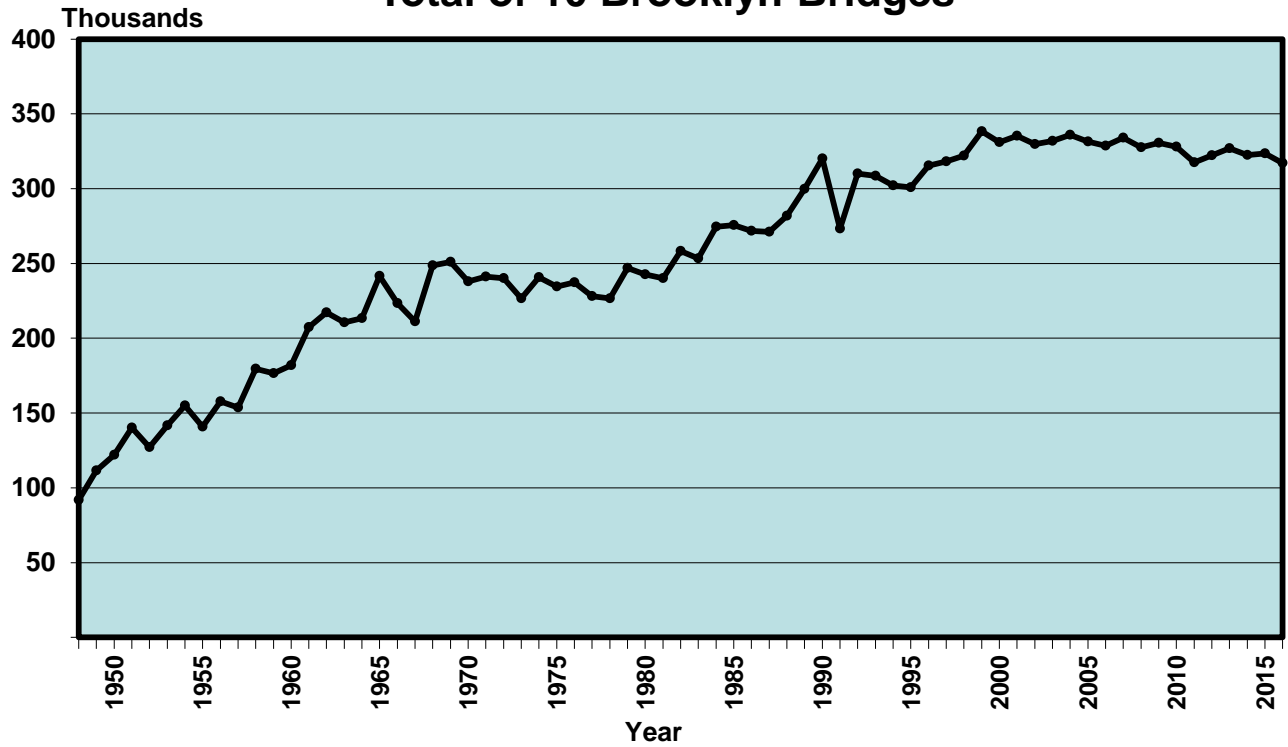
## Average Daily Traffic Volumes ~ Total of Both Directions Total of 4 Brooklyn-Queens Bridges



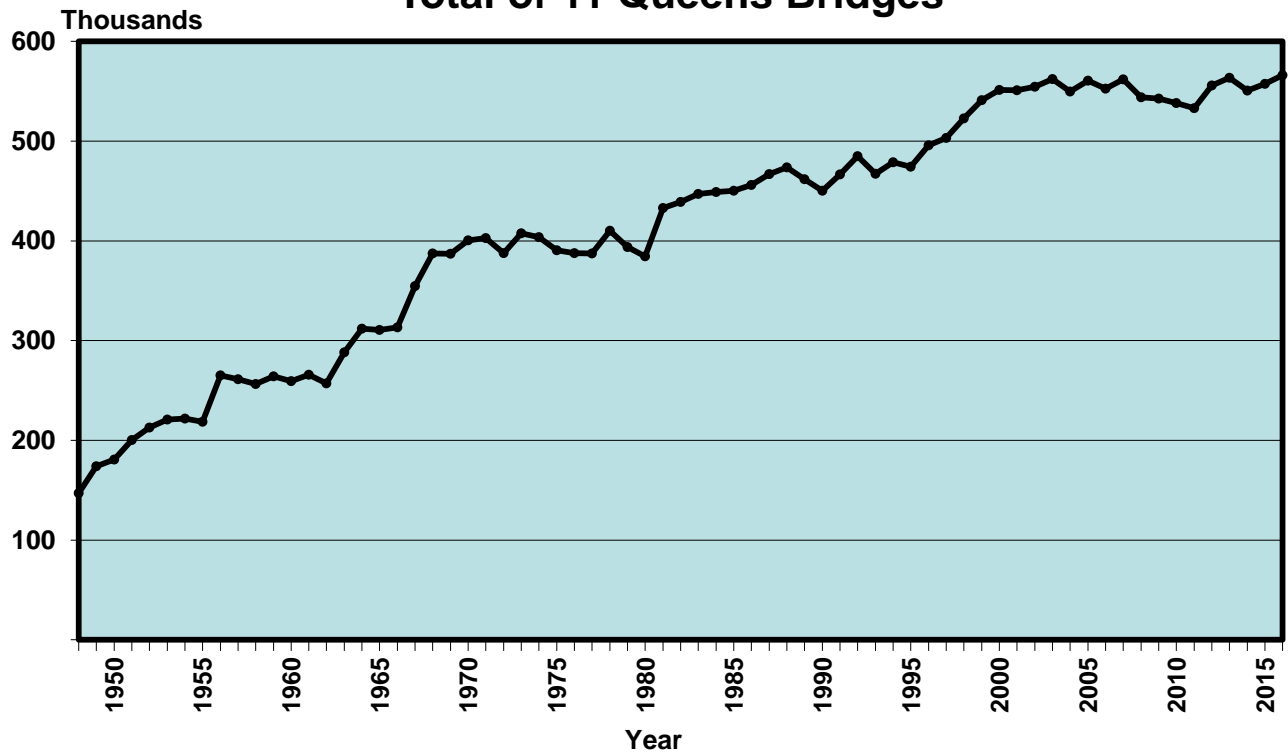
## Average Daily Traffic Volumes ~ Total of Both Directions Total of 8 Bronx Bridges



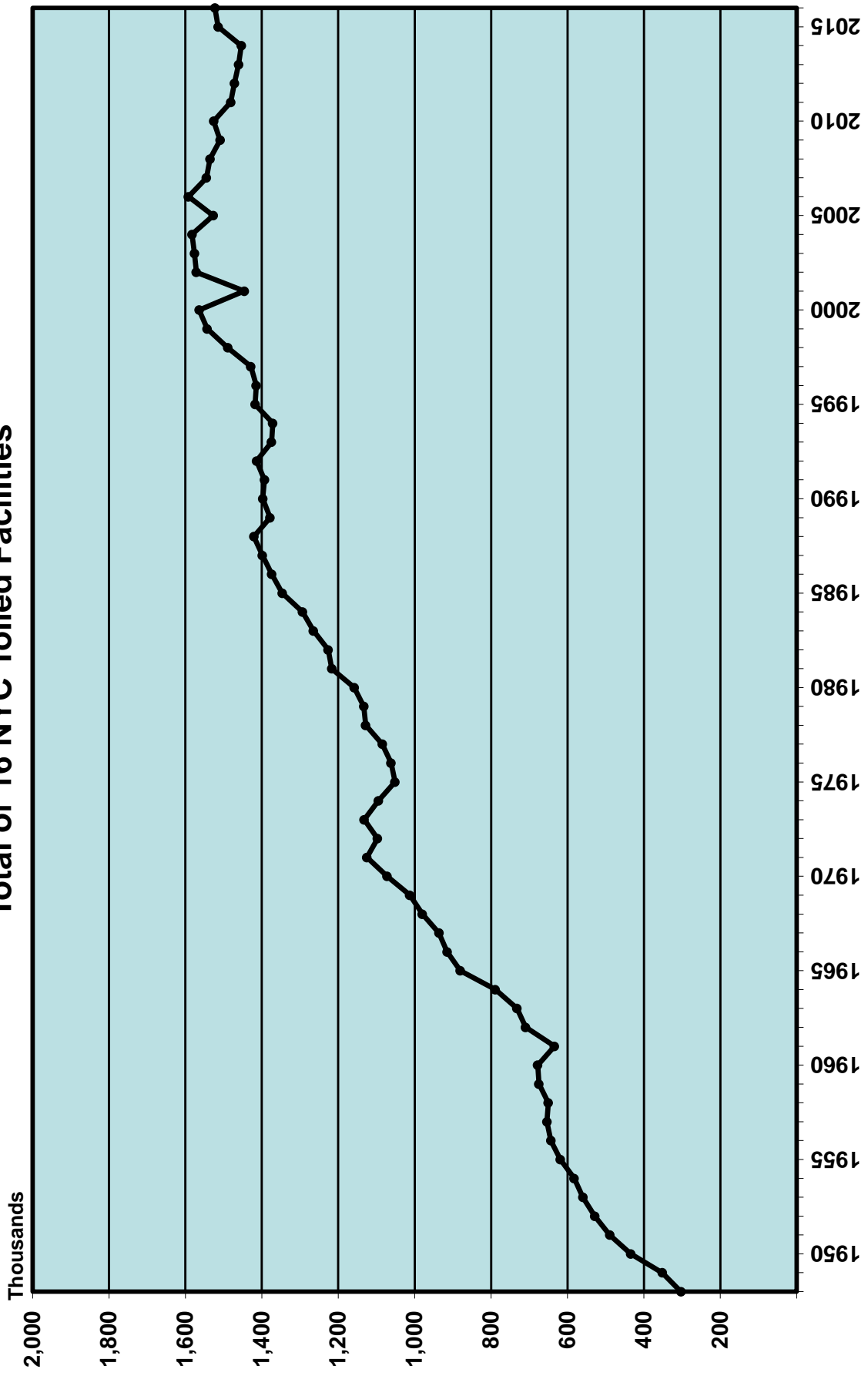
## Average Daily Traffic Volumes ~ Total of Both Directions Total of 10 Brooklyn Bridges



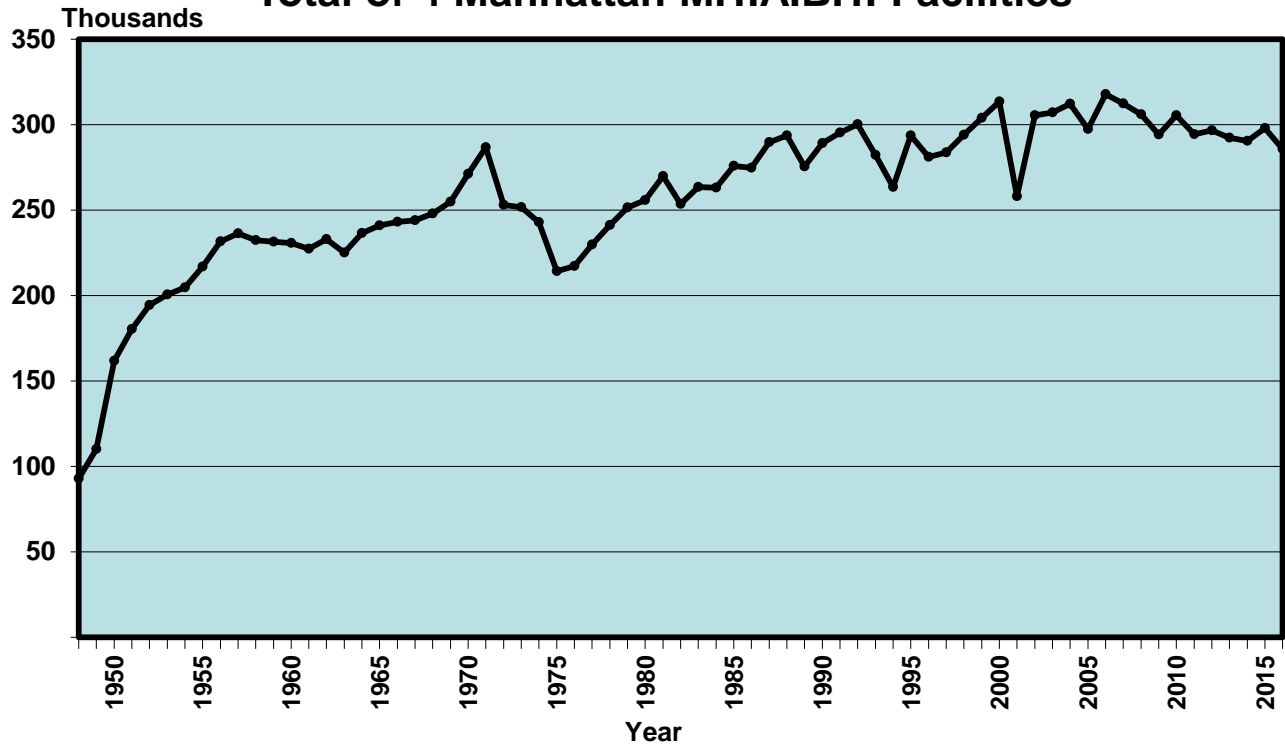
## Average Daily Traffic Volumes ~ Total of Both Directions Total of 11 Queens Bridges



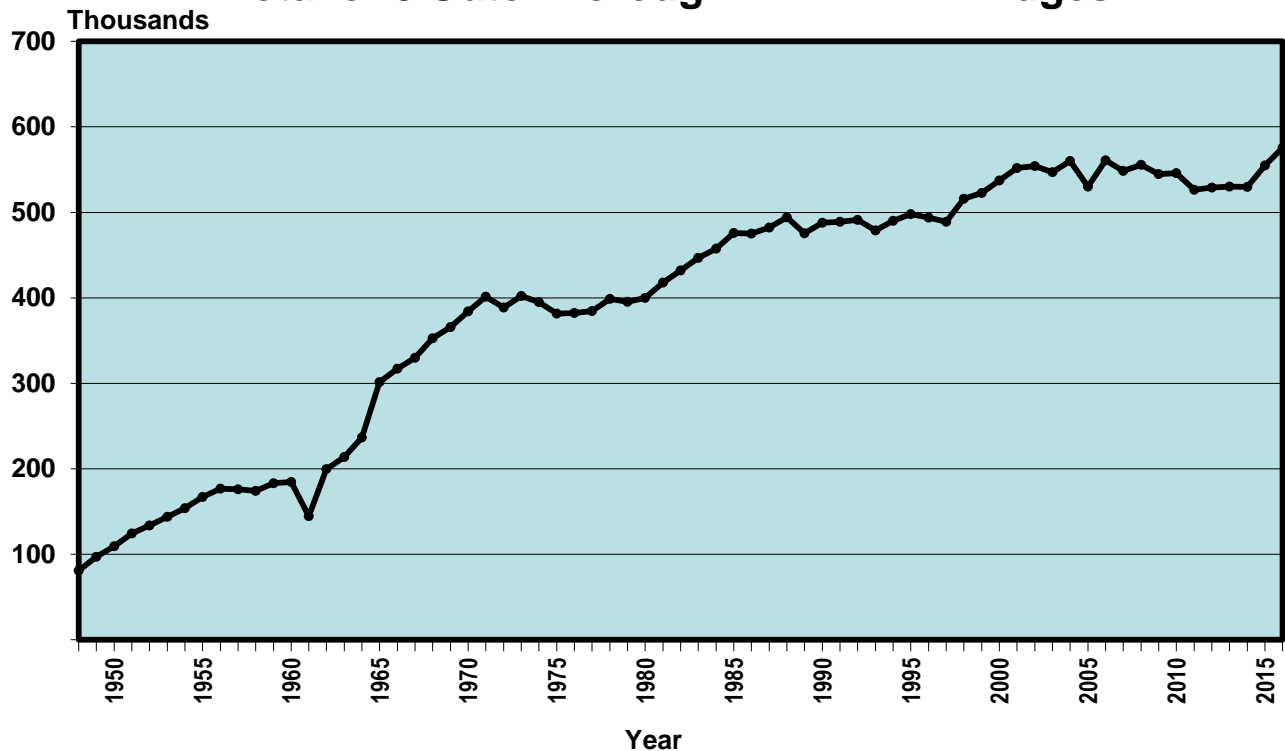
# Average Daily Traffic Volumes ~ Total of Both Directions Total of 16 NYC Tolled Facilities



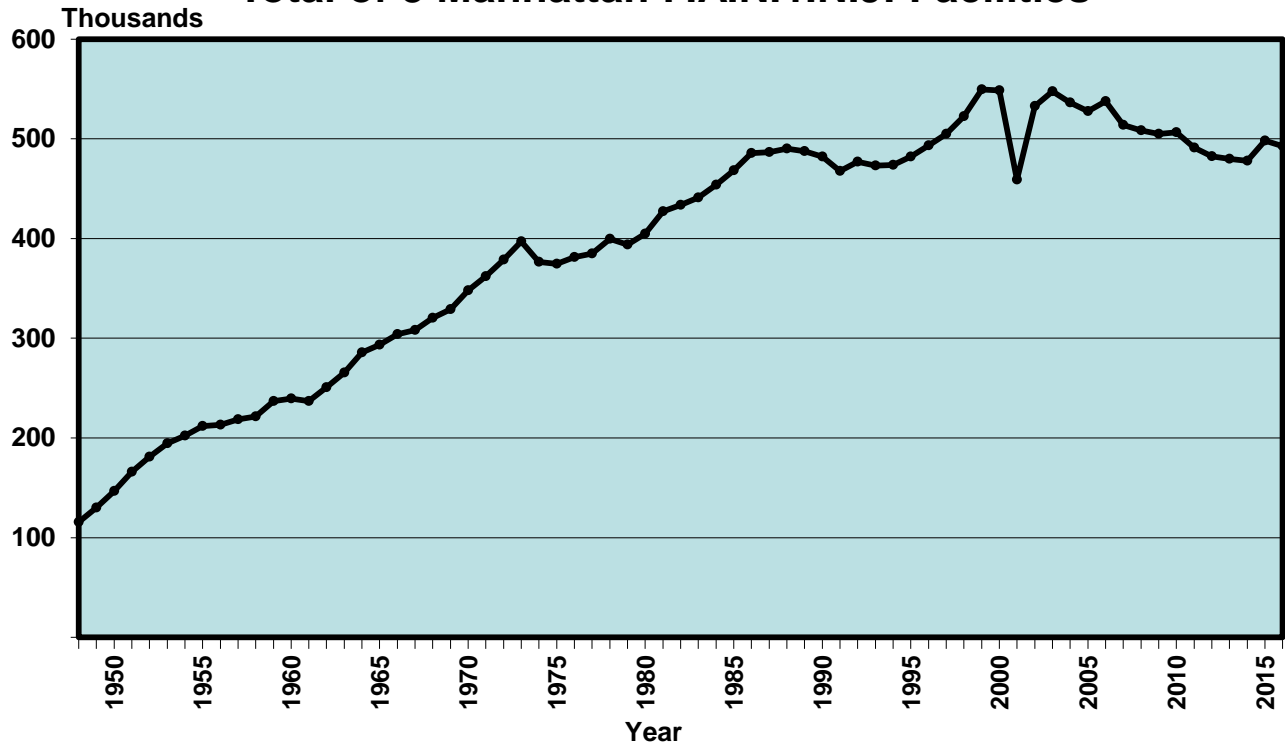
### Average Daily Traffic Volumes ~ Total of Both Directions Total of 4 Manhattan M.T.A.B.T. Facilities



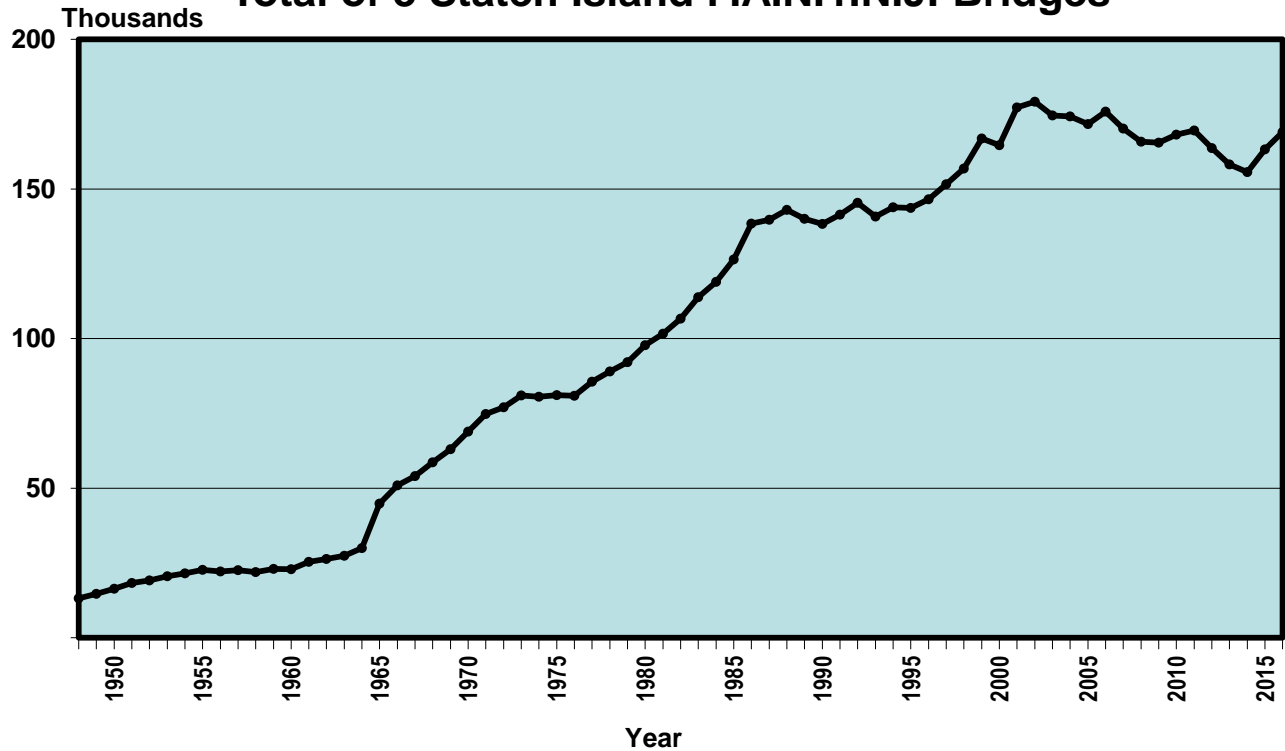
### Average Daily Traffic Volumes ~ Total of Both Directions Total of 6 Outer Borough M.T.A.B.T. Bridges



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



### Average Daily Traffic Volumes ~ Total of Both Directions Total of 3 Staten Island P.A.N.Y.N.J. Bridges







# East River Bridges

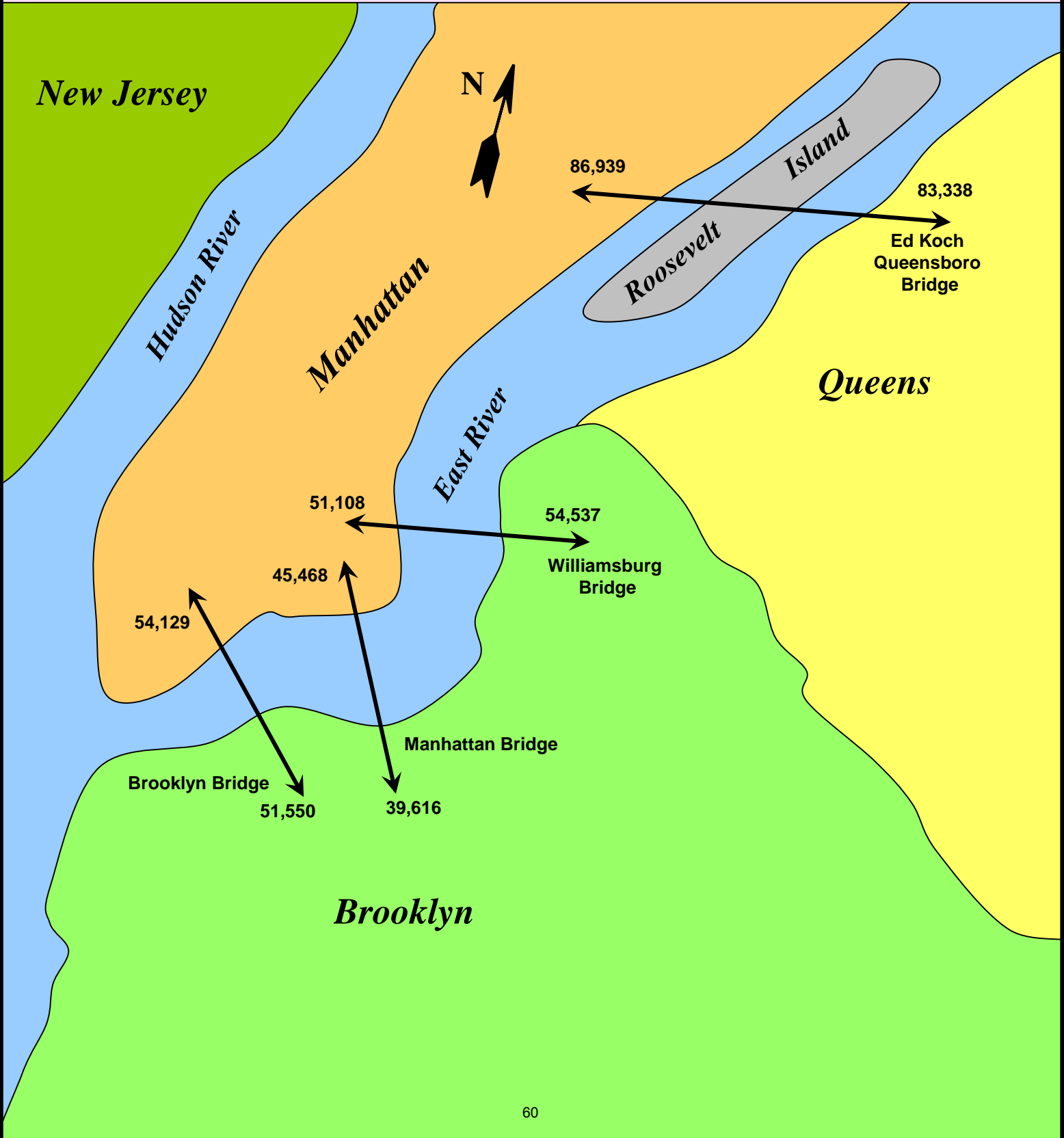


**Williamsburg Bridge**



# East River Bridges

## 2016 Daily Volumes



**East River Bridges**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<i>Year</i>	<i>Brooklyn Bridge</i>	<i>Ed Koch Queensboro Bridge</i>	<i>Manhattan Bridge</i>	<i>Williamsburg Bridge</i>	<i>Totals</i>
1948	37,011	83,201	86,717	47,139	254,068
1949	37,244	88,821	80,420	54,448	260,933
1950	13,397	84,863	84,027	57,940	240,227
1951	14,865	90,922	100,826	62,739	269,352
1952	16,907	85,748	96,476	62,573	261,704
1953	14,513	106,391	94,320	77,502	292,726
1954	42,455	101,285	77,698	76,465	297,903
1955	53,964	91,958	66,968	80,743	293,633
1956	54,981	90,786	69,656	82,443	297,866
1957	23,852	93,676	89,793	89,707	297,028
1958	43,089	100,555	82,128	78,698	304,470
1959	53,115	103,522	74,329	81,465	312,431
1960	73,486	107,536	60,481	81,157	322,660
1961	68,997	104,505	62,797	80,514	316,813
1962	78,850	105,930	51,450	81,940	318,170
1963	78,770	116,350	58,510	80,250	333,880
1964	80,230	120,900	59,250	80,650	341,030
1965	84,141	117,588	71,222	80,567	353,518
1966	89,124	122,896	63,693	80,032	355,745
1967	87,387	124,033	75,741	65,775	352,936
1968	72,475	130,777	79,906	74,074	357,232
1969	97,565	132,553	75,473	73,825	379,416
1970	100,050	126,554	72,077	73,062	371,743
1971	102,535	120,555	68,681	72,299	364,070
1972	103,815	136,455	73,803	76,219	390,292
1973	102,834	138,066	73,401	79,989	394,290
1974	99,959	138,560	77,198	78,914	394,631
1975	103,750	144,252	74,320	82,057	404,379
1976	102,590	145,130	68,057	82,471	398,248
1977	104,532	146,283	64,835	82,490	398,140
1978	104,848	138,415	74,257	82,626	400,146
1979	91,319	133,966	75,403	81,340	382,028
1980	103,954	127,929	77,914	82,663	392,460
1981	102,572	127,864	79,589	85,100	395,125
1982	110,991	136,864	87,760	79,369	414,984
1983	115,825	125,158	85,222	86,947	413,152
1984	110,432	134,107	89,104	94,898	428,541
1985	116,929	150,892	100,825	107,386	476,032
1986	126,555	158,191	77,784	107,181	469,711
1987	123,523	151,688	77,519	107,362	460,092
1988	129,153	153,841	75,221	102,643	460,858
1989	131,951	152,591	68,593	107,967	461,102
1990	129,626	140,063	69,550	109,474	448,713
1991	128,491	131,438	72,695	115,345	447,969
1992	125,643	141,078	78,117	98,307	443,145
1993	134,793	135,964	74,526	86,591	431,874
1994	134,837	151,483	78,418	83,525	448,263
1995	131,883	157,306	75,126	100,588	464,903
1996	131,872	161,965	81,075	88,570	463,482
1997	147,898	184,179	83,209	96,124	511,410
1998	144,131	192,119	78,172	109,268	523,690
1999	127,065	189,190	92,311	107,941	516,507
2000	147,767	182,940	75,684	108,376	514,767
2001	95,586	176,469	73,064	82,202	427,321
2002	121,145	176,419	66,152	103,364	467,080
2003	134,444	184,964	73,767	100,243	493,418
2004	137,563	180,369	79,129	110,528	507,589
2005	132,210	178,610	80,363	107,030	498,213
2006	126,805	186,110	74,621	107,040	494,576
2007	131,551	181,365	73,205	110,545	496,666
2008	123,781	176,306	70,341	106,783	477,211
2009	125,021	180,162	71,936	108,194	485,313
2010	123,640	177,695	74,777	111,189	487,301
2011	105,820	183,401	85,392	103,590	478,203
2012	100,288	178,188	89,087	112,696	480,259
2013	102,542	171,556	87,375	115,674	477,147
2014	99,986	174,239	84,048	111,634	469,907
2015	102,219	174,447	87,046	105,206	468,918
2016	105,679	170,277	85,084	105,645	466,685

# Hourly Vehicular Volumes Brooklyn Bridge - 2016

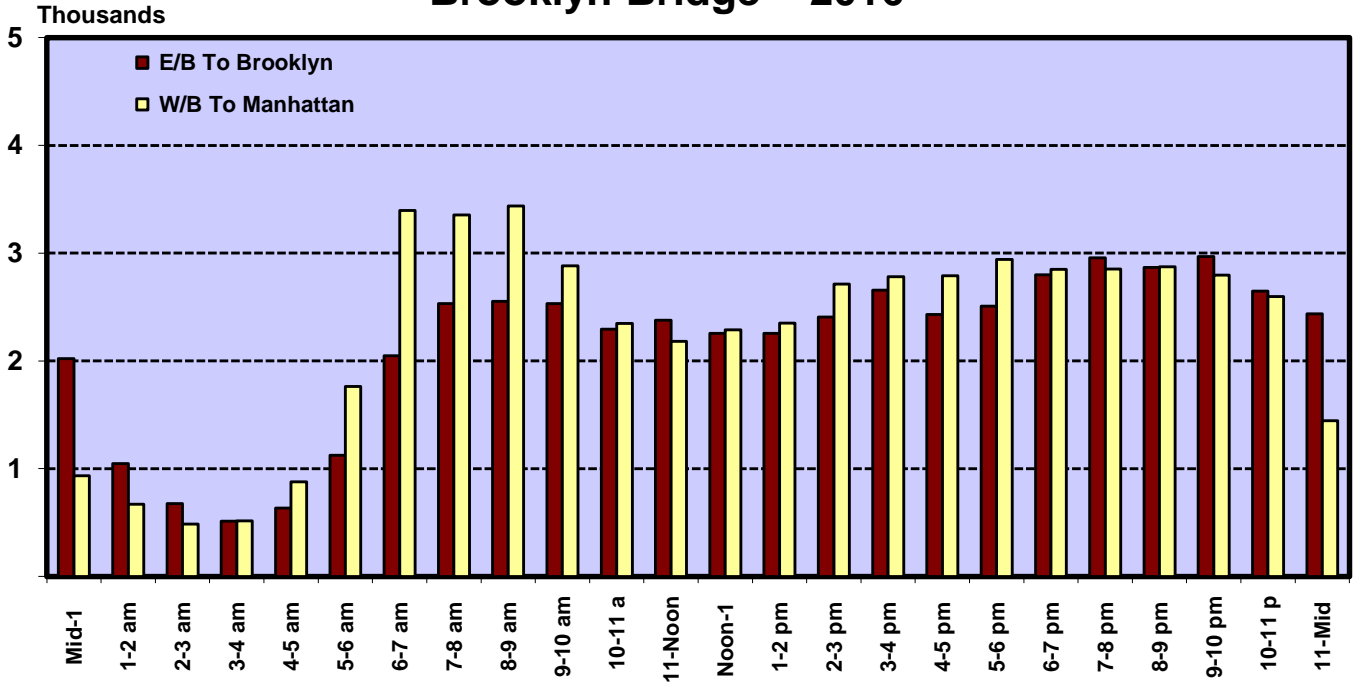
## Eastbound to Brooklyn

## Westbound to Manhattan

FHWA Classes	Commuter Vans					Commuter Vans					2-Way Grand Totals			
	Autos & Motorcycles	Taxi	Commercial Vans Pickups Large SUVs	Buses	Single Unit Trucks	Tractor Trailers	Total Vehicles	Autos & Motorcycles	Taxi	Commercial Vans Pickups Large SUVs		Buses	Single Unit Trucks	Tractor Trailers
	1 & 2	2	3	4	5-7	8-13		1 & 2	2	3	4	5-7	8-13	
12-1am	1,611	385	22	0	4	0	2,022	676	233	22	0	3	0	934
1-2am	770	262	14	0	0	0	1,046	648	132	19	0	2	0	669
2-3am	506	160	11	0	0	0	677	470	86	15	0	2	0	487
3-4am	405	100	9	0	0	0	514	483	71	33	0	0	0	516
4-5am	528	96	11	0	1	0	636	852	84	22	1	4	0	879
5-6am	1,064	44	14	0	3	0	1,125	1,719	145	32	9	4	0	1,764
6-7am	1,954	72	18	3	0	0	2,047	3,308	284	56	30	2	0	3,396
7-8am	2,345	125	35	27	1	0	2,533	3,235	382	90	26	3	0	3,354
8-9am	2,256	195	54	48	0	0	2,553	3,293	330	133	10	3	0	3,439
9-10am	2,196	269	38	26	3	0	2,532	2,738	271	139	3	3	0	2,883
10-11am	2,005	253	32	4	0	0	2,294	2,236	177	104	6	3	0	2,349
11-12am	2,112	210	55	2	0	0	2,379	2,065	192	114	2	0	0	2,181
12-1pm	1,983	220	45	7	0	0	2,255	2,167	187	113	8	0	0	2,288
1-2pm	1,979	223	48	2	3	0	2,255	2,244	177	87	16	4	0	2,351
2-3pm	2,112	254	36	6	0	0	2,408	2,601	206	84	27	1	0	2,713
3-4pm	2,295	305	29	29	0	0	2,658	2,697	223	68	14	3	0	2,782
4-5pm	2,146	241	27	18	0	0	2,432	2,712	208	69	7	1	0	2,789
5-6pm	2,330	149	26	3	0	0	2,508	2,877	299	62	2	1	0	2,942
6-7pm	2,564	208	23	3	0	0	2,798	2,805	312	44	1	0	0	2,850
7-8pm	2,649	293	14	1	0	0	2,957	2,804	294	47	1	0	0	2,852
8-9pm	2,474	376	17	1	0	0	2,868	2,851	368	22	0	0	0	2,873
9-10pm	2,378	563	27	0	0	0	2,968	2,751	443	42	0	3	0	2,796
10-11pm	2,065	566	16	1	0	1	2,649	2,572	478	22	0	2	0	2,596
11-12pm	1,941	485	10	0	0	0	2,436	1,428	335	15	0	3	0	1,446
Totals	44,668	631	181	15	1	1	51,550	52,232	5,917	1,454	163	47	0	54,129
7-10am	6,797	127	101	4	0	0	7,618	9,266	362	39	9	0	0	9,676
10am-1pm	6,100	132	13	0	0	0	6,928	6,468	331	16	3	0	0	6,818
1-4pm	6,386	113	37	3	0	0	7,321	7,542	239	57	8	0	0	7,846
4-7pm	7,040	76	24	0	0	0	7,738	8,394	175	10	2	0	0	8,581
7am-7pm	26,323	448	175	7	0	0	29,605	31,670	1,107	122	22	0	0	32,921
6-10am	8,751	145	104	4	0	0	9,665	12,574	418	69	11	0	0	13,072
3-7pm	9,335	105	53	0	0	0	10,396	11,091	243	24	5	0	0	11,363
6am-7pm	28,277	466	178	7	0	0	31,652	34,978	1,163	152	24	0	0	36,317

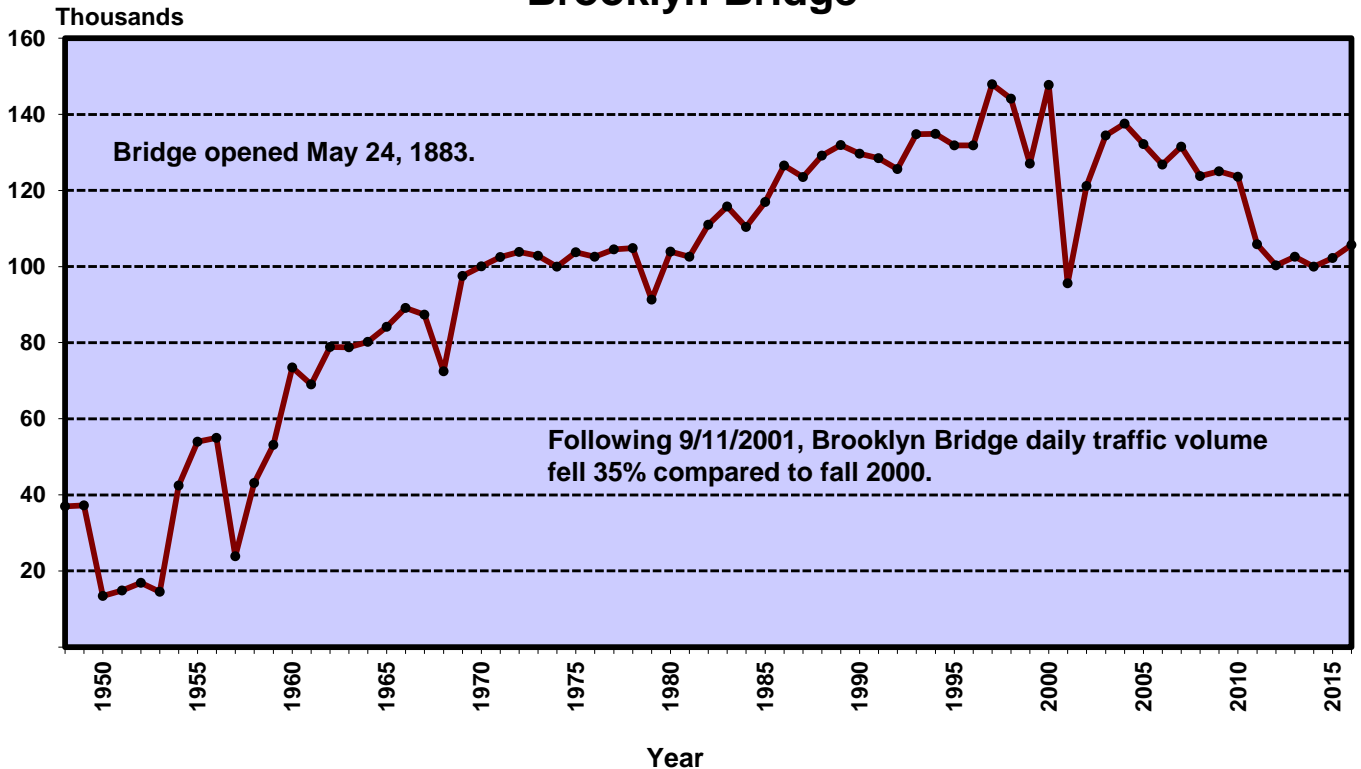
Based on March 2006 Classification Survey Data. \*\* Peak Volumes

## Hourly Vehicular Volumes Brooklyn Bridge ~ 2016



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

## Average Daily Traffic Volumes ~ Total of Both Directions Brooklyn Bridge



# Hourly Vehicular Volumes

## Ed Koch Queensboro Bridge - 2016

### Eastbound to Queens

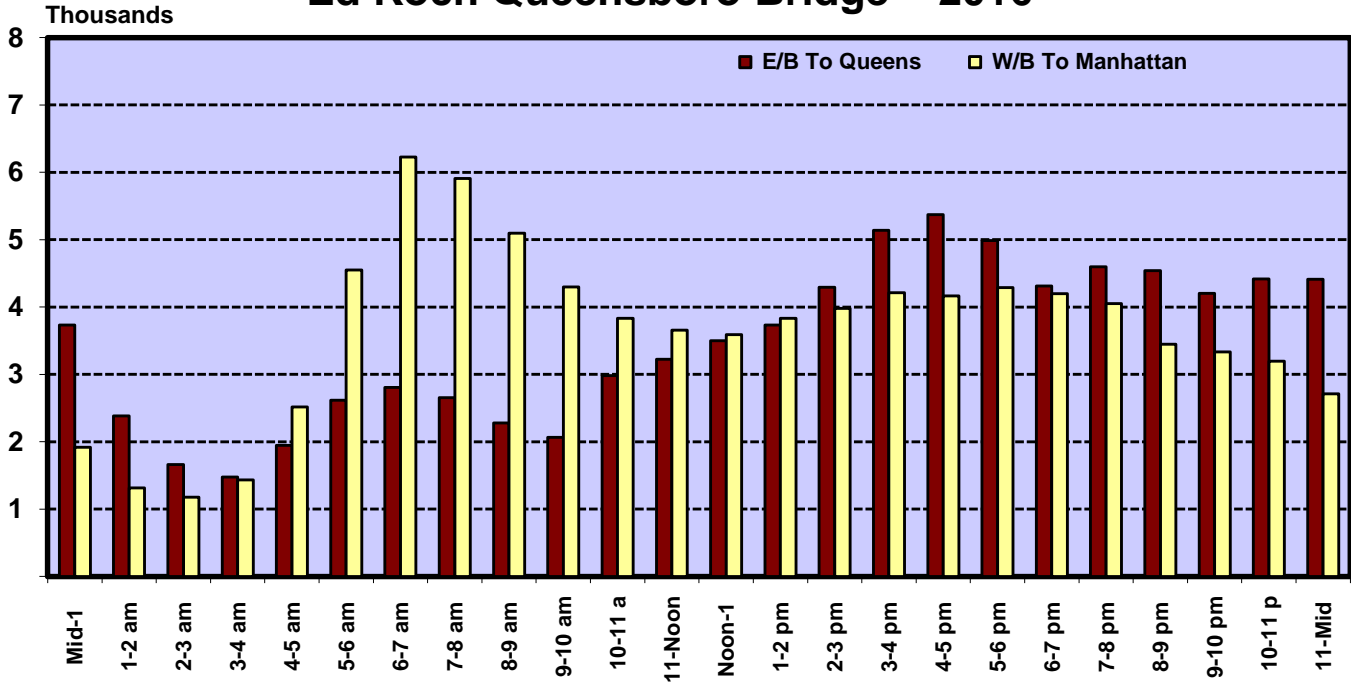
### Westbound to Manhattan

FHWA Classes	Commercial Vans, Panel Trucks, Pickups,							Commercial Vans, Panel Trucks, Pickups,							Total Vehicles	Multiple Unit Trucks	Single Unit Trucks	Buses	Multiple Unit Trucks	Total Vehicles	2-Way Grand Totals
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	2 & 3	4	5 - 7	8 - 13	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	2 & 3	4	5 - 7	8 - 13							
12-1am	1,736	1,793	113	13	54	22	3,731	972	812	56	9	36	31	1,916	5,647						
1-2am	845	1,367	76	13	43	41	2,385	537	624	69	6	37	40	1,313	3,698						
2-3am	665	830	78	6	34	48	1,661	477	491	127	4	38	41	1,178	2,839						
3-4am	646	628	105	3	31	61	1,474	603	495	224	4	60	48	1,434	2,908						
4-5am	897	755	132	5	40	118	1,947	1,199	896	237	7	87	89	2,515	4,462						
5-6am	1,757	572	151	4	53	79	2,616	2,463	1,549	276	11	181	70	4,550	7,166						
6-7am	2,349	203	118	11	77	50	2,808	3,760	1,826	333	44	203	61	6,227	9,035						
7-8am	2,227	169	114	45	89	10	2,654	2,967	1,854	767	55	237	31	5,911	8,565						
8-9am	1,768	248	108	60	82	12	2,278	2,662	1,084	981	70	282	19	5,098	7,376						
9-10am	1,464	302	128	56	103	11	2,064	2,301	731	950	26	263	27	4,298	6,362						
10-11am	1,744	758	272	47	144	15	2,980	2,056	778	656	53	261	30	3,834	6,814						
11-12am	1,868	809	348	34	144	22	3,225	1,960	892	557	21	188	41	3,659	6,884						
12-1pm	2,191	681	416	34	162	17	3,501	1,878	982	499	29	157	44	3,589	7,090						
1-2pm	2,373	728	390	41	187	16	3,735	2,146	1,013	436	40	165	31	3,831	7,566						
2-3pm	2,463	1,030	551	40	193	15	4,292	2,351	1,047	378	42	128	35	3,981	8,273						
3-4pm	2,993	1,147	721	54	211	15	5,141	2,607	1,115	351	20	98	21	4,212	9,353						
4-5pm	3,069	1,409	676	61	152	5	5,372	2,476	1,330	258	24	60	17	4,165	9,537						
5-6pm	3,554	755	475	90	109	5	4,988	2,489	1,516	191	22	64	8	4,290	9,278						
6-7pm	3,238	630	287	81	72	4	4,312	2,711	1,196	190	30	54	16	4,197	8,509						
7-8pm	3,384	827	252	65	46	24	4,598	2,977	792	167	37	54	26	4,053	8,651						
8-9pm	3,142	1,084	208	31	55	23	4,543	2,501	720	131	31	49	15	3,447	7,990						
9-10pm	2,680	1,302	135	31	37	20	4,205	2,326	792	119	11	70	17	3,335	7,540						
10-11pm	2,710	1,462	128	40	60	17	4,417	2,151	850	99	13	52	29	3,194	7,611						
11-12pm	2,661	1,558	100	23	41	28	4,411	1,703	860	67	9	42	31	2,712	7,123						
Totals	52,424	21,047	6,082	888	2,219	678	83,338	50,273	24,245	8,119	618	2,866	818	86,939	170,277						
7-10am	5,459	719	350	161	274	33	6,996	7,930	3,669	2,698	151	782	77	15,307	22,303						
10am-1pm	5,803	2,248	1,036	115	450	54	9,706	5,894	2,652	1,712	103	606	115	11,082	20,788						
1-4pm	7,829	2,905	1,662	135	591	46	13,168	7,104	3,175	1,165	102	391	87	12,024	25,192						
4-7pm	9,861	2,794	1,438	232	333	14	14,672	7,676	4,042	639	76	178	41	12,652	27,324						
7am-7pm	28,952	8,666	4,486	643	1,648	147	44,542	28,604	13,538	6,214	432	1,957	320	51,065	95,607						
6-10am	7,808	922	468	172	351	83	9,804	11,690	5,495	3,031	195	985	138	21,534	31,338						
3-7pm	12,854	3,941	2,159	286	544	29	19,813	10,283	5,157	990	96	276	62	16,864	36,677						
6am-7pm	31,301	8,869	4,604	654	1,725	197	47,350	32,364	15,364	6,547	476	2,160	381	57,292	104,642						

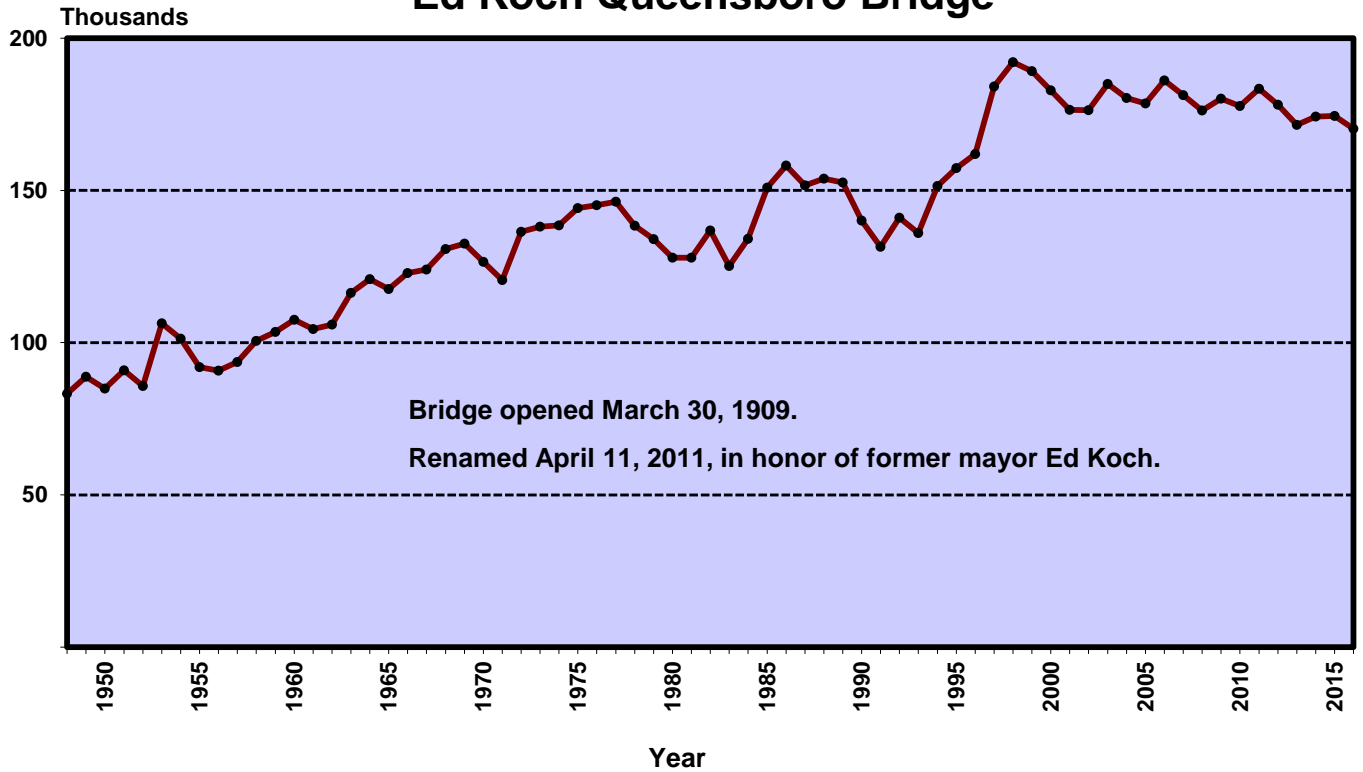
Based on October 2014 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Ed Koch Queensboro Bridge ~ 2016



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



# Hourly Vehicular Volumes Manhattan Bridge - 2016

## Eastbound to Brooklyn

## Westbound to Manhattan

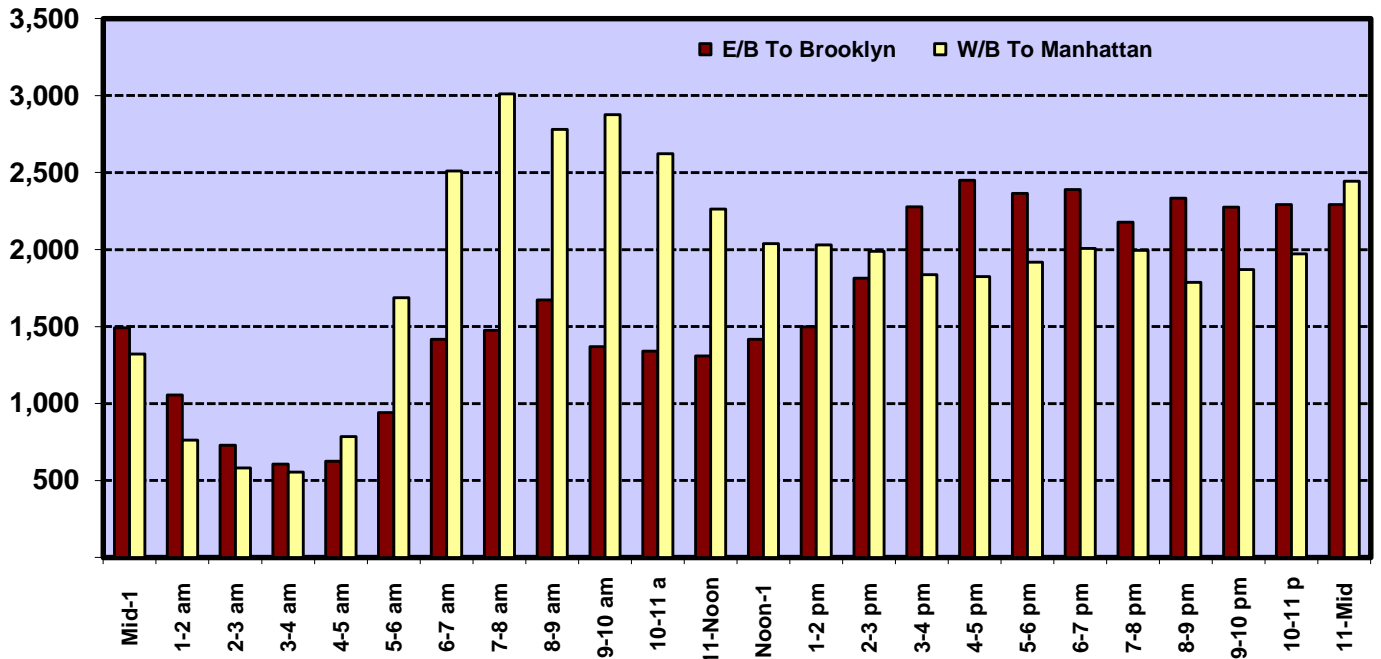
FHWA Classes	Commercial Vans,							Total Vehicles	Commercial Vans,							Total Vehicles	2-Way Grand Totals
	Autos, Motorcycles			Panel Trucks, Pickups,					Autos, Motorcycles			Panel Trucks, Pickups,					
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13				
	Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks		Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks				
12-1am	910	478	53	9	25	17	1,492	769	476	30	2	32	13	1,322	2,814		
1-2am	581	377	55	13	14	15	1,055	402	290	40	1	22	8	763	1,818		
2-3am	403	226	44	6	31	18	728	326	188	24	3	25	16	582	1,310		
3-4am	308	191	53	5	29	21	607	312	139	43	2	39	20	555	1,162		
4-5am	360	128	60	2	50	25	625	536	142	49	2	29	27	785	1,410		
5-6am	639	85	67	15	110	24	940	1,262	190	112	18	67	38	1,687	2,627		
6-7am	997	71	165	27	101	55	1,416	1,531	230	368	127	170	85	2,511	3,927		
7-8am	1,020	61	206	18	107	64	1,476	1,808	244	581	102	199	77	3,011	4,487		
8-9am	1,080	94	240	63	138	58	1,673	1,604	155	607	51	261	103	2,781	4,454		
9-10am	821	120	228	34	121	45	1,369	1,647	191	631	51	296	61	2,877	4,246		
10-11am	830	102	243	21	105	39	1,340	1,493	152	549	31	297	100	2,622	3,962		
11-12am	940	84	138	51	75	21	1,309	1,339	124	429	39	244	87	2,262	3,571		
12-1pm	1,017	87	169	32	97	15	1,417	1,202	112	400	51	215	59	2,039	3,456		
1-2pm	917	88	320	23	129	22	1,499	1,198	103	375	98	188	68	2,030	3,529		
2-3pm	1,188	120	320	20	133	34	1,815	1,262	111	342	51	171	51	1,988	3,803		
3-4pm	1,454	167	421	74	131	30	2,277	1,255	106	302	23	119	32	1,837	4,114		
4-5pm	1,580	200	498	60	94	19	2,451	1,336	108	221	25	120	15	1,825	4,276		
5-6pm	1,734	133	355	27	103	13	2,365	1,387	168	251	20	74	18	1,918	4,283		
6-7pm	1,774	201	272	56	66	21	2,390	1,484	279	152	17	63	12	2,007	4,397		
7-8pm	1,627	245	174	77	51	4	2,178	1,452	285	145	32	62	18	1,994	4,172		
8-9pm	1,688	373	127	82	39	24	2,333	1,267	319	102	36	49	13	1,786	4,119		
9-10pm	1,570	499	96	53	33	25	2,276	1,265	411	85	34	36	39	1,870	4,146		
10-11pm	1,484	618	106	59	21	5	2,293	1,289	568	57	12	32	15	1,973	4,266		
11-12pm	1,496	652	85	19	28	12	2,292	1,508	853	53	3	17	9	2,443	4,735		
Totals	26,418	5,400	4,495	846	1,831	626	39,616	28,934	5,944	5,948	831	2,827	984	45,468	85,084		
7-10am	2,921	275	674	115	366	167	4,518	5,059	590	1,819	204	756	241	8,669	13,187		
10am-1pm	2,787	273	550	104	277	75	4,066	4,034	388	1,378	121	756	246	6,923	10,989		
1-4pm	3,559	375	1,061	117	393	86	5,591	3,715	320	1,019	172	478	151	5,855	11,446		
4-7pm	5,088	534	1,125	143	263	53	7,206	4,207	555	624	62	257	45	5,750	12,956		
7am-7pm	14,355	1,457	3,410	479	1,299	381	21,381	17,015	1,853	4,840	559	2,247	683	27,197	48,578		
6-10am	3,918	346	839	142	467	222	5,934	6,590	820	2,187	331	926	326	11,180	17,114		
3-7pm	6,542	701	1,546	217	394	83	9,483	5,462	661	926	85	376	77	7,587	17,070		
6am-7pm	15,352	1,528	3,575	506	1,400	436	22,797	18,546	2,083	5,208	686	2,417	768	29,708	52,505		

Based on October 2015 Classification Survey Data.

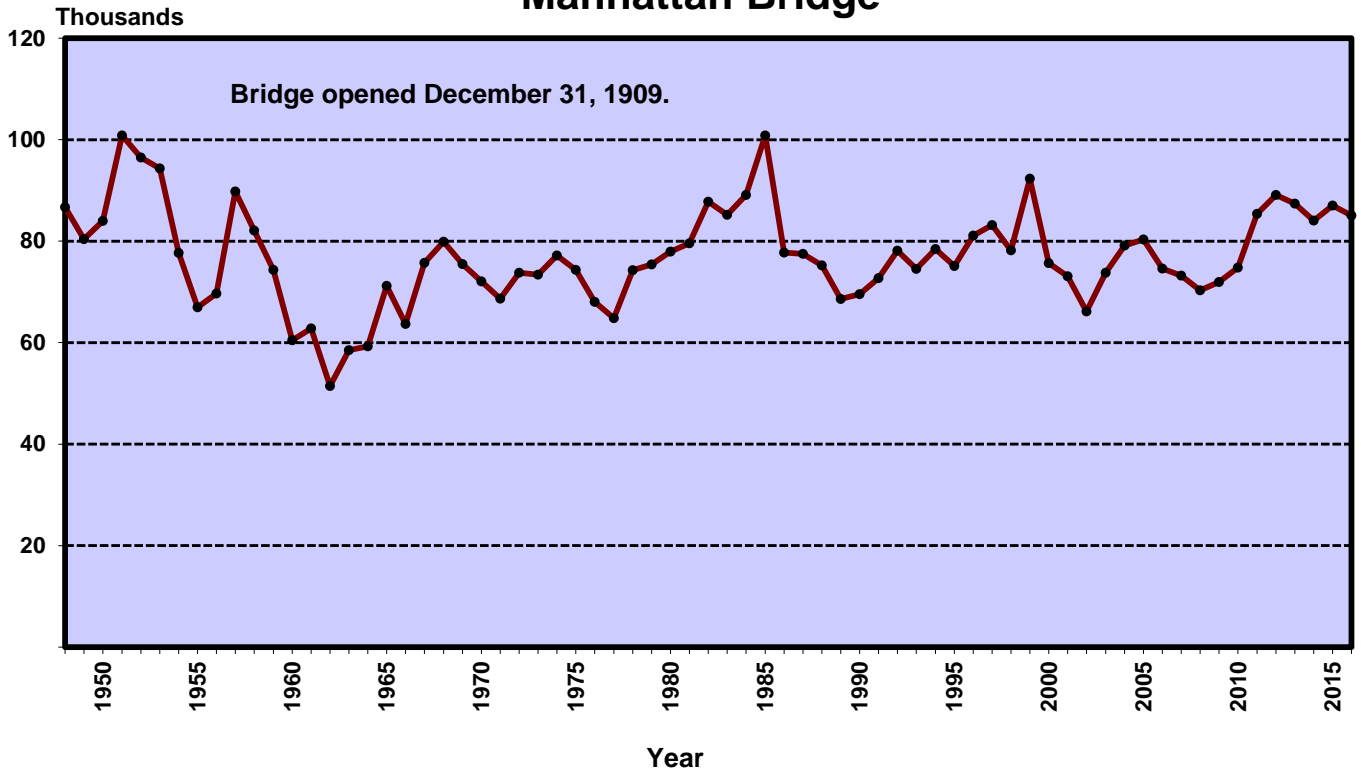
\*\* Peak Volumes



## Hourly Vehicular Volumes Manhattan Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Manhattan Bridge



# Hourly Vehicular Volumes Williamsburg Bridge - 2016

## Eastbound to Brooklyn

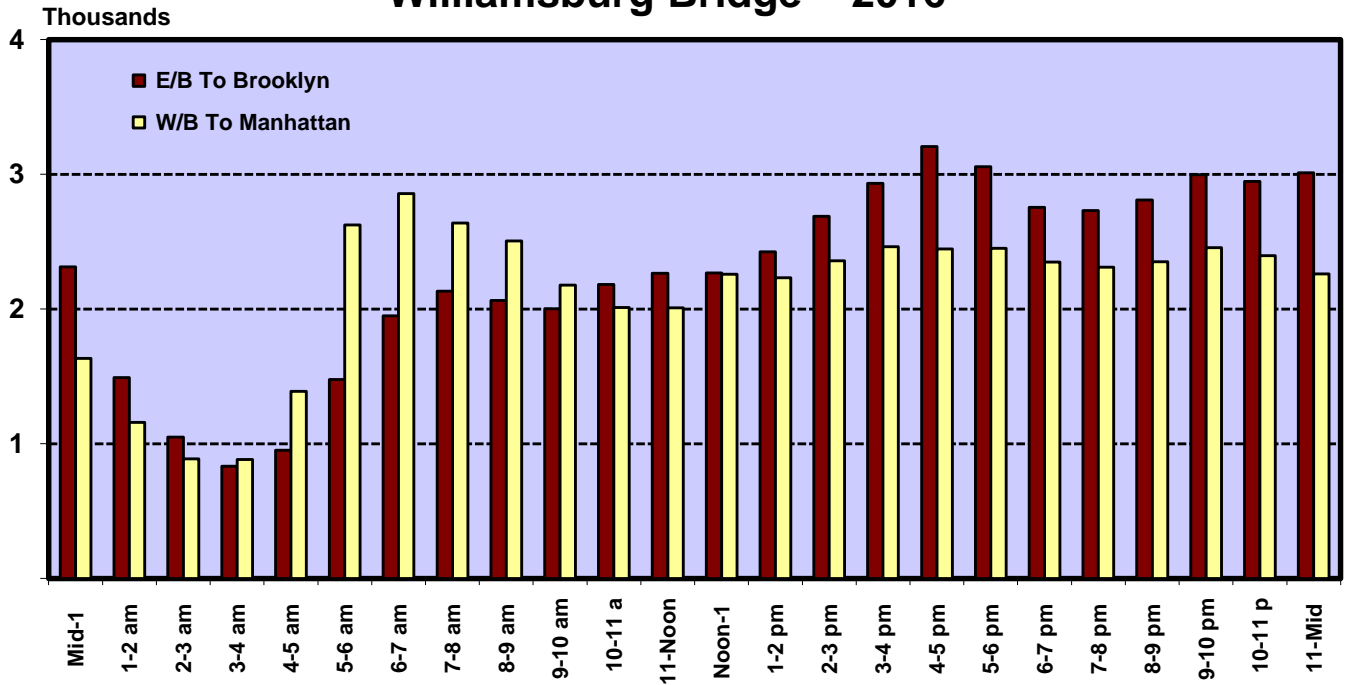
## Westbound to Manhattan

FHWA Classes ▶	Eastbound to Brooklyn										Westbound to Manhattan										2-Way Grand Totals		
	Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups,					Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups,							
	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Total Vehicles	Single Unit Trucks	Multiple Unit Trucks	2 & 3	4	5 - 7	8 - 13	Total Vehicles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	2 & 3	4	5 - 7	8 - 13	Total Vehicles
12-1am	1,406	793	83	2	2,934	28	2	83	2	35	8	2,314	683	886	39	1	23	2	39	1	23	2	1,634
1-2am	854	544	62	3	1,491	23	5	62	3	28	1	1,491	343	752	32	1	28	3	32	1	28	3	1,159
2-3am	575	396	51	7	1,049	19	1	51	7	19	1	1,049	257	565	32	1	28	5	32	1	28	5	888
3-4am	404	359	38	8	832	22	1	38	8	22	1	832	308	501	37	0	32	5	37	0	32	5	1,715
4-5am	481	371	52	6	951	40	1	52	6	40	1	951	634	516	122	4	97	15	122	4	97	15	1,388
5-6am	857	405	124	4	1,477	83	4	124	4	83	4	1,477	1,608	523	228	24	220	22	228	24	220	22	2,625
6-7am	1,279	372	213	7	1,949	71	7	213	7	71	7	1,949	1,798	405	298	65	251	40	298	65	251	40	2,857 **
7-8am	1,369	419	225	21	2,133	94	5	225	21	94	5	2,133	1,703	275	365	38	237	21	365	38	237	21	2,639
8-9am	1,302	322	247	49	2,064	134	10	247	49	134	10	2,064	1,388	249	543	23	290	13	543	23	290	13	2,506
9-10am	1,213	317	276	43	2,002	140	13	276	43	140	13	2,002	1,166	263	464	13	254	17	464	13	254	17	2,177
10-11am	1,286	340	341	26	2,183	178	12	341	26	178	12	2,183	1,267	279	285	11	164	6	285	11	164	6	4,195
11-12am	1,457	291	314	15	2,265	182	6	314	15	182	6	2,265	1,382	274	231	11	111	0	231	11	111	0	2,009
12-1pm	1,482	337	257	13	2,267	172	6	257	13	172	6	2,267	1,430	424	241	19	128	17	241	19	128	17	2,259
1-2pm	1,677	316	252	9	2,424	164	6	252	9	164	6	2,424	1,489	318	235	33	142	16	235	33	142	16	4,657
2-3pm	1,814	440	237	9	2,688	186	2	237	9	186	2	2,688	1,717	296	200	15	119	11	200	15	119	11	2,358
3-4pm	1,886	543	273	36	2,932	188	6	273	36	188	6	2,932	1,877	317	163	16	86	4	163	16	86	4	2,463
4-5pm	2,188	489	307	35	3,206 **	185	2	307	35	185	2	3,206 **	1,812	422	131	14	63	3	131	14	63	3	2,445
5-6pm	2,152	577	193	12	3,056	119	3	193	12	119	3	3,056	1,690	589	110	15	44	3	110	15	44	3	2,451
6-7pm	1,737	818	102	12	2,756	86	1	102	12	86	1	2,756	1,583	604	109	3	47	2	109	3	47	2	2,348
7-8pm	1,488	1,073	92	11	2,732	66	2	92	11	66	2	2,732	1,572	608	95	10	26	0	95	10	26	0	2,311
8-9pm	1,529	1,155	83	7	2,810	34	2	83	7	34	2	2,810	1,447	774	83	4	39	3	83	4	39	3	2,350
9-10pm	1,664	1,230	50	13	2,997	39	1	50	13	39	1	2,997	1,517	819	73	3	44	0	73	3	44	0	2,456
10-11pm	1,617	1,207	82	2	2,947	35	4	82	2	35	4	2,947	1,341	955	59	7	34	1	59	7	34	1	2,397
11-12pm	1,690	1,233	45	4	3,012	38	2	45	4	38	2	3,012	1,134	1,032	47	2	43	2	47	2	43	2	2,260
<b>Totals</b>	<b>33,407</b>	<b>14,347</b>	<b>3,999</b>	<b>354</b>	<b>54,537</b>	<b>2,326</b>	<b>104</b>	<b>12,646</b>	<b>333</b>	<b>2,550</b>	<b>211</b>	<b>51,108</b>	<b>31,146</b>	<b>12,646</b>	<b>4,222</b>	<b>333</b>	<b>2,550</b>	<b>211</b>	<b>4,222</b>	<b>333</b>	<b>2,550</b>	<b>211</b>	<b>105,645</b>
7-10am	3,884	1,058	748	113	6,199	368	28	787	74	368	28	6,199	4,257	787	1,372	74	781	51	1,372	74	781	51	13,521
10am-1pm	4,225	968	912	54	6,715	532	24	977	41	532	24	6,715	4,079	977	757	41	403	23	757	41	403	23	12,995
1-4pm	5,377	1,299	762	54	8,044	538	14	931	64	538	14	8,044	5,083	931	598	64	347	31	598	64	347	31	15,098
4-7pm	6,077	1,894	602	59	9,018	390	6	1,615	32	390	6	9,018	5,085	1,615	350	32	154	8	350	32	154	8	16,262
7am-7pm	19,563	5,209	3,024	280	29,976	1,828	72	4,310	211	1,828	72	29,976	18,504	4,310	3,077	211	1,685	113	3,077	211	1,685	113	57,876
6-10am	5,163	1,430	961	120	8,148	439	35	1,192	139	439	35	8,148	6,055	1,192	1,670	139	1,032	91	1,670	139	1,032	91	18,327
3-7pm	7,963	2,427	875	95	11,950	578	12	1,932	48	578	12	11,950	6,962	1,932	513	48	240	12	513	48	240	12	21,657
6am-7pm	20,842	5,581	3,237	287	31,925	1,899	79	4,715	276	1,899	79	31,925	20,302	4,715	3,375	276	1,936	153	3,375	276	1,936	153	62,682

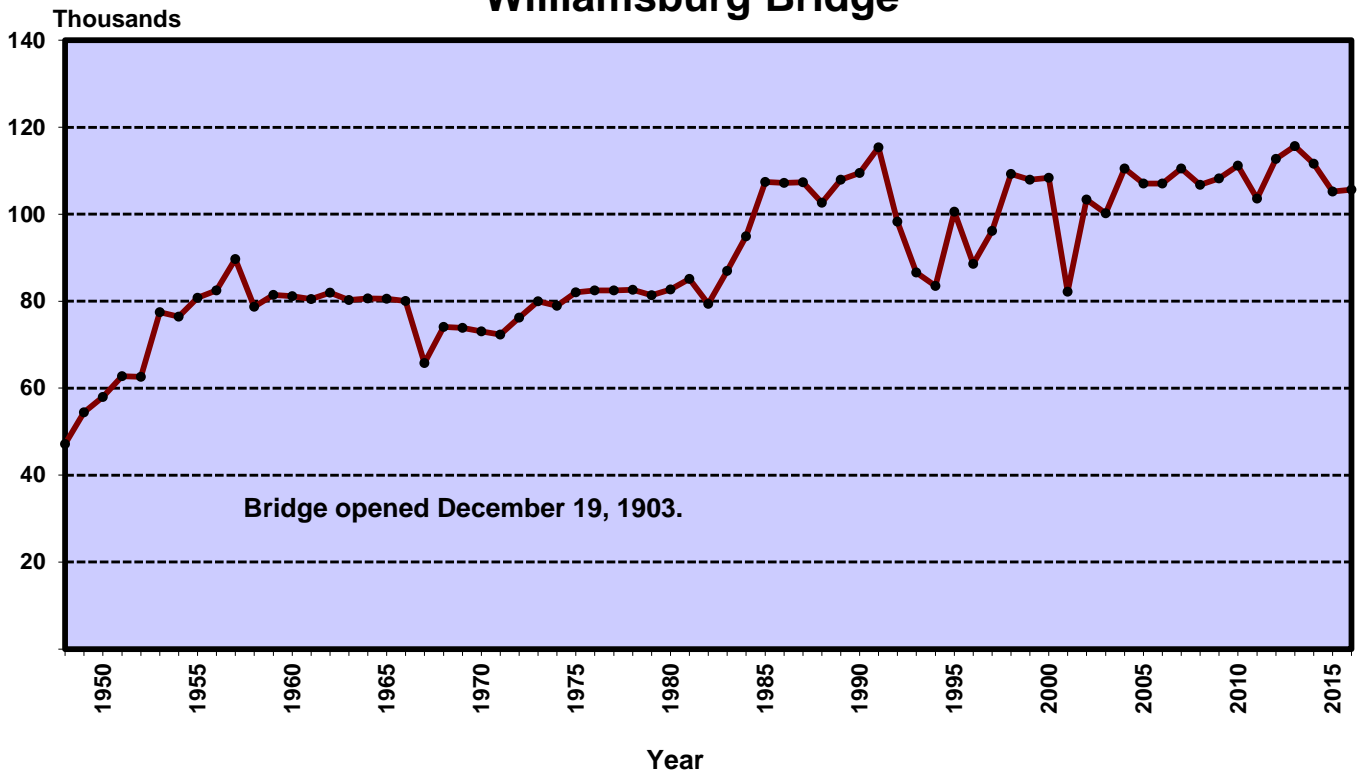
Based on October 2015 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Williamsburg Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Williamsburg Bridge





# Harlem River Bridges

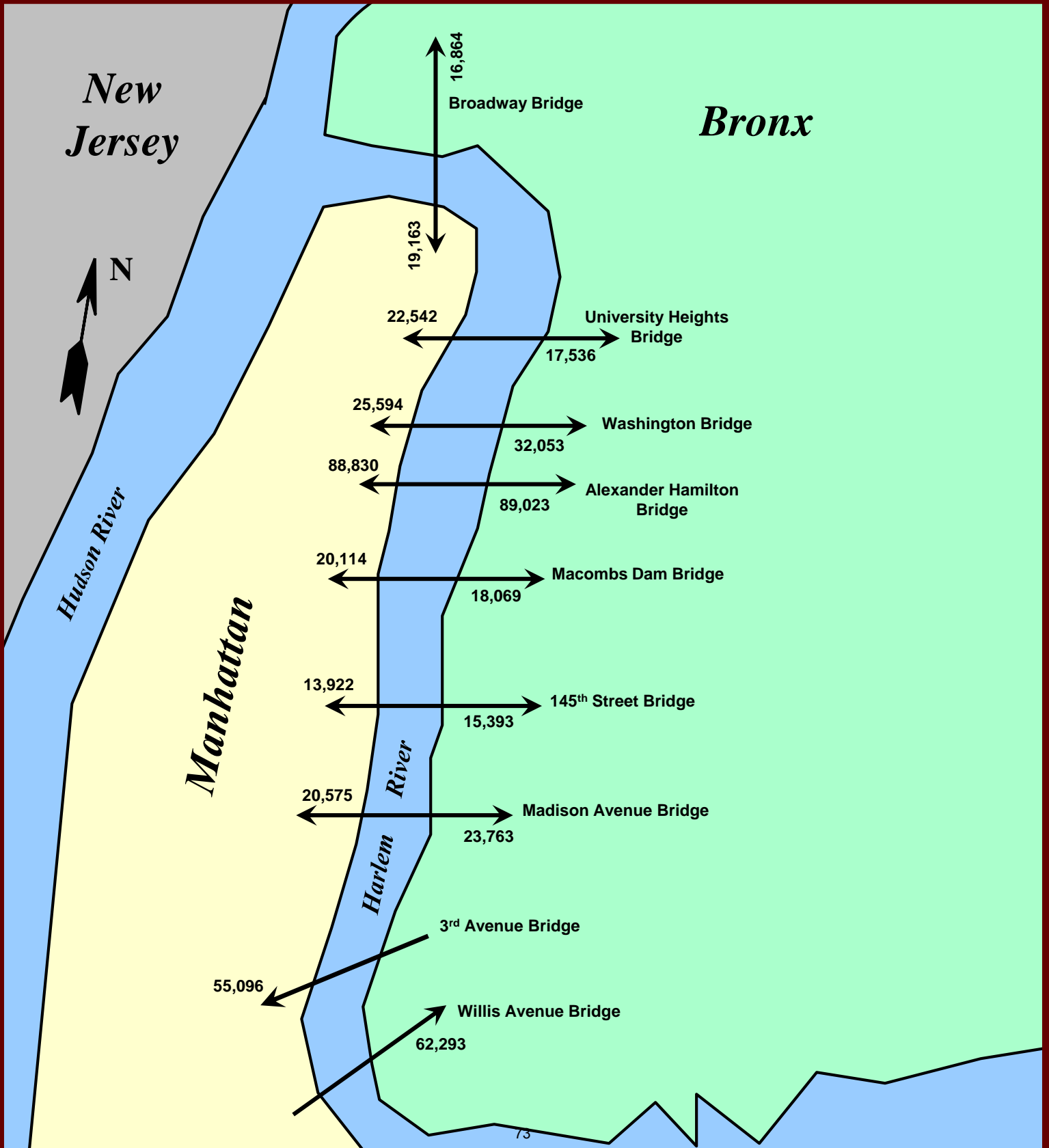


**Willis Avenue Bridge**



# Harlem River Bridges

## 2016 Daily Volumes



**Harlem River Bridges**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<b>Year</b>	<b>Alexander Hamilton</b>	<b>Broadway</b>	<b>Macombs Dam</b>	<b>Madison Avenue</b>	<b>Third Avenue</b>
1948		16,020	33,608	27,222	31,403
1949		17,369	23,854	17,363	20,024
1950		15,462	28,641	27,933	34,984
1951	<i>Bridge</i>	16,374	31,072	33,576	51,478
1952	<i>Opened</i>	17,412	36,100	27,468	34,023
1953	<i>Jan. 1963</i>	16,821	35,331	24,382	37,593
1954		15,958	27,911	23,408	33,667
1955		17,046	27,914	34,681	38,201
1956		17,960	32,761	46,591	42,735
1957		20,345	55,609	40,860	47,269
1958		22,132	50,227	33,393	61,367
1959		25,491	48,720	27,967	56,525
1960		23,025	50,865	22,541	68,079
1961		21,097	32,447	28,375	61,584
1962		19,170	39,580	25,400	53,580
1963		23,110	43,450	27,090	63,840
1964	87,840	25,020	31,050	31,170	63,250
1965	125,133	17,555	37,451	26,315	55,644
1966	104,559	22,438	39,922	28,865	70,938
1967	135,803	22,844	35,595	27,683	52,931
1968	92,771	23,621	33,875	27,658	41,243
1969	132,487	22,224	38,845	28,219	57,748
1970	141,609	23,115	46,523	24,941	48,110
1971	137,881	28,232	40,489	28,891	50,548
1972	142,139	25,178	39,702	26,923	47,454
1973	137,133	24,408	38,349	34,815	60,415
1974	144,909	21,825	40,934	30,425	54,770
1975	134,013	30,638	38,995	29,823	62,079
1976	137,141	26,453	36,065	27,838	54,957
1977	158,710	26,465	33,539	29,832	52,969
1978	151,342	25,145	35,764	34,938	54,177
1979	143,973	27,673	37,145	29,036	54,428
1980	152,852	29,838	37,464	27,476	54,152
1981	148,609	30,485	42,064	29,456	51,483
1982	156,038	30,846	45,178	30,485	60,236
1983	161,772	29,875	42,747	30,715	67,813
1984	164,734	28,338	46,870	33,101	56,706
1985	171,602	33,086	52,497	37,956	59,907
1986	175,635	32,314	50,602	39,809	64,404
1987	180,908	31,934	48,021	31,506	62,089
1988	172,970	33,047	43,318	31,321	62,379
1989	183,661	35,066	43,450	31,688	64,849
1990	192,848	41,705	41,113	32,458	63,516
1991	187,309	40,444	42,393	34,826	65,787
1992	176,279	35,184	42,022	32,907	66,967
1993	180,507	33,752	39,251	32,432	68,812
1994	178,522	32,833	39,876	22,923	66,104
1995	175,279	42,555	41,571	22,739	68,663
1996	176,856	40,040	40,031	17,948	67,206
1997	176,102	34,645	44,033	28,646	71,365
1998	176,632	35,770	42,027	32,922	70,757
1999	180,201	35,412	41,813	38,102	68,544
2000	177,899	37,990	21,008	47,583	73,121
2001	168,605	41,175	39,615	43,331	72,756
2002	168,079	38,287	18,878	49,487	58,949
2003	182,704	36,888	42,254	41,575	43,065
2004	175,323	35,190	40,558	48,723	47,053
2005	181,566	35,698	40,112	48,397	60,152
2006	190,183	33,551	39,878	43,805	61,874
2007	192,651	35,523	40,749	44,663	59,712
2008	189,598	33,266	38,897	41,740	58,510
2009	191,646	35,566	39,508	43,480	59,039
2010	192,213	37,292	39,627	42,966	60,549
2011	182,174	35,770	44,311	41,423	59,603
2012	185,309	35,411	39,020	41,782	59,053
2013	188,417	35,462	38,930	47,046	60,120
2014	178,809	34,239	38,417	41,340	58,447
2015	178,407	33,897	38,556	40,432	55,988
2016	177,853	36,027	38,183	44,338	55,096



**Harlem River Bridges (cont'd)**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<i>Year</i>	<i>University Heights</i>	<i>Washington</i>	<i>Willis Avenue</i>	<i>145th Street</i>	<i>Totals</i>	<i>Year</i>
1948	21,706	29,374	29,648	18,196	207,177	1948
1949	14,098	32,122	42,772	25,908	193,510	1949
1950	24,986	29,541	38,708	22,416	222,671	1950
1951	25,270	28,599	35,958	26,872	249,199	1951
1952	21,527	28,270	33,207	24,189	222,196	1952
1953	29,240	37,298	38,579	29,385	248,629	1953
1954	22,979	39,339	46,675	26,119	236,056	1954
1955	18,151	33,988	44,809	35,449	250,239	1955
1956	21,834	30,598	43,752	30,550	266,781	1956
1957	34,077	38,861	51,395	28,114	316,530	1957
1958	37,078	50,100	49,773	25,677	329,747	1958
1959	33,580	51,652	58,705	39,709	342,349	1959
1960	36,763	54,008	59,050	30,868	345,199	1960
1961	43,749	61,542	50,902	33,767	333,463	1961
1962	35,940	56,110	55,910	27,540	313,230	1962
1963	26,030	32,760	65,290	27,520	309,090	1963
1964	31,490	41,410	65,190	31,260	407,680	1964
1965	23,458	35,560	53,219	26,924	401,259	1965
1966	25,700	31,104	53,677	25,284	402,487	1966
1967	26,990	33,921	69,609	22,368	427,744	1967
1968	26,126	35,218	58,730	22,853	362,095	1968
1969	29,941	19,136	60,192	24,200	412,992	1969
1970	26,718	33,661	61,433	23,580	429,690	1970
1971	29,622	38,522	53,609	24,401	432,195	1971
1972	31,620	36,812	49,431	23,105	422,364	1972
1973	33,503	46,079	51,537	23,431	449,670	1973
1974	29,297	42,014	53,322	21,616	439,112	1974
1975	29,111	41,522	52,984	21,189	440,354	1975
1976	34,494	39,058	53,873	19,750	429,629	1976
1977	29,128	38,185	52,484	20,888	442,200	1977
1978	35,883	37,690	54,335	21,484	450,758	1978
1979	31,796	37,348	44,851	21,566	427,816	1979
1980	32,562	38,061	52,061	21,826	446,292	1980
1981	34,454	38,061	52,561	21,150	448,323	1981
1982	25,416	44,168	55,762	22,656	470,785	1982
1983	32,233	42,186	60,296	23,516	491,153	1983
1984	30,485	46,896	66,017	23,802	496,949	1984
1985	37,553	51,302	65,638	28,722	538,263	1985
1986	36,192	54,935	66,824	26,181	546,896	1986
1987	37,223	46,094	67,558	24,895	530,228	1987
1988	38,542	48,025	64,862	25,818	520,282	1988
1989	42,246	49,092	66,012	23,317	539,381	1989
1990	19,768	61,668	62,315	24,172	539,563	1990
1991	18,220	57,526	60,415	26,448	533,368	1991
1992	39,232	51,925	66,522	26,315	537,353	1992
1993	38,895	52,795	70,472	25,390	542,306	1993
1994	38,134	57,009	67,344	23,299	526,044	1994
1995	21,238	56,372	67,716	25,749	521,882	1995
1996	35,280	56,204	70,229	27,156	530,950	1996
1997	39,639	54,708	73,461	24,151	546,750	1997
1998	41,640	57,307	78,145	24,862	560,062	1998
1999	42,287	58,907	71,555	26,361	563,182	1999
2000	45,557	68,075	73,175	34,362	578,770	2000
2001	46,381	57,443	72,901	26,552	568,759	2001
2002	45,311	63,609	73,435	35,796	551,831	2002
2003	50,126	63,154	66,710	23,034	549,510	2003
2004	47,350	57,530	74,700	25,994	552,421	2004
2005	44,938	58,019	66,708	25,802	561,392	2005
2006	42,118	57,689	66,212	21,733	557,043	2006
2007	41,422	56,945	65,113	21,147	557,925	2007
2008	39,340	52,768	62,167	23,148	539,434	2008
2009	39,165	52,420	58,548	24,364	543,736	2009
2010	39,230	52,014	56,934	28,749	549,574	2010
2011	43,601	52,373	57,710	27,677	544,642	2011
2012	39,641	57,011	62,062	27,918	547,207	2012
2013	40,774	54,031	65,216	28,167	558,163	2013
2014	37,791	52,537	67,951	28,357	537,888	2014
2015	38,513	54,006	63,912	27,097	530,808	2015
2016	40,078	57,647	62,293	29,315	540,830	2016

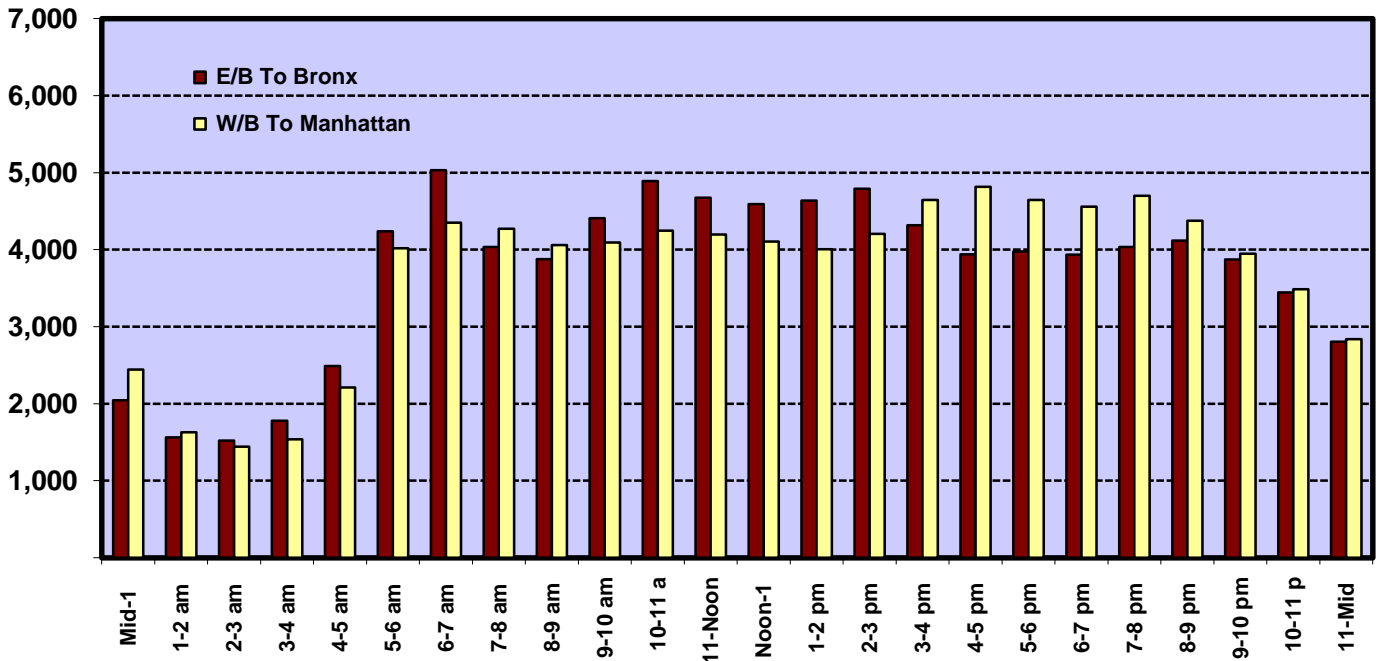
## Hourly Vehicular Volumes Alexander Hamilton Bridge - 2016

FHWA Classes ▶	<b>Eastbound to Bronx</b>							<b>Westbound to Manhattan</b>							<b>2-way Grand Totals</b>
	Commercial Vans,				Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Commercial Vans,				Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Panel Trucks, Pickups, Police, Fleet Vehicles	Buses				Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Panel Trucks, Pickups, Police, Fleet Vehicles	Buses				
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		
12-1am	1,466	77	40	4	75	382	2,044	1,790	17	67	17	64	488	2,443	4,487
1-2am	924	65	24	3	69	477	1,562	999	25	65	7	70	462	1,628	3,190
2-3am	723	42	27	0	120	607	1,519	705	13	43	3	48	629	1,441	2,960
3-4am	684	54	40	2	230	768	1,778	588	0	46	3	93	809	1,539	3,317
4-5am	1,231	71	98	0	253	838	2,491	1,122	21	98	0	186	785	2,212	4,703
5-6am	2,503	24	115	3	187	1,406	4,238	2,426	51	144	0	381	1,016	4,018	8,256
6-7am	3,518	9	300	1	85	1,121	5,034 **	3,210	34	229	46	159	673	4,351	9,385 **
7-8am	3,113	17	235	16	277	375	4,033	3,281	55	282	36	236	381	4,271	8,304
8-9am	2,838	40	256	29	349	365	3,877	3,123	34	184	22	266	429	4,058	7,935
9-10am	3,158	26	347	40	379	461	4,411	2,924	34	152	18	374	592	4,094	8,505
10-11am	3,544	15	316	16	500	502	4,893	2,717	29	291	21	444	745	4,247	9,140
11-12am	3,326	87	300	8	464	491	4,676	2,656	26	223	23	348	921	4,197	8,873
12-1pm	3,312	80	281	24	412	484	4,593	2,579	38	221	26	384	856	4,104	8,697
1-2pm	3,571	44	280	28	327	387	4,637	2,629	29	239	39	295	775	4,006	8,643
2-3pm	3,866	42	233	23	326	302	4,792	2,919	57	221	27	280	702	4,206	8,998
3-4pm	3,404	63	213	33	291	315	4,319	3,441	43	303	14	239	605	4,645	8,964
4-5pm	3,183	42	202	52	232	227	3,938	3,740	32	275	13	224	533	4,817 **	8,755
5-6pm	3,211	35	296	20	172	242	3,976	3,877	37	163	3	167	399	4,646	8,622
6-7pm	3,343	7	140	7	147	293	3,937	3,959	16	123	2	111	347	4,558	8,495
7-8pm	3,369	36	121	29	154	324	4,033	3,985	21	132	7	118	436	4,699	8,732
8-9pm	3,454	58	96	10	172	327	4,117	3,667	27	136	5	103	439	4,377	8,494
9-10pm	3,122	84	108	4	102	454	3,874	3,281	29	99	0	86	451	3,946	7,820
10-11pm	2,876	49	71	0	56	394	3,446	2,952	38	107	8	79	303	3,487	6,933
11-12pm	2,391	75	38	0	50	251	2,805	2,056	27	90	11	86	570	2,840	5,645
<b>Totals</b>	<b>66,130</b>	<b>1,142</b>	<b>4,177</b>	<b>352</b>	<b>5,429</b>	<b>11,793</b>	<b>89,023</b>	<b>64,626</b>	<b>733</b>	<b>3,933</b>	<b>351</b>	<b>4,841</b>	<b>14,346</b>	<b>88,830</b>	<b>177,853</b>
7-10am	9,109	83	838	85	1,005	1,201	12,321	9,328	123	618	76	876	1,402	12,423	24,744
10am-1pm	10,182	182	897	48	1,376	1,477	14,162	7,952	93	735	70	1,176	2,522	12,548	26,710
1-4pm	10,841	149	726	84	944	1,004	13,748	8,989	129	763	80	814	2,082	12,857	26,605
4-7pm	9,737	84	638	79	551	762	11,851	11,576	85	561	18	502	1,279	14,021	25,872
7am-7pm	39,869	498	3,099	296	3,876	4,444	52,082	37,845	430	2,677	244	3,368	7,285	51,849	103,931
6-10am	12,627	92	1,138	86	1,090	2,322	17,355	12,538	157	847	122	1,035	2,075	16,774	34,129
3-7pm	13,141	147	851	112	842	1,077	16,170	15,017	128	864	32	741	1,884	18,666	34,836
6am-7pm	43,387	507	3,399	297	3,961	5,565	57,116	41,055	464	2,906	290	3,527	7,958	56,200	113,316

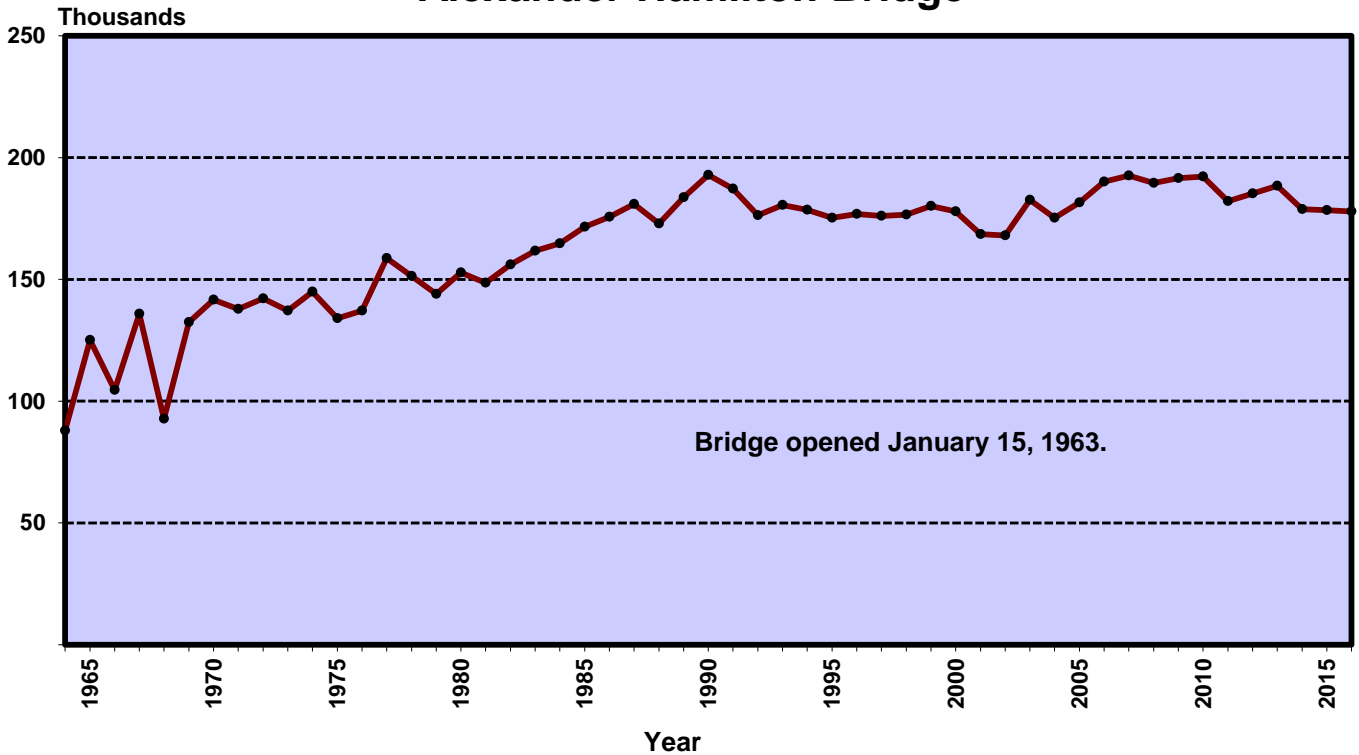
Based on October 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Alexander Hamilton Bridge ~ 2016



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



# Hourly Vehicular Volumes Broadway Bridge - 2016

## Northbound to Bronx

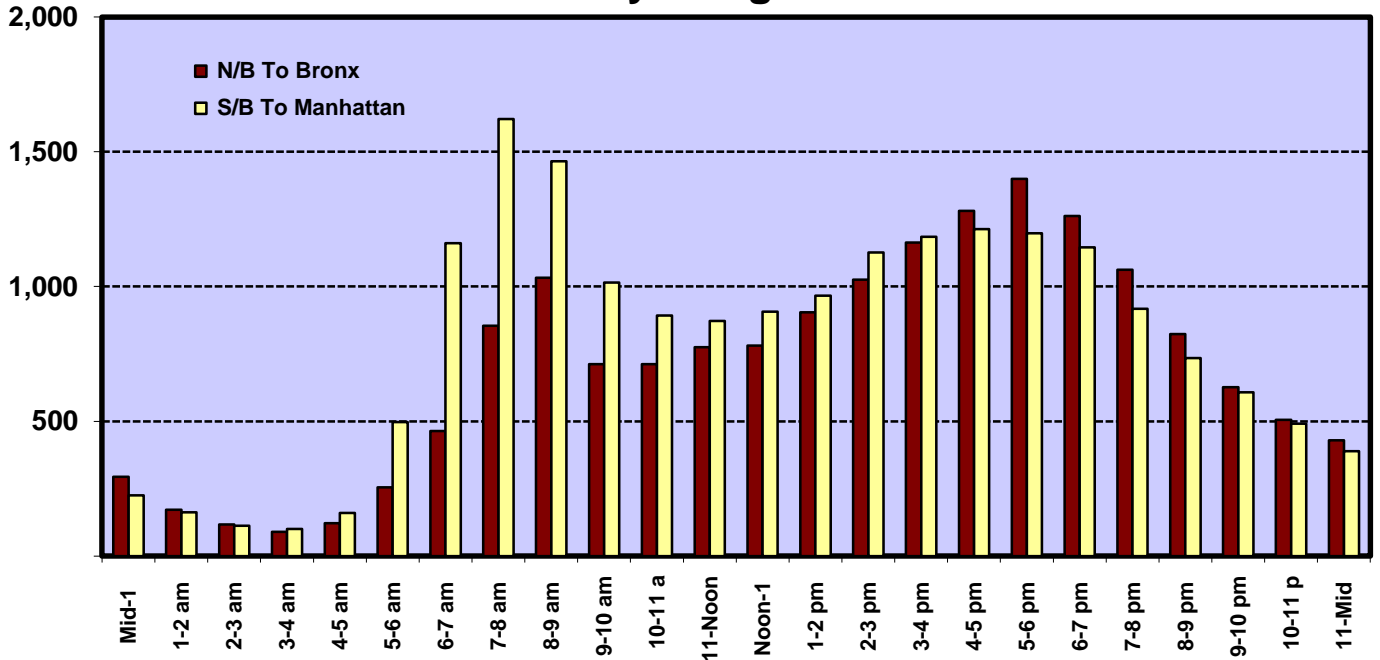
## Southbound to Manhattan

FHWA Classes	Northbound to Bronx						Southbound to Manhattan						2-way Grand Totals		
	Autos, Motorcycles			Commercial Vans, Panel Trucks, Pickups,			Autos, Motorcycles			Commercial Vans, Panel Trucks, Pickups,					
	SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Police, Fleet Vehicles	2 & 3	4	SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Police, Fleet Vehicles	2 & 3	4	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13			
12-1am	252	18	8	12	2	2	136	68	3	16	2	0			225
1-2am	137	17	0	12	5	1	91	47	1	20	0	3			162
2-3am	100	7	6	1	2	1	59	43	4	4	1	2			113
3-4am	69	16	3	0	0	2	65	24	3	2	4	2			100
4-5am	88	11	1	14	4	4	111	30	11	1	1	6			160
5-6am	149	10	3	58	34	1	387	70	23	9	6	2			497
6-7am	339	14	12	67	2	30	924	106	36	83	11	1			1,161
7-8am	712	27	23	63	17	13	1,311	186	54	52	14	5			1,622
8-9am	875	79	23	36	10	10	1,135	187	62	50	21	10			1,465
9-10am	558	56	45	32	17	4	734	142	54	43	23	19			1,015
10-11am	556	59	45	16	26	10	595	177	42	26	23	30			893
11-12am	620	77	26	20	24	8	587	176	66	11	22	10			1,647
12-1pm	620	68	36	21	28	8	675	135	48	19	22	8			1,688
1-2pm	719	55	49	46	34	1	673	191	49	23	20	10			1,870
2-3pm	847	78	30	38	22	11	836	158	53	43	29	7			2,152
3-4pm	993	84	27	41	16	2	886	175	55	49	18	2			2,348
4-5pm	1,075	120	27	48	10	1	958	157	50	30	18	0			2,494
5-6pm	1,191	129	40	36	3	1	986	136	39	29	7	1			2,598
6-7pm	1,165	45	22	28	1	1	920	154	16	45	8	2			2,407
7-8pm	973	45	16	16	9	3	741	108	17	42	8	1			1,979
8-9pm	740	44	12	17	10	1	520	149	22	34	4	5			1,558
9-10pm	566	40	15	2	1	2	436	113	11	45	1	1			1,233
10-11pm	441	44	11	7	0	2	334	115	6	32	2	2			996
11-12pm	369	35	10	8	6	1	256	103	16	12	0	2			818
<b>Totals</b>	<b>14,154</b>	<b>1,178</b>	<b>490</b>	<b>639</b>	<b>283</b>	<b>120</b>	<b>14,356</b>	<b>2,950</b>	<b>741</b>	<b>720</b>	<b>265</b>	<b>131</b>			<b>19,163</b>
7-10am	2,145	162	91	131	44	27	3,180	515	170	145	58	34			6,702
10am-1pm	1,796	204	107	57	78	26	1,857	488	156	56	67	48			4,940
1-4pm	2,559	217	106	125	72	14	2,395	524	157	115	67	19			6,370
4-7pm	3,431	294	89	112	14	3	2,864	447	105	104	33	3			7,499
7am-7pm	9,931	877	393	425	208	70	10,296	1,974	588	420	225	104			25,511
6-10am	2,484	176	103	198	46	57	4,104	621	206	228	69	35			8,327
3-7pm	4,424	378	116	153	30	5	3,750	622	160	153	51	5			9,847
6am-7pm	10,270	891	405	492	210	100	11,220	2,080	624	503	236	105			14,768

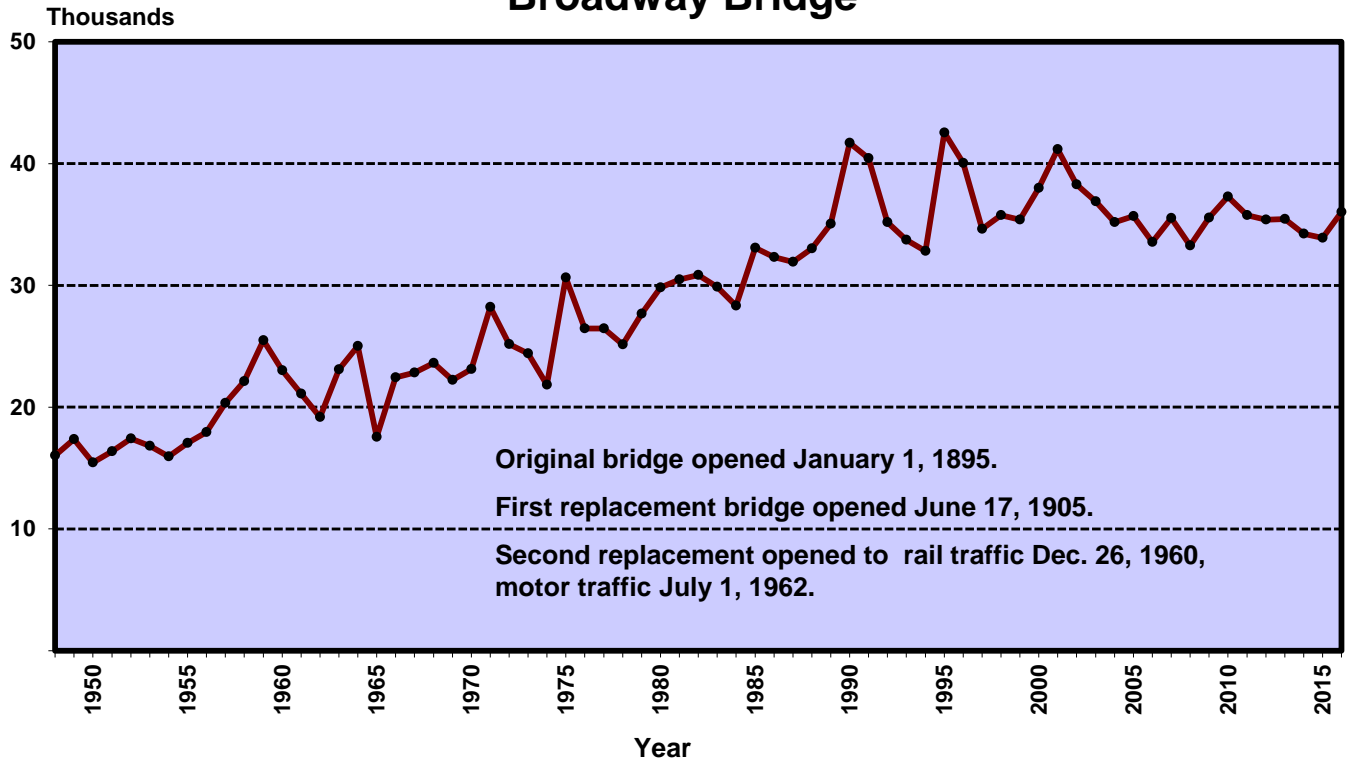
Based on October 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Broadway Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Broadway Bridge



# Hourly Vehicular Volumes Macombs Dam Bridge - 2016

## Eastbound to Bronx

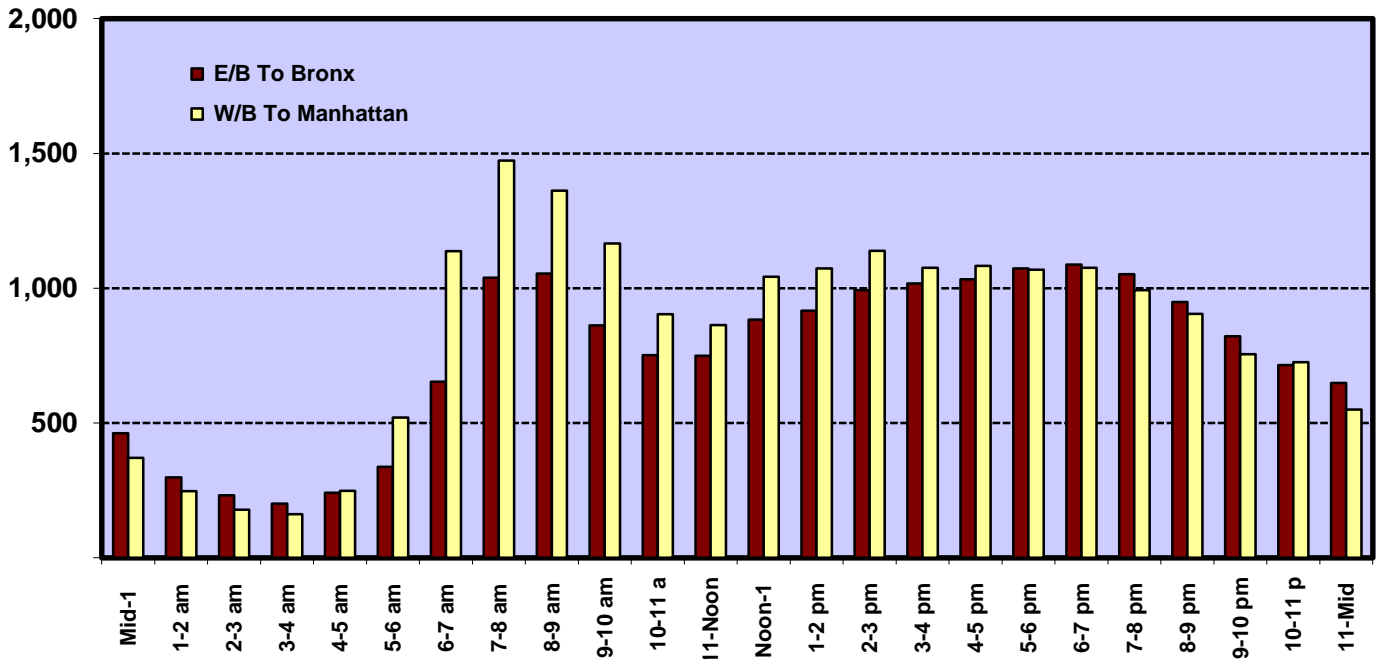
## Westbound to Manhattan

FHWA Classes	Eastbound to Bronx										Westbound to Manhattan										2-way Grand Totals
	Autos, Motorcycles SUVs, Family Vans					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Autos, Motorcycles SUVs, Family Vans					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					
	1, 2, 3	2	2 & 3	4	5-7	8-13	Total Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	1, 2, 3	2	2 & 3	4	5-7	8-13	Total Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	
12-1am	373	44	28	5	9	3	462				320	30	14	4	1	1	370				
1-2am	242	26	18	5	5	2	298				215	18	11	2	0	1	247				
2-3am	176	32	11	2	9	2	232				146	22	6	2	2	0	178				
3-4am	152	31	13	1	1	3	201				137	18	3	2	1	0	161				
4-5am	180	45	7	1	7	1	241				194	21	17	13	2	1	248				
5-6am	268	50	10	3	1	5	337				382	81	31	16	7	3	520				
6-7am	511	89	25	8	20	0	653				723	183	113	62	44	12	1,137				
7-8am	850	124	25	21	16	3	1,039				1,036	188	115	85	30	20	1,474				
8-9am	866	87	23	57	16	5	1,054				1,086	110	91	25	43	7	1,362				
9-10am	691	81	42	25	21	2	862				920	97	67	12	63	7	1,166				
10-11am	585	79	44	11	30	3	752				721	65	52	20	39	6	903				
11-12am	560	90	61	7	25	6	749				660	78	74	16	29	6	863				
12-1pm	670	102	72	8	26	5	883				823	95	77	14	22	12	1,043				
1-2pm	698	109	69	10	28	3	917				811	133	75	22	24	8	1,073				
2-3pm	790	110	56	10	25	1	992				871	136	82	27	20	3	1,139				
3-4pm	840	80	49	17	25	6	1,017				827	112	72	31	30	4	1,076				
4-5pm	872	69	43	24	22	3	1,033				871	85	81	32	13	1	1,083				
5-6pm	858	104	39	32	33	7	1,073				905	80	57	20	6	0	1,068				
6-7pm	889	101	57	12	24	5	1,088				930	74	51	16	5	0	1,076				
7-8pm	860	95	67	9	17	4	1,052				858	71	44	16	2	1	992				
8-9pm	790	91	51	5	8	4	949				788	63	41	10	3	0	905				
9-10pm	690	75	44	6	6	1	822				654	63	25	10	3	0	755				
10-11pm	595	64	40	5	6	5	715				623	47	41	9	5	0	725				
11-12pm	540	54	38	3	9	4	648				475	38	23	11	3	0	550				
<b>Totals</b>	<b>14,546</b>	<b>1,832</b>	<b>932</b>	<b>287</b>	<b>389</b>	<b>83</b>	<b>18,069</b>				<b>15,976</b>	<b>1,908</b>	<b>1,263</b>	<b>477</b>	<b>397</b>	<b>93</b>	<b>20,114</b>				
7-10am	2,407	292	90	103	53	10	2,955				3,042	395	273	122	136	34	4,002				
10am-1pm	1,815	271	177	26	81	14	2,384				2,204	238	203	50	90	24	2,809				
1-4pm	2,328	299	174	37	78	10	2,926				2,509	381	229	80	74	15	3,288				
4-7pm	2,619	274	139	68	79	15	3,194				2,706	239	189	68	24	1	3,227				
7am-7pm	9,169	1,136	580	234	291	49	11,459				10,461	1,253	894	320	324	74	13,326				
6-10am	2,918	381	115	111	73	10	3,608				3,765	578	386	184	180	46	5,139				
3-7pm	3,459	354	188	85	104	21	4,211				3,533	351	261	99	54	5	4,303				
6am-7pm	9,680	1,225	605	242	311	49	12,112				11,184	1,436	1,007	382	368	86	14,463				

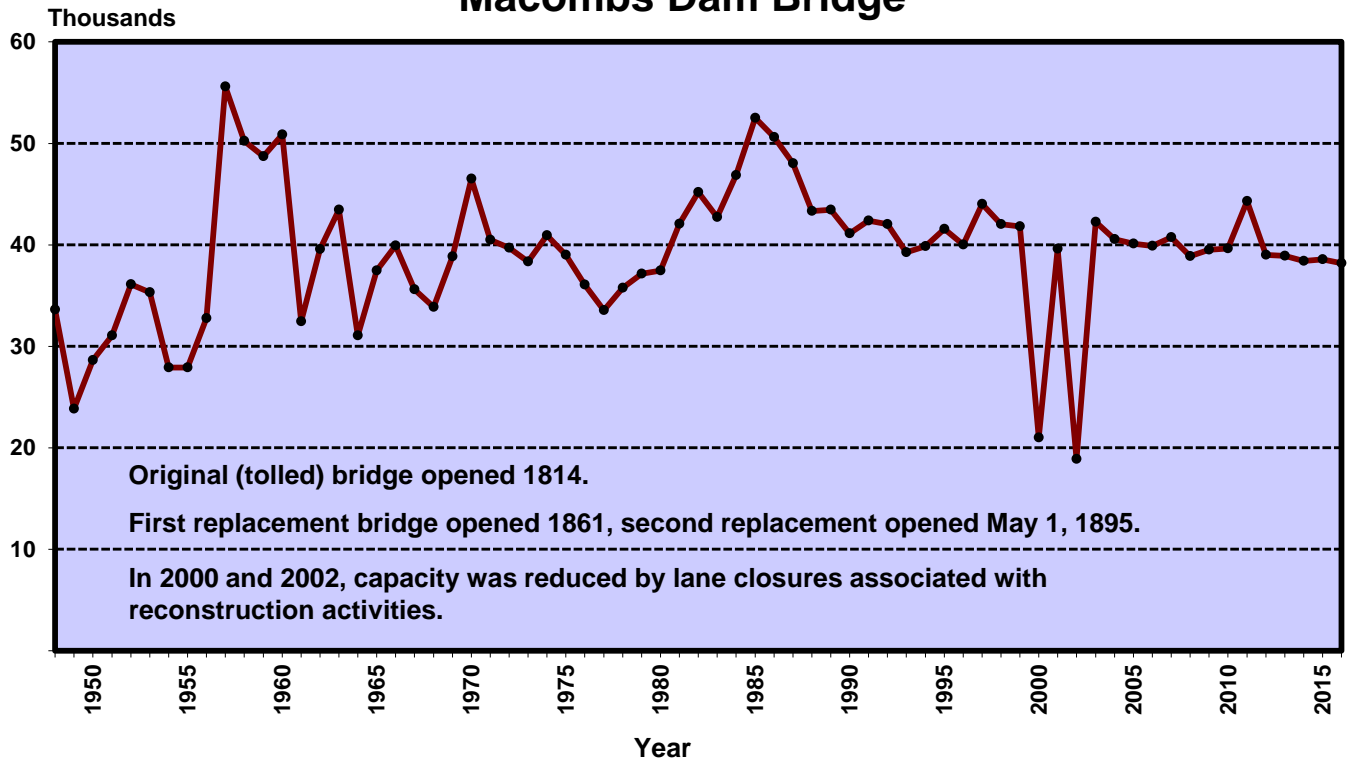
Based on October 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Macombs Dam Bridge ~ 2016



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



# Hourly Vehicular Volumes Madison Avenue Bridge - 2016

## Eastbound to Bronx

## Westbound to Manhattan

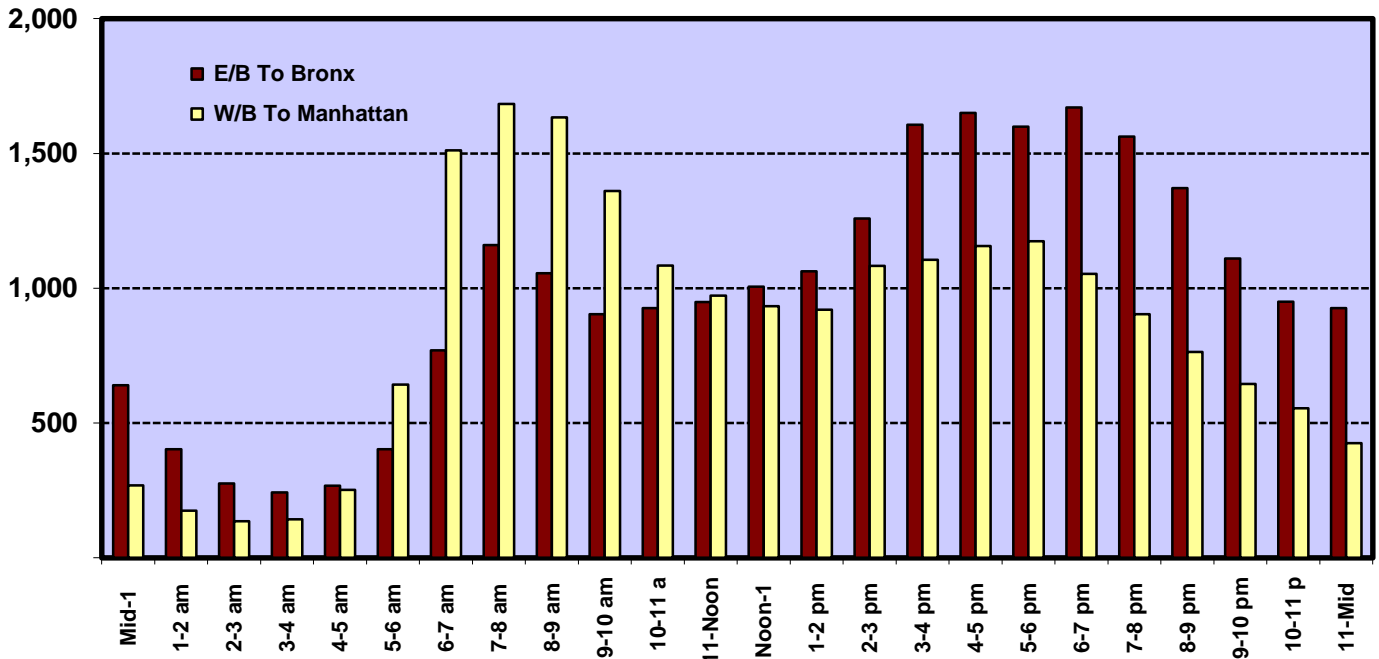
FHWA Classes	Eastbound to Bronx										Westbound to Manhattan										2-way Grand Totals						
	Autos, Motorcycles SUVs, Family Vans					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Autos, Motorcycles SUVs, Family Vans					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles											
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	Single Unit Trucks	Multiple Unit Trucks	Buses	Taxis, Limos	Police, Fleet Vehicles	2 & 3	4	5 - 7	8 - 13	Total Vehicles	Single Unit Trucks	Multiple Unit Trucks	Buses	Taxis, Limos	Police, Fleet Vehicles	2 & 3	4	5 - 7	8 - 13	Total Vehicles
12-1am	513	86	18	11	8	4	640										640										268
1-2am	279	90	12	4	17	0	402										402										174
2-3am	188	66	6	1	15	0	276										276										135
3-4am	158	55	14	1	9	5	242										242										143
4-5am	174	54	15	1	16	7	267										267										252
5-6am	314	41	15	2	30	0	402										402										642
6-7am	644	51	28	9	37	0	769										769										1,512
7-8am	1,003	37	26	39	52	3	1,160										1,160										1,683
8-9am	816	68	39	94	36	2	1,055										1,055										1,634
9-10am	562	177	76	43	36	9	903										903										1,361
10-11am	604	141	86	28	66	1	926										926										1,084
11-12am	692	91	92	20	51	3	949										949										972
12-1pm	671	121	114	31	67	2	1,006										1,006										933
1-2pm	797	73	92	24	77	0	1,063										1,063										920
2-3pm	972	61	121	22	82	0	1,258										1,258										1,083
3-4pm	1,159	129	171	74	70	3	1,606										1,606										1,105
4-5pm	1,177	204	163	60	43	3	1,650										1,650										1,156
5-6pm	1,352	62	119	38	28	0	1,599										1,599										1,174
6-7pm	1,483	41	75	34	38	0	1,671										1,671										1,053
7-8pm	1,377	72	67	23	22	1	1,562										1,562										903
8-9pm	1,216	88	39	16	11	1	1,371										1,371										763
9-10pm	978	82	31	9	10	0	1,110										1,110										645
10-11pm	809	100	23	8	9	1	950										950										555
11-12pm	797	75	25	12	16	1	926										926										425
Totals	18,735	2,065	1,467	604	846	46	23,763										23,763										20,575
7-10am	2,381	282	141	176	124	14	3,118										3,118										4,678
10am-1pm	1,967	353	292	79	184	6	2,881										2,881										2,989
1-4pm	2,928	263	384	120	229	3	3,927										3,927										3,108
4-7pm	4,012	307	357	132	109	3	4,920										4,920										3,383
7am-7pm	11,288	1,205	1,174	507	646	26	14,846										14,846										14,158
6-10am	3,025	333	169	185	161	14	3,887										3,887										6,190
3-7pm	5,171	436	528	206	179	6	6,526										6,526										4,488
6am-7pm	11,932	1,256	1,202	516	683	26	15,615										15,615										15,670

Based on October 2013 Classification Survey Data.

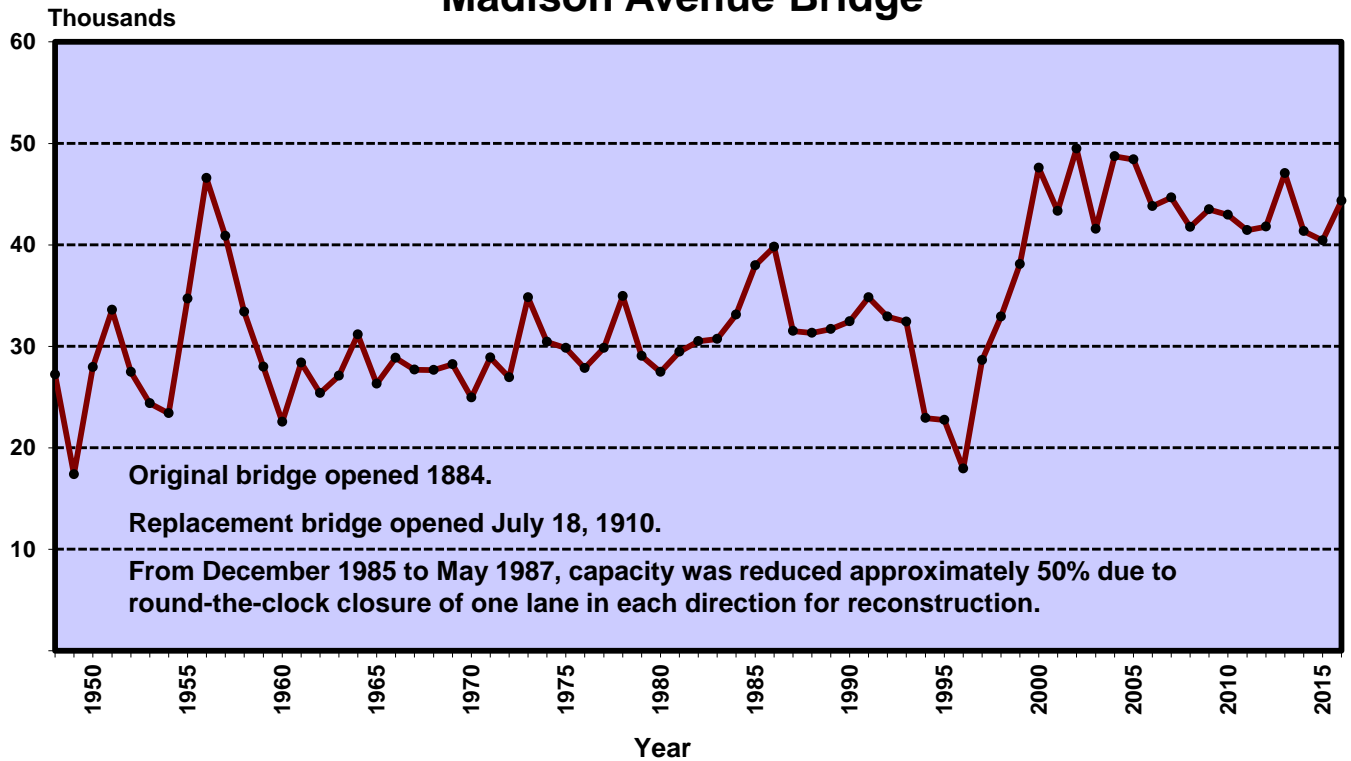
\*\* Peak Volumes



## Hourly Vehicular Volumes Madison Avenue Bridge ~ 2016



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



# Hourly Vehicular Volumes Third Avenue Bridge - 2016

## Northbound to Bronx

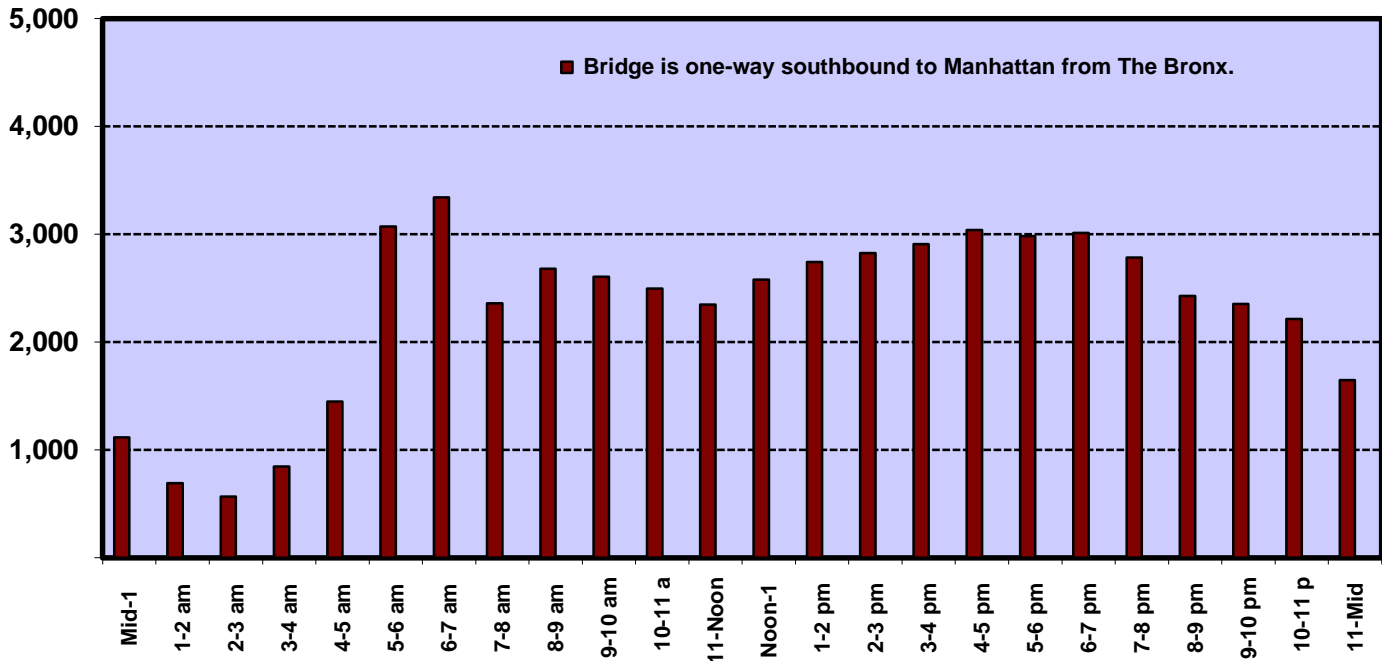
## Southbound to Manhattan

FHWA Classes	Northbound to Bronx					Southbound to Manhattan					2-way Grand Totals	
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Total Vehicles	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Total Vehicles		
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	2	2 & 3	4	5 - 7	8 - 13	
12-1am	882	171	22	3	35	4	1,117	22	3	35	4	1,117
1-2am	485	132	20	2	46	6	691	20	2	46	6	691
2-3am	340	160	33	1	30	3	567	33	1	30	3	567
3-4am	451	236	46	0	104	8	845	46	0	104	8	845
4-5am	888	228	86	4	223	21	1,450	86	4	223	21	1,450
5-6am	2,217	315	187	18	293	42	3,072	187	18	293	42	3,072
6-7am	2,498	166	235	138	279	25	3,341	235	138	279	25	3,341
7-8am	1,763	145	225	74	141	11	2,359	145	74	141	11	2,359
8-9am	2,046	90	364	21	154	6	2,681	90	21	154	6	2,681
9-10am	1,894	196	321	24	162	8	2,605	196	24	162	8	2,605
10-11am	1,799	267	281	24	116	10	2,497	267	24	116	10	2,497
11-12am	1,732	232	230	24	116	15	2,349	232	24	116	15	2,349
12-1pm	1,943	198	261	58	111	8	2,579	198	58	111	8	2,579
1-2pm	2,126	176	202	127	107	6	2,744	176	127	107	6	2,744
2-3pm	2,228	249	156	100	91	3	2,827	249	100	91	3	2,827
3-4pm	2,507	211	96	49	43	3	2,909	211	49	43	3	2,909
4-5pm	2,613	272	82	26	40	6	3,039	272	26	40	6	3,039
5-6pm	2,497	273	145	23	36	8	2,982	273	23	36	8	2,982
6-7pm	2,626	237	94	18	33	5	3,013	237	18	33	5	3,013
7-8pm	2,420	243	75	10	30	7	2,785	243	10	30	7	2,785
8-9pm	2,132	202	59	6	27	3	2,429	202	6	27	3	2,429
9-10pm	2,054	177	64	2	56	1	2,354	177	2	56	1	2,354
10-11pm	1,895	214	58	1	43	4	2,215	214	1	43	4	2,215
11-12pm	1,353	212	33	4	36	8	1,646	212	4	36	8	1,646
Totals	43,389	5,002	3,375	757	2,352	221	55,096	5,002	757	2,352	221	55,096
7-10am	5,703	431	910	119	457	25	7,645	431	119	457	25	7,645
10am-1pm	5,474	697	772	106	343	33	7,425	697	106	343	33	7,425
1-4pm	6,861	636	454	276	241	12	8,480	636	276	241	12	8,480
4-7pm	7,736	782	321	67	109	19	9,034	782	67	109	19	9,034
7am-7pm	25,774	2,546	2,457	568	1,150	89	32,584	2,546	568	1,150	89	32,584
6-10am	8,201	597	1,145	257	736	50	10,986	597	257	736	50	10,986
3-7pm	10,243	993	417	116	152	22	11,943	993	116	152	22	11,943
6am-7pm	28,272	2,712	2,692	706	1,429	114	35,925	2,712	706	1,429	114	35,925

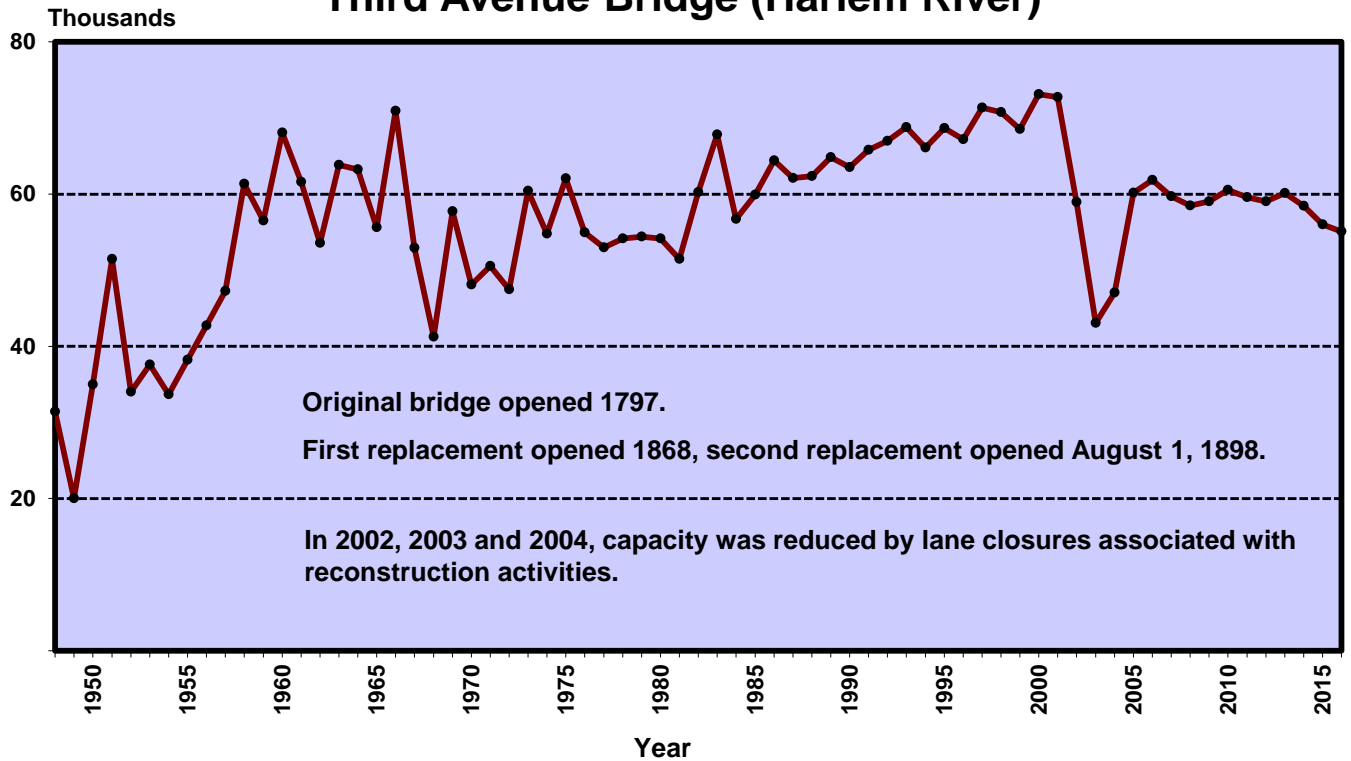
Based on October 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Third Avenue Bridge (Harlem River) ~ 2016



## Average Daily Traffic Volumes Third Avenue Bridge (Harlem River)



# Hourly Vehicular Volumes University Heights Bridge - 2016

## Eastbound to Bronx

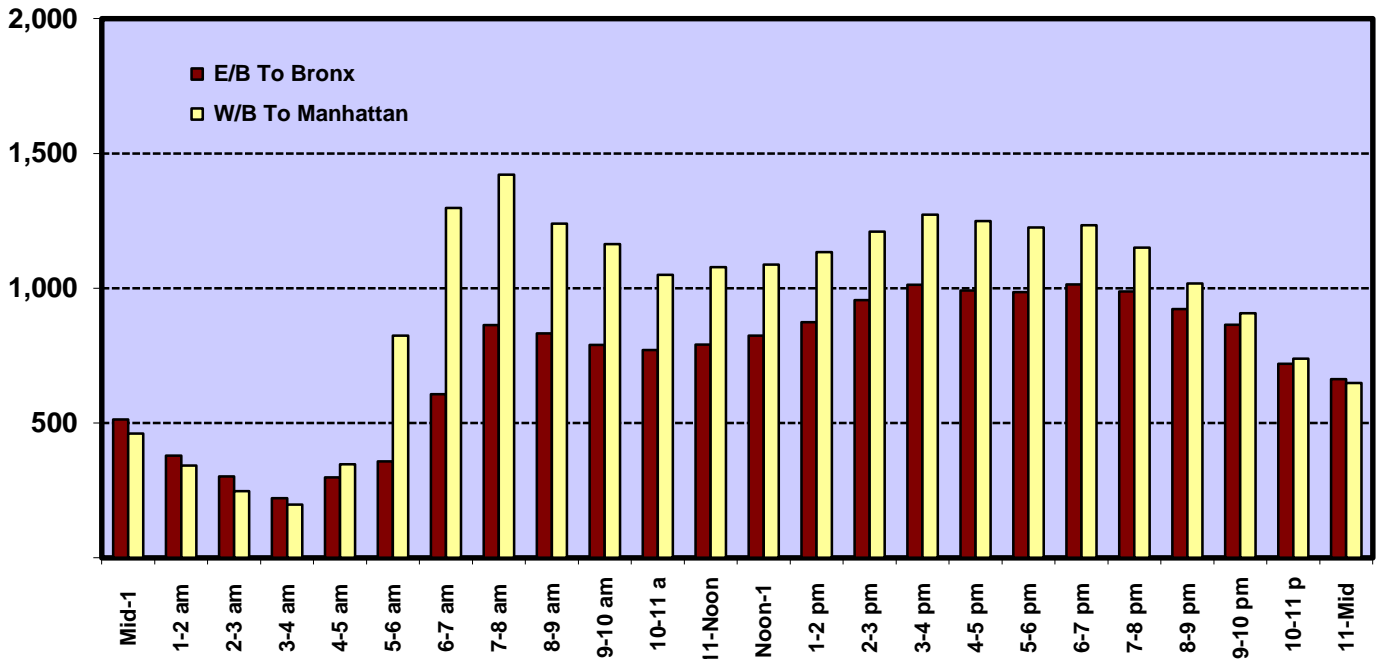
## Westbound to Manhattan

FHWA Classes	Commercial Vans,							Commercial Vans,							2-way Grand Totals
	Autos, Motorcycles			Panel Trucks, Pickups,			Total Vehicles	Autos, Motorcycles			Panel Trucks, Pickups,			Total Vehicles	
	1, 2, 3	2	2 & 3	4	5	10		5-7	8-13	1, 2, 3	2	2 & 3	4		5-7
	435	57	5	5	5	10	513	1	397	41	7	7	9	0	461
	339	24	10	3	3	3	379	0	265	56	11	1	9	0	342
	269	21	3	3	3	6	302	0	179	38	10	2	18	0	247
	178	20	7	2	2	13	221	1	182	4	3	4	4	0	197
	245	13	23	4	4	6	298	7	300	22	10	1	14	0	347
	304	21	16	4	4	9	357	3	695	55	43	10	19	2	824
	463	49	18	19	19	57	607	1	1,040	78	83	69	26	2	1,298
	698	54	39	30	30	38	863	4	1,194	61	59	54	51	2	1,421
	646	70	57	32	32	23	832	4	1,019	78	74	20	45	3	1,239
	542	103	63	21	21	59	790	2	854	112	100	27	61	10	1,164
	607	79	88	17	17	22	770	3	791	108	73	13	63	2	1,050
	618	64	50	14	14	48	791	8	878	53	63	20	57	7	1,078
	692	76	57	16	16	53	824	4	879	64	58	26	57	4	1,088
	748	58	72	18	18	25	874	9	879	102	72	35	45	1	1,134
	795	91	54	21	21	31	956	11	957	121	63	25	43	1	1,210
	797	81	77	32	32	27	1,013	1	1,077	66	52	36	40	2	1,273
	795	68	62	42	42	21	991	1	1,030	91	60	25	42	1	1,249
	871	102	51	20	20	14	986	4	1,009	110	69	18	19	0	1,225
	764	141	32	7	7	18	1,014	2	1,045	114	37	16	22	0	1,234
	753	117	28	12	12	11	988	2	940	138	39	16	17	0	1,150
	775	53	22	10	10	4	864	0	846	110	35	12	13	1	1,017
	616	71	19	7	7	6	719	0	616	93	21	11	6	0	907
	576	65	10	6	6	4	662	1	539	74	17	4	13	1	648
Totals	14,087	1,582	914	364	364	519	17,536	70	18,387	1,883	1,071	461	700	40	22,542
7-10am	1,886	227	159	83	83	120	2,485	10	3,067	251	233	101	157	15	3,824
10am-1pm	1,786	219	195	47	47	123	2,385	15	2,548	225	194	59	177	13	3,216
1-4pm	2,235	230	203	71	71	83	2,843	21	2,913	289	187	96	128	4	3,617
4-7pm	2,463	254	145	69	69	53	2,991	7	3,084	315	166	59	83	1	3,708
7am-7pm	8,370	930	702	270	270	379	10,704	53	11,612	1,080	780	315	545	33	14,365
6-10am	2,349	276	177	102	102	177	3,092	11	4,107	329	316	170	183	17	5,122
3-7pm	3,258	335	222	101	101	80	4,004	8	4,161	381	218	95	123	3	4,981
6am-7pm	8,833	979	720	289	289	436	11,311	54	12,652	1,158	863	384	571	35	15,663

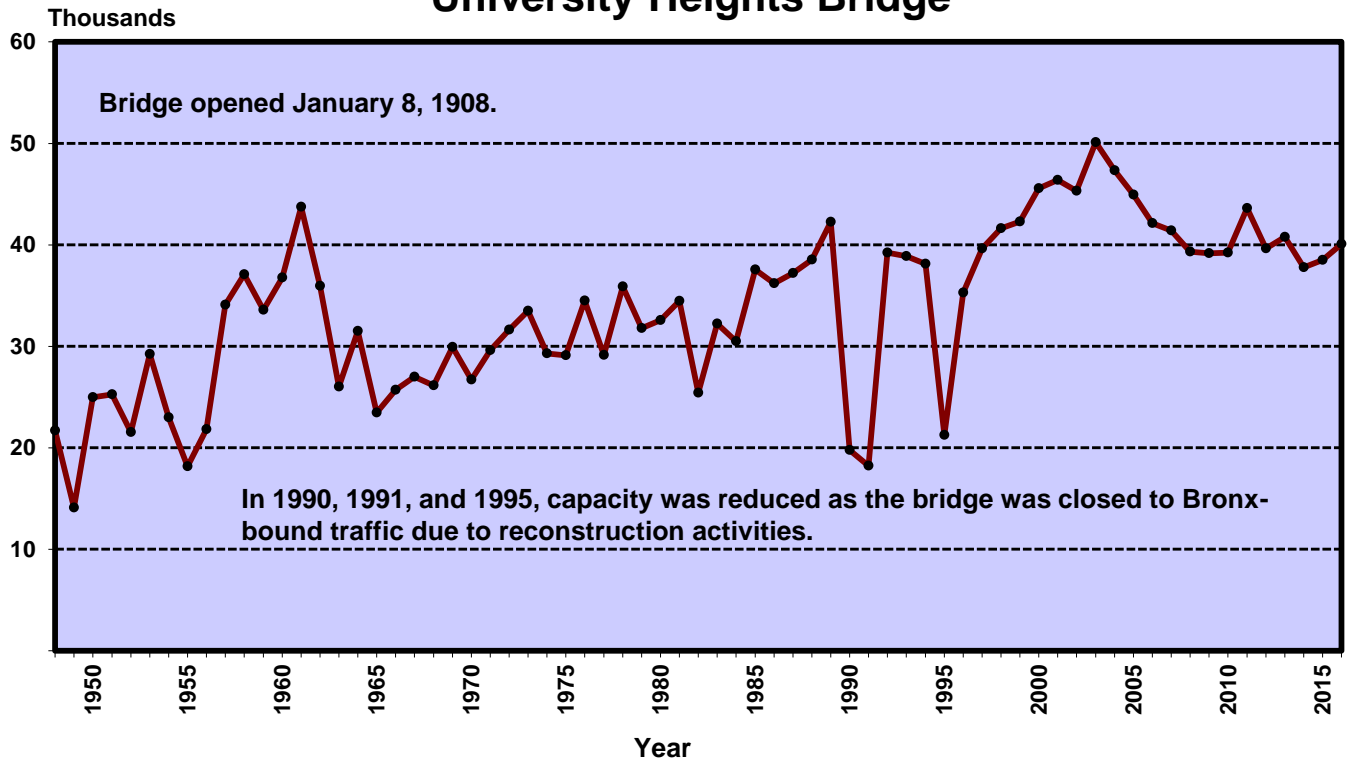
Based on October 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes University Heights Bridge ~ 2016



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



# Washington Bridge - 2016

## Eastbound to Bronx

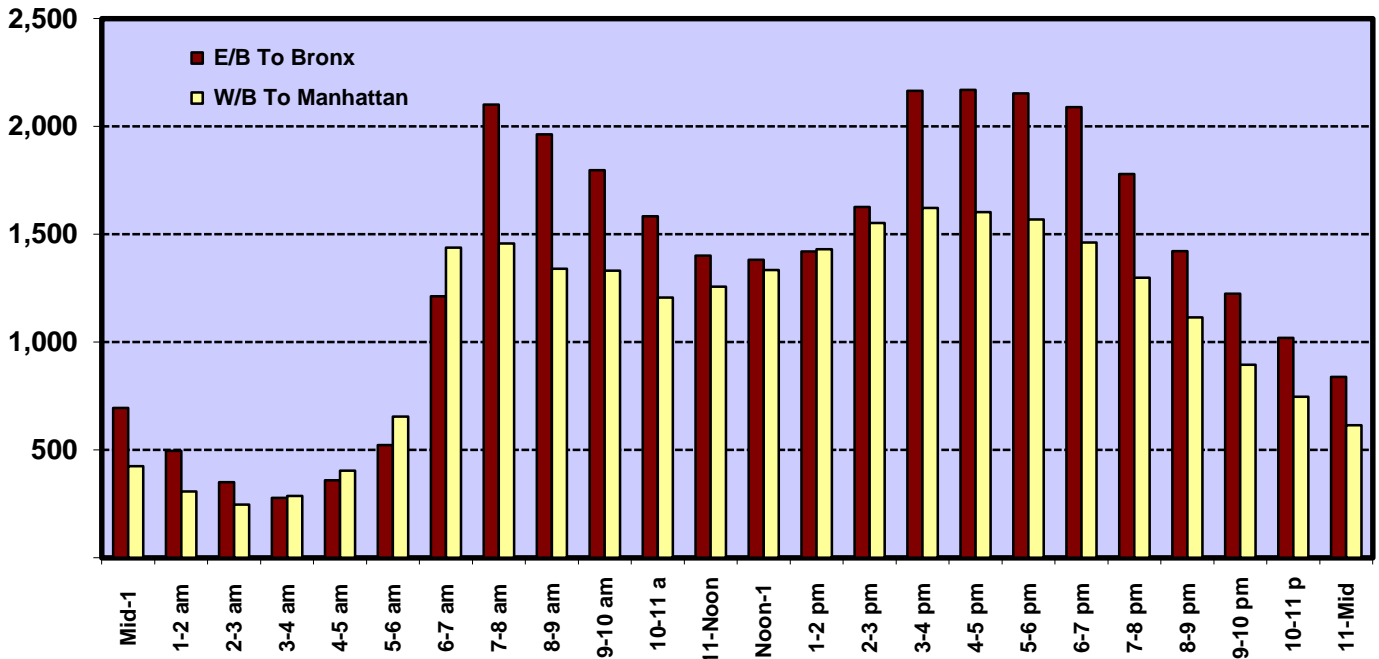
## Westbound to Manhattan

FHWA Classes	Commercial Vans,										Commercial Vans,										2-way Grand Totals
	Autos, Motorcycles					Panel Trucks, Pickups,					Autos, Motorcycles					Panel Trucks, Pickups,					
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	
12-1am	634	29	18	13	1	0	695	361	30	10	19	3	1	424	361	30	10	19	3	1	424
1-2am	443	30	8	11	3	0	495	265	28	7	8	0	0	308	265	28	7	8	0	0	308
2-3am	312	20	8	4	7	0	351	215	17	7	4	0	0	246	215	17	7	4	0	0	246
3-4am	233	12	12	3	14	4	278	249	19	10	6	1	1	286	249	19	10	6	1	1	286
4-5am	321	16	17	2	3	0	359	329	22	21	6	11	15	404	329	22	21	6	11	15	404
5-6am	459	8	22	18	16	0	523	555	17	21	24	14	23	654	555	17	21	24	14	23	654
6-7am	1,063	25	54	43	21	6	1,212	1,143	50	67	156	14	8	1,438	1,143	50	67	156	14	8	1,438
7-8am	1,922	34	61	75	10	0	2,102	1,224	63	73	75	17	6	1,458	1,224	63	73	75	17	6	1,458
8-9am	1,711	35	75	115	23	4	1,963	1,085	64	92	68	26	5	1,340	1,085	64	92	68	26	5	1,340
9-10am	1,552	35	102	63	41	5	1,798	1,075	39	123	65	21	8	1,329	1,075	39	123	65	21	8	1,329
10-11am	1,353	32	109	44	42	4	1,584	987	33	109	41	31	6	1,207	987	33	109	41	31	6	1,207
11-12am	1,175	44	97	32	44	9	1,401	1,061	36	72	40	32	16	1,257	1,061	36	72	40	32	16	1,257
12-1pm	1,159	41	99	39	40	4	1,382	1,100	48	84	54	33	15	1,334	1,100	48	84	54	33	15	1,334
1-2pm	1,198	37	92	58	34	1	1,420	1,151	34	114	79	39	13	1,430	1,151	34	114	79	39	13	1,430
2-3pm	1,398	44	82	54	45	4	1,627	1,322	49	86	62	27	6	1,552	1,322	49	86	62	27	6	1,552
3-4pm	1,835	45	147	90	48	1	2,166	1,415	48	73	58	19	9	1,622	1,415	48	73	58	19	9	1,622
4-5pm	1,839	42	161	105	21	2	2,170	1,382	46	93	52	26	4	1,603	1,382	46	93	52	26	4	1,603
5-6pm	1,875	39	139	69	29	2	2,153	1,378	41	84	54	11	1	1,569	1,378	41	84	54	11	1	1,569
6-7pm	1,866	40	107	55	19	2	2,089	1,330	26	58	40	8	0	1,462	1,330	26	58	40	8	0	1,462
7-8pm	1,619	29	71	36	21	3	1,779	1,206	25	28	35	1	4	1,299	1,206	25	28	35	1	4	1,299
8-9pm	1,262	54	52	41	12	1	1,422	1,029	17	19	46	1	2	1,114	1,029	17	19	46	1	2	1,114
9-10pm	1,057	89	43	31	4	1	1,225	832	27	3	32	1	0	895	832	27	3	32	1	0	895
10-11pm	912	43	30	29	5	1	1,020	690	15	7	20	3	11	746	690	15	7	20	3	11	746
11-12pm	698	100	20	19	1	1	839	570	19	6	19	0	1	615	570	19	6	19	0	1	615
Totals	27,896	923	1,626	1,049	504	55	32,053	21,954	813	1,267	1,063	339	158	25,594	21,954	813	1,267	1,063	339	158	25,594
7-10am	5,185	104	238	253	74	9	5,863	3,384	166	288	208	64	19	9,992	3,384	166	288	208	64	19	9,992
10am-1pm	3,687	117	305	115	126	17	4,367	3,148	117	265	135	96	37	3,798	3,148	117	265	135	96	37	3,798
1-4pm	4,431	126	321	202	127	6	5,213	3,888	131	273	199	85	28	4,604	3,888	131	273	199	85	28	4,604
4-7pm	5,580	121	407	229	69	6	6,412	4,090	113	235	146	45	5	11,046	4,090	113	235	146	45	5	11,046
7am-7pm	18,883	468	1,271	799	396	38	21,855	14,510	527	1,061	688	290	89	17,165	14,510	527	1,061	688	290	89	17,165
6-10am	6,248	129	292	296	95	15	7,075	4,527	216	355	364	78	27	5,567	4,527	216	355	364	78	27	5,567
3-7pm	7,415	166	554	319	117	7	8,578	5,505	161	308	204	64	14	14,834	5,505	161	308	204	64	14	14,834
6am-7pm	19,946	493	1,325	842	417	44	23,067	15,653	577	1,128	844	304	97	18,603	15,653	577	1,128	844	304	97	18,603

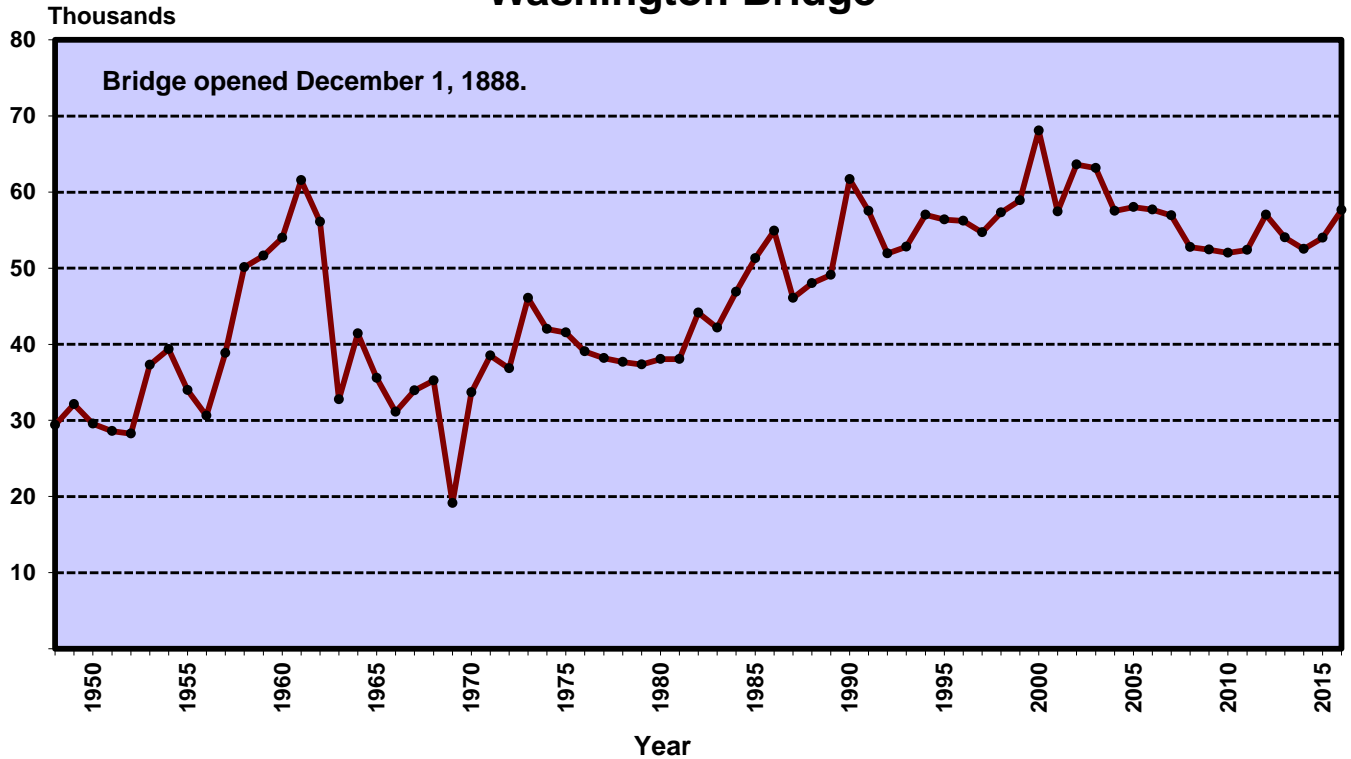
Based on October 2015 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Washington Bridge ~ 2016



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



# Hourly Vehicular Volumes Willis Avenue Bridge - 2016

## Northbound to Bronx

## Southbound to Manhattan

FHWA Classes	Northbound to Bronx					Southbound to Manhattan					2-way Grand Totals			
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles SUVs, Family Vans	Taxis, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles		Buses	Single Unit Trucks	Multiple Unit Trucks
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	
12-1am	1,897	122	75	3	34	10	2,141							2,141
1-2am	1,123	76	50	4	31	23	1,307							1,307
2-3am	786	53	35	3	22	16	915							915
3-4am	719	49	32	3	20	15	838							838
4-5am	959	65	43	4	26	19	1,116							1,116
5-6am	1,511	108	77	10	60	59	1,825							1,825
6-7am	2,688	85	113	30	95	57	3,068							3,068
7-8am	3,107	88	125	56	93	23	3,492							3,492
8-9am	2,526	98	150	180	104	29	3,087							3,087
9-10am	1,997	92	201	78	146	24	2,538							2,538
10-11am	1,802	99	255	39	177	27	2,399							2,399
11-12am	1,965	86	301	19	204	29	2,604							2,604
12-1pm	2,024	108	276	34	252	36	2,730							2,730
1-2pm	2,208	94	313	28	245	31	2,919							2,919
2-3pm	2,403	62	333	37	220	24	3,079							3,079
3-4pm	2,755	98	318	98	169	24	3,462							3,462
4-5pm	2,529	129	336	118	128	11	3,251							3,251
5-6pm	2,702	80	251	49	92	9	3,183							3,183
6-7pm	2,826	49	179	23	62	7	3,146							3,146
7-8pm	3,005	84	146	16	67	8	3,326							3,326
8-9pm	2,884	85	110	9	49	13	3,150							3,150
9-10pm	2,848	107	86	7	68	16	3,132							3,132
10-11pm	2,646	128	103	7	38	10	2,932							2,932
11-12pm	2,339	143	117	7	42	5	2,653							2,653
Totals	52,249	2,188	4,025	862	2,444	525	62,293							62,293
7-10am	7,630	278	476	314	343	76	9,117							9,117
10am-1pm	5,791	293	832	92	633	92	7,733							7,733
1-4pm	7,366	254	964	163	634	79	9,460							9,460
4-7pm	8,057	258	766	190	282	27	9,580							9,580
7am-7pm	28,844	1,083	3,038	759	1,892	274	35,890							35,890
6-10am	10,318	363	589	344	438	133	12,185							12,185
3-7pm	10,812	356	1,084	288	451	51	13,042							13,042
6am-7pm	31,532	1,168	3,151	789	1,987	331	38,958							38,958

Bridge is 1-way northbound from Manhattan to Bronx.

Bridge closed for reconstruction 1:00am to 5:00am during 2013 classification survey.

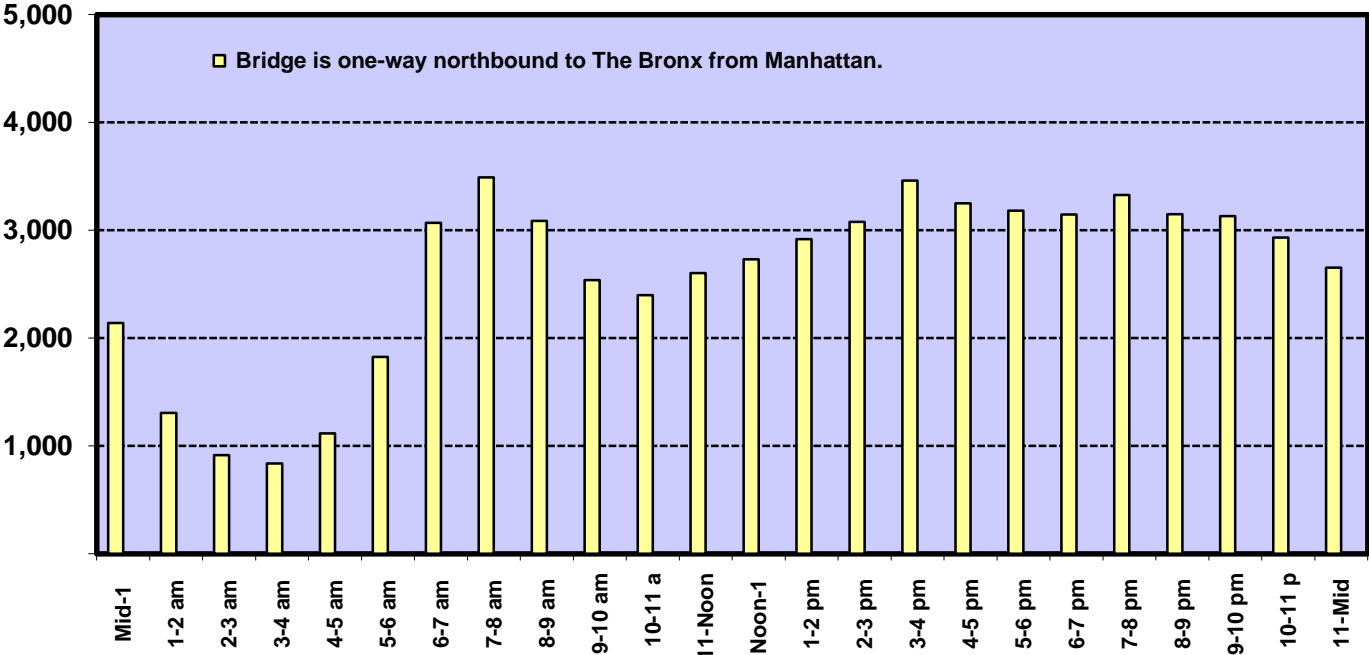
Classification distribution is estimated for these hours.

Based on October 2013 Classification Survey Data.

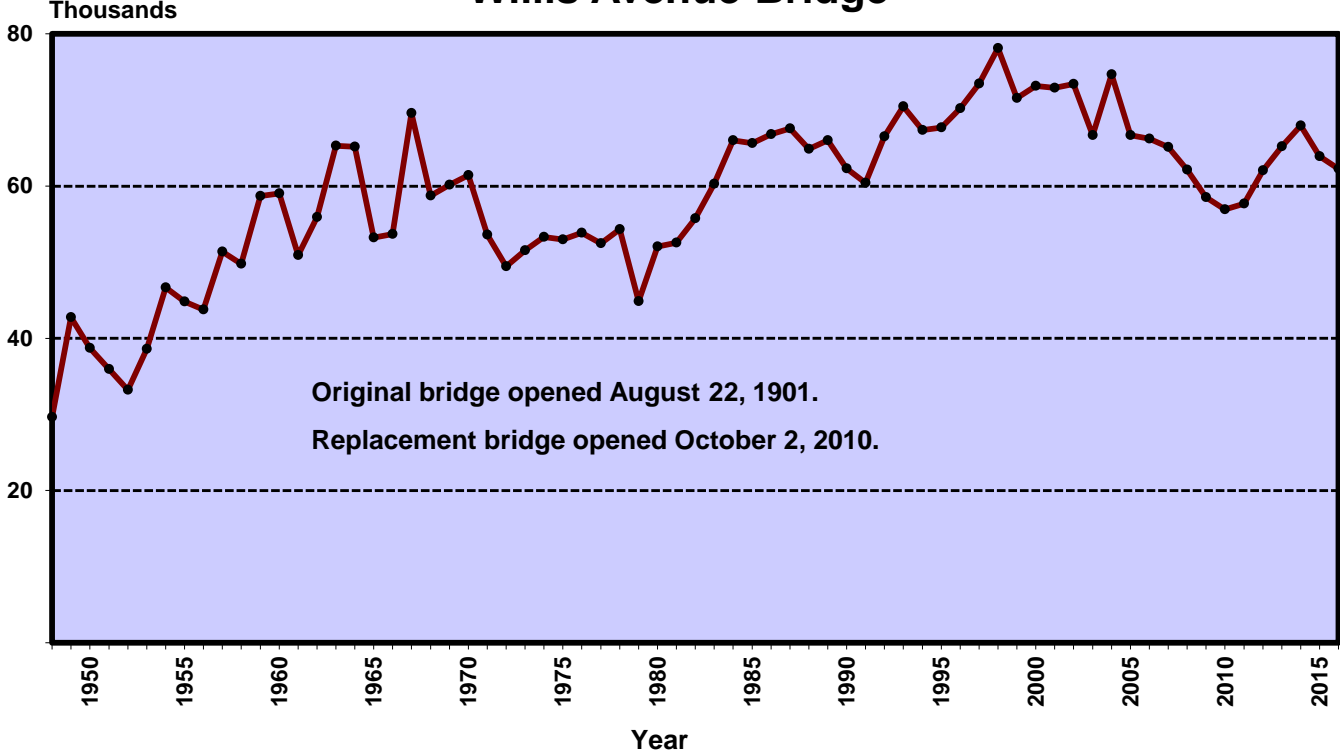
\*\* Peak Volumes



# Hourly Vehicular Volumes Willis Avenue Bridge ~ 2016



# Average Daily Traffic Volumes Willis Avenue Bridge



# Hourly Vehicular Volumes 145th Street Bridge - 2016

## Eastbound to Bronx

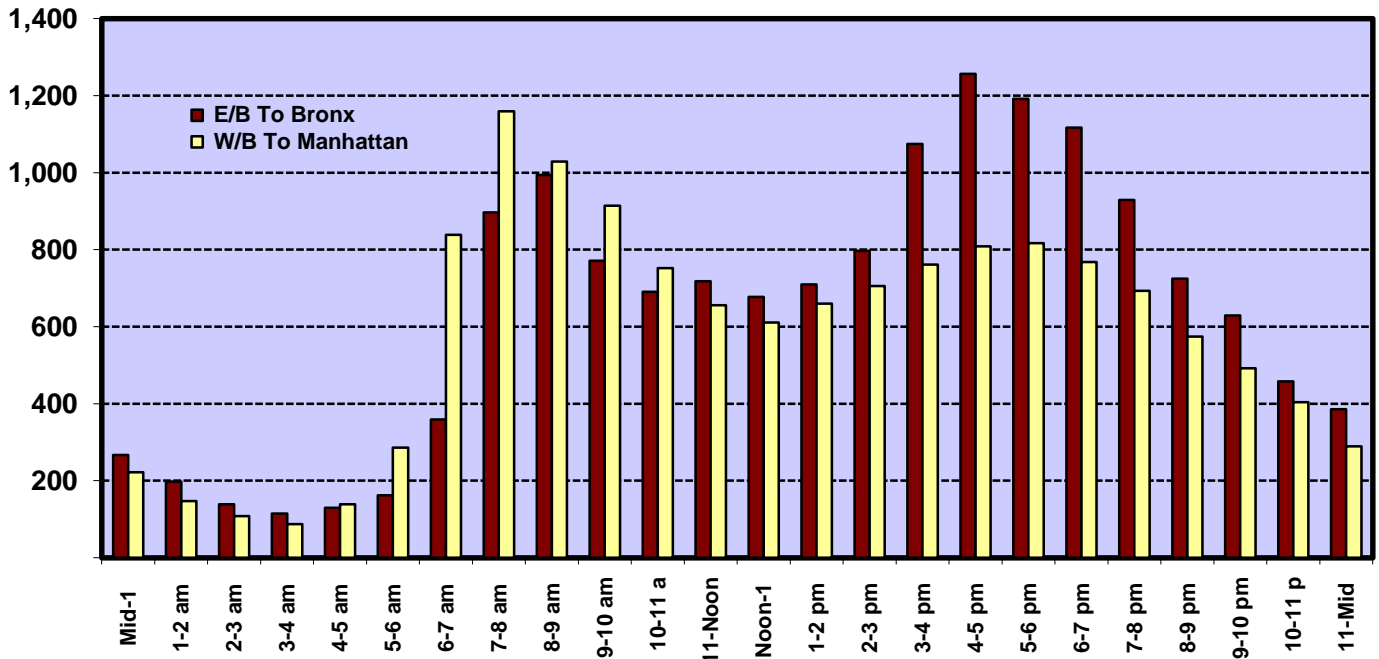
## Westbound to Manhattan

FHWA Classes	Commercial Vans,							Commercial Vans,							2-way Grand Totals		
	Autos, Motorcycles			Panel Trucks, Pickups, Police, Fleet Vehicles			Autos, Motorcycles			Panel Trucks, Pickups, Police, Fleet Vehicles							
	SUVs, Family Vans	Taxis, Limos	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	1, 2, 3	2	2 & 3	4	5	6	7	8 - 13	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles
12-1am	182	72	5	0	1	267	143	65	5	6	3	0	222				489
1-2am	82	98	9	2	2	198	77	67	1	1	1	0	147				345
2-3am	57	75	0	4	0	139	40	65	1	0	2	0	108				247
3-4am	49	54	2	5	3	115	37	39	5	4	1	1	87				202
4-5am	58	52	14	2	2	130	63	46	16	4	7	3	139				269
5-6am	98	47	6	7	0	162	188	58	11	11	15	3	286				448
6-7am	250	69	13	20	1	359	427	145	46	126	85	10	839				1,198
7-8am	643	185	31	25	1	897	712	238	84	61	43	21	1,159			**	2,056
8-9am	670	174	53	72	3	994	611	209	135	16	40	18	1,029				2,023
9-10am	441	235	38	21	4	771	559	187	88	18	55	7	914				1,685
10-11am	385	201	54	13	2	691	451	161	76	21	38	5	752				1,443
11-12am	421	172	70	14	34	718	392	158	62	12	24	8	656				1,374
12-1pm	371	157	81	12	7	677	395	108	73	14	14	7	611				1,288
1-2pm	428	138	71	16	2	710	411	126	58	21	40	4	660				1,370
2-3pm	475	180	69	14	4	797	494	106	40	39	23	4	706				1,503
3-4pm	678	212	77	68	1	1,075	590	93	39	31	6	2	761				1,836
4-5pm	754	206	126	127	5	1,257	663	76	24	20	4	2	809			**	2,066
5-6pm	830	234	65	31	1	1,192	639	132	22	10	13	1	817				2,009
6-7pm	939	83	51	13	3	1,117	584	149	15	8	11	1	768				1,885
7-8pm	768	94	43	12	1	929	575	86	18	8	4	2	693				1,622
8-9pm	630	40	30	12	0	725	468	82	11	6	5	2	574				1,299
9-10pm	405	197	17	7	0	629	370	93	14	8	6	1	492				1,121
10-11pm	294	138	13	8	0	458	299	84	9	6	5	1	404				862
11-12pm	259	103	12	6	0	386	226	51	6	2	1	3	289				675
Totals	10,167	3,216	950	514	50	15,393	9,434	2,624	859	453	446	106	13,922				29,315
7-10am	1,754	594	122	118	8	2,662	1,882	634	307	95	138	46	3,102				5,764
10am-1pm	1,177	530	205	39	16	2,086	1,238	427	211	47	76	20	2,019				4,105
1-4pm	1,581	530	217	98	7	2,562	1,495	325	137	91	69	10	2,127				4,709
4-7pm	2,523	523	242	171	9	3,566	1,906	357	61	38	28	4	2,394				5,960
7am-7pm	7,035	2,177	786	426	40	10,896	6,521	1,743	716	271	311	80	9,642				20,538
6-10am	2,004	663	135	138	9	3,021	2,309	779	353	221	223	56	3,941				6,962
3-7pm	3,201	735	319	239	10	4,641	2,496	450	100	69	34	6	3,155				7,796
6am-7pm	7,285	2,246	799	446	41	11,255	6,948	1,888	762	397	396	90	10,481				21,736

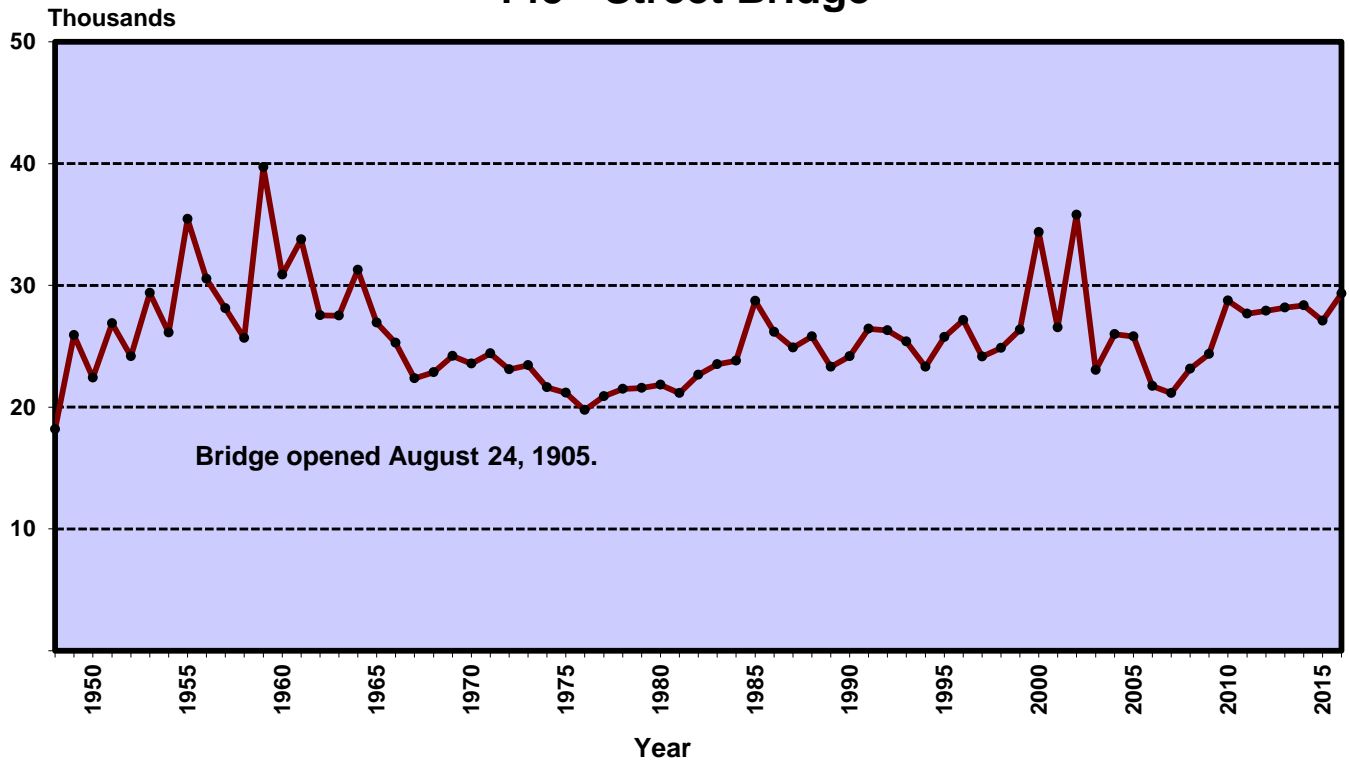
Based on October 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes 145<sup>th</sup> Street Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions 145<sup>th</sup> Street Bridge





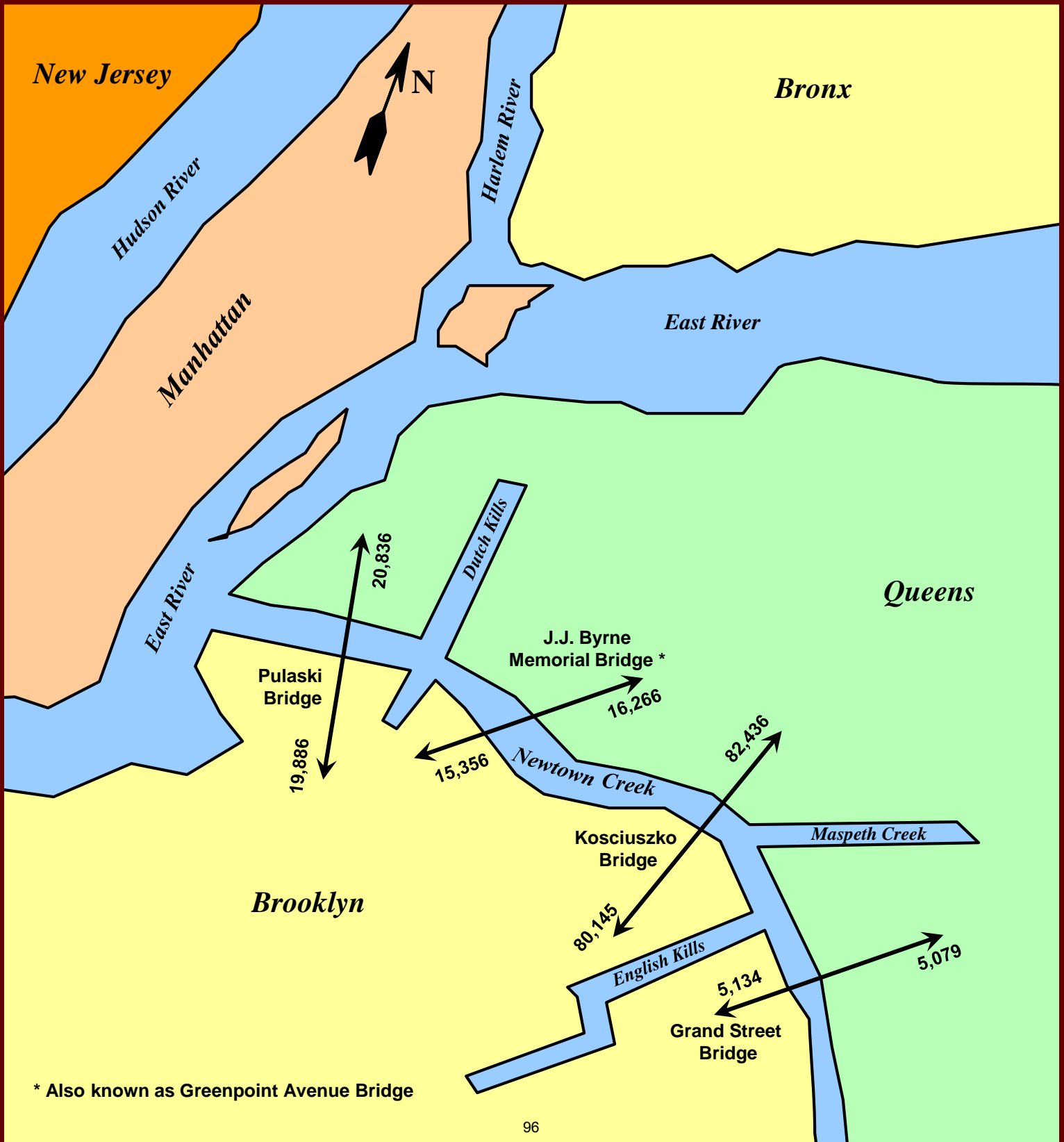
# Brooklyn-Queens Bridges



**Pulaski Bridge**

# Brooklyn-Queens Bridges

2016 Daily Volumes



\* Also known as Greenpoint Avenue Bridge

## Brooklyn - Queens Bridges ~ Average Daily Traffic Volumes

1948 - 2016

<b>Year</b>	<b>Grand Street Bridge</b>	<b>J.J. Byrne Memorial Bridge *</b>	<b>Kosciuszko Bridge</b>	<b>Pulaski Bridge</b>	<b>Totals</b>
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	14,333	21,806	131,298	31,447	198,884
1967	13,437	23,827	132,586	27,845	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	Closed	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	12,845	18,478	158,978	32,570	222,871
1989	13,041	17,473	176,288	33,087	239,889
1990	13,880	20,295	176,940	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
2005	13,016	29,449	198,813	38,911	280,189
2006	12,893	29,840	184,341	38,224	265,298
2007	12,585	27,027	186,493	37,221	263,326
2008	13,031	26,926	181,783	37,019	258,759
2009	12,576	26,637	188,322	36,103	263,638
2010	12,662	26,716	190,753	36,981	267,112
2011	12,320	25,709	191,624	37,422	267,075
2012	12,595	26,379	196,217	36,867	272,058
2013	13,843	25,701	191,225	39,076	269,845
2014	13,662	27,836	184,025	40,405	265,928
2015	12,546	28,361	179,137	40,485	260,529
2016	10,213	31,622	162,581	40,722	245,138

\* J.J. Byrne Memorial Bridge also known as Greenpoint Avenue Bridge.

# Hourly Vehicular Volumes

## Grand Street Bridge - 2016

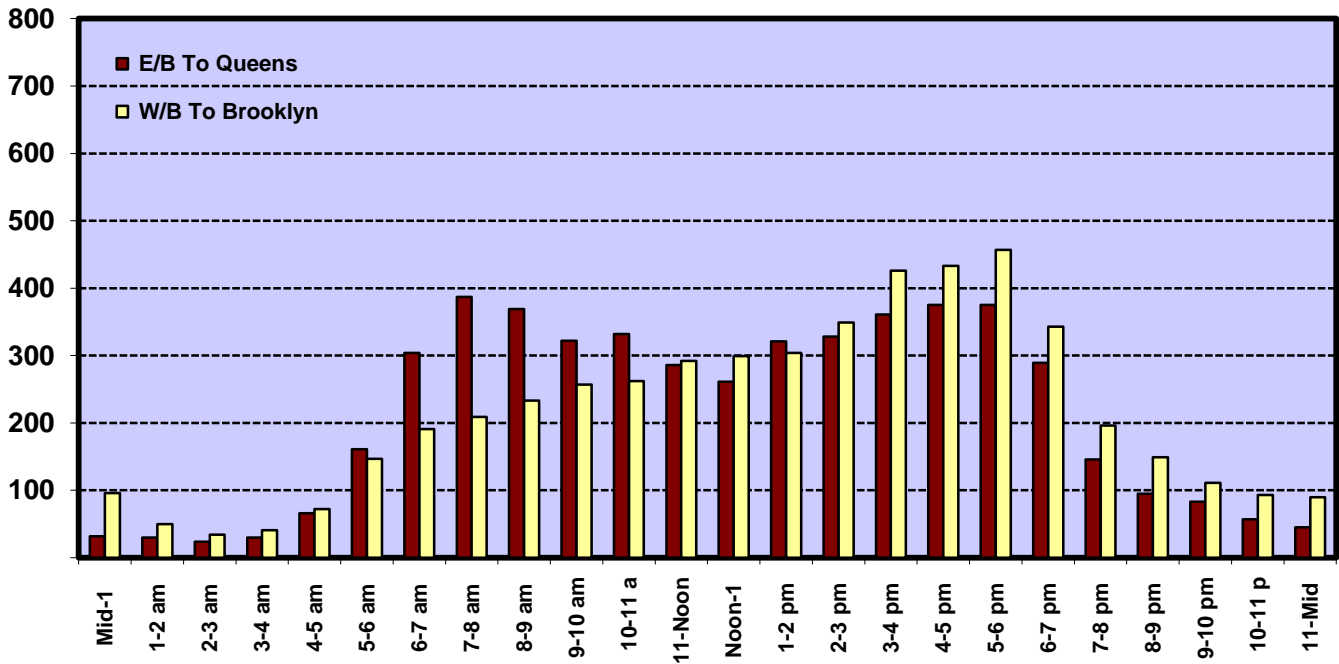
	<b>Eastbound to Queens</b>					<b>Westbound to Brooklyn</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	32	---	---	---	---	---	96
1-2am	---	---	---	---	---	30	---	---	---	---	---	50
2-3am	---	---	---	---	---	24	---	---	---	---	---	34
3-4am	---	---	---	---	---	30	---	---	---	---	---	41
4-5am	---	---	---	---	---	66	---	---	---	---	---	72
5-6am	---	---	---	---	---	161	---	---	---	---	---	147
6-7am	---	---	---	---	---	304	---	---	---	---	---	191
7-8am	306	11	10	45	15	387	142	5	10	42	10	209
8-9am	241	5	10	91	22	369	130	2	12	68	21	233
9-10am	215	15	2	68	22	322	138	4	14	79	22	257
10-11am	240	4	4	55	29	332	200	6	7	38	11	262
11-12am	156	5	9	88	28	286	181	4	18	70	19	292
12-1pm	219	6	2	27	7	261	242	7	10	32	8	299
1-2pm	253	4	8	43	13	321	221	10	17	45	11	304
2-3pm	204	8	9	80	27	328	184	4	24	109	28	349
3-4pm	310	6	3	35	7	361	332	14	10	59	11	426
4-5pm	301	10	10	39	15	375	319	8	22	66	18	433
5-6pm	302	5	8	43	17	375	351	4	21	64	17	457
6-7pm	228	4	6	39	12	289	286	7	16	30	4	343
7-8pm	---	---	---	---	---	146	---	---	---	---	---	196
8-9pm	---	---	---	---	---	95	---	---	---	---	---	149
9-10pm	---	---	---	---	---	83	---	---	---	---	---	111
10-11pm	---	---	---	---	---	57	---	---	---	---	---	93
11-12pm	---	---	---	---	---	45	---	---	---	---	---	90
<b>Totals</b>	---	---	---	---	---	<b>5,079</b>	---	---	---	---	---	<b>5,134</b>
7-10am	762	31	22	204	59	1,078	410	11	36	189	53	699
10am-1pm	615	15	15	170	64	879	623	17	35	140	38	853
1-4pm	767	18	20	158	47	1,010	737	28	51	213	50	1,079
4-7pm	831	19	24	121	44	1,039	956	19	59	160	39	1,233
7am-7pm	2,975	83	81	653	214	4,006	2,726	75	181	702	180	3,864
6-10am	---	---	---	---	---	1,382	---	---	---	---	---	890
3-7pm	1,141	25	27	156	51	1,400	1,288	33	69	219	50	1,659
6am-7pm	---	---	---	---	---	4,310	---	---	---	---	---	4,055

Based on September 1989 Classification Survey Data.

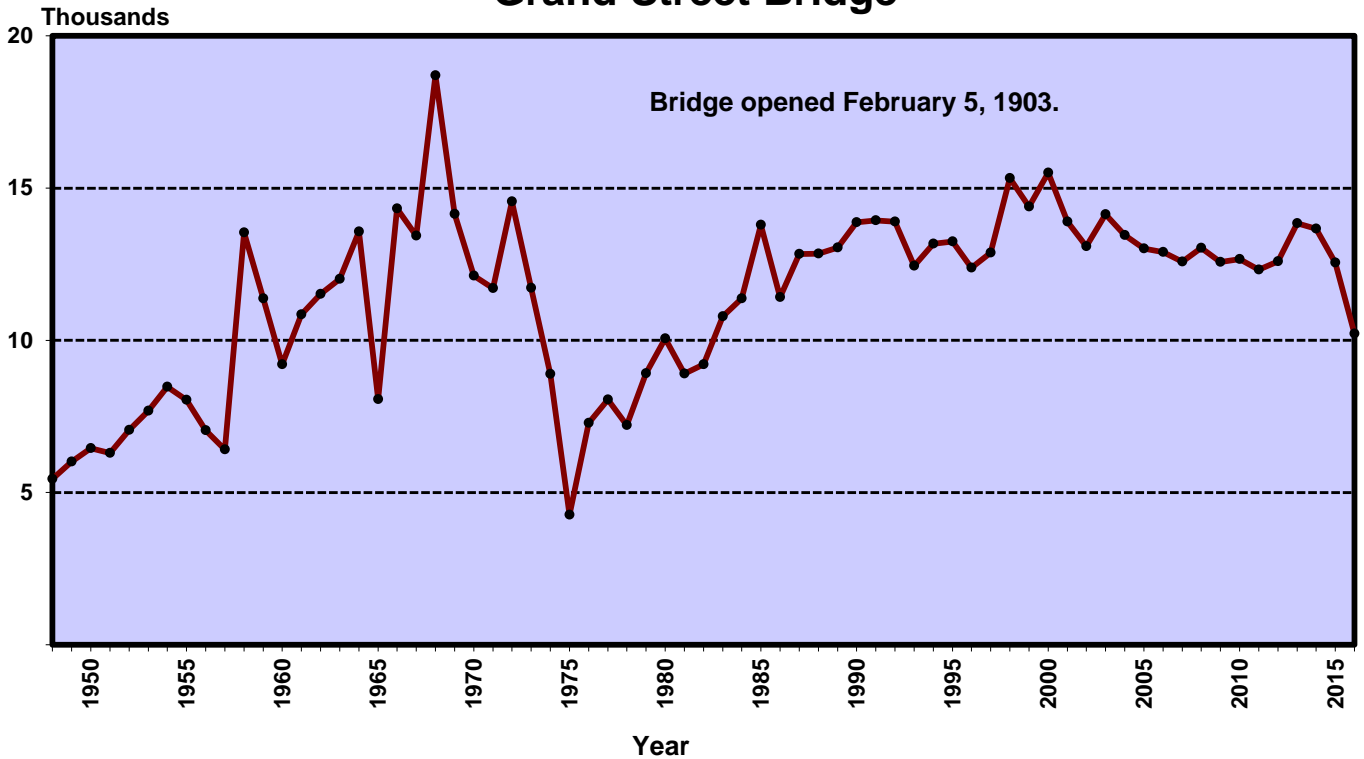
\*\* Peak Volumes



## Hourly Vehicular Volumes Grand Street Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Grand Street Bridge



# Hourly Vehicular Volumes

## J.J. Byrne Memorial Bridge - 2016 (Greenpoint Avenue Bridge)

### Eastbound to Queens

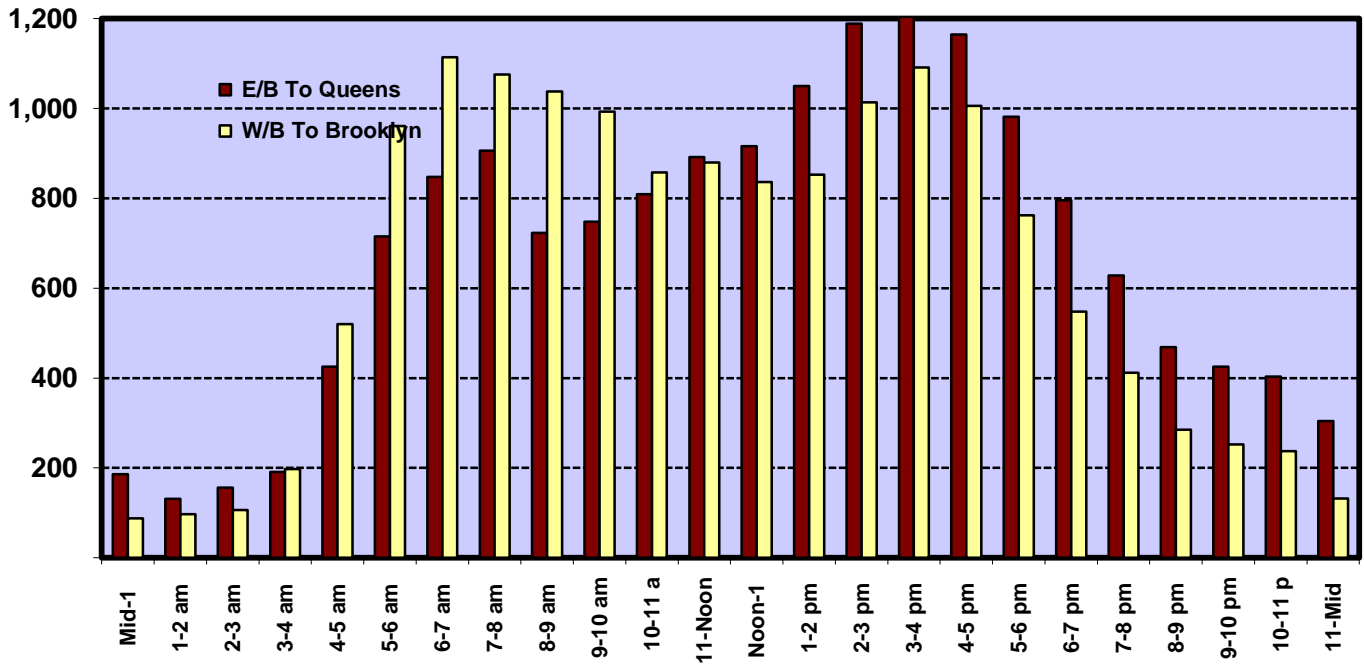
### Westbound to Brooklyn

FHWA Classes	Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					2-way Grand Totals
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	
12-1am	115	38	13	2	13	5	186	67	5	4	1	6	5	88						274	
1-2am	71	40	3	2	10	5	131	51	17	12	0	5	12	97						228	
2-3am	65	45	14	2	18	12	156	45	10	20	2	17	12	106						262	
3-4am	86	36	16	7	30	16	191	93	11	37	2	28	26	197						388	
4-5am	178	46	57	0	98	46	425	260	18	106	6	71	59	520						945	
5-6am	455	34	64	8	84	70	715	678	35	87	39	74	48	961						1,676	
6-7am	571	25	91	14	97	50	848	820	10	135	24	111	14	1,114					**	1,962	
7-8am	604	21	102	15	144	20	906	773	24	100	14	132	33	1,076						1,982	
8-9am	453	19	106	19	115	11	723	661	53	173	23	110	18	1,038						1,761	
9-10am	435	40	132	13	104	24	748	555	66	148	11	185	28	993						1,741	
10-11am	448	42	140	10	137	32	809	530	60	120	8	122	18	858						1,667	
11-12am	484	57	146	9	163	33	892	555	61	89	14	142	19	880						1,772	
12-1pm	518	60	177	9	127	25	916	513	76	104	5	122	16	836						1,752	
1-2pm	611	46	160	2	200	31	1,050	530	78	93	10	129	13	853						1,903	
2-3pm	752	48	204	0	155	30	1,189	727	75	77	8	100	27	2,203						2,203	
3-4pm	808	44	179	9	138	31	1,209	780	76	95	9	114	17	2,300					**	2,300	
4-5pm	858	32	151	10	101	13	1,165	709	79	115	7	80	16	2,171						2,171	
5-6pm	750	53	111	3	62	3	982	577	49	68	5	59	4	1,744						1,744	
6-7pm	638	37	68	7	33	13	796	444	32	30	10	28	4	1,344						1,344	
7-8pm	496	37	34	9	41	11	628	334	28	28	4	11	7	1,040						1,040	
8-9pm	370	37	33	4	15	10	469	233	10	26	3	7	6	754						754	
9-10pm	327	48	12	5	18	15	425	204	12	17	5	10	4	677						677	
10-11pm	299	46	21	8	21	8	403	197	8	14	5	8	5	640						640	
11-12pm	212	41	20	5	18	8	304	98	6	9	2	13	4	436						436	
Totals	10,604	972	2,054	172	1,942	522	16,266	10,434	899	1,707	217	1,684	415	15,356						31,622	
7-10am	1,492	80	340	47	363	55	2,377	1,989	143	421	48	427	79	3,107						5,484	
10am-1pm	1,450	159	463	28	427	90	2,617	1,998	197	313	27	386	53	2,574						5,191	
1-4pm	2,171	138	543	11	493	92	3,448	2,037	229	265	27	343	57	2,958						6,406	
4-7pm	2,246	122	330	20	196	29	2,943	1,730	160	213	22	167	24	5,259						5,259	
7am-7pm	7,359	499	1,676	106	1,479	266	11,385	7,354	729	1,212	124	1,323	213	10,955						22,340	
6-10am	2,063	105	431	61	460	105	3,225	2,809	153	556	72	538	93	4,221						7,446	
3-7pm	3,054	166	509	29	334	60	4,152	2,510	236	308	31	281	41	3,407						7,559	
6am-7pm	7,930	524	1,767	120	1,576	316	12,233	8,174	739	1,347	148	1,434	227	12,069						24,302	

Based on October 2014 Classification Survey Data.

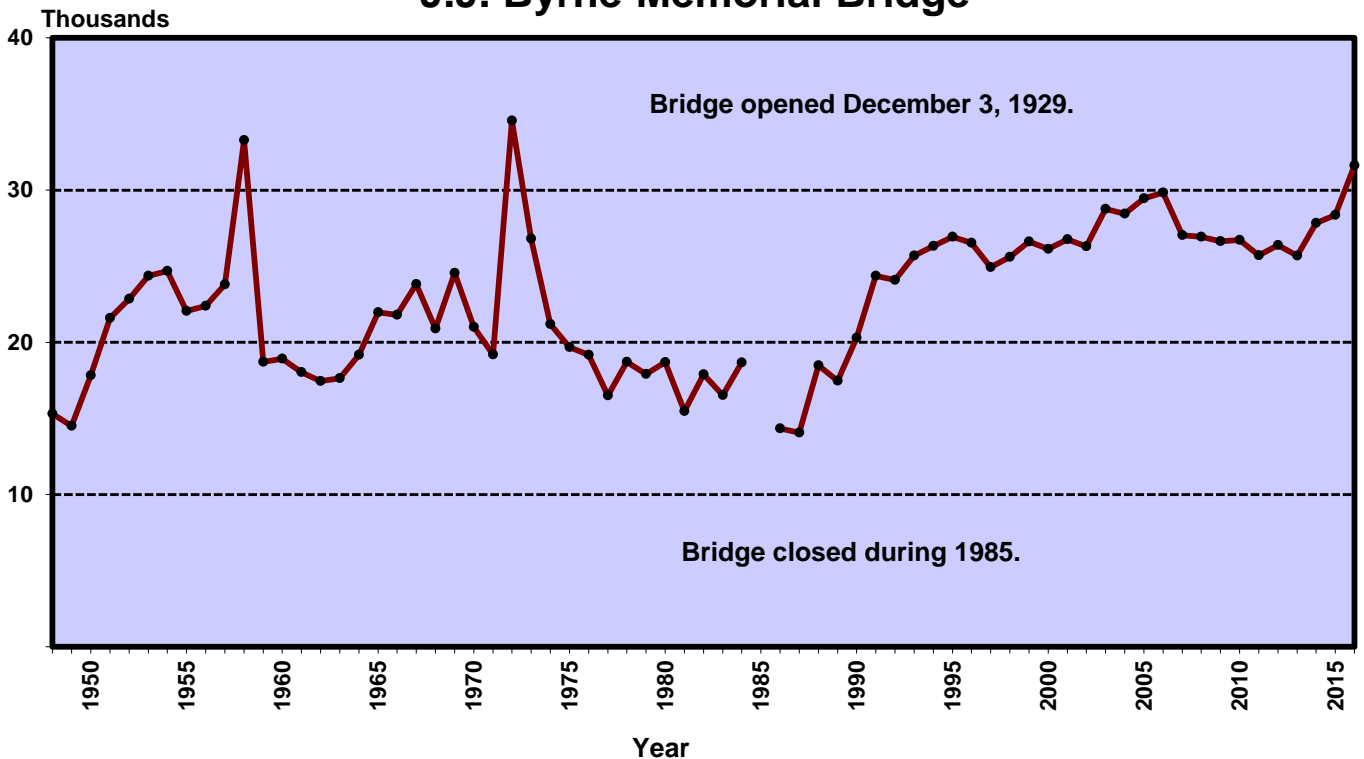
\*\* Peak Volumes

## Hourly Vehicular Volumes J.J. Byrne Memorial Bridge ~ 2016



Note: J.J. Byrne Memorial Bridge is also known as Greenpoint Avenue Bridge.

## Average Daily Traffic Volumes ~ Total of Both Directions J.J. Byrne Memorial Bridge



# Hourly Vehicular Volumes Kosciuszko Bridge - 2016

## Eastbound to Queens

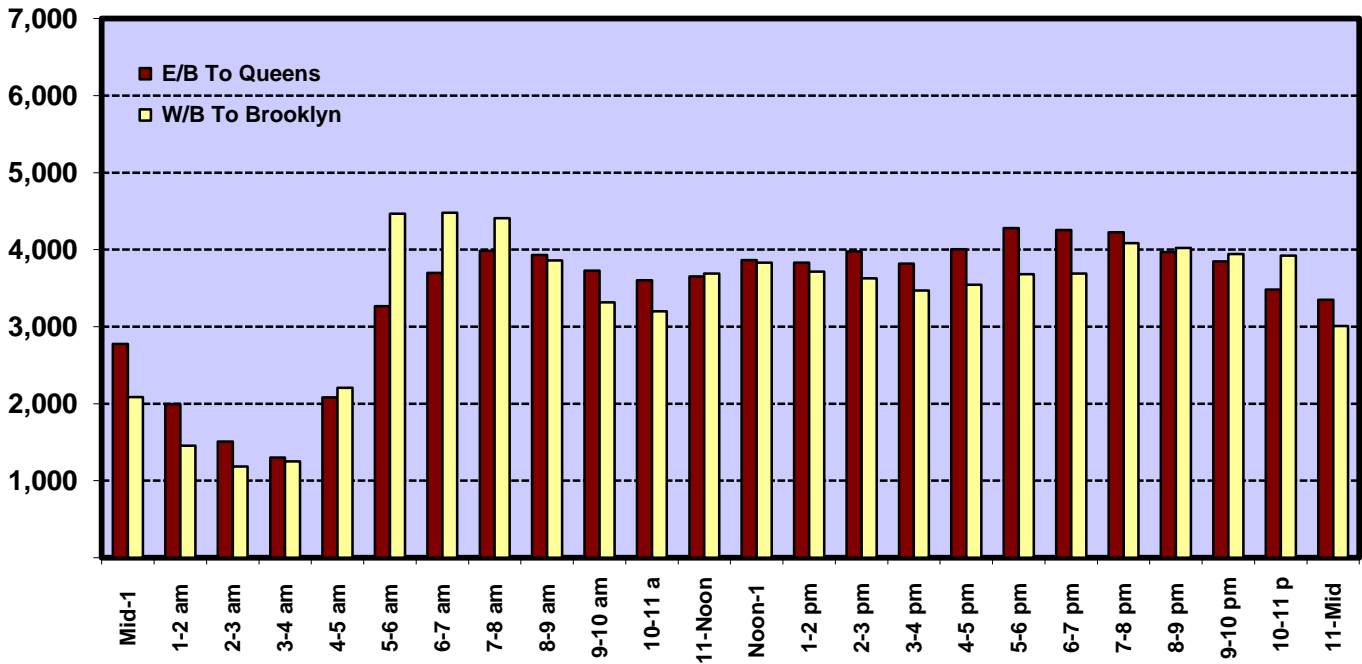
## Westbound to Brooklyn

FHWA Classes	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles										Autos, Motorcycles SUVs, Family Vans				Taxis, Limos, Liveries, Police, Fleet Vehicles				Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles				2-way Grand Totals
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles		
12-1am	2,072	402	136	10	49	109	2,778	1,515	302	65	8	79	116	2,085	1,515	302	65	8	79	116	2,085		
1-2am	1,373	308	89	2	107	115	1,994	933	243	79	0	93	107	1,455	933	243	79	0	93	107	1,455		
2-3am	866	223	70	0	141	209	1,509	671	171	70	7	98	166	1,183	671	171	70	7	98	166	1,183		
3-4am	740	142	72	6	120	219	1,299	778	145	80	0	119	131	1,253	778	145	80	0	119	131	1,253		
4-5am	1,189	164	128	8	232	363	2,084	1,479	241	162	5	187	133	2,207	1,479	241	162	5	187	133	2,207		
5-6am	2,173	207	223	16	237	409	3,265	2,774	277	943	17	312	144	4,467	2,774	277	943	17	312	144	4,467		
6-7am	2,571	211	326	49	318	222	3,697	2,996	173	561	45	534	170	4,479	2,996	173	561	45	534	170	4,479		
7-8am	2,927	139	384	35	313	188	3,986	3,167	87	635	23	366	130	4,408	3,167	87	635	23	366	130	4,408		
8-9am	2,735	152	485	48	347	163	3,930	2,680	75	601	15	353	138	3,862	2,680	75	601	15	353	138	3,862		
9-10am	2,310	181	527	28	421	262	3,729	2,147	65	453	25	418	208	3,316	2,147	65	453	25	418	208	3,316		
10-11am	2,122	199	540	48	451	242	3,602	2,222	73	420	26	327	132	3,200	2,222	73	420	26	327	132	3,200		
11-12am	2,231	203	551	24	428	215	3,652	2,494	97	485	24	389	203	3,692	2,494	97	485	24	389	203	3,692		
12-1pm	2,490	187	552	21	426	187	3,863	2,611	109	483	34	413	182	3,832	2,611	109	483	34	413	182	3,832		
1-2pm	2,437	171	636	20	370	197	3,831	2,565	85	455	35	444	130	3,714	2,565	85	455	35	444	130	3,714		
2-3pm	2,578	185	656	21	402	133	3,975	2,734	101	331	21	374	66	3,627	2,734	101	331	21	374	66	3,627		
3-4pm	2,581	157	705	25	285	68	3,821	2,610	92	352	36	307	71	3,468	2,610	92	352	36	307	71	3,468		
4-5pm	2,893	132	686	10	214	72	4,007	2,854	94	301	24	215	55	3,543	2,854	94	301	24	215	55	3,543		
5-6pm	3,316	117	576	24	180	68	4,281	3,134	118	199	9	188	34	3,682	3,134	118	199	9	188	34	3,682		
6-7pm	3,399	165	430	22	185	55	4,256	3,225	139	140	16	130	41	3,691	3,225	139	140	16	130	41	3,691		
7-8pm	3,471	196	257	34	95	77	3,968	3,553	176	123	14	118	38	4,022	3,553	176	123	14	118	38	4,022		
8-9pm	3,309	196	257	34	95	77	3,968	3,553	176	123	14	118	38	4,022	3,553	176	123	14	118	38	4,022		
9-10pm	3,224	271	192	16	79	68	3,850	3,415	226	89	48	105	62	3,945	3,415	226	89	48	105	62	3,945		
10-11pm	2,929	239	163	8	62	80	3,481	3,078	452	164	12	102	114	3,922	3,078	452	164	12	102	114	3,922		
11-12pm	2,793	261	135	10	56	96	3,351	2,192	548	105	10	42	112	3,009	2,192	548	105	10	42	112	3,009		
Totals	58,729	4,785	8,856	503	5,676	3,887	82,436	59,399	4,262	7,464	476	5,836	2,708	80,145	59,399	4,262	7,464	476	5,836	2,708	80,145		
7-10am	7,972	472	1,396	111	1,081	613	11,645	7,994	227	1,689	63	1,137	476	11,586	7,994	227	1,689	63	1,137	476	11,586		
10am-1pm	6,843	589	1,643	93	1,305	644	11,117	7,327	279	1,388	84	1,129	517	10,724	7,327	279	1,388	84	1,129	517	10,724		
1-4pm	7,596	513	1,997	66	1,057	398	11,627	7,909	278	1,138	92	1,125	267	10,809	7,909	278	1,138	92	1,125	267	10,809		
4-7pm	9,608	414	1,692	56	579	195	12,544	9,213	351	640	49	533	130	10,916	9,213	351	640	49	533	130	10,916		
7am-7pm	32,019	1,988	6,728	326	4,022	1,850	46,933	32,443	1,135	4,855	288	3,924	1,390	44,035	32,443	1,135	4,855	288	3,924	1,390	44,035		
6-10am	10,543	683	1,722	160	1,399	835	15,342	10,990	400	2,250	108	1,671	646	16,065	10,990	400	2,250	108	1,671	646	16,065		
3-7pm	12,189	571	2,397	81	864	263	16,365	11,823	443	992	85	840	201	14,384	11,823	443	992	85	840	201	14,384		
6am-7pm	34,590	2,199	7,054	375	4,340	2,072	50,630	35,439	1,308	5,416	333	4,458	1,560	48,514	35,439	1,308	5,416	333	4,458	1,560	48,514		

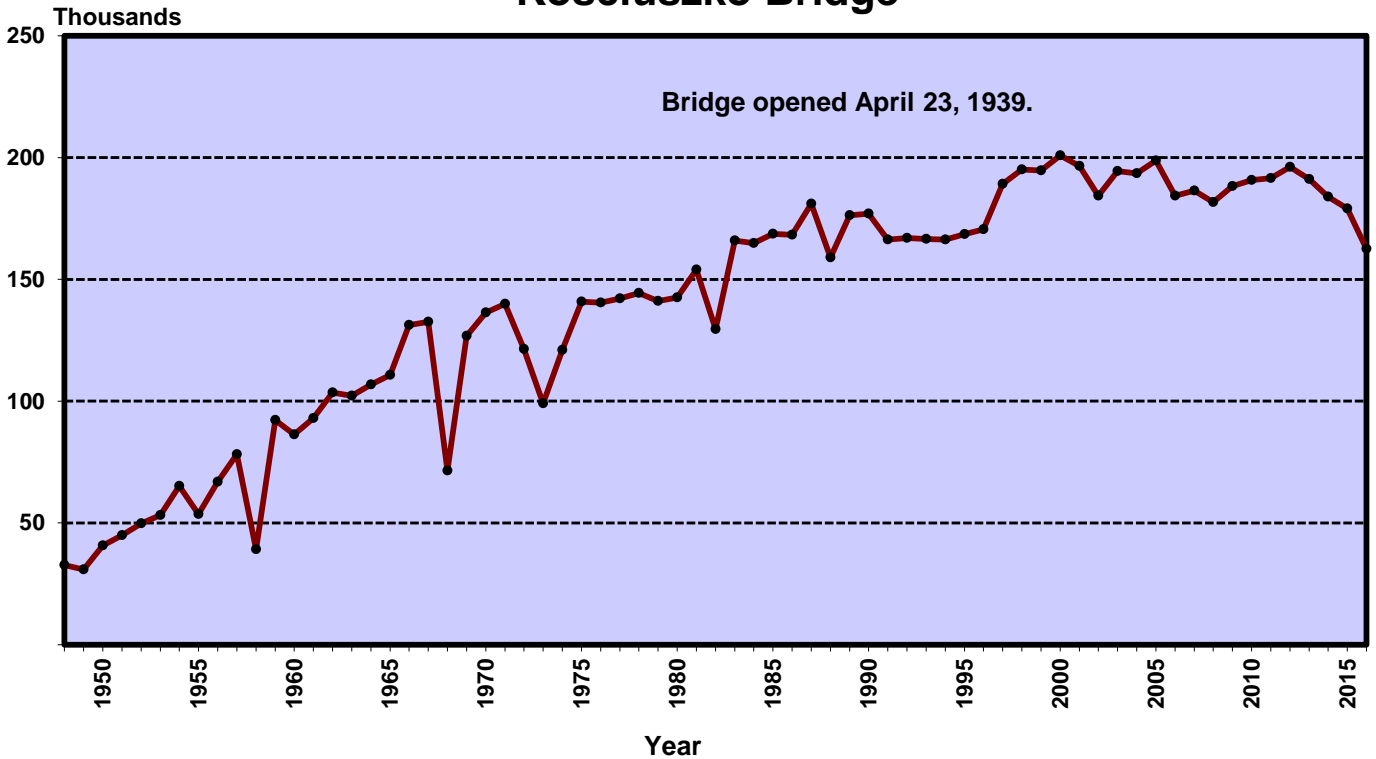
Based on November 2014 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Kosciuszko Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Kosciuszko Bridge



# Hourly Vehicular Volumes Pulaski Bridge - 2016

## Northbound to Queens

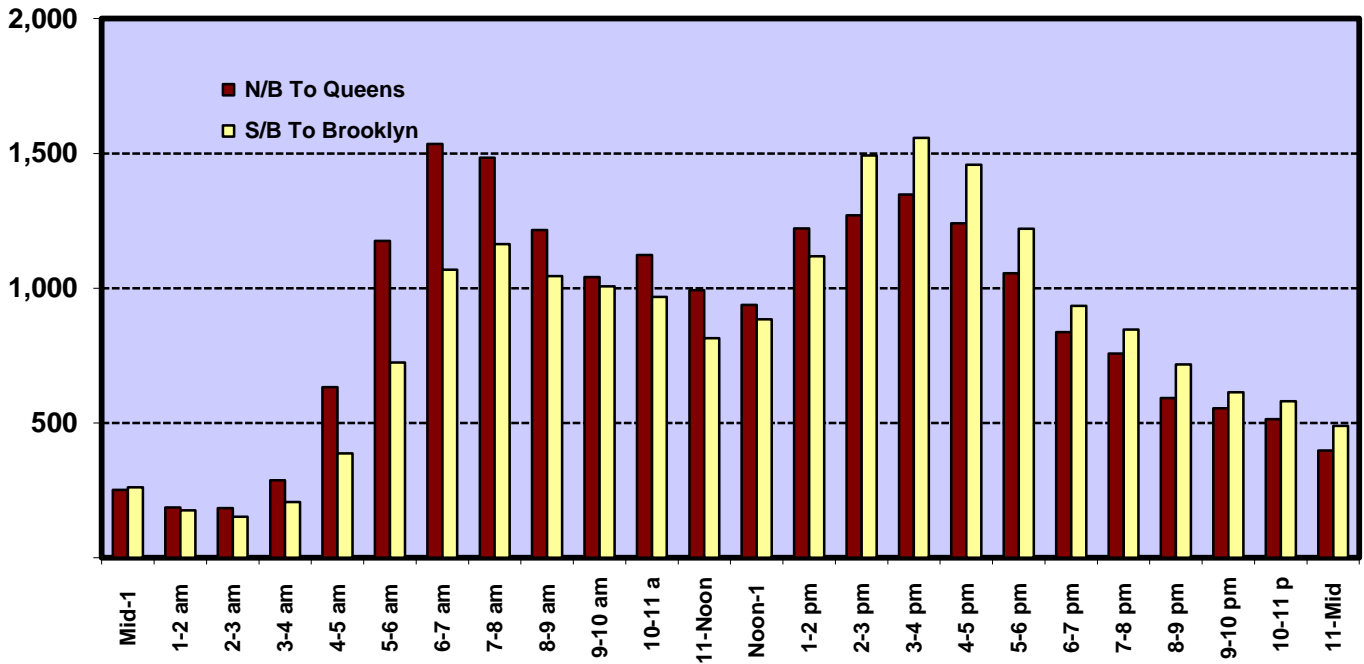
## Southbound to Brooklyn

FHWA Classes ▲	Northbound to Queens							Southbound to Brooklyn							2-way Grand Totals	
	Autos, Motorcycles			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Buses	Autos, Motorcycles			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Buses		Single Unit Trucks
	1, 2, 3	2	2 & 3	4	5	9		5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3		4	
12-1am	156	80	5	2	2	9	4	0	252	152	94	6	3	5	1	261
1-2am	74	98	2	2	2	11	2	0	187	85	76	2	1	8	4	176
2-3am	72	94	10	4	3	3	4	1	184	72	66	4	1	7	2	152
3-4am	130	126	17	1	13	0	1	0	287	107	77	8	2	9	4	207
4-5am	374	189	18	8	41	3	8	3	633	230	88	21	9	26	13	387
5-6am	921	134	42	16	49	13	16	13	1,175	515	107	44	14	37	7	724
6-7am	1,244	61	97	62	49	22	62	22	1,535	818	80	56	31	69	15	1,069
7-8am	1,145	46	184	26	69	14	26	14	1,484	842	64	122	29	87	19	1,163
8-9am	915	46	146	10	86	13	10	13	1,216	751	38	120	48	80	8	1,045
9-10am	703	46	198	16	74	4	16	4	1,041	719	46	128	37	65	12	1,007
10-11am	725	67	179	33	108	11	33	11	1,123	678	53	116	25	77	19	968
11-12am	667	49	176	12	76	13	12	13	993	561	41	97	20	85	11	815
12-1pm	631	40	158	12	93	4	12	4	938	631	32	106	19	74	22	884
1-2pm	818	35	196	38	123	12	38	12	1,222	798	37	131	35	103	14	1,118
2-3pm	914	46	144	30	144	11	30	11	1,271	1,047	45	219	31	123	27	1,492
3-4pm	943	77	152	28	140	7	28	7	1,347	1,209	59	134	46	102	8	1,558
4-5pm	941	105	102	16	68	9	16	9	1,241	1,141	77	117	42	63	18	1,458
5-6pm	855	79	68	11	34	8	11	8	1,055	961	71	116	20	36	16	1,220
6-7pm	697	48	49	7	27	9	7	9	837	758	82	47	11	25	11	934
7-8pm	631	46	35	12	33	0	12	0	757	681	76	28	9	45	8	847
8-9pm	479	65	17	8	21	2	8	2	592	557	94	32	10	16	8	717
9-10pm	443	63	16	7	21	4	7	4	554	474	105	15	6	11	3	614
10-11pm	399	65	15	6	27	2	6	2	514	416	121	21	4	12	7	581
11-12pm	307	59	9	7	14	2	7	2	398	342	120	3	4	13	7	489
Totals	15,184	1,764	2,035	374	1,315	164	374	164	20,836	14,545	1,749	1,693	457	1,178	264	19,886
7-10am	2,763	138	528	52	229	31	52	31	3,741	2,312	148	370	114	232	39	3,215
10am-1pm	2,023	156	513	57	277	28	57	28	3,054	1,870	126	319	64	236	52	2,667
1-4pm	2,675	158	492	96	389	30	96	30	3,840	3,054	141	484	112	328	49	4,168
4-7pm	2,493	232	219	34	129	26	34	26	3,133	2,860	230	280	73	124	45	3,612
7am-7pm	9,954	684	1,752	239	1,024	115	239	115	13,768	10,096	645	1,453	363	920	185	13,662
6-10am	4,007	199	625	114	278	53	114	53	5,276	3,130	228	426	145	301	54	4,284
3-7pm	3,436	309	371	62	269	33	62	33	4,480	4,069	289	414	119	226	53	5,170
6am-7pm	11,198	745	1,849	301	1,073	137	301	137	15,303	10,914	725	1,509	394	989	200	14,731

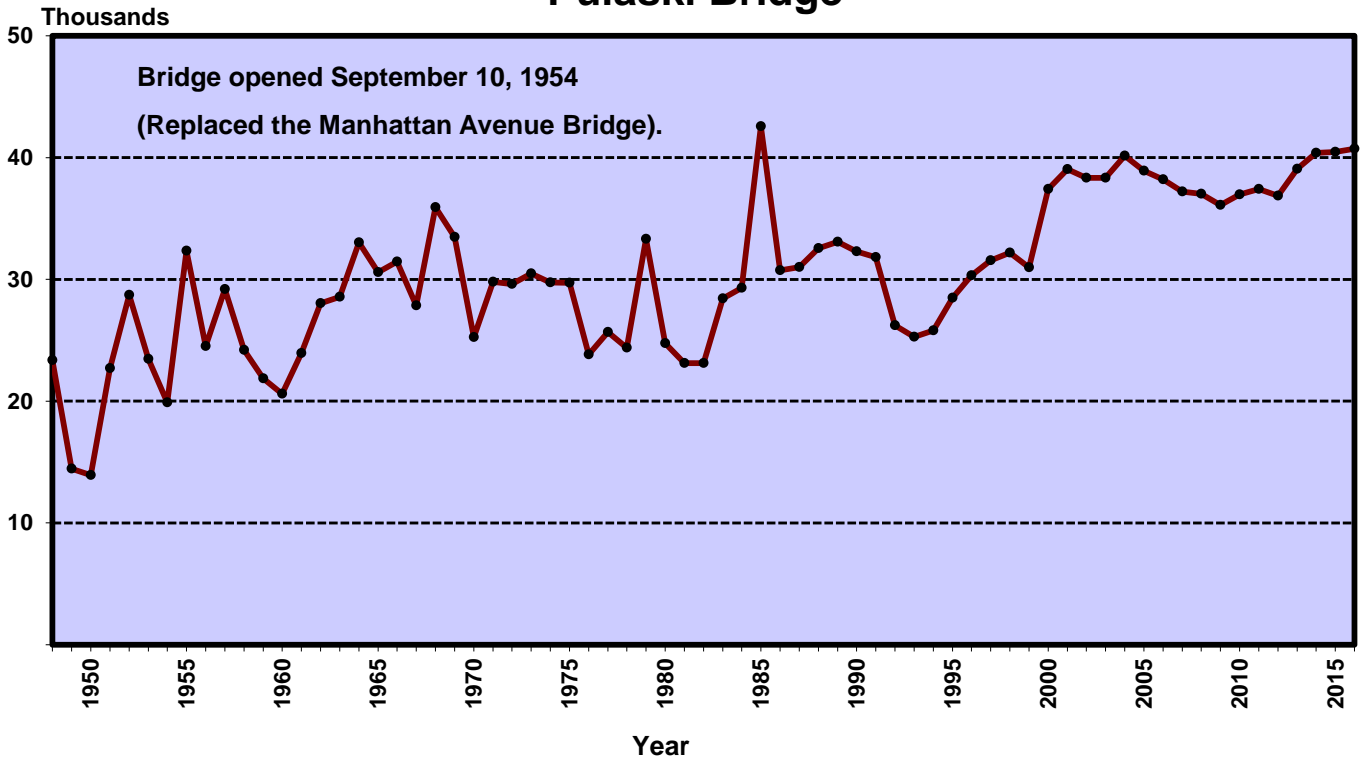
Based on December 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Pulaski Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Pulaski Bridge







# Bronx Bridges

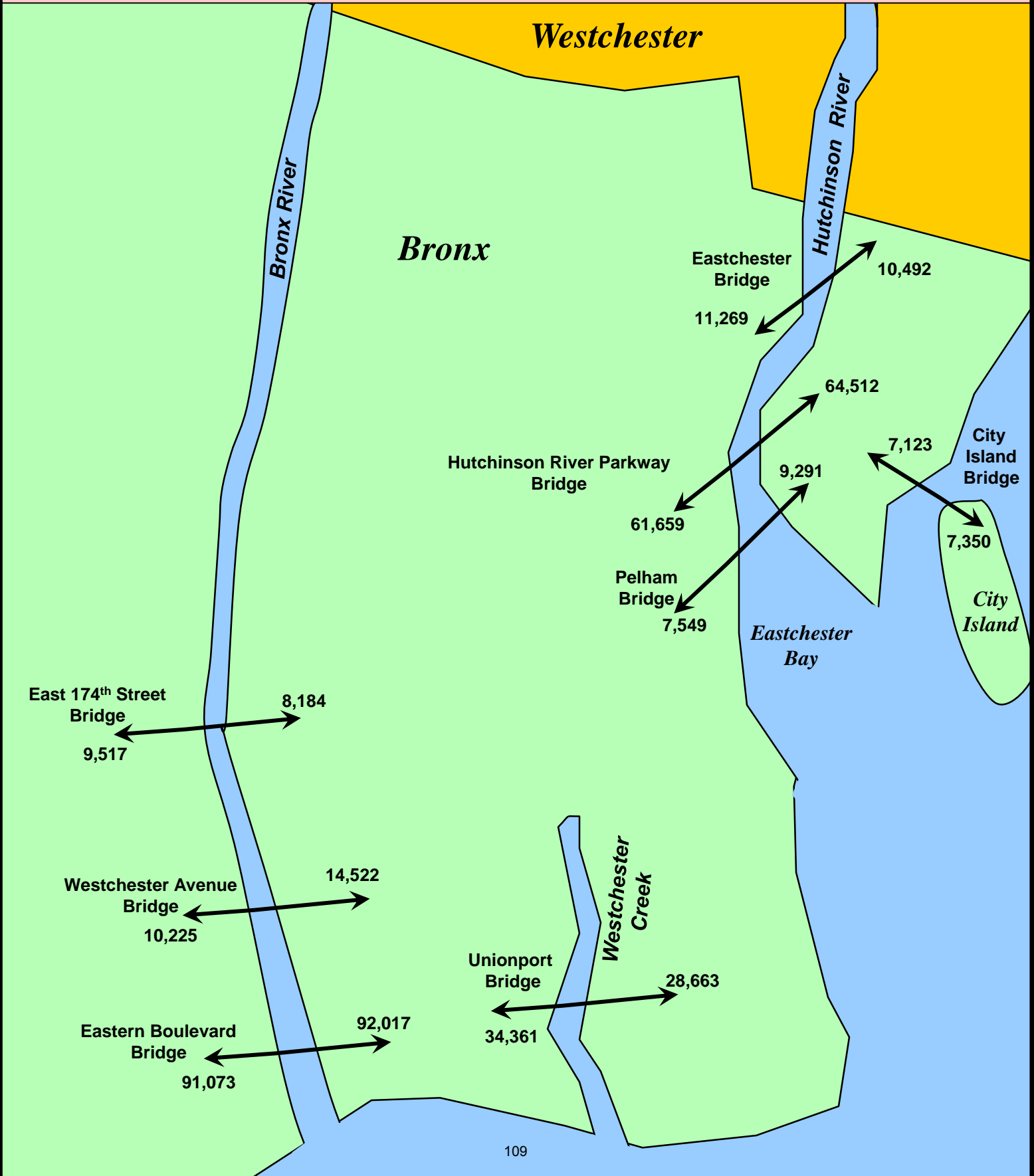


**Pelham Bridge**



# Bronx Bridges

## 2016 Daily Volumes



**Bronx Bridges**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<b>Year</b>	<b>City Island</b>	<b>East 174th Street</b>	<b>Eastchester</b>	<b>Eastern Boulevard</b>	<b>Hutchinson River Pky</b>
1948	4,249	8,995	15,012	44,563	15,085
1949	4,078	8,287	11,322	42,615	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	<i>Closed</i>	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
2005	15,297	13,632	22,318	183,743	118,387
2006	15,339	13,662	20,890	182,579	120,599
2007	15,188	14,436	21,431	180,128	117,660
2008	15,955	14,158	20,842	174,597	121,499
2009	14,313	14,130	20,329	176,800	119,285
2010	15,380	16,499	25,374	174,168	122,416
2011	14,480	15,940	21,292	175,020	115,574
2012	16,424	15,534	21,483	168,451	118,000
2013	16,431	15,273	21,393	175,436	120,999
2014	15,915	16,144	24,071	176,945	121,281
2015	15,292	16,556	22,317	177,999	124,390
2016	14,473	17,701	21,761	183,090	126,171

**Bronx Bridges (cont'd)**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<i>Year</i>	<i>Pelham</i>	<i>Unionport</i>	<i>Westchester Avenue</i>	<i>Totals</i>
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	4,331	38,468	14,716	177,999
1954	5,998	28,890	15,106	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	11,010	134,200	19,580	328,190
1965	13,345	139,724	22,218	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	13,284	29,903	23,448	280,315
1977	12,177	33,289	21,422	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	<i>Closed</i>	37,935	22,693	291,600
1983	10,740	38,676	22,693	301,686
1984	14,862	41,548	<i>Closed</i>	306,019
1985	12,603	42,915	26,239	311,072
1986	15,753	45,382	24,856	356,257
1987	14,498	45,450	22,624	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	24,807	47,953	24,117	361,505
1997	22,963	47,941	25,741	362,846
1998	23,264	48,975	25,863	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
2005	17,972	60,605	27,195	459,149
2006	16,749	61,262	24,921	456,001
2007	19,041	59,906	25,846	453,636
2008	19,131	62,342	25,789	454,313
2009	17,521	61,700	25,131	449,209
2010	17,159	64,098	25,978	461,072
2011	16,966	61,619	26,287	447,178
2012	17,668	62,845	27,408	447,813
2013	18,330	61,892	26,976	456,730
2014	18,117	62,715	25,204	460,392
2015	17,241	62,410	26,011	462,216
2016	16,840	63,024	24,747	467,807

# Hourly Vehicular Volumes

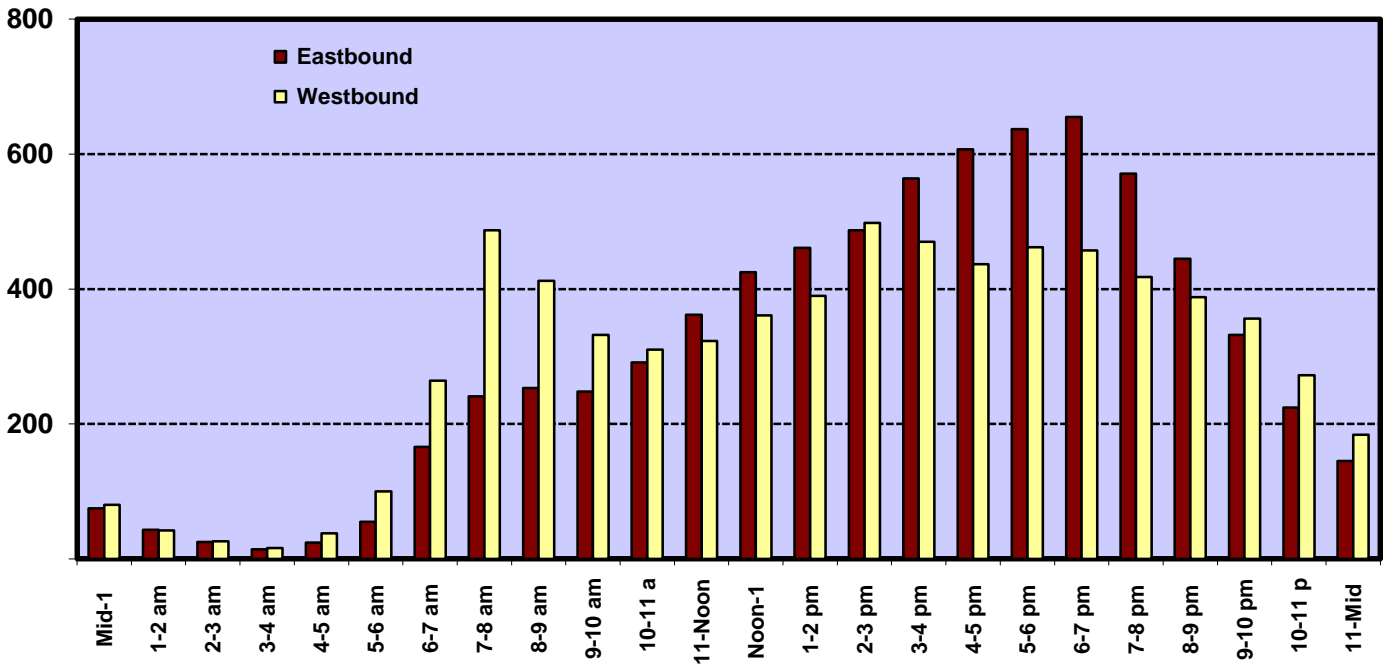
## City Island Bridge - 2016

	<b>Eastbound</b>					<b>Westbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	75	---	---	---	---	---	80
1-2am	---	---	---	---	---	43	---	---	---	---	---	42
2-3am	---	---	---	---	---	25	---	---	---	---	---	26
3-4am	---	---	---	---	---	14	---	---	---	---	---	16
4-5am	---	---	---	---	---	24	---	---	---	---	---	38
5-6am	---	---	---	---	---	55	---	---	---	---	---	100
6-7am	---	---	---	---	---	166	---	---	---	---	---	264
7-8am	200	8	11	5	17	241	440	10	0	18	19	487
8-9am	197	11	10	6	29	253	358	13	0	13	28	412
9-10am	207	4	4	7	26	248	301	4	0	9	18	332
10-11am	272	0	4	6	9	291	297	3	1	7	2	310
11-12am	310	5	9	6	32	362	312	6	0	2	3	323
12-1pm	392	2	8	3	20	425	347	8	0	4	2	361
1-2pm	431	2	1	6	21	461	366	2	0	5	17	390
2-3pm	407	9	13	19	39	487	429	11	2	23	33	498
3-4pm	527	11	6	7	13	564	442	14	0	5	9	470
4-5pm	529	2	22	11	43	607	403	2	0	7	25	437
5-6pm	591	6	12	7	21	637	430	5	0	9	18	462
6-7pm	618	5	6	9	17	655	433	6	0	8	10	457
7-8pm	---	---	---	---	---	571	---	---	---	---	---	418
8-9pm	---	---	---	---	---	445	---	---	---	---	---	388
9-10pm	---	---	---	---	---	332	---	---	---	---	---	356
10-11pm	---	---	---	---	---	224	---	---	---	---	---	272
11-12pm	---	---	---	---	---	145	---	---	---	---	---	184
<b>Totals</b>	---	---	---	---	---	<b>7,350</b>	---	---	---	---	---	<b>7,123</b>
7-10am	604	23	25	18	72	742	1,099	27	0	40	65	1,231
10am-1pm	974	7	21	15	61	1,078	956	17	1	13	7	994
1-4pm	1,365	22	20	32	73	1,512	1,237	27	2	33	59	1,358
4-7pm	1,738	13	40	27	81	1,899	1,266	13	0	24	53	1,356
7am-7pm	4,681	65	106	92	287	5,231	4,558	84	3	110	184	4,939
6-10am	---	---	---	---	---	908	---	---	---	---	---	1,495
3-7pm	2,265	24	46	34	94	2,463	1,708	27	0	29	62	1,826
6am-7pm	---	---	---	---	---	5,397	---	---	---	---	---	5,203

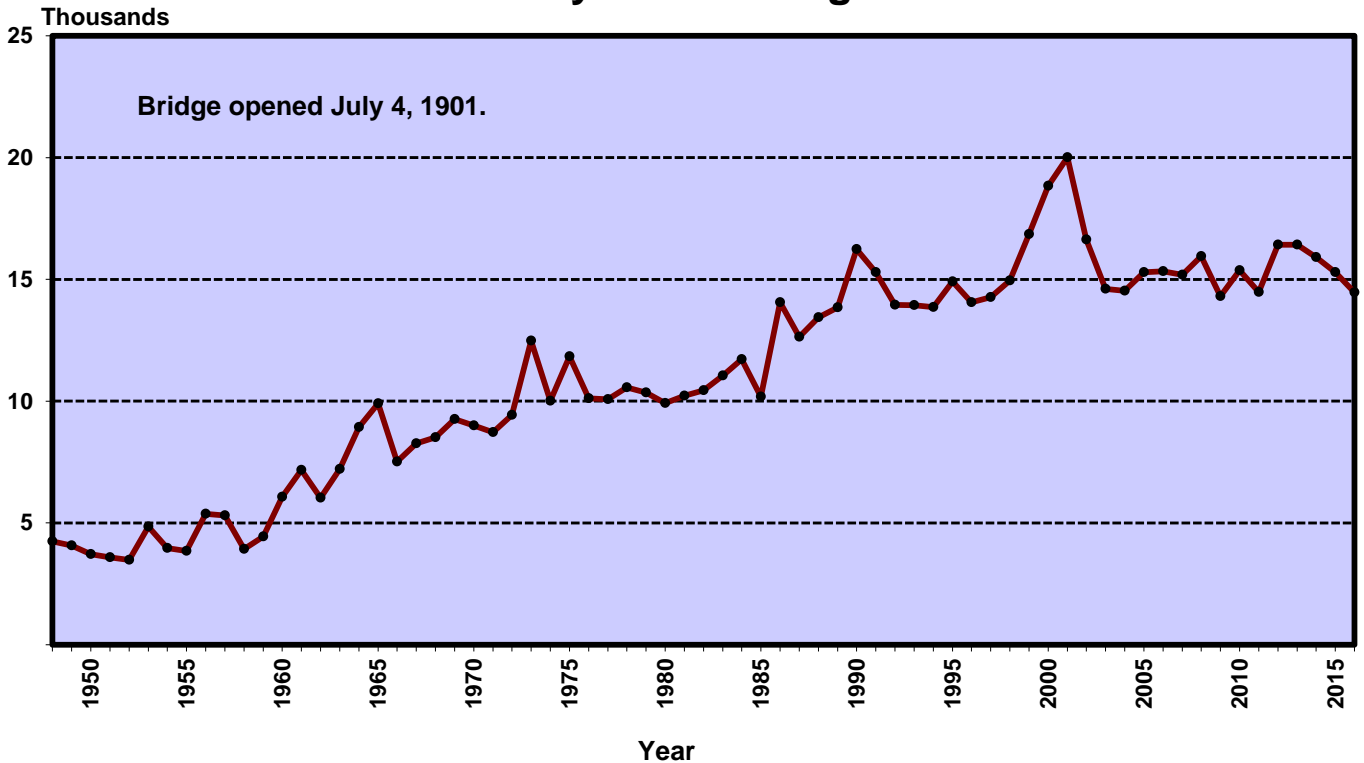
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes City Island Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions City Island Bridge



# Hourly Vehicular Volumes

## East 174th Street Bridge - 2016

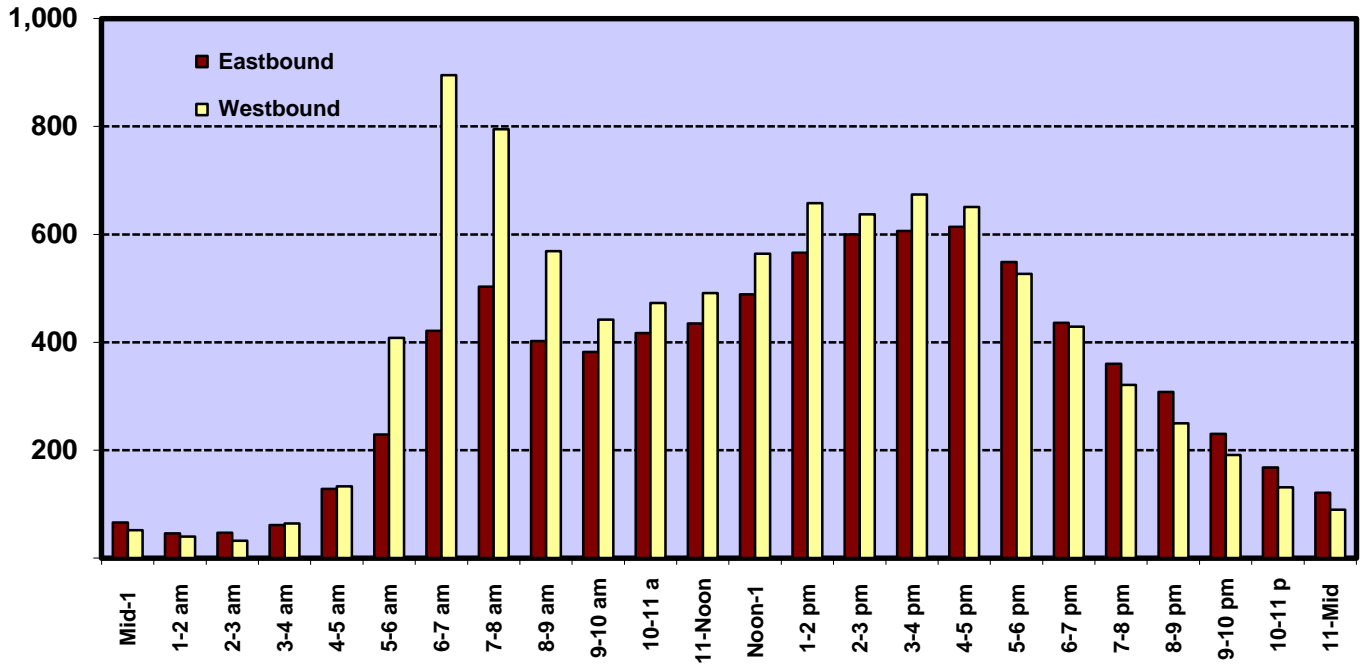
	<b>Eastbound</b>					<b>Westbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	66	---	---	---	---	---	52
1-2am	---	---	---	---	---	46	---	---	---	---	---	40
2-3am	---	---	---	---	---	47	---	---	---	---	---	32
3-4am	---	---	---	---	---	61	---	---	---	---	---	64
4-5am	---	---	---	---	---	128	---	---	---	---	---	133
5-6am	---	---	---	---	---	229	---	---	---	---	---	408
6-7am	---	---	---	---	---	421	---	---	---	---	---	895
7-8am	414	38	13	18	20	503	680	36	25	9	45	795
8-9am	307	45	9	29	12	402	478	25	22	10	34	569
9-10am	303	29	11	18	21	382	371	16	12	9	34	442
10-11am	359	21	7	18	12	417	423	36	6	2	2	473
11-12am	310	26	26	40	33	435	395	17	6	33	40	491
12-1pm	421	14	14	21	19	489	506	28	6	11	13	564
1-2pm	500	14	16	16	20	566	595	26	11	9	17	658
2-3pm	460	39	30	44	27	600	503	48	19	25	42	637
3-4pm	529	36	13	14	14	606	580	49	11	2	32	674
4-5pm	518	14	25	31	26	614	559	21	18	18	35	651
5-6pm	483	13	14	20	19	549	471	19	13	1	23	527
6-7pm	388	17	6	10	15	436	388	12	12	3	14	429
7-8pm	---	---	---	---	---	360	---	---	---	---	---	321
8-9pm	---	---	---	---	---	308	---	---	---	---	---	250
9-10pm	---	---	---	---	---	230	---	---	---	---	---	191
10-11pm	---	---	---	---	---	168	---	---	---	---	---	131
11-12pm	---	---	---	---	---	121	---	---	---	---	---	90
<b>Totals</b>	---	---	---	---	---	<b>8,184</b>	---	---	---	---	---	<b>9,517</b>
7-10am	1,024	112	33	65	53	1,287	1,529	77	59	28	113	1,806
10am-1pm	1,090	61	47	79	64	1,341	1,324	81	18	50	55	1,528
1-4pm	1,489	89	59	74	61	1,772	1,678	123	41	36	91	1,969
4-7pm	1,389	44	45	61	60	1,599	1,418	52	43	22	72	1,607
7am-7pm	4,992	306	184	279	238	5,999	5,949	333	161	136	331	6,910
6-10am	---	---	---	---	---	1,708	---	---	---	---	---	2,701
3-7pm	1,918	80	58	75	74	2,205	1,998	101	54	24	104	2,281
6am-7pm	---	---	---	---	---	6,420	---	---	---	---	---	7,805

Based on September 1989 Classification Survey Data.

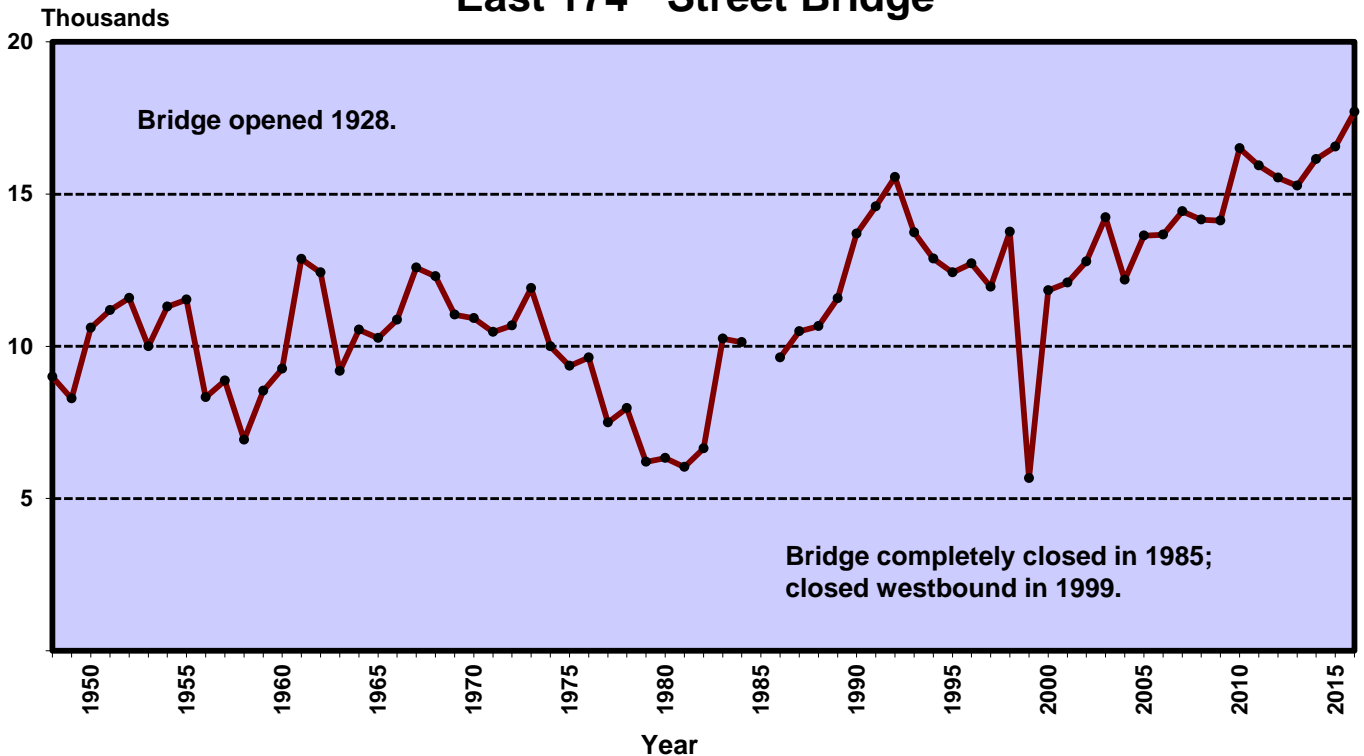
\*\* Peak Volumes



## Hourly Vehicular Volumes East 174<sup>th</sup> Street Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions East 174<sup>th</sup> Street Bridge



# Hourly Vehicular Volumes

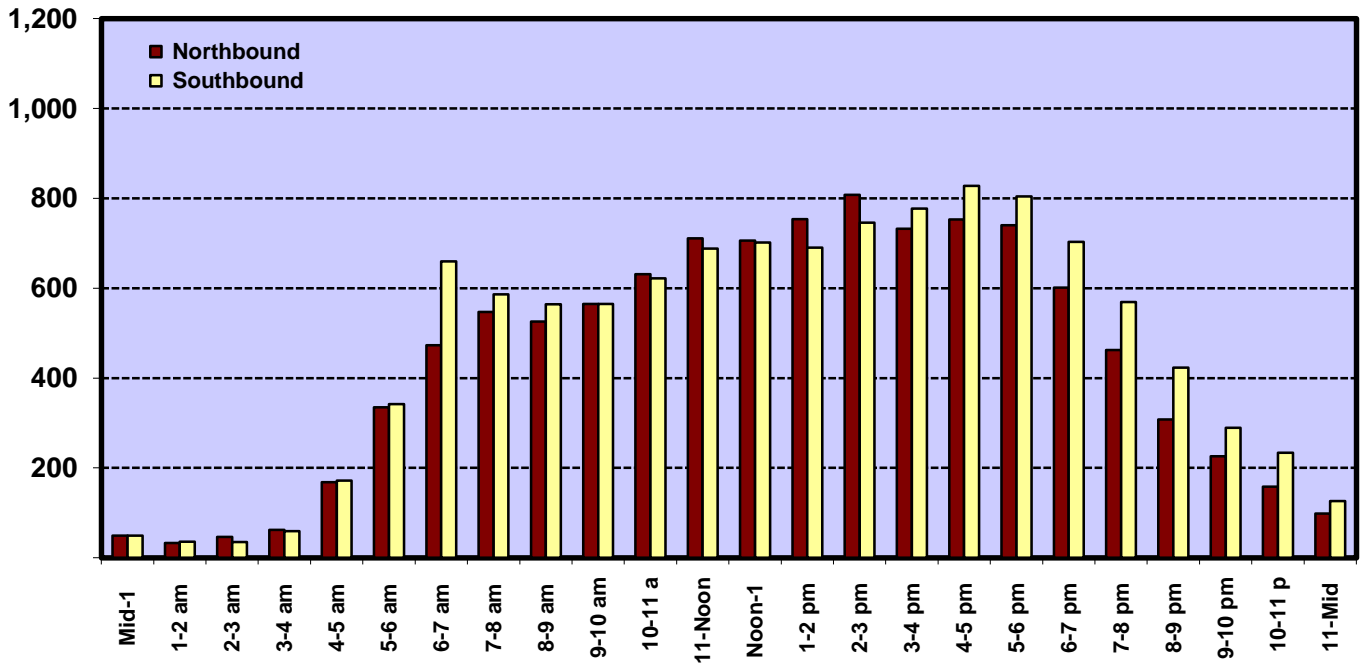
## Eastchester Bridge - 2016

	<b>Northbound</b>					<b>Southbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	49	---	---	---	---	---	49
1-2am	---	---	---	---	---	33	---	---	---	---	---	36
2-3am	---	---	---	---	---	46	---	---	---	---	---	35
3-4am	---	---	---	---	---	62	---	---	---	---	---	59
4-5am	---	---	---	---	---	168	---	---	---	---	---	172
5-6am	---	---	---	---	---	335	---	---	---	---	---	342
6-7am	---	---	---	---	---	473	---	---	---	---	---	660
7-8am	482	16	0	28	21	547	484	8	8	67	19	586
8-9am	445	11	0	39	31	526	443	11	13	73	24	564
9-10am	477	16	0	39	33	565	372	18	19	115	41	565
10-11am	577	8	0	25	21	631	540	8	15	39	20	622
11-12am	622	6	0	39	44	711	529	9	18	91	41	688
12-1pm	662	8	0	13	23	706	639	7	6	31	19	702
1-2pm	712	8	0	14	20	754	631	7	4	37	11	690
2-3pm	728	17	0	38	25	808	585	11	14	108	28	746
3-4pm	682	13	0	19	18	732	696	16	9	44	12	777
4-5pm	686	9	0	23	35	753	742	9	15	41	21	828
5-6pm	673	8	0	24	35	740	719	9	12	37	27	804
6-7pm	568	10	0	11	12	601	640	16	8	31	8	703
7-8pm	---	---	---	---	---	462	---	---	---	---	---	569
8-9pm	---	---	---	---	---	308	---	---	---	---	---	423
9-10pm	---	---	---	---	---	226	---	---	---	---	---	289
10-11pm	---	---	---	---	---	158	---	---	---	---	---	234
11-12pm	---	---	---	---	---	98	---	---	---	---	---	126
<b>Totals</b>	---	---	---	---	---	10,492	---	---	---	---	---	11,269
7-10am	1,404	43	0	106	85	1,638	1,299	37	40	255	84	1,715
10am-1pm	1,861	22	0	77	88	2,048	1,708	24	39	161	80	2,012
1-4pm	2,122	38	0	71	63	2,294	1,912	34	27	189	51	2,213
4-7pm	1,927	27	0	58	82	2,094	2,101	34	35	109	56	2,335
7am-7pm	7,314	130	0	312	318	8,074	7,020	129	141	714	271	8,275
6-10am	---	---	---	---	---	2,111	---	---	---	---	---	2,375
3-7pm	2,609	40	0	77	100	2,826	2,797	50	44	153	68	3,112
6am-7pm	---	---	---	---	---	8,547	---	---	---	---	---	8,935

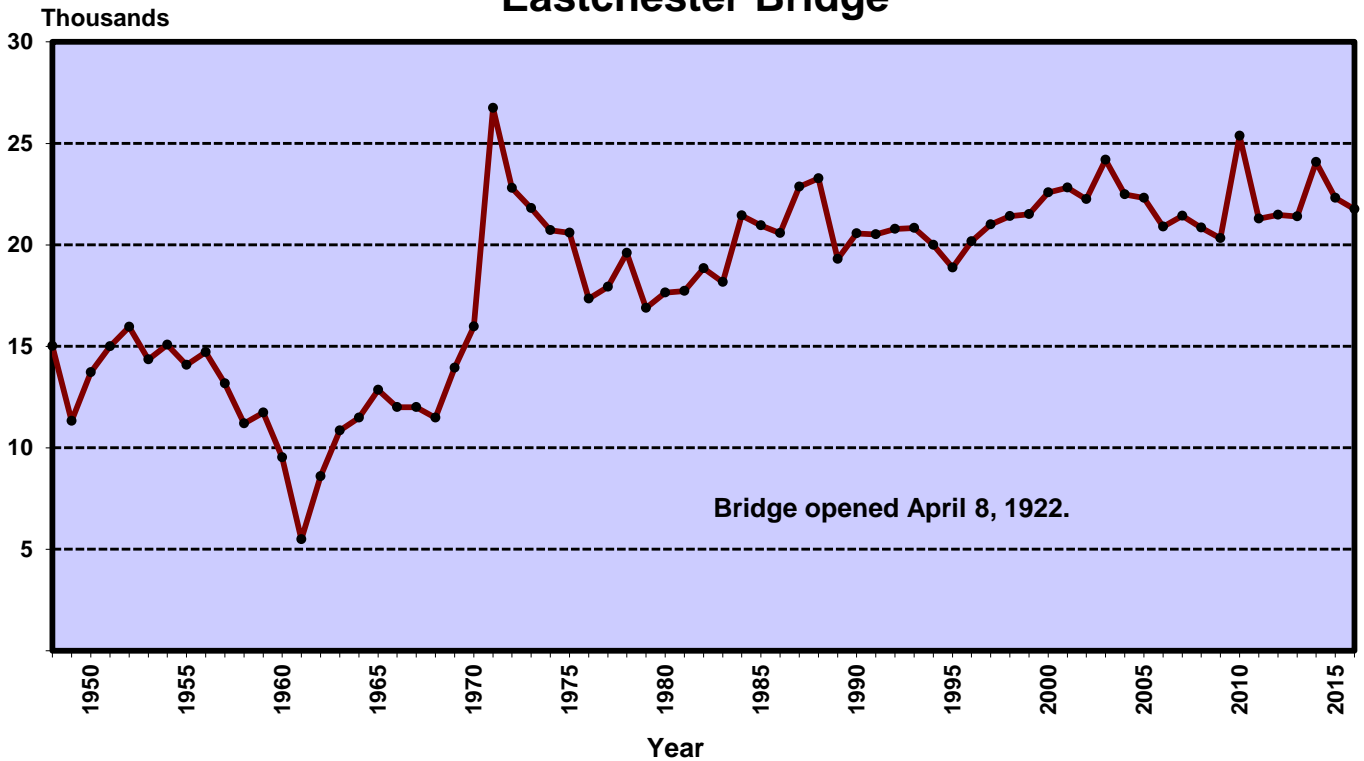
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Eastchester Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Eastchester Bridge



# Hourly Vehicular Volumes

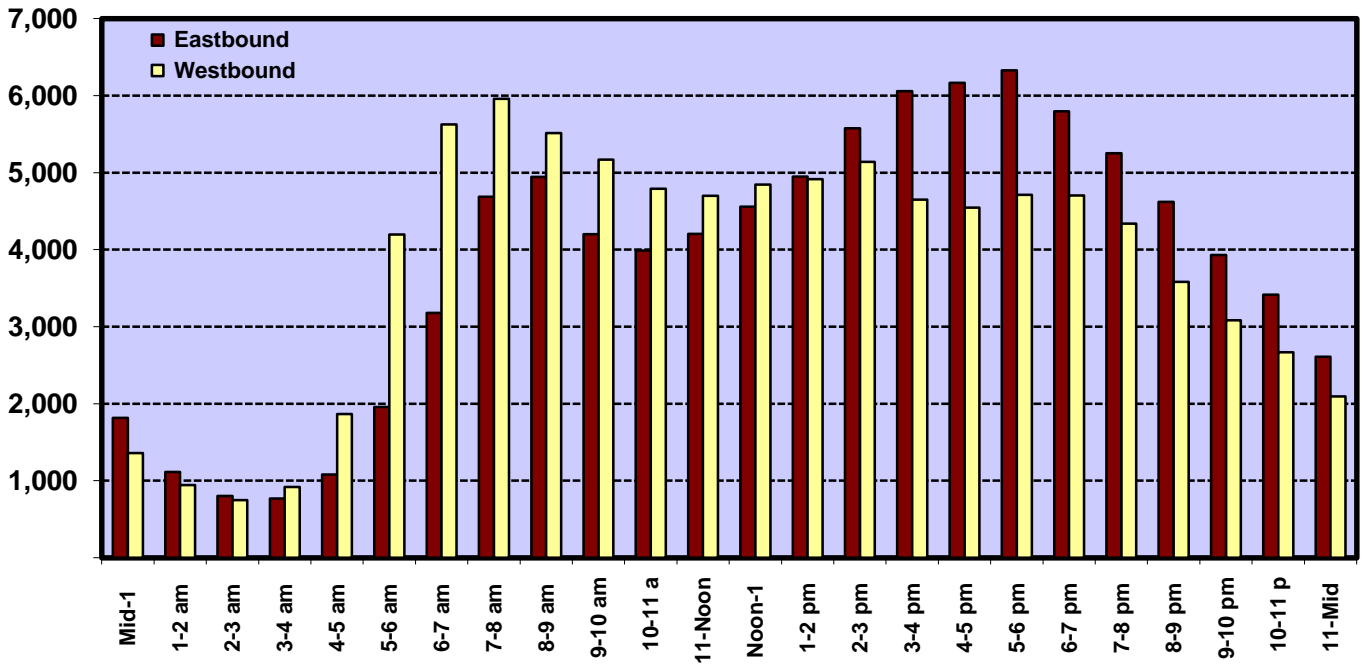
## Eastern Boulevard Bridge - 2016

	<i>Eastbound</i>					<i>Westbound</i>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	1,818	---	---	---	---	---	1,358
1-2am	---	---	---	---	---	1,114	---	---	---	---	---	945
2-3am	---	---	---	---	---	804	---	---	---	---	---	747
3-4am	---	---	---	---	---	769	---	---	---	---	---	917
4-5am	---	---	---	---	---	1,082	---	---	---	---	---	1,865
5-6am	---	---	---	---	---	1,956	---	---	---	---	---	4,196
6-7am	---	---	---	---	---	3,178	---	---	---	---	---	5,626
7-8am	3,963	60	74	445	145	4,687	5,173	94	112	333	245	5,957
8-9am	3,933	114	105	558	236	4,946	4,670	66	125	398	256	5,515
9-10am	3,232	101	116	541	210	4,200	4,475	46	84	326	237	5,168
10-11am	3,514	25	52	288	110	3,989	4,417	38	57	175	104	4,791
11-12am	3,324	17	151	445	268	4,205	4,030	27	112	311	219	4,699
12-1pm	4,105	22	74	225	131	4,557	4,484	30	36	188	107	4,845
1-2pm	4,661	30	1	164	94	4,950	4,546	59	62	185	65	4,917
2-3pm	5,040	45	0	283	209	5,577	4,418	121	96	366	141	5,142
3-4pm	5,768	41	0	154	97	6,060	4,332	63	39	168	48	4,650
4-5pm	5,647	36	0	298	187	6,168	3,926	95	113	261	153	4,548
5-6pm	6,000	62	0	94	174	6,330	4,300	33	130	166	83	4,712
6-7pm	5,454	44	0	151	146	5,795	4,434	39	80	89	62	4,704
7-8pm	---	---	---	---	---	5,253	---	---	---	---	---	4,340
8-9pm	---	---	---	---	---	4,622	---	---	---	---	---	3,584
9-10pm	---	---	---	---	---	3,933	---	---	---	---	---	3,084
10-11pm	---	---	---	---	---	3,415	---	---	---	---	---	2,667
11-12pm	---	---	---	---	---	2,609	---	---	---	---	---	2,096
<b>Totals</b>	---	---	---	---	---	<b>92,017</b>	---	---	---	---	---	<b>91,073</b>
7-10am	11,128	275	295	1,544	591	13,833	14,318	206	321	1,057	738	16,640
10am-1pm	10,943	64	277	958	509	12,751	12,931	95	205	674	430	14,335
1-4pm	15,469	116	1	601	400	16,587	13,296	243	197	719	254	14,709
4-7pm	17,101	142	0	543	507	18,293	12,660	167	323	516	298	13,964
7am-7pm	54,641	597	573	3,646	2,007	61,464	53,205	711	1,046	2,966	1,720	59,648
6-10am	---	---	---	---	---	17,011	---	---	---	---	---	22,266
3-7pm	22,869	183	0	697	604	24,353	16,992	230	362	684	346	18,614
6am-7pm	---	---	---	---	---	64,642	---	---	---	---	---	65,274

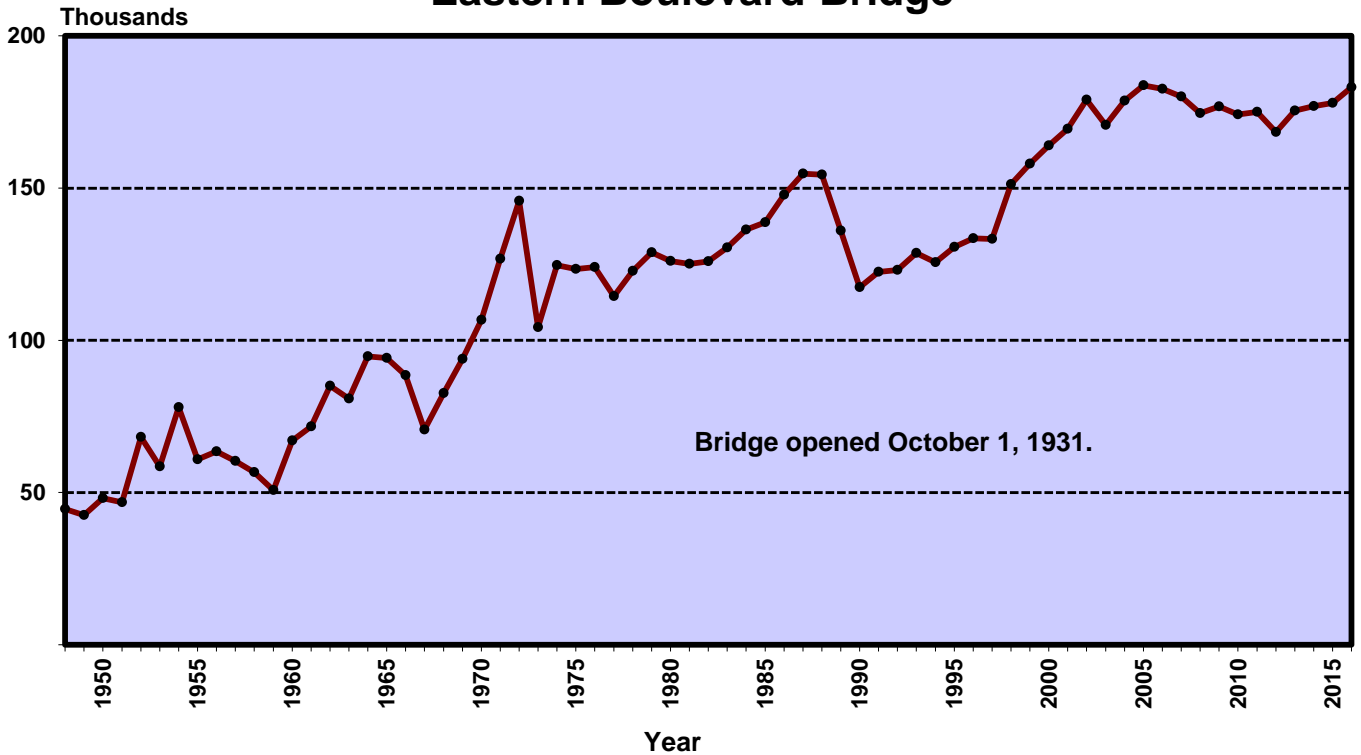
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Eastern Boulevard Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Eastern Boulevard Bridge



# Hourly Vehicular Volumes Hutchinson River Parkway Bridge - 2016

## Northbound

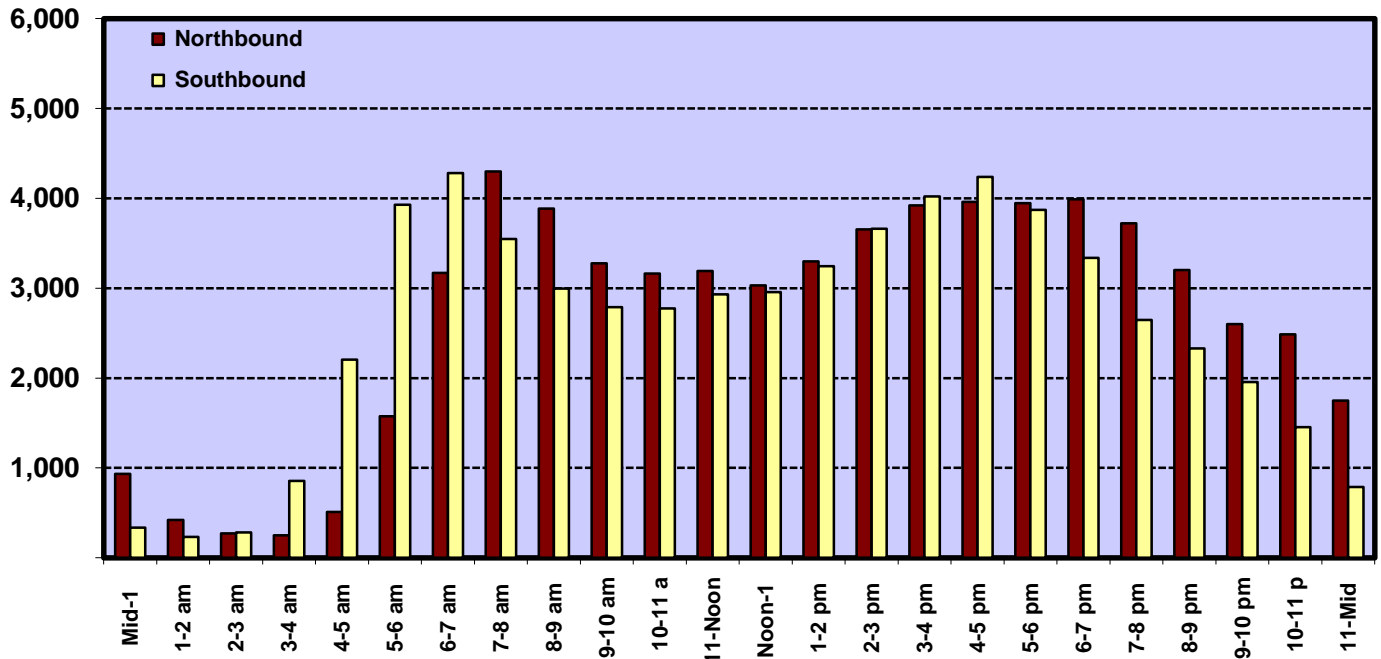
## Southbound

FHWA Classes	Northbound							Southbound							2-way Grand Totals
	Autos, Motorcycles				Commercial Vans, Panel Trucks, Pickups,			Autos, Motorcycles				Commercial Vans, Panel Trucks, Pickups,			
	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		
12-1am	885	40	8	0	0	0	933	319	9	5	0	1	0	334	
1-2am	385	33	2	0	2	0	422	221	8	2	0	1	0	232	
2-3am	252	15	2	0	1	0	270	255	15	7	0	3	0	280	
3-4am	240	6	4	0	1	0	251	782	22	47	0	4	0	855	
4-5am	482	18	10	0	1	0	511	2,048	72	81	4	0	0	2,205	
5-6am	1,414	116	32	8	2	2	1,574	3,470	138	149	159	13	0	3,929	
6-7am	2,971	112	74	7	6	0	3,170	3,789	166	184	142	1	0	4,282	
7-8am	3,971	164	100	60	3	0	4,298	3,343	99	94	10	0	0	3,546	
8-9am	3,586	159	96	45	1	0	3,887	2,807	73	91	23	1	0	2,995	
9-10am	3,028	140	84	18	6	0	3,276	2,616	80	70	22	2	0	2,790	
10-11am	2,904	139	108	11	1	0	3,163	2,590	77	96	9	2	0	2,774	
11-12am	2,853	144	171	10	12	1	3,191	2,724	90	105	5	7	0	2,931	
12-1pm	2,765	124	128	9	4	0	3,030	2,757	91	97	6	4	1	2,956	
1-2pm	3,039	121	108	29	3	0	3,300	3,032	85	103	23	2	1	3,246	
2-3pm	3,355	146	136	16	1	0	3,654	3,375	86	135	56	7	1	3,660	
3-4pm	3,622	161	123	13	3	0	3,922	3,649	132	138	86	15	3	4,023	
4-5pm	3,602	156	134	63	6	0	3,961	3,980	127	105	25	1	0	4,238	
5-6pm	3,657	151	82	55	3	0	3,948	3,685	94	90	3	1	0	3,873	
6-7pm	3,718	151	88	30	3	0	3,990	3,200	79	53	3	2	0	3,337	
7-8pm	3,461	182	68	10	1	0	3,722	2,518	63	59	1	1	3	2,645	
8-9pm	2,934	180	74	5	1	8	3,202	2,224	60	37	2	1	4	2,328	
9-10pm	2,340	202	57	1	2	0	2,602	1,855	64	33	0	3	2	1,957	
10-11pm	2,318	111	50	0	1	5	2,485	1,396	35	20	0	1	3	1,455	
11-12pm	1,646	56	38	1	3	6	1,750	748	27	10	1	2	0	788	
Totals	59,428	2,827	1,777	391	67	22	64,512	57,383	1,792	1,811	580	75	18	61,659	
7-10am	10,585	463	280	123	10	0	11,461	8,766	252	255	55	3	0	9,331	
10am-1pm	8,522	407	407	30	17	1	9,384	8,071	258	298	20	13	1	8,661	
1-4pm	10,016	428	367	58	7	0	10,876	10,056	303	376	165	24	5	10,929	
4-7pm	10,977	458	304	148	12	0	11,899	10,865	300	248	31	4	0	11,448	
7am-7pm	40,100	1,756	1,358	359	46	1	43,620	37,758	1,113	1,177	271	44	6	40,369	
6-10am	13,556	575	354	130	16	0	14,631	12,555	418	439	197	4	0	13,613	
3-7pm	14,599	619	427	161	15	0	15,821	14,514	432	386	117	19	3	15,471	
6am-7pm	43,071	1,868	1,432	366	52	1	46,790	41,547	1,279	1,361	413	45	6	44,651	

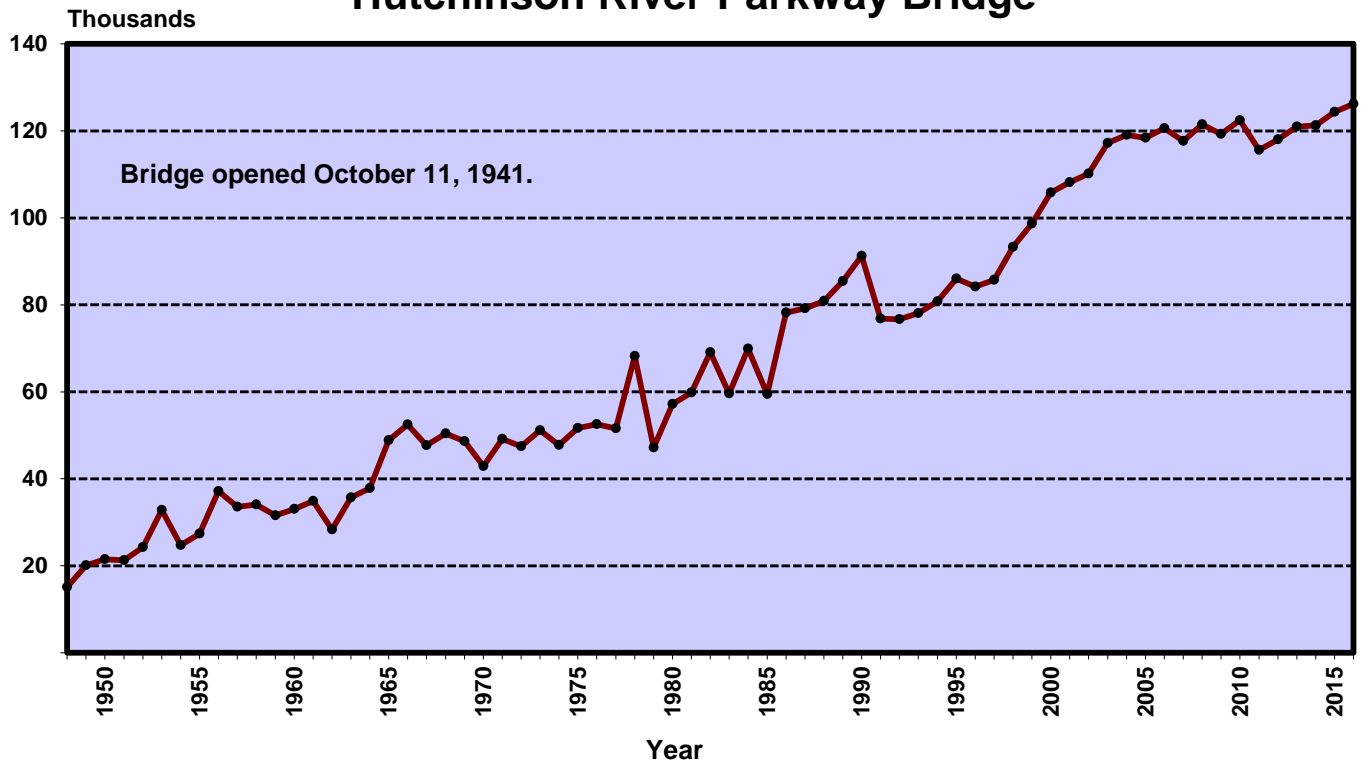
Based on November 2015 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Hutchinson River Parkway Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Hutchinson River Parkway Bridge



# Hourly Vehicular Volumes Pelham Bridge - 2016

## Northbound

## Southbound

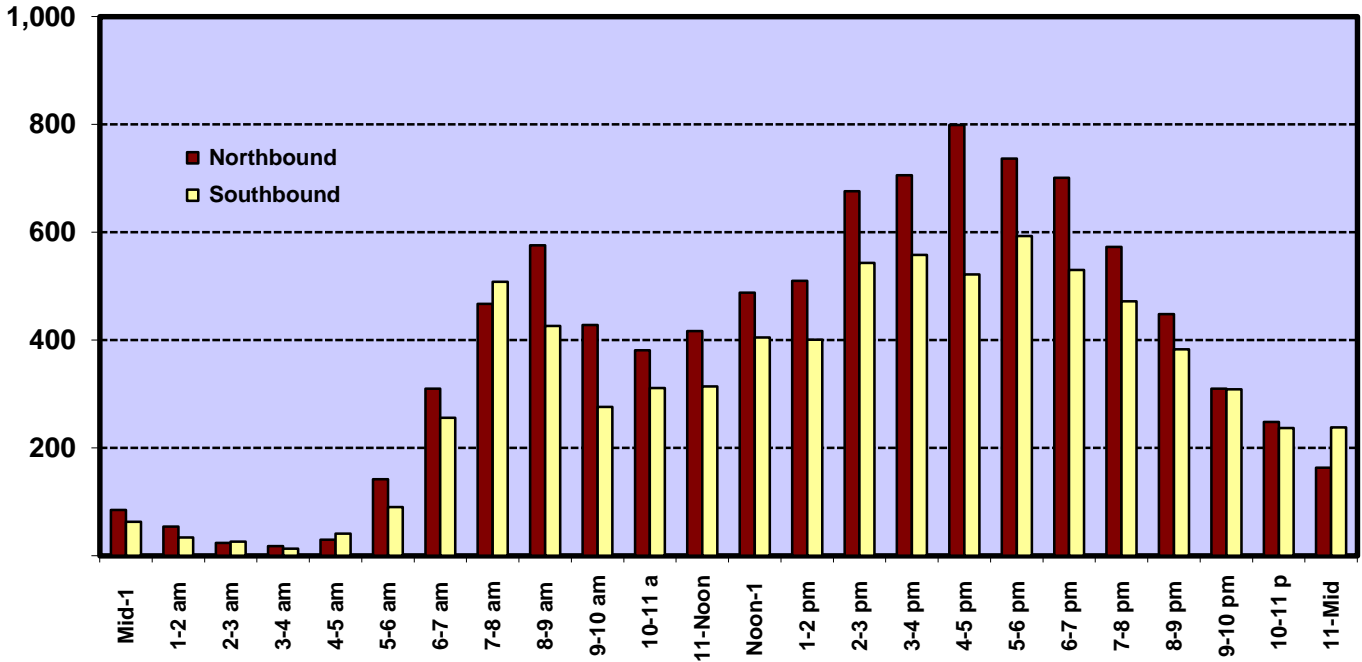
FHWA Classes	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles							2-way Grand Totals
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles			
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13			
12-1am	67	9	6	0	3	0	52	5	4	1	1	0	63		
1-2am	42	8	4	0	0	0	29	1	4	0	0	0	34		
2-3am	16	0	3	0	5	0	20	1	0	0	5	0	26		
3-4am	13	2	1	0	2	0	10	0	1	0	2	0	13		
4-5am	23	1	1	1	4	0	36	1	2	1	1	0	41		
5-6am	124	5	5	3	5	0	82	1	4	1	2	0	90		
6-7am	266	3	9	27	4	1	220	3	11	16	6	0	256		
7-8am	410	4	26	11	16	0	444	5	27	17	15	0	508		
8-9am	478	5	49	13	30	1	373	8	19	9	17	0	426		
9-10am	333	6	53	8	28	0	224	6	27	5	13	1	276		
10-11am	315	10	25	7	24	0	254	10	31	5	11	0	311		
11-12am	362	4	29	4	18	0	273	3	19	5	14	0	314		
12-1pm	423	9	38	5	13	0	340	5	29	9	22	0	405		
1-2pm	436	8	38	9	19	0	347	11	25	6	12	0	401		
2-3pm	593	10	31	10	30	2	491	9	16	8	18	1	543		
3-4pm	624	9	35	24	13	1	484	10	24	24	14	2	558		
4-5pm	749	11	26	9	4	0	483	10	17	11	1	0	522		
5-6pm	688	15	14	10	10	0	549	10	15	11	8	0	593		
6-7pm	648	14	25	12	1	1	492	7	12	13	5	1	530		
7-8pm	546	9	9	6	3	0	439	8	12	8	5	0	472		
8-9pm	418	15	8	5	2	0	359	10	7	6	1	0	383		
9-10pm	292	8	7	3	0	0	288	4	13	3	1	0	309		
10-11pm	218	9	11	5	5	0	229	2	4	2	0	0	237		
11-12pm	149	6	5	3	0	0	231	4	1	2	0	0	238		
Totals	8,233	180	458	175	239	6	6,749	134	324	163	174	5	7,549		
7-10am	1,221	15	128	32	74	1	1,041	19	73	31	45	1	1,210		
10am-1pm	1,100	23	92	16	55	0	867	18	79	19	47	0	1,030		
1-4pm	1,653	27	104	43	62	3	1,322	30	65	38	44	3	1,502		
4-7pm	2,085	40	65	31	15	1	1,524	27	44	35	14	1	1,645		
7am-7pm	6,059	105	389	122	206	5	4,754	94	261	123	150	5	5,387		
6-10am	1,487	18	137	59	78	2	1,251	22	84	47	51	1	1,466		
3-7pm	2,709	49	100	55	28	2	2,008	37	68	59	28	3	2,203		
6am-7pm	6,325	108	398	149	210	6	4,974	97	272	139	156	5	5,643		

Based on November 2013 Classification Survey Data.

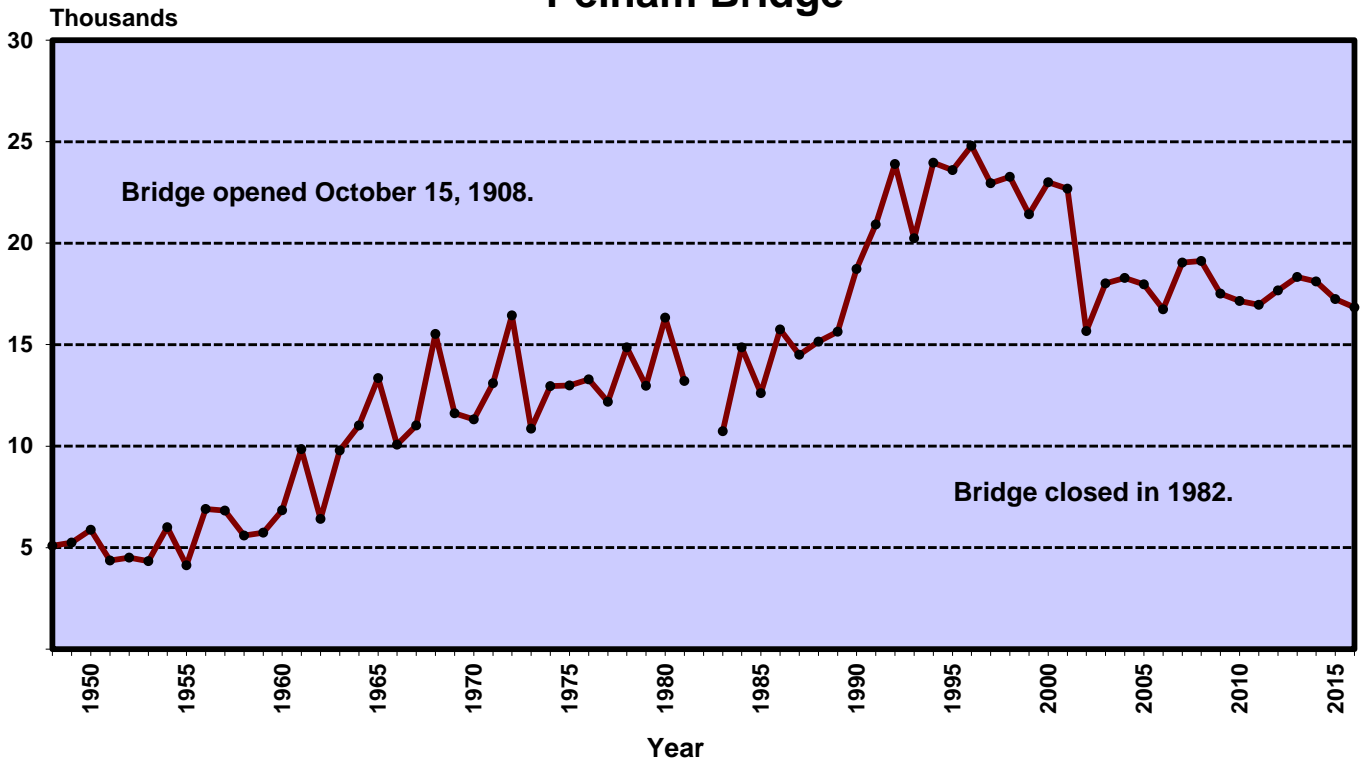
\*\* Peak Volumes



## Hourly Vehicular Volumes Pelham Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Pelham Bridge



# Hourly Vehicular Volumes

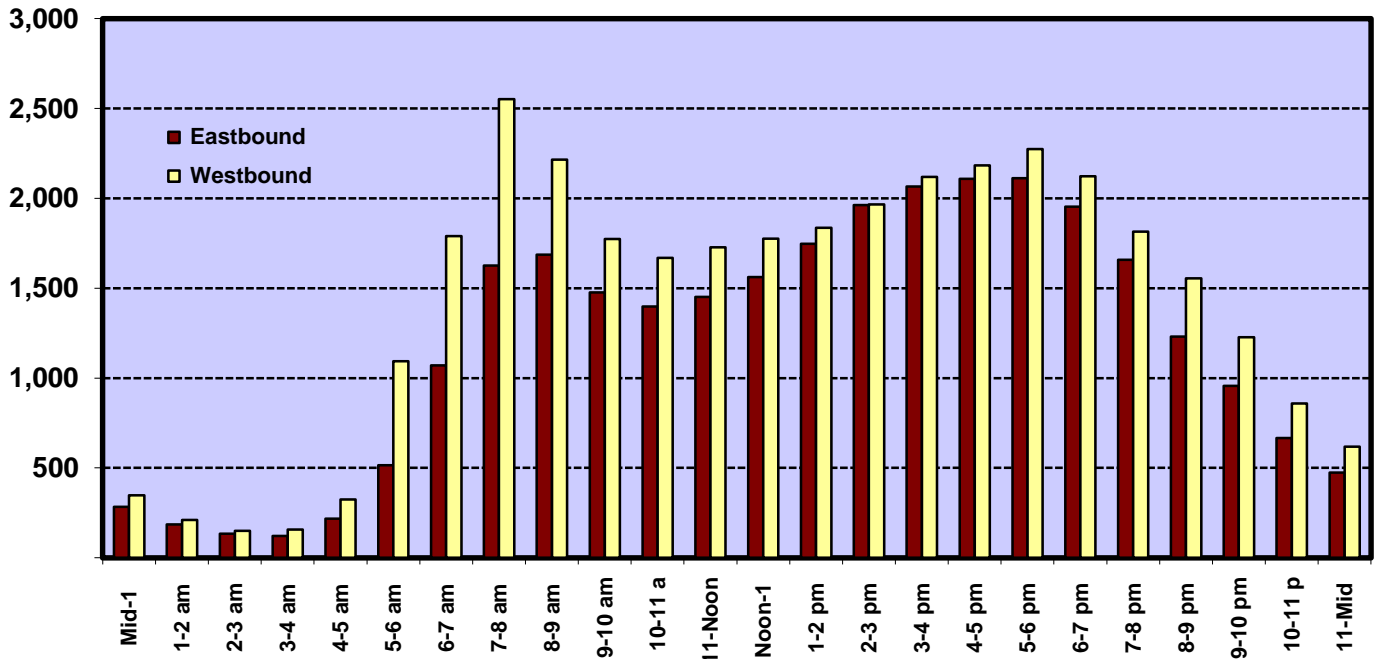
## Unionport Bridge - 2016

	<b>Eastbound</b>					<b>Westbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	284	---	---	---	---	---	347
1-2am	---	---	---	---	---	185	---	---	---	---	---	210
2-3am	---	---	---	---	---	133	---	---	---	---	---	150
3-4am	---	---	---	---	---	122	---	---	---	---	---	156
4-5am	---	---	---	---	---	218	---	---	---	---	---	325
5-6am	---	---	---	---	---	514	---	---	---	---	---	1,093
6-7am	---	---	---	---	---	1,070	---	---	---	---	---	1,790
7-8am	1,411	37	21	118	39	1,626	2,382	46	3	50	71	2,552
8-9am	1,424	34	44	121	64	1,687	2,066	26	0	72	52	2,216
9-10am	1,184	32	58	125	78	1,477	1,640	22	0	48	63	1,773
10-11am	1,234	18	20	80	46	1,398	1,570	22	0	19	57	1,668
11-12am	1,139	15	59	161	78	1,452	1,496	18	0	97	116	1,727
12-1pm	1,390	14	30	88	40	1,562	1,690	12	0	39	34	1,775
1-2pm	1,426	12	47	170	92	1,747	1,583	24	2	114	114	1,837
2-3pm	1,680	19	50	152	62	1,963	1,728	28	0	104	107	1,967
3-4pm	1,930	15	18	65	38	2,066	1,954	49	0	47	69	2,119
4-5pm	1,835	18	38	147	71	2,109	1,935	31	0	73	145	2,184
5-6pm	1,865	24	48	136	40	2,113	2,082	33	0	73	87	2,275
6-7pm	1,734	34	47	103	36	1,954	2,001	22	0	37	63	2,123
7-8pm	---	---	---	---	---	1,658	---	---	---	---	---	1,815
8-9pm	---	---	---	---	---	1,230	---	---	---	---	---	1,555
9-10pm	---	---	---	---	---	956	---	---	---	---	---	1,227
10-11pm	---	---	---	---	---	666	---	---	---	---	---	859
11-12pm	---	---	---	---	---	473	---	---	---	---	---	618
<b>Totals</b>	---	---	---	---	---	<b>28,663</b>	---	---	---	---	---	<b>34,361</b>
7-10am	4,019	103	123	364	181	4,790	6,088	94	3	170	186	6,541
10am-1pm	3,763	47	109	329	164	4,412	4,756	52	0	155	207	5,170
1-4pm	5,036	46	115	387	192	5,776	5,265	101	2	265	290	5,923
4-7pm	5,434	76	133	386	147	6,176	6,018	86	0	183	295	6,582
7am-7pm	18,252	272	480	1,466	684	21,154	22,127	333	5	773	978	24,216
6-10am	---	---	---	---	---	5,860	---	---	---	---	---	8,331
3-7pm	7,364	91	151	451	185	8,242	7,972	135	0	230	364	8,701
6am-7pm	---	---	---	---	---	22,224	---	---	---	---	---	26,006

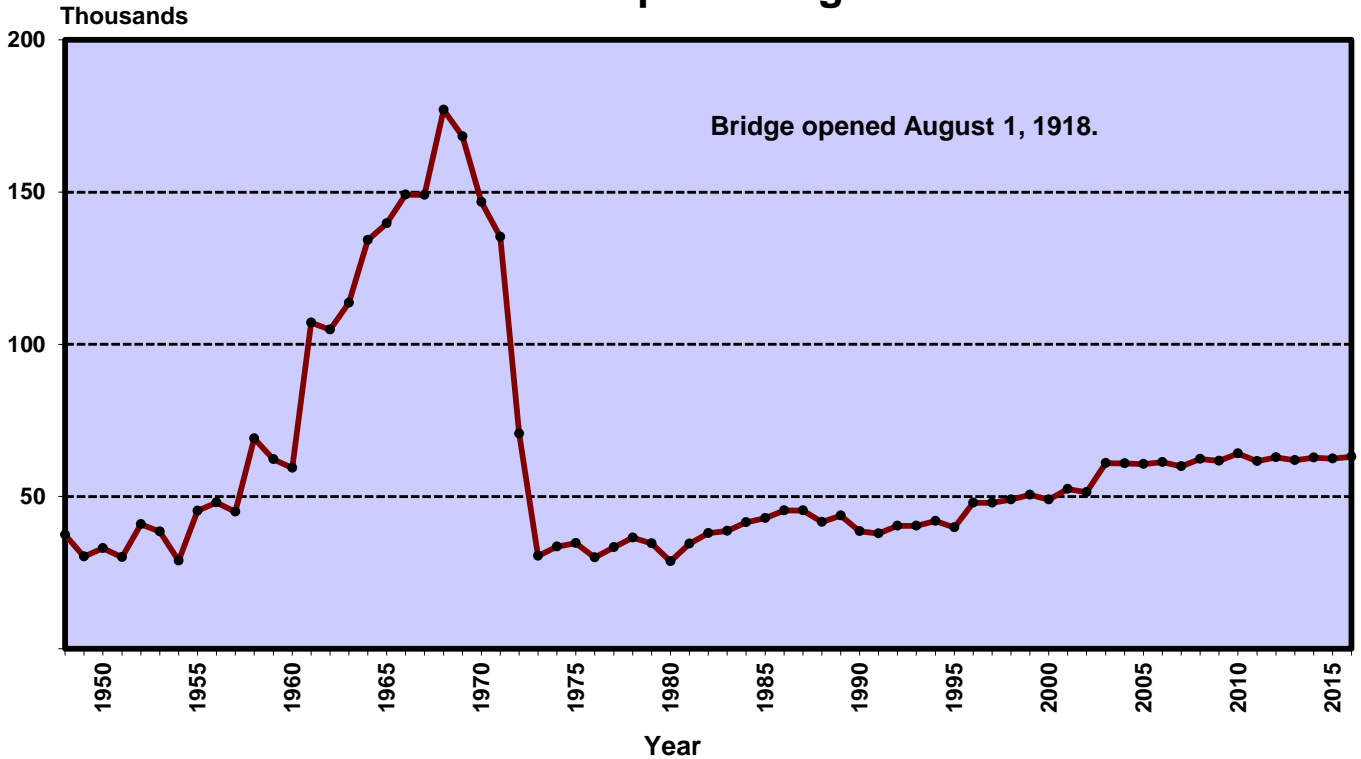
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Unionport Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Unionport Bridge



# Hourly Vehicular Volumes

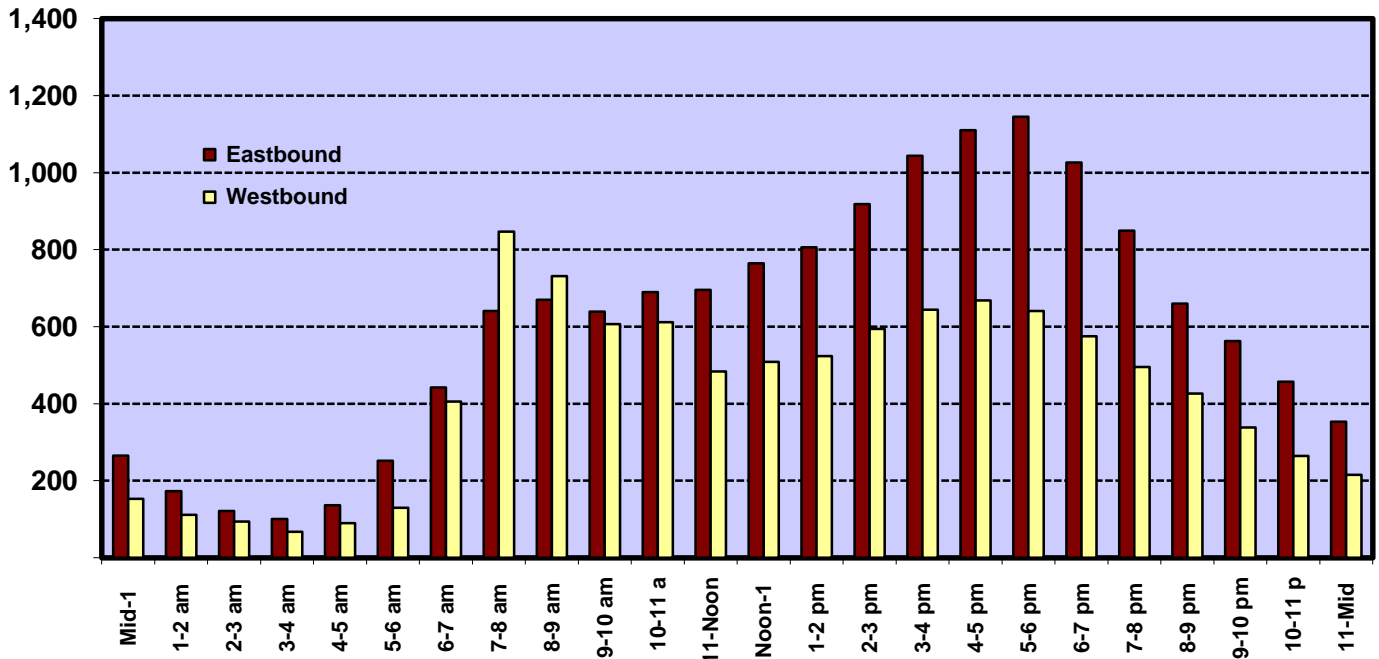
## Westchester Avenue Bridge - 2016

	<b>Eastbound</b>						<b>Westbound</b>						<b>2-Way Totals</b>
	Commuter			Commercial			Commuter			Commercial			
	Autos	Buses	Vans	Trucks	Vans	Totals	Autos	Buses	Vans	Trucks	Vans	Totals	
12-1am	---	---	---	---	---	265	---	---	---	---	---	153	418
1-2am	---	---	---	---	---	173	---	---	---	---	---	111	284
2-3am	---	---	---	---	---	121	---	---	---	---	---	94	215
3-4am	---	---	---	---	---	101	---	---	---	---	---	67	168
4-5am	---	---	---	---	---	136	---	---	---	---	---	90	226
5-6am	---	---	---	---	---	252	---	---	---	---	---	130	382
6-7am	---	---	---	---	---	442	---	---	---	---	---	406	848
7-8am	547	33	16	24	21	641	739	34	1	20	53	847	1,488
8-9am	570	48	7	23	22	670	635	34	1	25	36	731	1,401
9-10am	570	28	12	12	17	639	519	14	0	24	50	607	1,246
10-11am	627	33	5	10	15	690	571	18	0	13	10	612	1,302
11-12am	588	27	8	33	40	696	392	14	0	31	47	484	1,180
12-1pm	718	22	2	8	15	765	448	17	0	22	22	509	1,274
1-2pm	722	43	9	16	16	806	476	17	0	9	22	524	1,330
2-3pm	771	56	7	34	50	918	512	26	0	18	38	594	1,512
3-4pm	942	72	2	16	12	1,044	596	22	0	12	14	644	1,688
4-5pm	1,002	41	24	23	20	1,110	586	27	0	19	36	668	1,778
5-6pm	1,050	24	13	22	36	1,145	551	16	0	17	57	641	1,786
6-7pm	942	31	2	9	42	1,026	512	8	0	2	53	575	1,601
7-8pm	---	---	---	---	---	849	---	---	---	---	---	495	1,344
8-9pm	---	---	---	---	---	660	---	---	---	---	---	426	1,086
9-10pm	---	---	---	---	---	563	---	---	---	---	---	338	901
10-11pm	---	---	---	---	---	457	---	---	---	---	---	264	721
11-12pm	---	---	---	---	---	353	---	---	---	---	---	215	568
Totals	---	---	---	---	---	14,522	---	---	---	---	---	10,225	24,747
7-10am	1,687	109	35	59	60	1,950	1,893	82	2	69	139	2,185	4,135
10am-1pm	1,933	82	15	51	70	2,151	1,411	49	0	66	79	1,605	3,756
1-4pm	2,435	171	18	66	78	2,768	1,584	65	0	39	74	1,762	4,530
4-7pm	2,994	96	39	54	98	3,281	1,649	51	0	38	146	1,884	5,165
7am-7pm	9,049	458	107	230	306	10,150	6,537	247	2	212	438	7,436	17,586
6-10am	---	---	---	---	---	2,392	---	---	---	---	---	2,591	4,983
3-7pm	3,936	168	41	70	110	4,325	2,245	73	0	50	160	2,528	6,853
6am-7pm	---	---	---	---	---	10,592	---	---	---	---	---	7,842	18,434

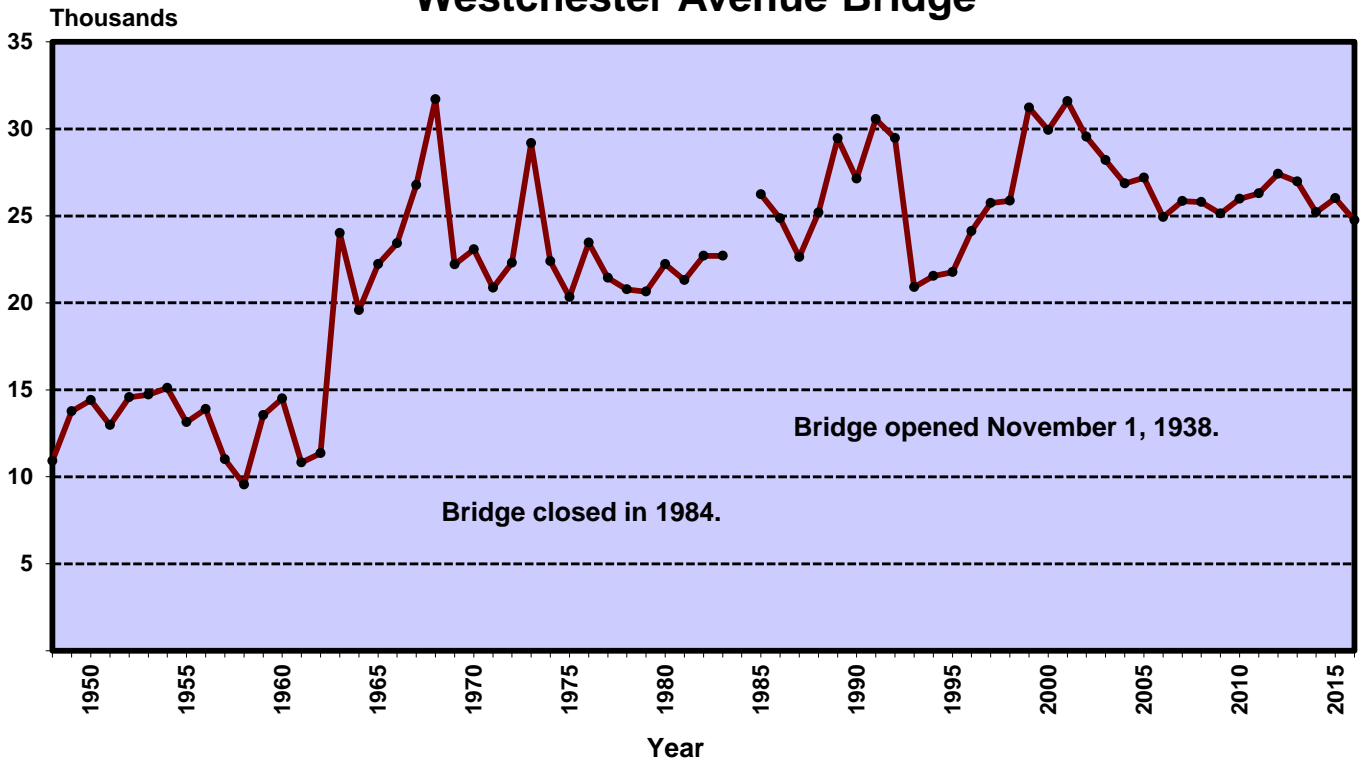
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Westchester Avenue Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Westchester Avenue Bridge





# Brooklyn Bridges



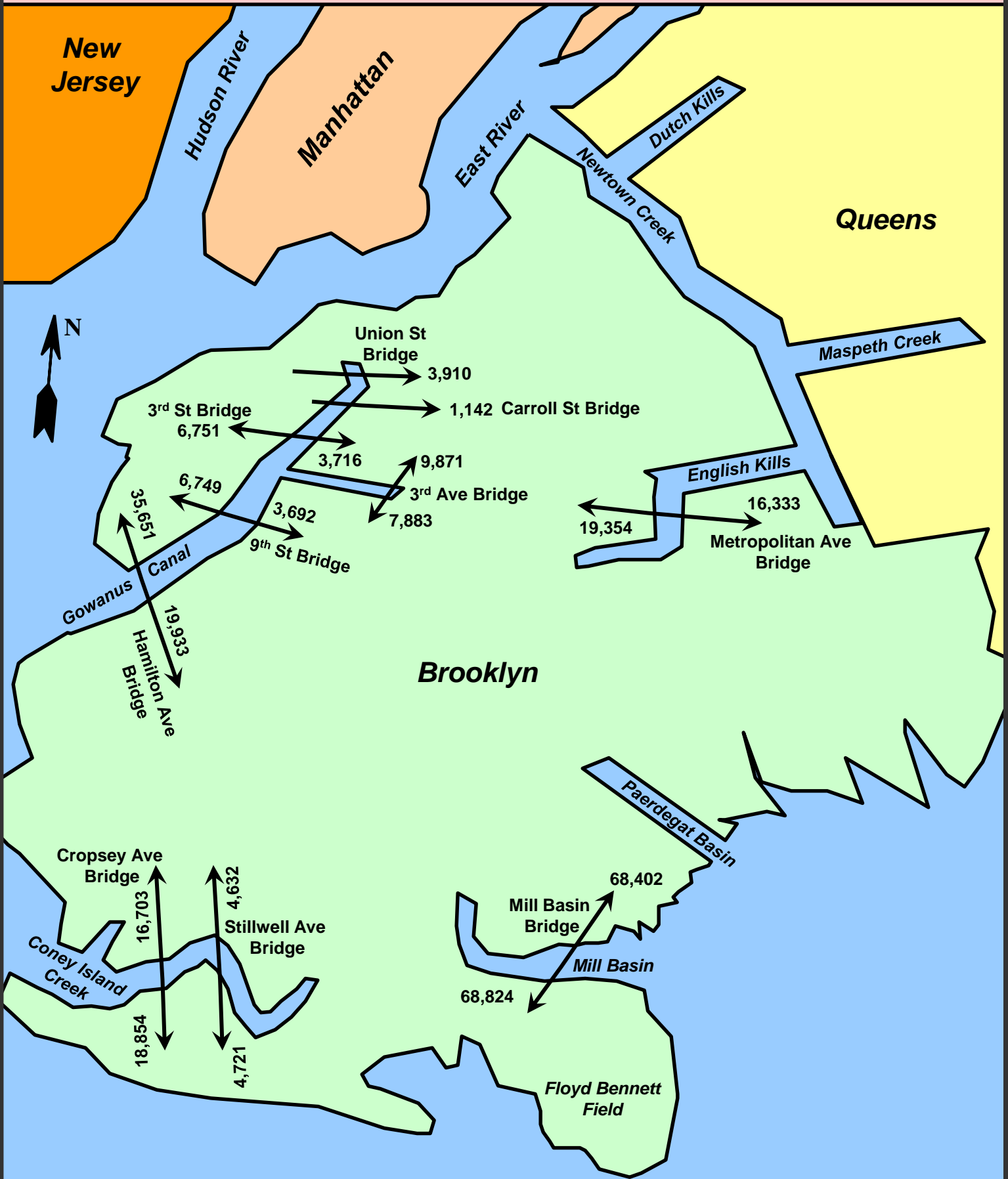
9<sup>th</sup> Street Bridge





# BROOKLYN BRIDGES

## 2016 Daily Volumes



**Brooklyn Bridges**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<b>Year</b>	<b>Carroll Street</b>	<b>Cropsey Avenue</b>	<b>Hamilton Avenue</b>	<b>Metropolitan Avenue</b>	<b>Mill Basin</b>
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	2,574	15,832	29,676	11,637	57,515
1957	1,917	11,836	22,862	12,293	63,310
1958	1,805	17,462	31,543	25,777	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	42,869	31,457	105,979
1969	1,965	22,292	42,400	28,604	111,694
1970	2,671	20,257	38,078	29,977	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	Closed	21,462	36,084	29,717	109,782
1981	1,112	21,504	35,510	30,190	106,378
1982	1,467	21,005	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	1,387	28,230	56,227	37,510	130,737
1993	1,125	27,878	56,655	36,538	130,805
1994	1,132	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	39,944	142,105
2003	1,150	35,137	59,108	40,284	141,212
2004	1,099	35,104	60,240	38,529	145,760
2005	1,101	36,132	59,885	35,113	143,158
2006	1,068	35,398	55,526	38,130	143,917
2007	1,116	36,395	54,632	37,332	148,802
2008	1,103	35,881	52,731	38,587	144,010
2009	956	36,379	55,577	37,557	144,536
2010	994	37,411	55,252	38,279	140,800
2011	992	31,643	54,663	38,613	139,835
2012	1,136	34,998	55,797	38,262	136,875
2013	1,072	34,062	52,321	37,437	148,084
2014	1,106	33,373	54,250	39,620	141,150
2015	1,238	33,433	55,266	38,191	141,303
2016	1,142	35,557	55,584	35,687	137,226

**Brooklyn Bridges (cont'd)**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<b>Year</b>	<b>Ninth Street</b>	<b>Stillwell Avenue</b>	<b>Third Avenue</b>	<b>Third Street</b>	<b>Union Street</b>	<b>Totals</b>
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	8,860	248,667
1969	9,363	7,070	13,798	5,527	8,402	251,115
1970	8,855	7,091	14,413	5,650	8,064	238,020
1971	9,952	7,344	13,473	5,991	8,786	241,116
1972	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	Closed	18,787	Closed	9,418	274,583
1985	9,438	Closed	17,304	Closed	9,229	275,566
1986	12,263	Closed	15,235	2,426	11,374	271,818
1987	8,762	Closed	20,029	5,626	5,971	271,080
1988	11,005	Closed	20,971	7,189	6,535	281,731
1989	9,571	Closed	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	9,666	9,186	21,745	7,978	4,307	302,135
1995	Closed	9,889	22,639	9,556	4,802	300,832
1996	Closed	9,044	21,664	9,048	4,562	315,395
1997	Closed	9,602	21,129	10,400	4,573	318,101
1998	Closed	9,243	20,597	11,378	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
2003	9,406	10,138	20,517	10,010	4,843	331,805
2004	10,216	10,436	20,292	9,846	4,399	335,921
2005	11,393	10,166	20,046	10,108	4,421	331,523
2006	11,143	11,158	18,403	9,487	4,390	328,620
2007	11,903	10,085	19,410	9,937	4,343	333,955
2008	13,362	10,197	17,901	9,482	4,390	327,644
2009	13,251	10,302	17,587	10,028	4,441	330,614
2010	12,567	9,884	18,088	10,390	4,319	327,984
2011	12,404	7,548	17,895	9,776	4,147	317,516
2012	13,321	8,827	17,432	10,579	5,032	322,259
2013	12,136	8,519	17,630	10,611	5,036	326,908
2014	11,020	8,569	18,227	10,299	4,777	322,391
2015	11,549	8,917	18,179	11,160	4,358	323,594
2016	10,441	9,353	17,754	10,467	3,910	317,121

# Hourly Vehicular Volumes

## Carroll Street Bridge - 2016

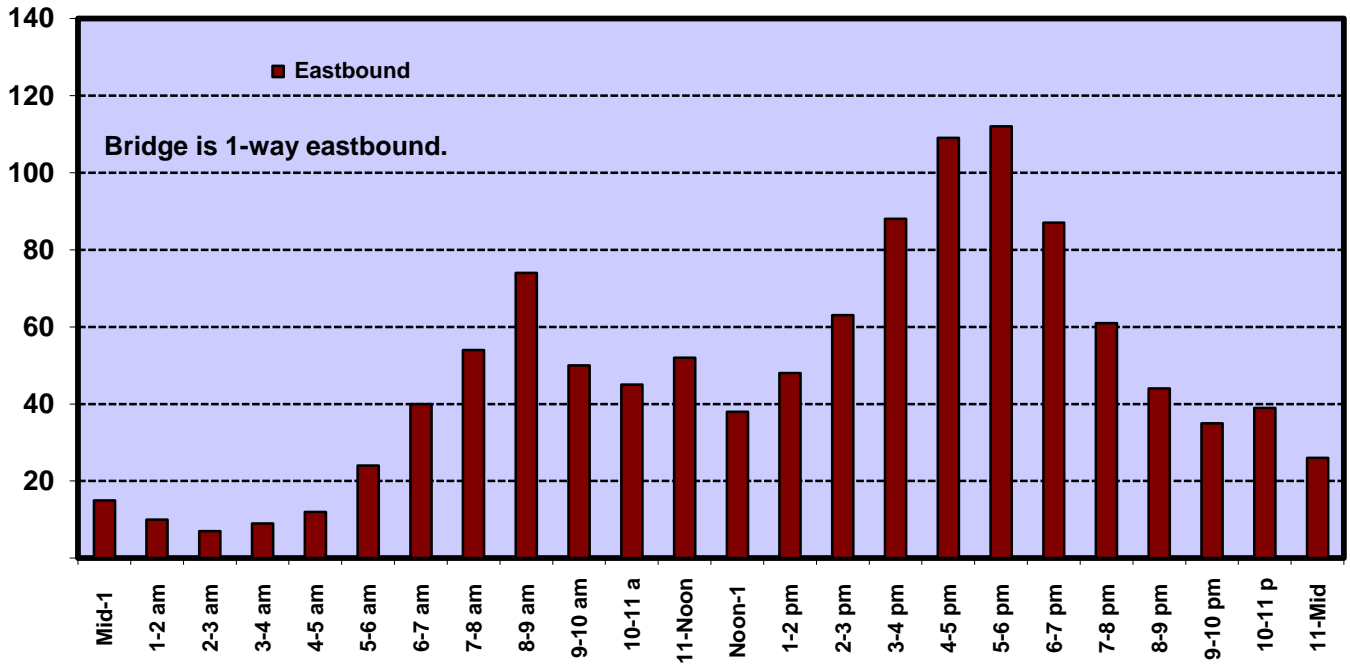
	<b>Eastbound</b>					<b>Westbound</b>					<b>Grand Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	15	---	---	---	---	---	15
1-2am	---	---	---	---	---	10	---	---	---	---	---	10
2-3am	---	---	---	---	---	7	---	---	---	---	---	7
3-4am	---	---	---	---	---	9	---	---	---	---	---	9
4-5am	---	---	---	---	---	12	---	---	---	---	---	12
5-6am	---	---	---	---	---	24	---	---	---	---	---	24
6-7am	---	---	---	---	---	40	---	---	---	---	---	40
7-8am	20	0	10	14	10	54	---	---	---	---	---	54
8-9am	23	2	7	22	20	74	---	---	---	---	---	74
9-10am	18	0	6	19	7	50	---	---	---	---	---	50
10-11am	22	0	0	13	10	45	---	---	---	---	---	45
11-12am	18	0	6	15	13	52	---	---	---	---	---	52
12-1pm	8	0	7	11	12	38	---	---	---	---	---	38
1-2pm	14	0	7	8	19	48	---	---	---	---	---	48
2-3pm	1	0	13	32	17	63	---	---	---	---	---	63
3-4pm	72	0	2	8	6	88	---	---	---	---	---	88
4-5pm	83	0	3	9	14	109	---	---	---	---	---	109
5-6pm	89	0	9	5	9	112	---	---	---	---	---	112
6-7pm	75	0	5	2	5	87	---	---	---	---	---	87
7-8pm	---	---	---	---	---	61	---	---	---	---	---	61
8-9pm	---	---	---	---	---	44	---	---	---	---	---	44
9-10pm	---	---	---	---	---	35	---	---	---	---	---	35
10-11pm	---	---	---	---	---	39	---	---	---	---	---	39
11-12pm	---	---	---	---	---	26	---	---	---	---	---	26
<b>Totals</b>	---	---	---	---	---	<b>1,142</b>	---	---	---	---	---	<b>1,142</b>
7-10am	61	2	23	55	37	178	---	---	---	---	---	178
10am-1pm	48	0	13	39	35	135	---	---	---	---	---	135
1-4pm	87	0	22	48	42	199	---	---	---	---	---	199
4-7pm	247	0	17	16	28	308	---	---	---	---	---	308
7am-7pm	443	2	75	158	142	820	---	---	---	---	---	820
6-10am	---	---	---	---	---	---	---	---	---	---	---	---
3-7pm	319	0	19	24	34	396	---	---	---	---	---	396
6am-7pm	---	---	---	---	---	860	---	---	---	---	---	860

*Bridge is 1-way eastbound.*

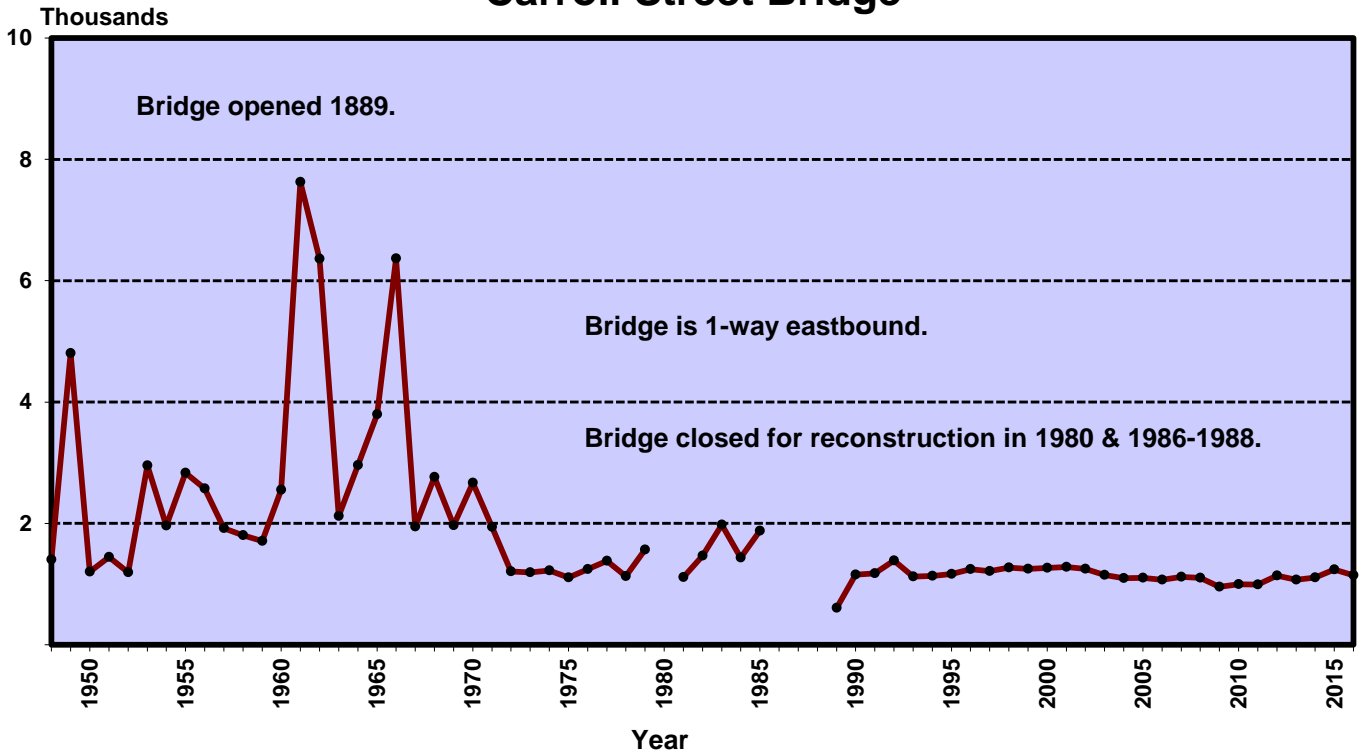
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Carroll Street Bridge ~ 2016



## Average Daily Traffic Volumes Carroll Street Bridge



# Hourly Vehicular Volumes

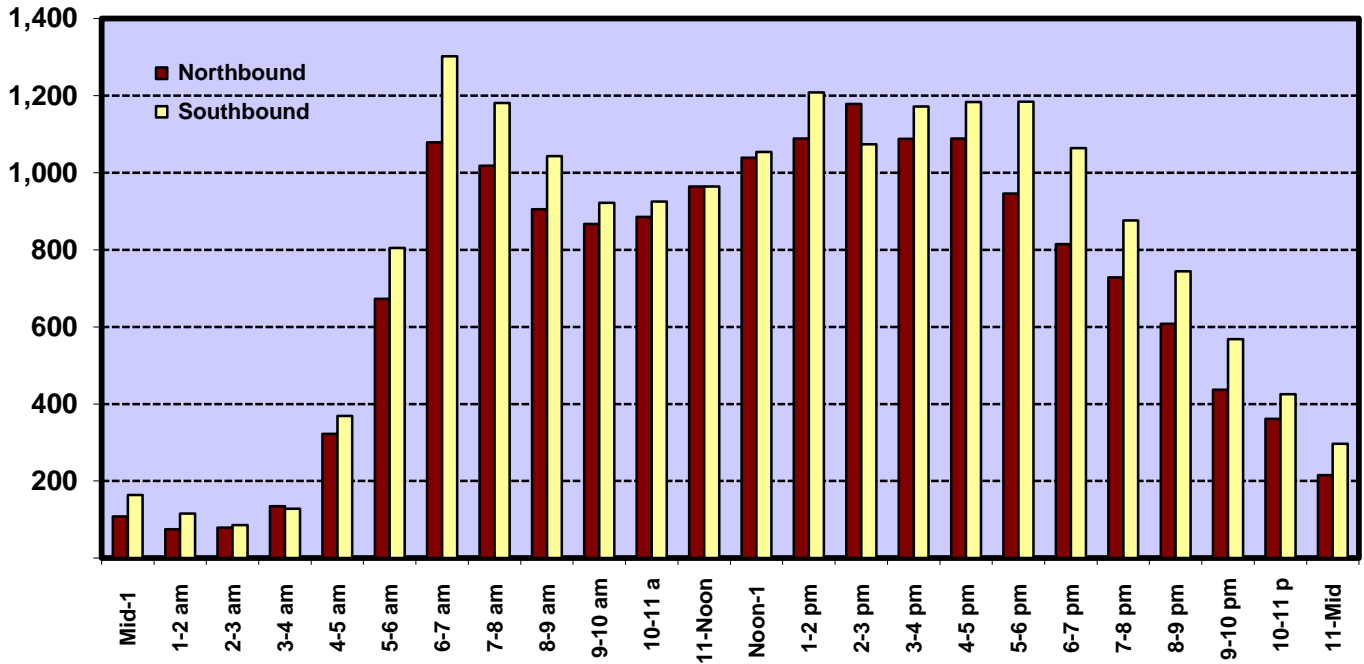
## Cropsey Avenue Bridge - 2016

	Northbound					Southbound					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	108	---	---	---	---	---	164
1-2am	---	---	---	---	---	75	---	---	---	---	---	116
2-3am	---	---	---	---	---	79	---	---	---	---	---	86
3-4am	---	---	---	---	---	135	---	---	---	---	---	128
4-5am	---	---	---	---	---	322	---	---	---	---	---	369
5-6am	---	---	---	---	---	673	---	---	---	---	---	805
6-7am	---	---	---	---	---	1,079	---	---	---	---	---	1,302 **
7-8am	821	72	2	43	80	1,018	979	105	0	57	40	1,181
8-9am	756	49	3	46	51	905	885	72	2	49	35	1,043
9-10am	692	46	1	46	82	867	714	85	3	51	69	922
10-11am	776	43	0	27	39	885	819	27	0	37	42	925
11-12am	799	27	0	73	65	964	769	28	1	80	86	964
12-1pm	913	49	0	34	43	1,039	965	34	0	30	25	1,054
1-2pm	936	70	0	35	48	1,089	1,090	42	1	28	47	1,208
2-3pm	930	90	3	71	84	1,178 **	889	51	0	60	74	1,074
3-4pm	931	88	1	30	38	1,088	1,008	80	2	26	56	1,172
4-5pm	923	42	0	55	69	1,089	1,005	57	0	27	94	1,183
5-6pm	821	11	0	52	62	946	1,003	21	9	47	104	1,184
6-7pm	728	18	0	30	39	815	970	8	0	15	71	1,064
7-8pm	---	---	---	---	---	728	---	---	---	---	---	876
8-9pm	---	---	---	---	---	608	---	---	---	---	---	744
9-10pm	---	---	---	---	---	437	---	---	---	---	---	568
10-11pm	---	---	---	---	---	361	---	---	---	---	---	425
11-12pm	---	---	---	---	---	215	---	---	---	---	---	297
Totals	---	---	---	---	---	16,703	---	---	---	---	---	18,854
7-10am	2,269	167	6	135	213	2,790	2,578	262	5	157	144	3,146
10am-1pm	2,488	119	0	134	147	2,888	2,553	89	1	147	153	2,943
1-4pm	2,797	248	4	136	170	3,355	2,987	173	3	114	177	3,454
4-7pm	2,472	71	0	137	170	2,850	2,978	86	9	89	269	3,431
7am-7pm	10,026	605	10	542	700	11,883	11,096	610	18	507	743	12,974
6-10am	---	---	---	---	---	3,869	---	---	---	---	---	4,448
3-7pm	3,403	159	1	167	208	3,938	3,986	166	11	115	325	4,603
6am-7pm	---	---	---	---	---	12,962	---	---	---	---	---	14,276

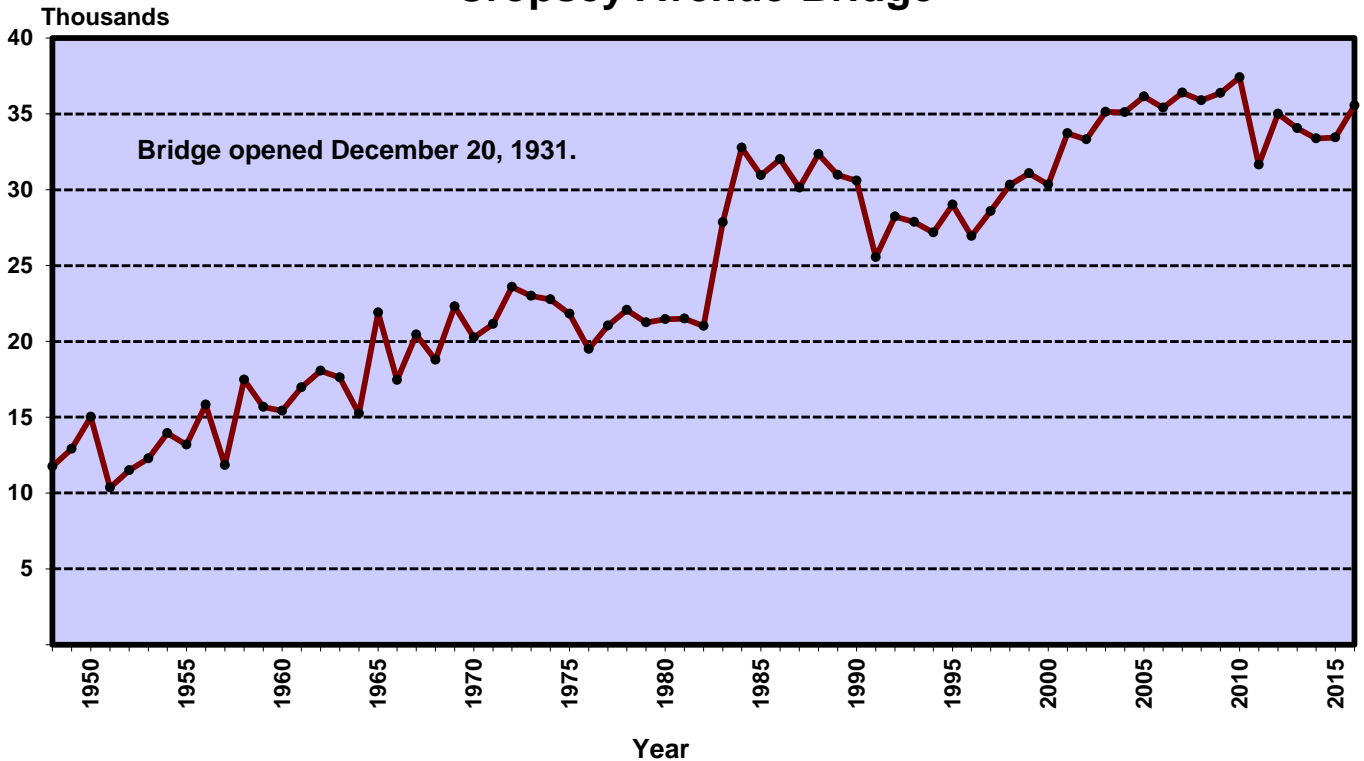
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Cropsey Avenue Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Cropsey Avenue Bridge



# Hourly Vehicular Volumes

## Hamilton Avenue Bridge - 2016

### Northbound

### Southbound

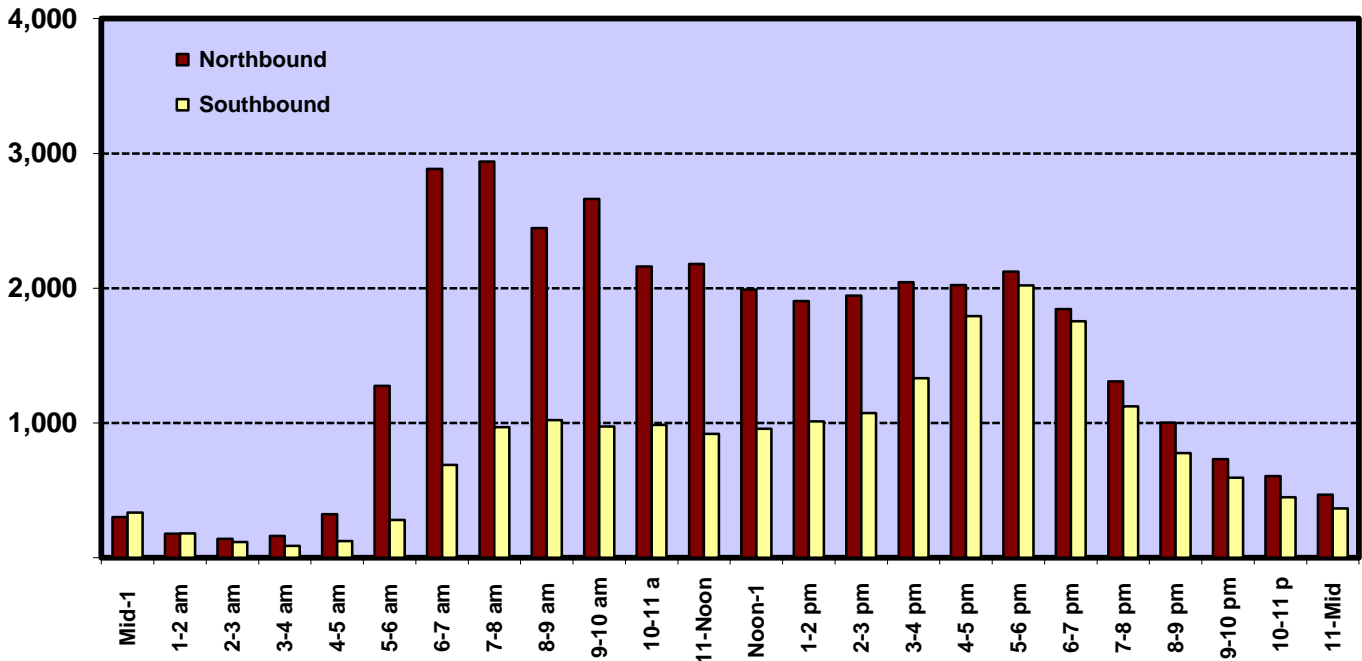
FHWA Classes ▲	Northbound							Southbound							Grand Totals
	Autos, Motorcycles			Commercial Vans, Panel Trucks,			Total Vehicles	Autos, Motorcycles			Commercial Vans, Panel Trucks,			Total Vehicles	
	1, 2, 3	2	2 & 3	Buses	Single Unit Trucks	Multiple Unit Trucks			1, 2, 3	2	2 & 3	Buses	Single Unit Trucks		Multiple Unit Trucks
12-1am	211	47	7	1	8	27	301	235	51	17	0	7	24	334	
1-2am	113	26	5	3	9	22	178	110	30	14	0	0	27	181	
2-3am	85	19	2	1	10	24	141	51	25	10	1	4	25	116	
3-4am	97	16	13	2	17	17	162	49	13	6	1	2	18	89	
4-5am	241	20	12	3	21	26	323	76	6	12	1	7	21	123	
5-6am	1,019	89	49	12	59	48	1,276	167	13	12	24	30	34	280	
6-7am	2,356	257	130	53	57	31	2,884	377	19	41	151	55	46	689	
7-8am	2,427	245	164	33	53	18	2,940	713	20	90	33	78	35	969	
8-9am	2,039	112	190	26	49	31	2,447	730	31	126	41	62	31	1,021	
9-10am	1,992	74	326	25	185	60	2,662	701	31	94	24	93	31	974	
10-11am	1,657	72	250	15	133	34	2,161	637	42	145	15	105	42	986	
11-12am	1,573	86	251	14	183	73	2,180	647	35	112	15	84	27	920	
12-1pm	1,471	80	247	11	132	50	1,991	642	31	119	27	98	41	958	
1-2pm	1,399	79	189	28	153	57	1,905	715	26	130	27	84	30	1,012	
2-3pm	1,463	76	176	33	143	54	1,945	768	30	124	22	95	35	1,074	
3-4pm	1,637	82	140	59	107	20	2,045	999	37	137	40	92	28	1,333	
4-5pm	1,523	111	153	86	113	38	2,024	1,465	48	137	38	96	9	1,793	
5-6pm	1,689	165	139	46	60	25	2,124	1,763	61	97	11	84	4	2,020	
6-7pm	1,521	126	105	18	54	22	1,846	1,476	58	119	20	65	18	1,756	
7-8pm	1,128	56	58	4	33	30	1,309	970	31	58	15	39	10	1,123	
8-9pm	816	78	41	13	29	24	1,001	666	46	33	5	21	5	776	
9-10pm	604	48	29	3	27	20	731	498	45	27	3	16	4	593	
10-11pm	504	54	21	4	12	11	606	355	43	40	3	4	3	448	
11-12pm	371	59	15	4	9	11	469	309	35	13	2	3	3	365	
Totals	27,936	2,077	2,712	497	1,656	773	35,651	15,119	807	1,713	519	1,224	551	19,933	
7-10am	6,458	431	680	84	287	109	8,049	2,144	82	310	98	233	97	2,964	
10am-1pm	4,701	238	748	40	448	157	6,332	1,926	108	376	57	287	110	2,864	
1-4pm	4,499	237	505	120	403	131	5,895	2,482	93	391	89	271	93	3,419	
4-7pm	4,733	402	397	150	227	85	5,994	4,704	167	353	69	245	31	5,569	
7am-7pm	20,391	1,308	2,330	394	1,365	482	26,270	11,256	450	1,430	313	1,036	331	14,816	
6-10am	8,814	688	810	137	344	140	10,933	2,521	101	351	249	288	143	3,653	
3-7pm	6,370	484	537	209	334	105	8,039	5,703	204	490	109	337	59	6,902	
6am-7pm	22,747	1,565	2,460	447	1,422	513	29,154	11,633	469	1,471	464	1,091	377	15,505	

Based on October 2015 Classification Survey Data.

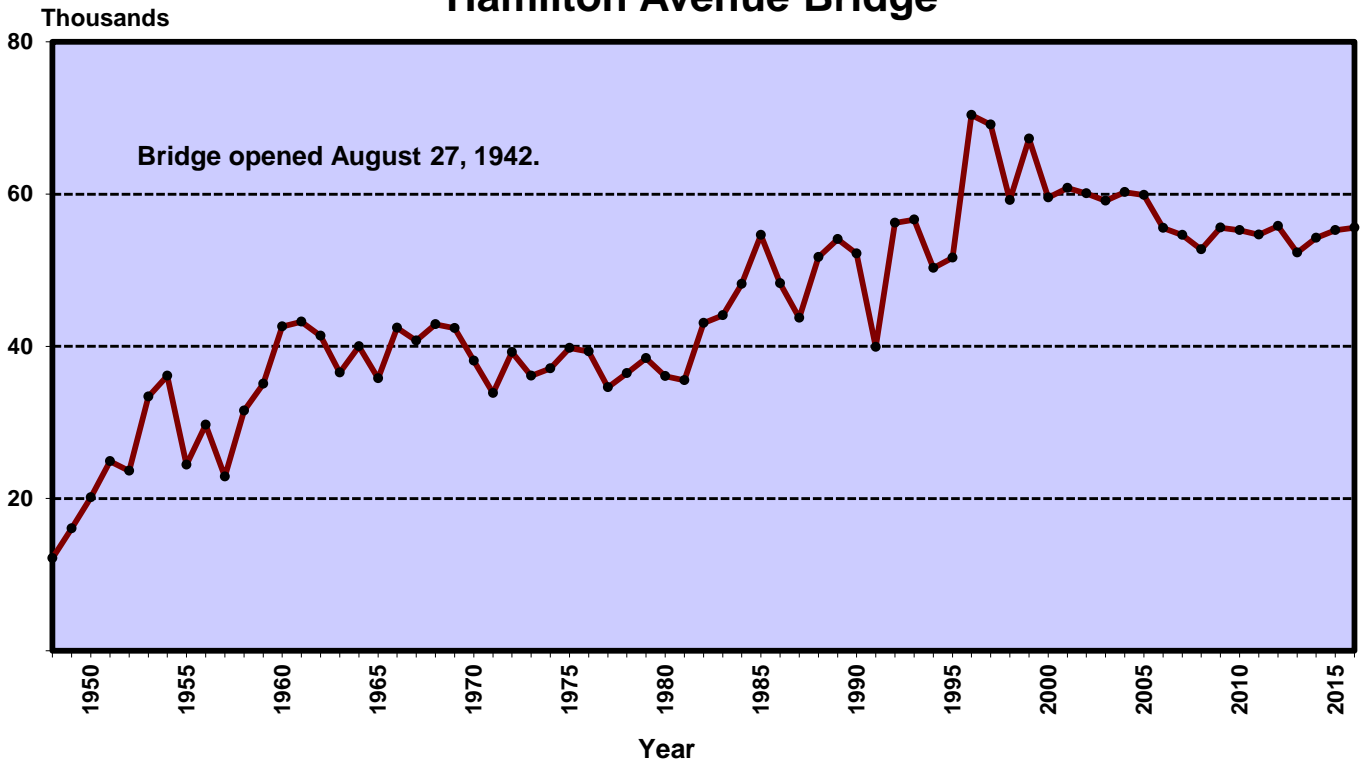
\*\* Peak Volumes



## Hourly Vehicular Volumes Hamilton Avenue Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Hamilton Avenue Bridge



# Hourly Vehicular Volumes

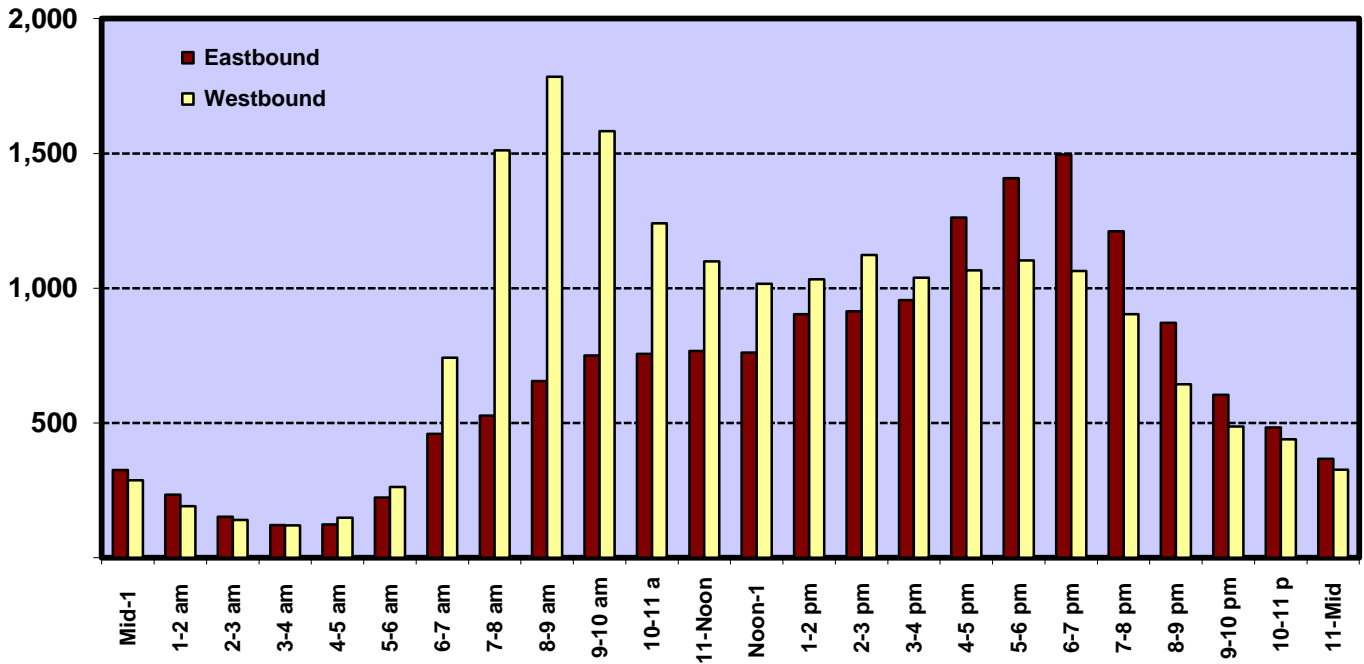
## Metropolitan Avenue Bridge - 2016

	<b>Eastbound</b>					<b>Westbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	325	---	---	---	---	---	287
1-2am	---	---	---	---	---	234	---	---	---	---	---	191
2-3am	---	---	---	---	---	152	---	---	---	---	---	140
3-4am	---	---	---	---	---	121	---	---	---	---	---	120
4-5am	---	---	---	---	---	124	---	---	---	---	---	149
5-6am	---	---	---	---	---	223	---	---	---	---	---	263
6-7am	---	---	---	---	---	460	---	---	---	---	---	742
7-8am	395	10	10	85	27	527	1,119	32	62	213	85	1,511
8-9am	423	12	17	136	68	656	1,253	20	58	319	134	1,784
9-10am	387	33	20	221	89	750	959	45	51	389	139	1,583
10-11am	619	7	10	87	33	756	1,029	22	31	118	41	1,241
11-12am	452	13	21	215	66	767	690	19	50	254	87	1,100
12-1pm	627	12	14	82	26	761	826	16	26	111	37	1,016
1-2pm	734	25	8	92	45	904	859	23	22	89	40	1,033
2-3pm	634	11	26	165	78	914	772	19	33	206	93	1,123
3-4pm	802	11	20	84	39	956	853	20	17	100	49	1,039
4-5pm	931	31	52	143	105	1,262	813	14	28	142	69	1,066
5-6pm	1,069	13	67	145	114	1,408	862	10	57	94	80	1,103
6-7pm	1,187	13	65	132	99	1,496	889	15	50	58	52	1,064
7-8pm	---	---	---	---	---	1,211	---	---	---	---	---	904
8-9pm	---	---	---	---	---	872	---	---	---	---	---	643
9-10pm	---	---	---	---	---	604	---	---	---	---	---	487
10-11pm	---	---	---	---	---	483	---	---	---	---	---	439
11-12pm	---	---	---	---	---	367	---	---	---	---	---	326
Totals	---	---	---	---	---	16,333	---	---	---	---	---	19,354
7-10am	1,205	55	47	442	184	1,933	3,331	97	171	921	358	4,878
10am-1pm	1,698	32	45	384	125	2,284	2,545	57	107	483	165	3,357
1-4pm	2,170	47	54	341	162	2,774	2,484	62	72	395	182	3,195
4-7pm	3,187	57	184	420	318	4,166	2,564	39	135	294	201	3,233
7am-7pm	8,260	191	330	1,587	789	11,157	10,924	255	485	2,093	906	14,663
6-10am	---	---	---	---	---	2,393	---	---	---	---	---	5,620
3-7pm	3,989	68	204	504	357	5,122	3,417	59	152	394	250	4,272
6am-7pm	---	---	---	---	---	11,617	---	---	---	---	---	15,405

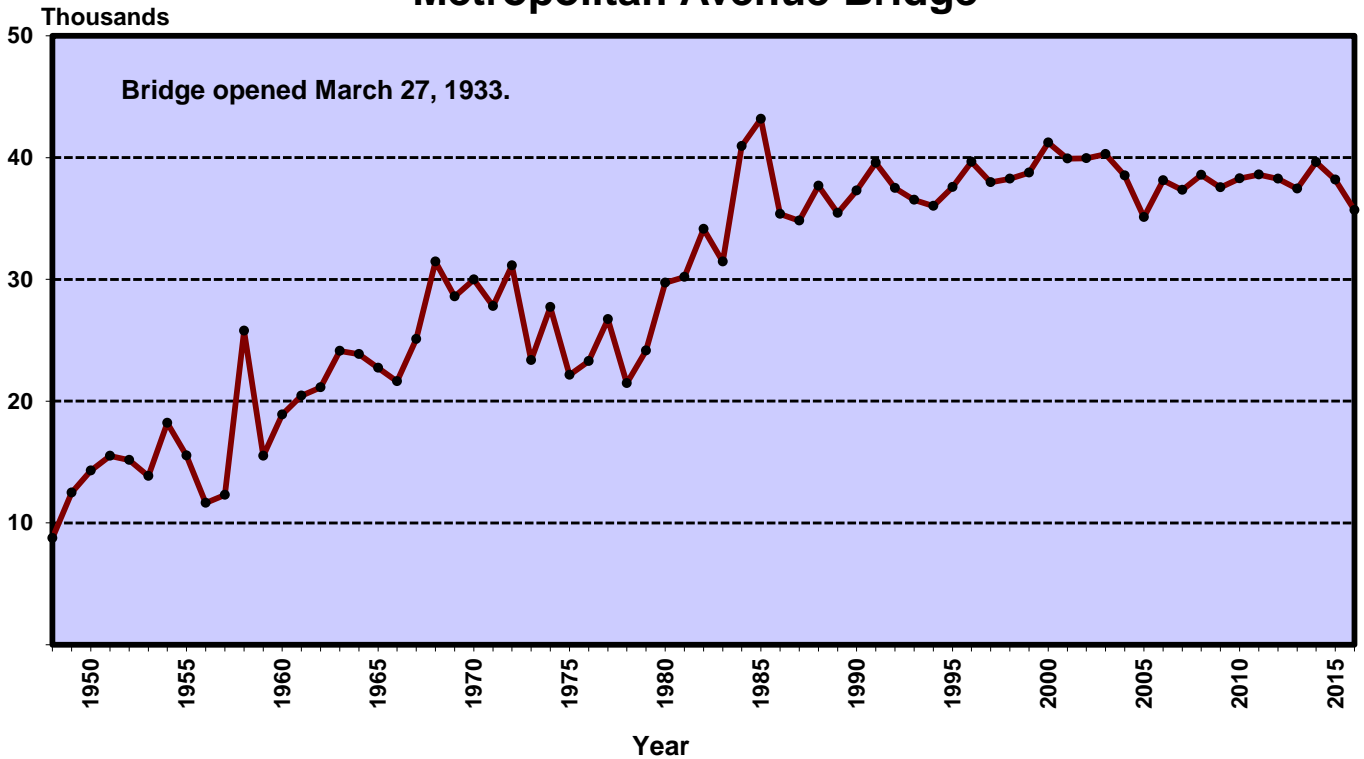
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Metropolitan Avenue Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Metropolitan Avenue Bridge



# Hourly Vehicular Volumes

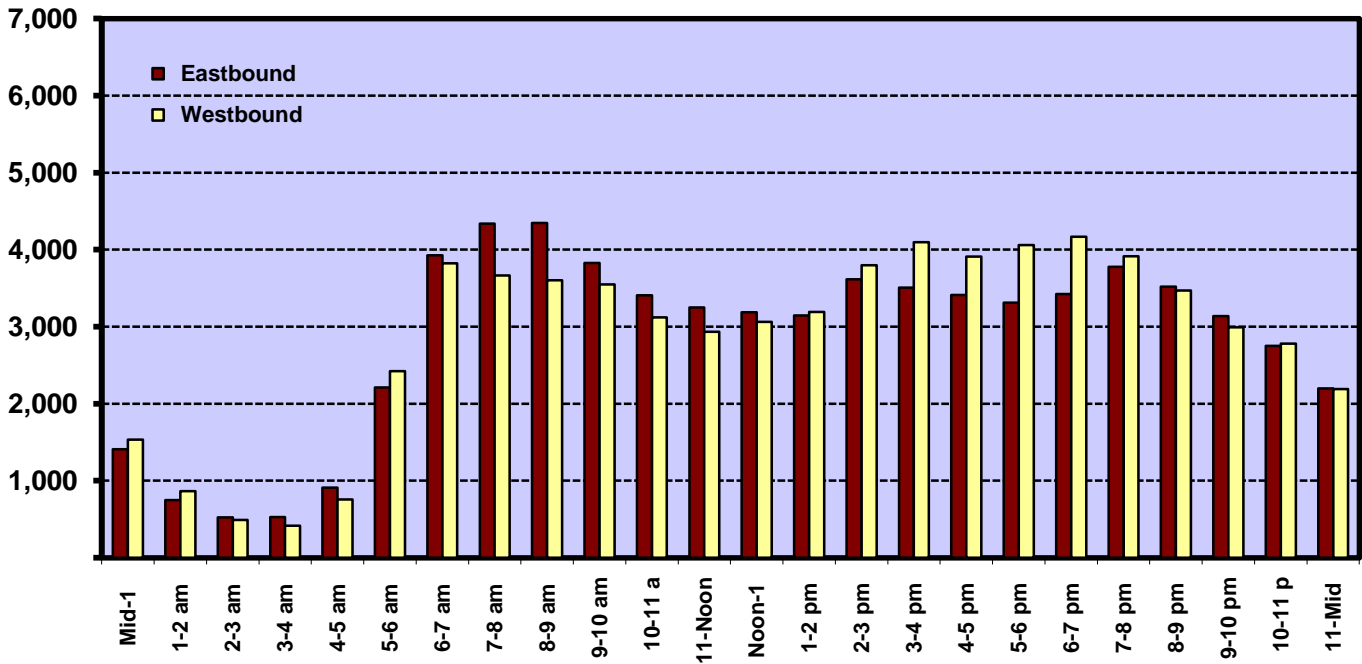
## Mill Basin Bridge - 2016

	<b>Eastbound</b>					<b>Westbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	1,407	---	---	---	---	---	1,535
1-2am	---	---	---	---	---	747	---	---	---	---	---	865
2-3am	---	---	---	---	---	524	---	---	---	---	---	492
3-4am	---	---	---	---	---	527	---	---	---	---	---	417
4-5am	---	---	---	---	---	909	---	---	---	---	---	757
5-6am	---	---	---	---	---	2,209	---	---	---	---	---	2,421
6-7am	---	---	---	---	---	3,926	---	---	---	---	---	3,825
7-8am	4,038	57	21	5	219	4,340	3,413	16	0	107	130	3,666
8-9am	4,110	17	15	16	188	4,346	3,297	42	0	96	168	3,603
9-10am	3,525	9	17	24	252	3,827	3,220	63	1	98	166	3,548
10-11am	3,286	8	11	14	90	3,409	3,017	15	0	32	55	3,119
11-12am	2,874	4	63	29	279	3,249	2,650	0	4	140	139	2,933
12-1pm	3,044	4	19	14	106	3,187	2,885	0	0	67	111	3,063
1-2pm	2,944	81	12	10	98	3,145	3,079	9	0	34	71	3,193
2-3pm	3,280	34	22	13	268	3,617	3,520	7	0	108	164	3,799
3-4pm	3,348	20	13	5	121	3,507	3,848	69	0	75	105	4,097
4-5pm	3,175	10	30	5	190	3,410	3,591	36	2	112	170	3,911
5-6pm	3,129	5	14	11	152	3,311	3,758	28	3	121	150	4,060
6-7pm	3,240	3	13	4	166	3,426	3,909	3	1	104	151	4,168
7-8pm	---	---	---	---	---	3,777	---	---	---	---	---	3,916
8-9pm	---	---	---	---	---	3,518	---	---	---	---	---	3,471
9-10pm	---	---	---	---	---	3,137	---	---	---	---	---	2,994
10-11pm	---	---	---	---	---	2,749	---	---	---	---	---	2,780
11-12pm	---	---	---	---	---	2,198	---	---	---	---	---	2,191
<b>Totals</b>	---	---	---	---	---	<b>68,402</b>	---	---	---	---	---	<b>68,824</b>
7-10am	11,673	83	53	45	659	12,513	9,930	121	1	301	464	10,817
10am-1pm	9,204	16	93	57	475	9,845	8,552	15	4	239	305	9,115
1-4pm	9,572	135	47	28	487	10,269	10,447	85	0	217	340	11,089
4-7pm	9,544	18	57	20	508	10,147	11,258	67	6	337	471	12,139
7am-7pm	39,993	252	250	150	2,129	42,774	40,187	288	11	1,094	1,580	43,160
6-10am	---	---	---	---	---	16,439	---	---	---	---	---	14,642
3-7pm	12,892	38	70	25	629	13,654	15,106	136	6	412	576	16,236
6am-7pm	---	---	---	---	---	46,700	---	---	---	---	---	46,985

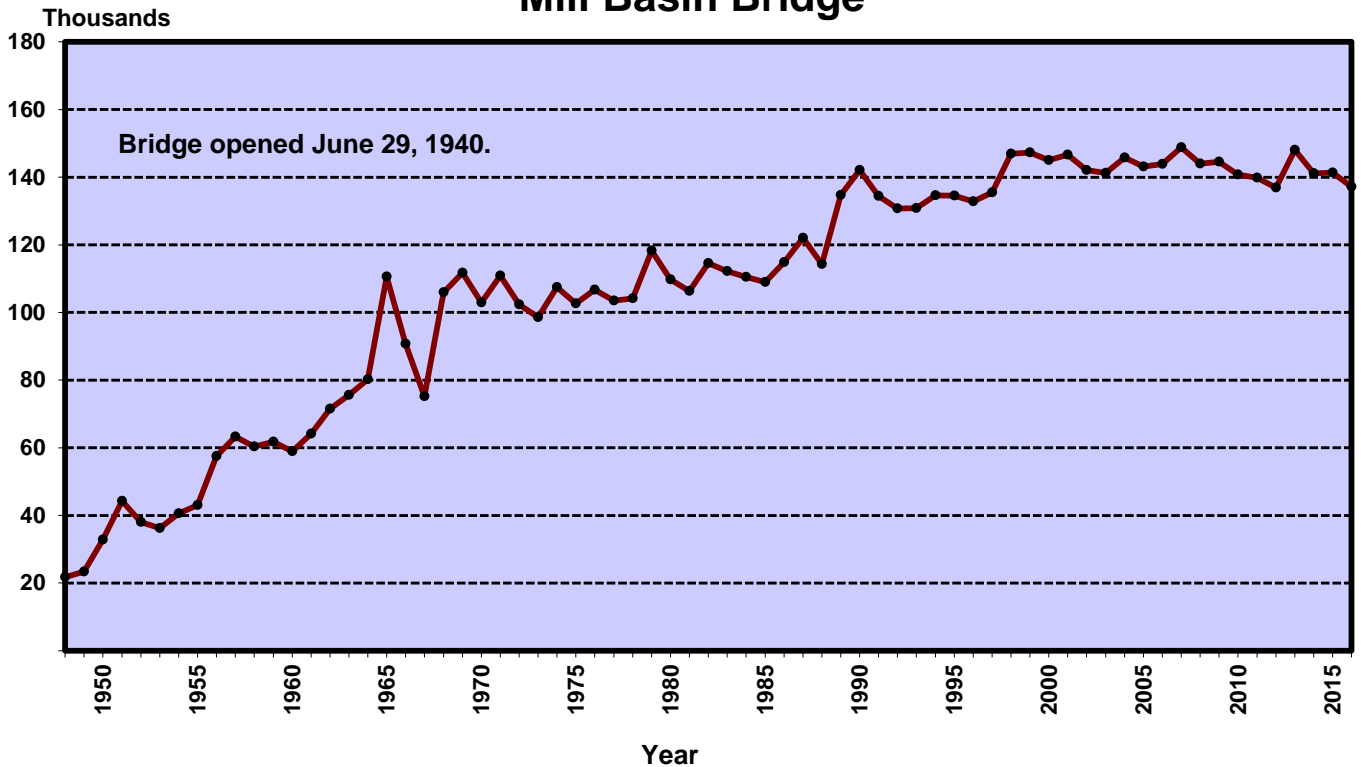
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Mill Basin Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Mill Basin Bridge



# Hourly Vehicular Volumes

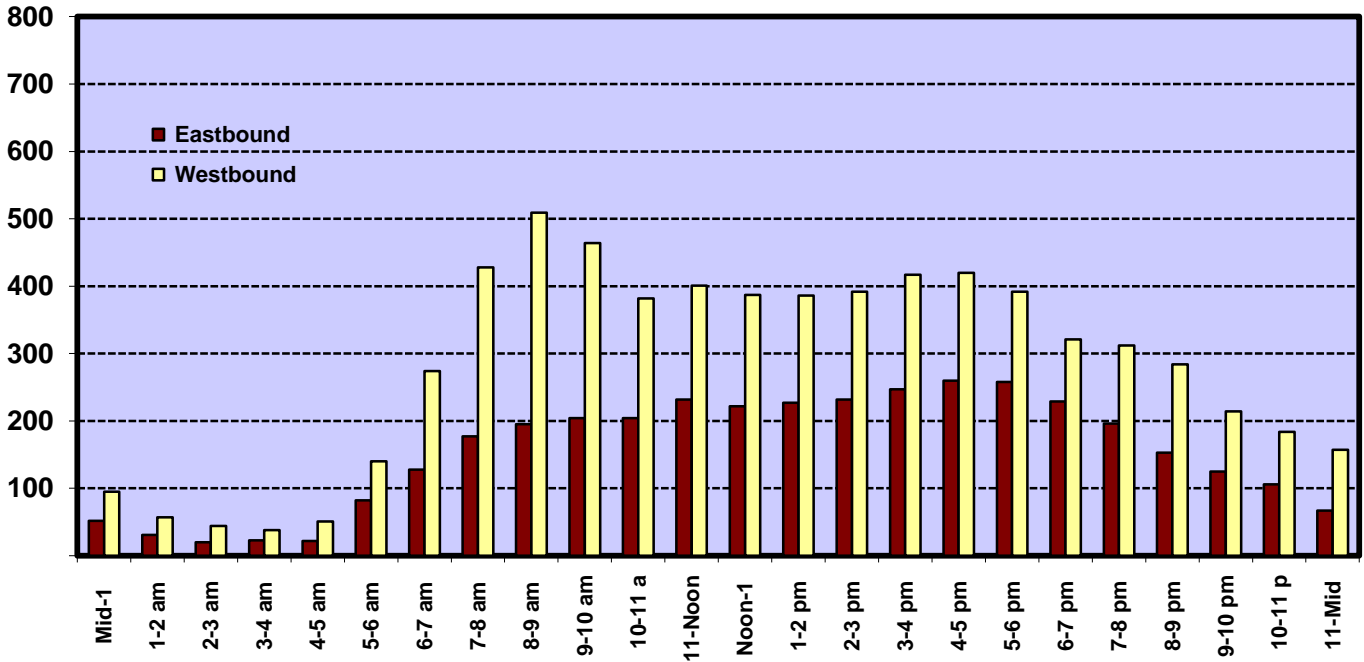
## Ninth Street Bridge - 2016

	<b>Eastbound</b>					<b>Westbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	52	---	---	---	---	---	95
1-2am	---	---	---	---	---	31	---	---	---	---	---	57
2-3am	---	---	---	---	---	20	---	---	---	---	---	44
3-4am	---	---	---	---	---	23	---	---	---	---	---	38
4-5am	---	---	---	---	---	22	---	---	---	---	---	51
5-6am	---	---	---	---	---	82	---	---	---	---	---	140
6-7am	---	---	---	---	128	---	---	---	---	---	---	274
7-8am	129	18	5	15	10	177	346	9	0	33	40	428
8-9am	121	17	7	38	12	195	425	5	0	35	44	509
9-10am	129	15	3	39	18	204	389	10	0	25	40	464
10-11am	159	15	3	17	10	204	345	8	0	13	16	382
11-12am	154	14	10	44	10	232	251	28	0	38	84	401
12-1pm	169	11	10	22	10	222	255	27	0	34	71	387
1-2pm	108	13	15	76	15	227	290	7	39	25	25	386
2-3pm	142	15	11	46	18	232	303	17	15	33	33	392
3-4pm	200	12	2	19	14	247	349	20	0	18	30	417
4-5pm	196	11	5	29	19	260	323	14	0	32	51	420
5-6pm	199	17	1	30	11	258	330	23	0	16	23	392
6-7pm	156	15	1	41	16	229	291	9	0	8	13	321
7-8pm	---	---	---	---	---	196	---	---	---	---	---	312
8-9pm	---	---	---	---	---	153	---	---	---	---	---	284
9-10pm	---	---	---	---	---	125	---	---	---	---	---	214
10-11pm	---	---	---	---	---	106	---	---	---	---	---	184
11-12pm	---	---	---	---	---	67	---	---	---	---	---	157
Totals	---	---	---	---	---	3,692	---	---	---	---	---	6,749
7-10am	379	50	15	92	40	576	1,160	24	0	93	124	1,401
10am-1pm	482	40	23	83	30	658	851	63	0	85	171	1,170
1-4pm	450	40	28	141	47	706	942	44	54	67	88	1,195
4-7pm	551	43	7	100	46	747	944	46	0	56	87	1,133
7am-7pm	1,862	173	73	416	163	2,687	3,897	177	54	301	470	4,899
6-10am	---	---	---	---	---	704	---	---	---	---	---	1,675
3-7pm	751	55	9	119	60	994	1,293	66	0	74	117	1,550
6am-7pm	---	---	---	---	---	2,815	---	---	---	---	---	5,173

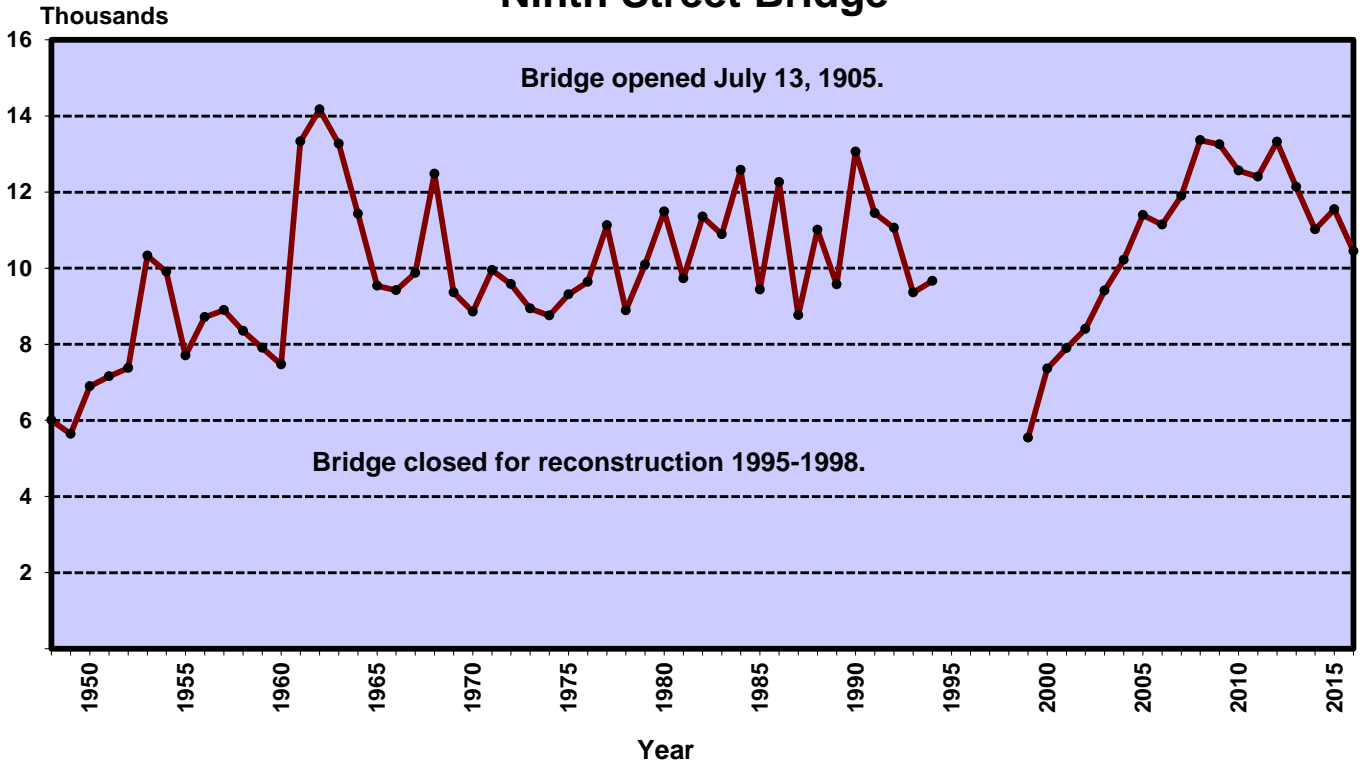
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Ninth Street Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Ninth Street Bridge



# Hourly Vehicular Volumes

## Stillwell Avenue Bridge - 2016

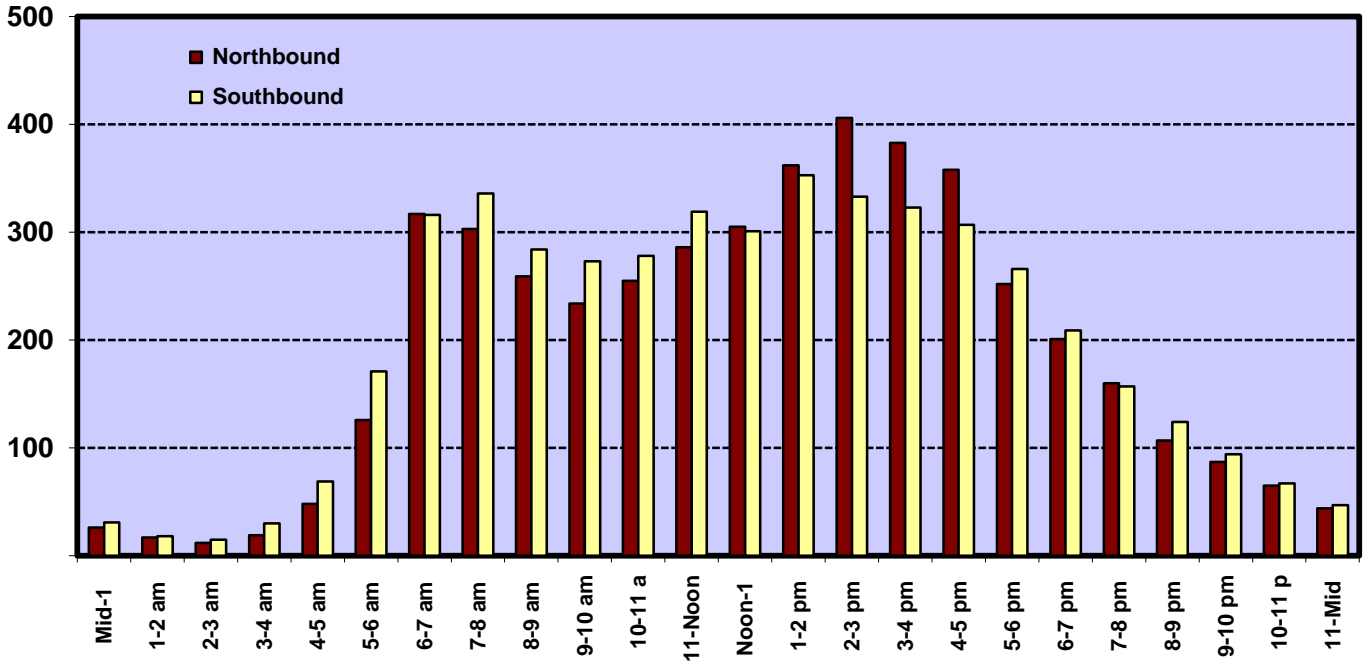
	Northbound						Southbound						2-Way Totals
	Autos	Buses	Commuter		Commercial		Autos	Buses	Commuter		Commercial		
			Vans	Trucks	Vans	Trucks			Vans	Trucks	Vans	Trucks	
12-1am	---	---	---	---	---	26	---	---	---	---	---	---	31
1-2am	---	---	---	---	---	17	---	---	---	---	---	---	18
2-3am	---	---	---	---	---	12	---	---	---	---	---	---	15
3-4am	---	---	---	---	---	19	---	---	---	---	---	---	30
4-5am	---	---	---	---	---	48	---	---	---	---	---	---	69
5-6am	---	---	---	---	---	126	---	---	---	---	---	---	171
6-7am	---	---	---	---	---	317	---	---	---	---	---	---	316
7-8am	242	22	0	39	0	303	261	57	0	18	0	336	639
8-9am	196	27	0	36	0	259	235	31	0	18	0	284	543
9-10am	175	27	0	32	0	234	177	17	0	79	0	273	507
10-11am	182	28	0	45	0	255	201	21	0	56	0	278	533
11-12am	214	12	0	60	0	286	255	16	0	48	0	319	605
12-1pm	213	14	0	78	0	305	242	17	0	42	0	301	606
1-2pm	244	27	0	91	0	362	257	22	0	74	0	353	715
2-3pm	291	35	0	80	0	406	218	25	0	90	0	333	739
3-4pm	296	40	0	47	0	383	263	17	0	43	0	323	706
4-5pm	276	37	0	45	0	358	249	18	0	40	0	307	665
5-6pm	220	17	0	15	0	252	227	14	0	25	0	266	518
6-7pm	173	19	0	9	0	201	183	17	0	9	0	209	410
7-8pm	---	---	---	---	---	160	---	---	---	---	---	---	157
8-9pm	---	---	---	---	---	107	---	---	---	---	---	---	124
9-10pm	---	---	---	---	---	87	---	---	---	---	---	---	94
10-11pm	---	---	---	---	---	65	---	---	---	---	---	---	67
11-12pm	---	---	---	---	---	44	---	---	---	---	---	---	47
Totals	---	---	---	---	---	4,632	---	---	---	---	---	---	4,721
7-10am	613	76	0	107	0	796	673	105	0	115	0	893	1,689
10am-1pm	609	54	0	183	0	846	698	54	0	146	0	898	1,744
1-4pm	831	102	0	218	0	1,151	738	64	0	207	0	1,009	2,160
4-7pm	669	73	0	69	0	811	659	49	0	74	0	782	1,593
7am-7pm	2,722	305	0	577	0	3,604	2,768	272	0	542	0	3,582	7,186
6-10am	---	---	---	---	---	1,113	---	---	---	---	---	---	1,209
3-7pm	965	113	0	116	0	1,194	922	66	0	117	0	1,105	2,299
6am-7pm	---	---	---	---	---	3,921	---	---	---	---	---	---	3,898

Based on September 1989 Classification Survey Data.

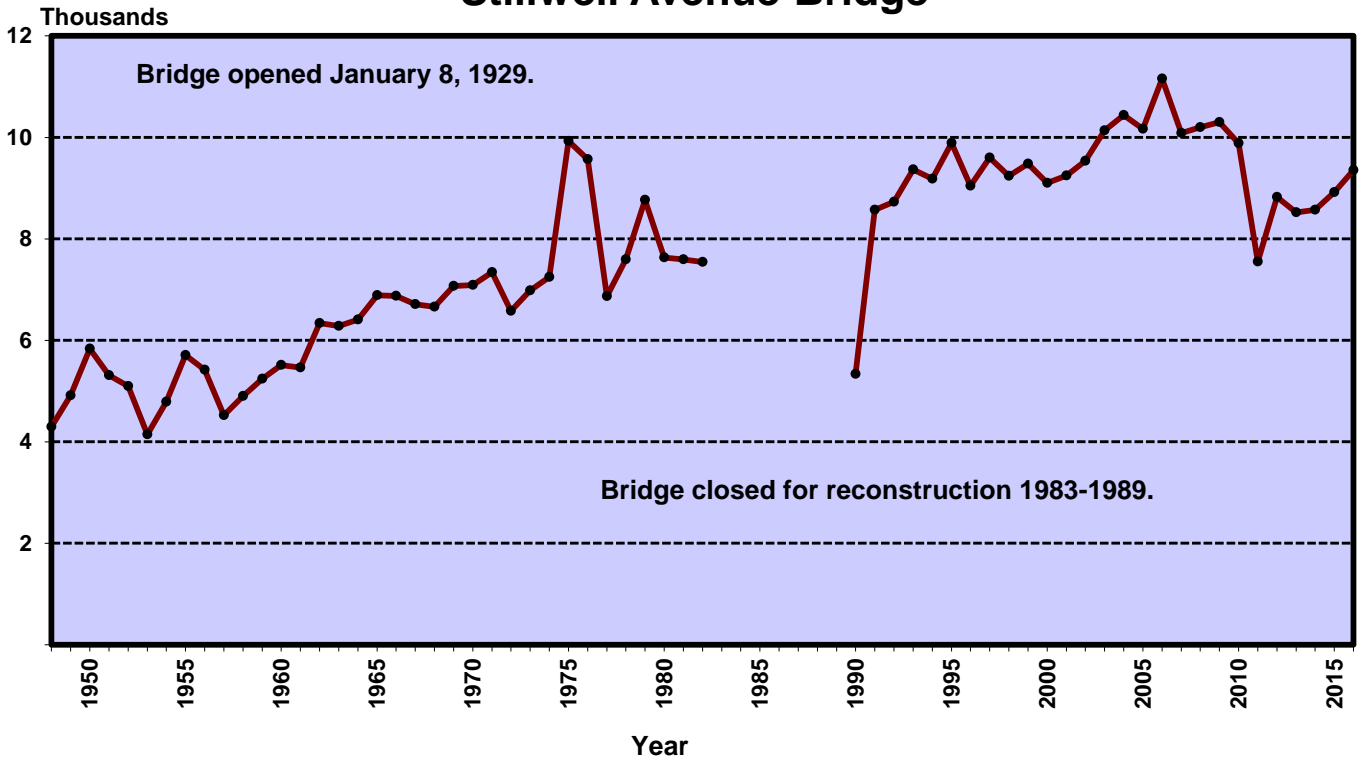
\*\* Peak Volumes



## Hourly Vehicular Volumes Stillwell Avenue Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Stillwell Avenue Bridge



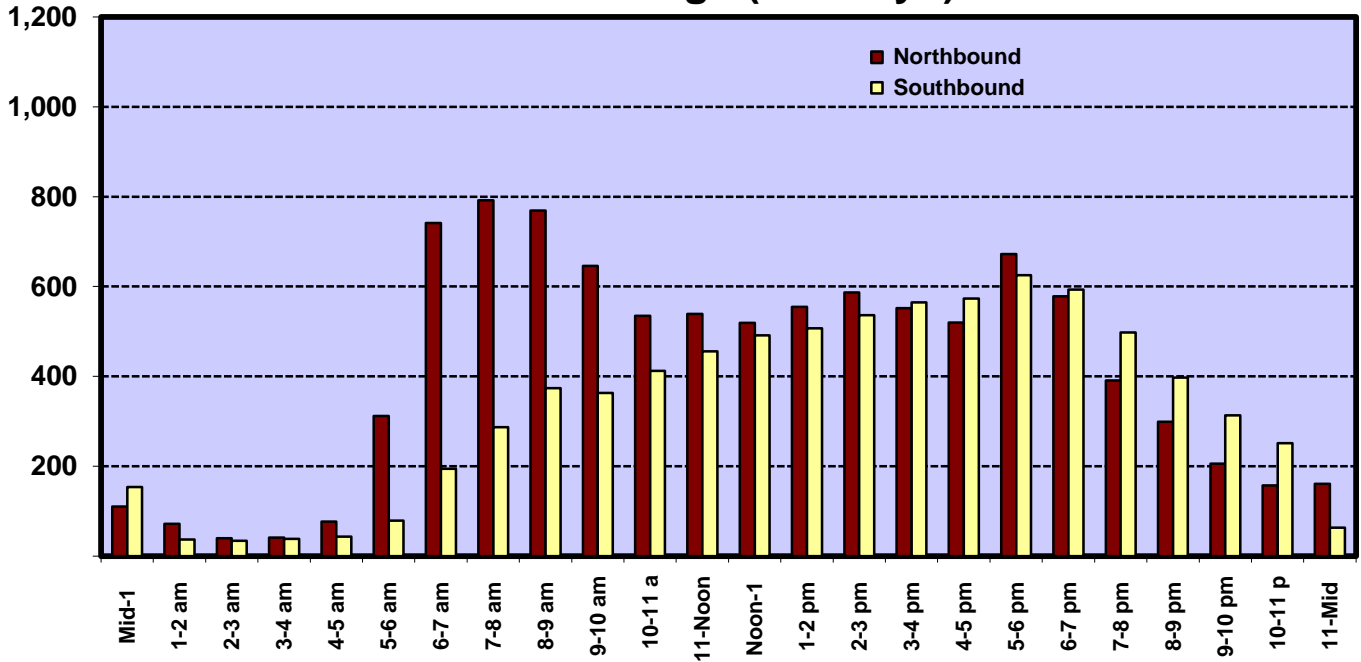
# Hourly Vehicular Volumes Third Avenue Bridge - 2016

	Northbound						Southbound						2-Way Totals
	Autos	Buses	Commuter		Commercial		Autos	Buses	Commuter		Commercial		
			Vans	Trucks	Vans	Trucks			Vans	Trucks	Vans	Trucks	
12-1am	---	---	---	---	---	110	---	---	---	---	---	---	154
1-2am	---	---	---	---	---	72	---	---	---	---	---	---	37
2-3am	---	---	---	---	---	40	---	---	---	---	---	---	34
3-4am	---	---	---	---	---	41	---	---	---	---	---	---	38
4-5am	---	---	---	---	---	77	---	---	---	---	---	---	43
5-6am	---	---	---	---	---	312	---	---	---	---	---	---	79
6-7am	---	---	---	---	---	741	---	---	---	---	---	---	194
7-8am	627	12	0	88	65	792	212	6	0	39	30	287	1,079
8-9am	638	8	0	66	57	769	271	11	0	60	32	374	1,143
9-10am	408	8	0	137	93	646	254	7	2	60	40	363	1,009
10-11am	462	9	0	34	30	535	345	5	1	35	26	412	947
11-12am	395	8	1	84	51	539	341	5	0	65	45	456	995
12-1pm	466	3	0	29	21	519	434	4	1	27	25	491	1,010
1-2pm	439	9	0	62	45	555	439	5	0	34	29	507	1,062
2-3pm	381	16	0	110	80	587	392	6	0	87	51	536	1,123
3-4pm	458	12	0	44	38	552	514	5	0	20	26	565	1,117
4-5pm	405	7	0	52	56	520	463	6	0	48	56	573	1,093
5-6pm	588	7	0	31	46	672	541	3	0	35	46	625	1,297
6-7pm	500	12	0	39	27	578	505	4	0	36	48	593	1,171
7-8pm	---	---	---	---	---	391	---	---	---	---	---	---	498
8-9pm	---	---	---	---	---	299	---	---	---	---	---	---	397
9-10pm	---	---	---	---	---	206	---	---	---	---	---	---	313
10-11pm	---	---	---	---	---	157	---	---	---	---	---	---	251
11-12pm	---	---	---	---	---	161	---	---	---	---	---	---	63
Totals	---	---	---	---	---	9,871	---	---	---	---	---	---	7,883
7-10am	1,673	28	0	291	215	2,207	737	24	2	159	102	1,024	3,231
10am-1pm	1,323	20	1	147	102	1,593	1,120	14	2	127	96	1,359	2,952
1-4pm	1,278	37	0	216	163	1,694	1,345	16	0	141	106	1,608	3,302
4-7pm	1,493	26	0	122	129	1,770	1,509	13	0	119	150	1,791	3,561
7am-7pm	5,767	111	1	776	609	7,264	4,711	67	4	546	454	5,782	13,046
6-10am	---	---	---	---	---	2,948	---	---	---	---	---	---	1,218
3-7pm	1,951	38	0	166	167	2,322	2,023	18	0	139	176	2,356	4,678
6am-7pm	---	---	---	---	---	8,005	---	---	---	---	---	---	5,976

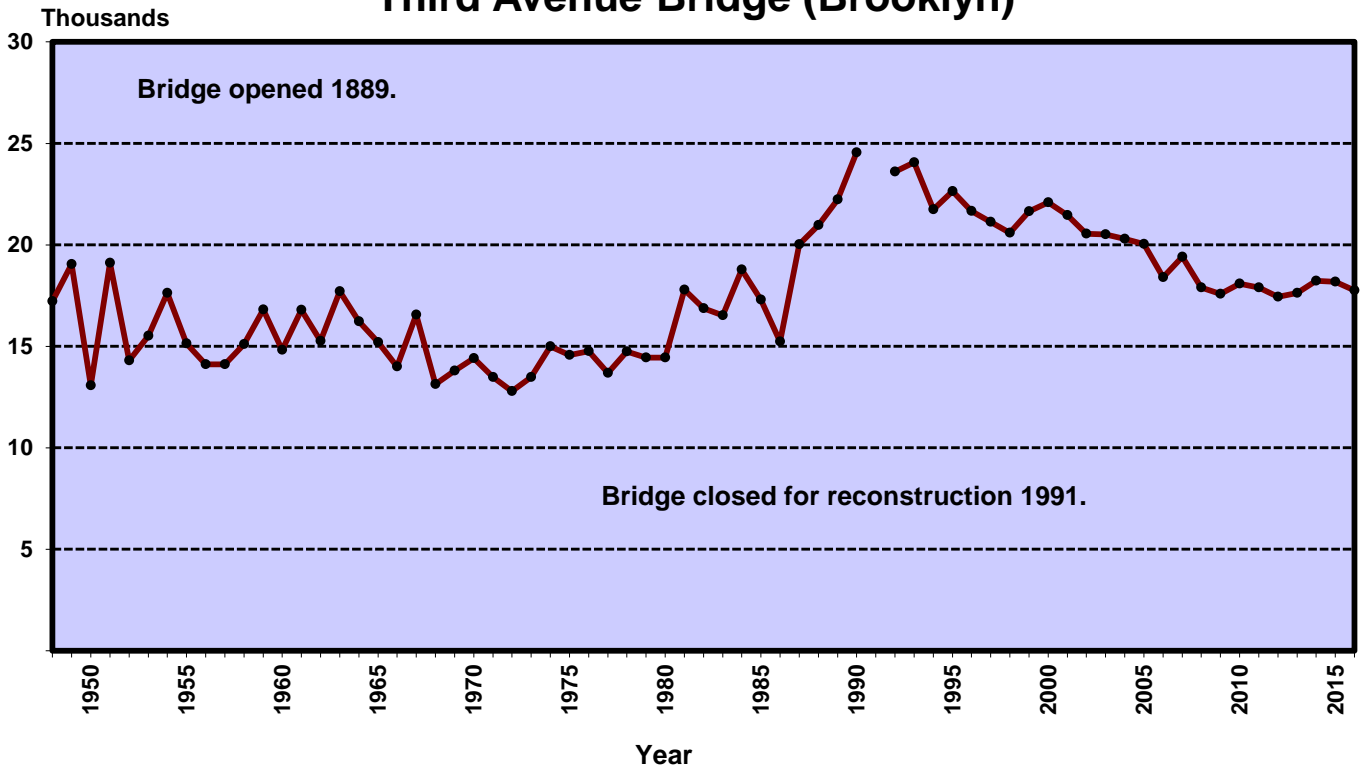
Based on September 1989 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Third Avenue Bridge (Brooklyn) ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Third Avenue Bridge (Brooklyn)



# Hourly Vehicular Volumes Third Street Bridge - 2016

## Eastbound

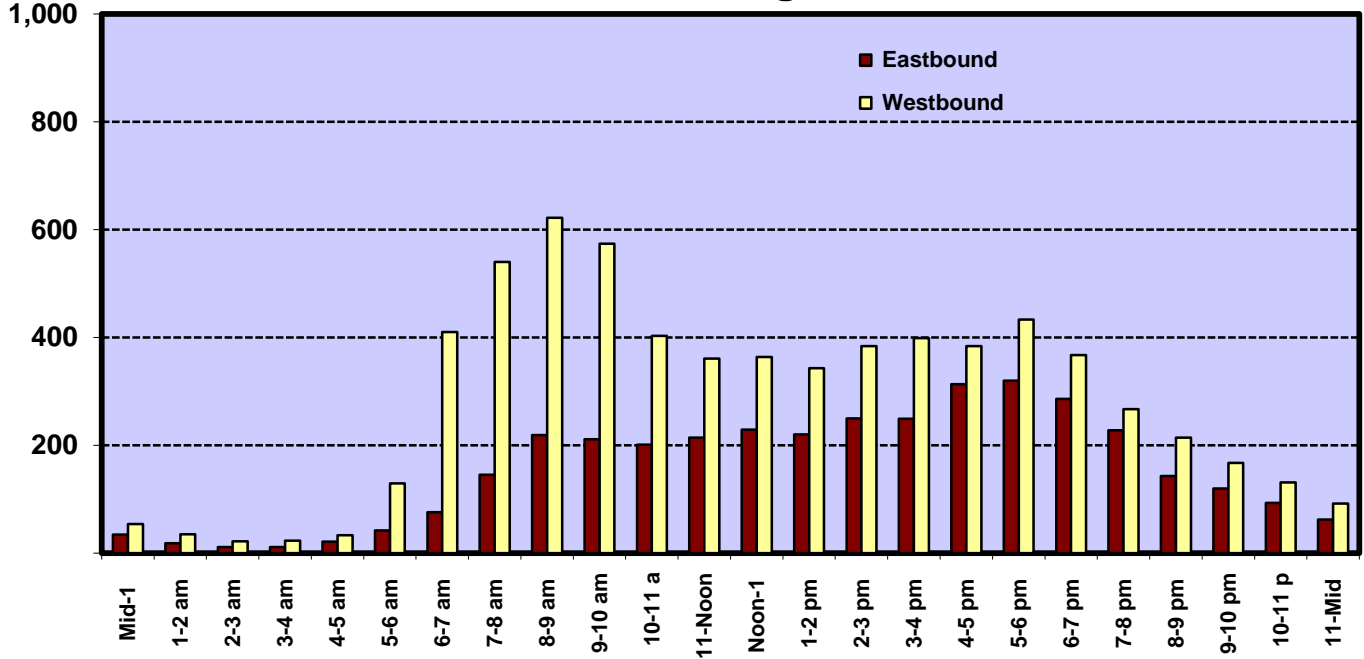
## Westbound

FHWA Classes ▲	Commercial Vans, Panel Trucks, Pickups, Police, Fleet							Autos, Motorcycles SUVs, Family Vans							Commercial Vans, Panel Trucks, Pickups, Police, Fleet							Grand Totals
	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles		
12-1am	17	10	4	1	1	34	16	36	1	0	0	1	54	16	36	1	0	0	1	54		
1-2am	6	8	0	1	3	18	10	23	0	0	1	1	35	10	23	0	0	1	1	35		
2-3am	3	8	0	0	0	11	8	12	0	0	1	1	22	8	12	0	0	1	1	22		
3-4am	3	6	1	0	1	11	9	10	0	0	1	3	23	9	10	0	0	1	3	23		
4-5am	6	11	0	0	4	21	7	23	0	0	3	33	54	7	23	0	0	3	33			
5-6am	29	5	4	0	4	42	45	72	0	3	6	129	171	45	72	0	3	6	129			
6-7am	42	5	12	13	2	76	232	145	16	7	5	410	486	232	145	16	7	5	410			
7-8am	118	2	7	9	2	145	383	111	16	14	12	540	685	383	111	16	14	12	540			
8-9am	187	0	9	14	9	219	464	96	24	12	19	622	841	464	96	24	12	19	622			
9-10am	133	9	36	15	9	211	418	73	67	3	8	574	785	418	73	67	3	8	574			
10-11am	120	7	21	14	37	201	310	32	49	0	10	403	604	310	32	49	0	10	403			
11-12am	163	10	6	19	10	214	289	27	31	0	8	361	575	289	27	31	0	8	361			
12-1pm	195	7	10	12	5	229	295	39	18	0	10	364	593	295	39	18	0	10	364			
1-2pm	170	7	0	13	20	229	281	32	22	0	8	343	563	281	32	22	0	8	343			
2-3pm	206	0	13	3	9	250	292	33	40	0	14	384	634	292	33	40	0	14	384			
3-4pm	214	8	8	11	3	249	317	32	27	17	6	399	648	317	32	27	17	6	399			
4-5pm	262	3	19	11	5	313	293	48	29	12	2	384	697	293	48	29	12	2	384			
5-6pm	266	24	15	6	3	320	354	57	11	0	9	433	753	354	57	11	0	9	433			
6-7pm	247	26	3	7	0	286	308	45	6	2	6	367	653	308	45	6	2	6	367			
7-8pm	199	14	10	5	0	228	198	60	2	0	5	267	495	198	60	2	0	5	267			
8-9pm	99	38	0	2	0	143	140	66	6	0	2	214	357	140	66	6	0	2	214			
9-10pm	105	10	0	0	5	120	97	68	1	0	1	167	287	97	68	1	0	1	167			
10-11pm	66	20	1	5	0	93	76	53	1	0	1	131	224	76	53	1	0	1	131			
11-12pm	32	22	2	1	2	62	45	45	1	0	1	92	154	45	45	1	0	1	92			
Totals	2,888	260	163	116	134	3,716	4,887	1,238	368	70	133	6,751	10,467	4,887	1,238	368	70	133	6,751			
7-10am	438	11	52	16	20	575	1,265	280	107	29	39	1,736	2,311	1,265	280	107	29	39	1,736			
10am-1pm	478	24	37	8	52	644	894	98	98	0	28	1,128	1,772	894	98	98	0	28	1,128			
1-4pm	590	15	21	37	32	719	890	97	89	17	28	1,126	1,845	890	97	89	17	28	1,126			
4-7pm	775	53	37	22	8	919	955	150	46	14	17	1,184	2,103	955	150	46	14	17	1,184			
7am-7pm	2,281	103	147	83	112	2,857	4,004	625	340	60	112	5,174	8,031	4,004	625	340	60	112	5,174			
6-10am	480	16	54	28	22	651	1,497	425	123	36	44	2,146	2,797	1,497	425	123	36	44	2,146			
3-7pm	989	61	45	27	11	1,168	1,272	182	73	31	23	1,583	2,751	1,272	182	73	31	23	1,583			
6am-7pm	2,323	108	149	95	114	2,933	4,236	770	356	67	117	5,584	8,517	4,236	770	356	67	117	5,584			

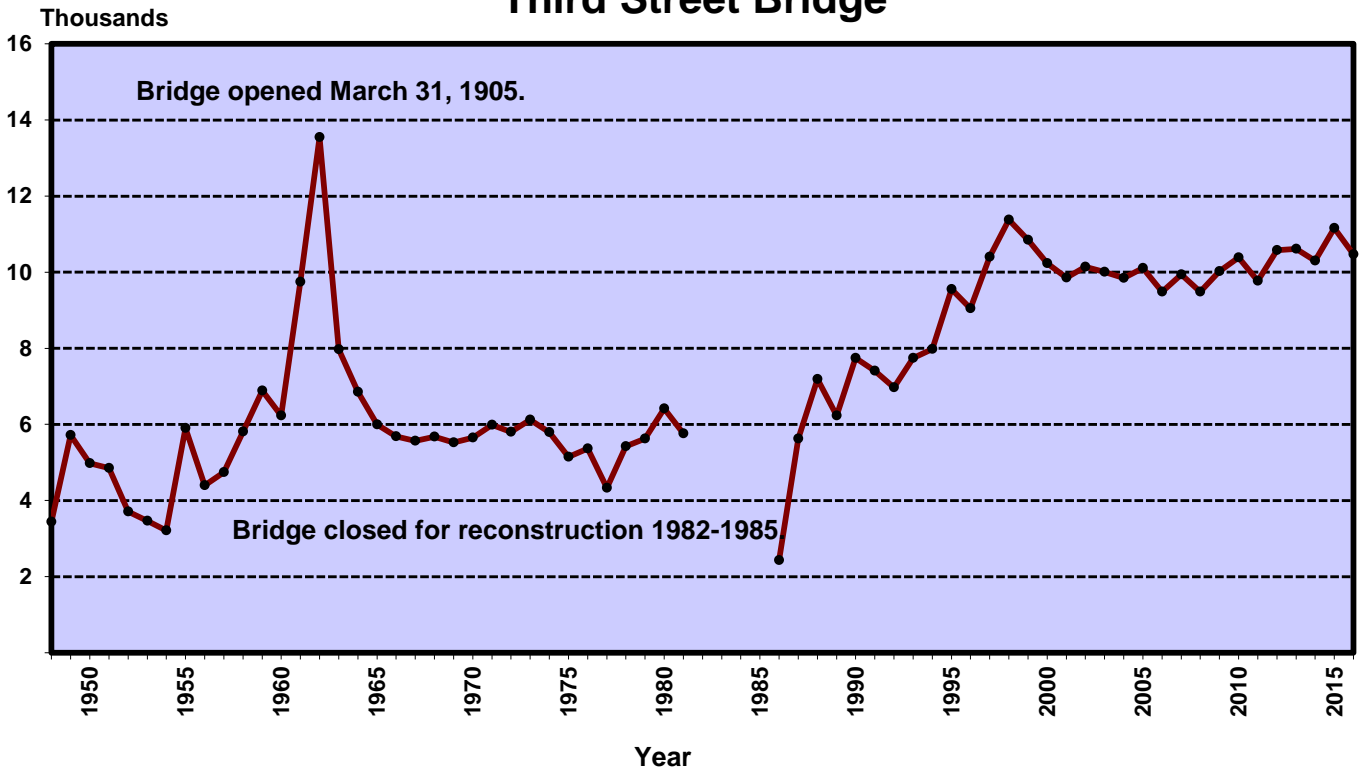
Based on October 2015 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Third Street Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Third Street Bridge



# Hourly Vehicular Volumes

## Union Street Bridge - 2016

### Eastbound

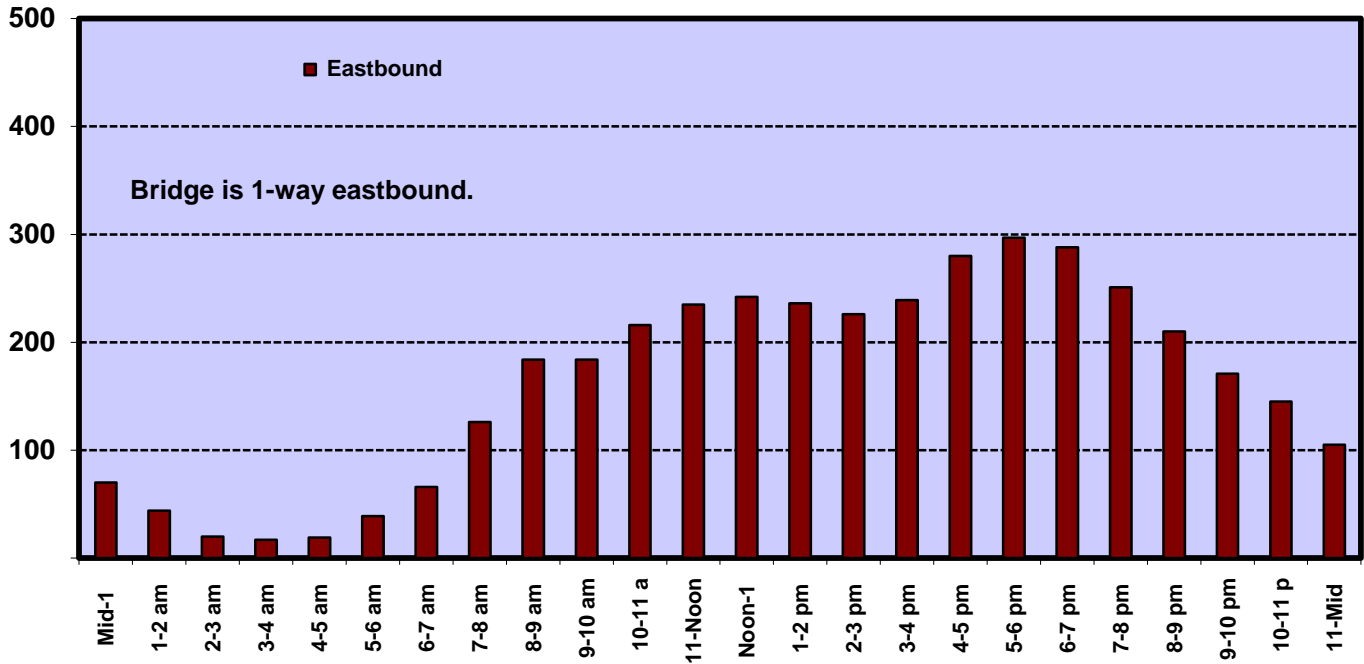
### Westbound

FHWA Classes	Eastbound							Westbound							Grand Totals
	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	Autos, Motorcycles SUVs, Family Vans	Taxis, Liveries, Limos	Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		
<b>Bridge is 1-way eastbound.</b>															
12-1am	47	20	1	0	2	0	70							70	
1-2am	25	16	3	0	0	0	44							44	
2-3am	11	5	2	0	2	0	20							20	
3-4am	5	5	5	0	1	1	17							17	
4-5am	8	4	4	0	3	0	19							19	
5-6am	22	6	2	2	3	0	39							39	
6-7am	43	6	2	9	6	0	66							66	
7-8am	91	12	9	3	10	1	126							126	
8-9am	121	27	17	9	10	0	184							184	
9-10am	95	41	31	3	14	0	184							184	
10-11am	119	49	29	4	15	0	216							216	
11-12am	160	32	26	2	15	0	235							235	
12-1pm	137	45	45	3	12	0	242							242	
1-2pm	139	35	34	4	23	1	236							236	
2-3pm	141	42	26	4	13	0	226							226	
3-4pm	161	33	27	8	10	0	239							239	
4-5pm	207	30	23	7	13	0	280							280	
5-6pm	216	55	17	1	8	0	297	**						297	
6-7pm	200	65	19	0	4	0	288							288	
7-8pm	188	43	12	0	8	0	251							251	
8-9pm	149	48	8	1	4	0	210							210	
9-10pm	107	50	8	0	6	0	171							171	
10-11pm	95	41	5	0	4	0	145							145	
11-12pm	70	30	3	1	1	0	105							105	
Totals	2,557	740	362	61	187	3	3,910							3,910	
7-10am	307	80	57	15	34	1	494							494	
10am-1pm	416	126	100	9	42	0	693							693	
1-4pm	441	110	87	16	46	1	701							701	
4-7pm	623	150	59	8	25	0	865							865	
7am-7pm	1,787	466	303	48	147	2	2,753							2,753	
6-10am	350	86	59	24	40	1	560							560	
3-7pm	784	183	86	16	35	0	1,104							1,104	
6am-7pm	1,830	472	305	57	153	2	2,819							2,819	

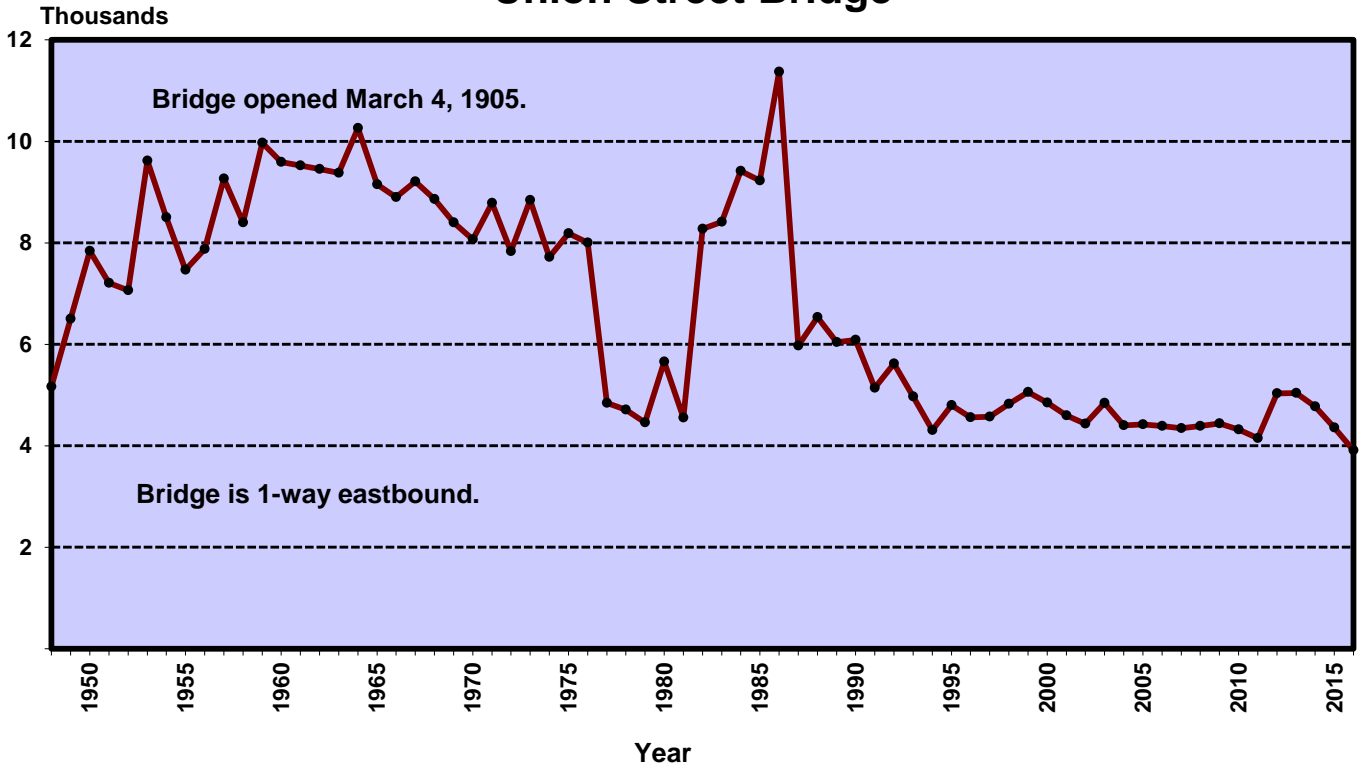
Based on October 2015 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Union Street Bridge ~ 2016



## Average Daily Traffic Volumes Union Street Bridge







# Queens Bridges

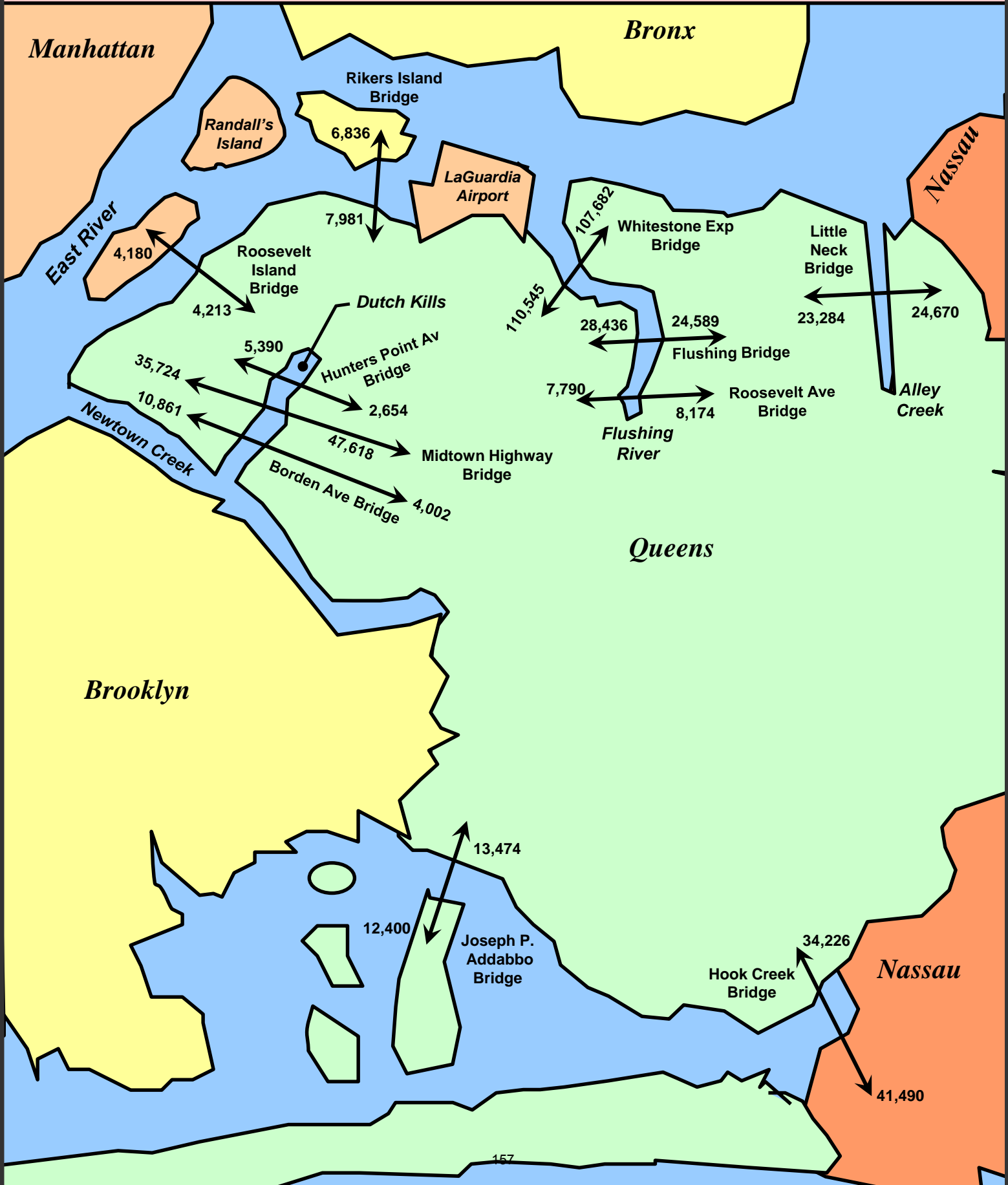


**Joseph P. Addabbo Memorial Bridge**



# QUEENS BRIDGES

## 2016 Daily Volumes



**Queens Bridges ~ Average Daily Traffic Volumes  
1948 - 2016**

<b>Year</b>	<b>Borden Avenue Bridge</b>	<b>Flushing Bridge</b>	<b>Hook Creek Bridge</b>	<b>Hunters Point Bridge</b>	<b>Joseph P. Addabbo Bridge *</b>	<b>Little Neck Bridge</b>
1948	4,846	26,276	9,620	5,500	8,521	22,255
1949	11,052	29,949	14,969	9,482	8,855	21,190
1950	6,222	30,836	18,240	6,751	7,361	19,549
1951	5,930	50,918	16,064	6,000	9,868	30,873
1952	6,155	40,589	16,856	5,688	8,952	31,544
1953	7,473	46,952	17,218	6,575	10,941	29,266
1954	5,997	39,837	23,389	7,611	10,661	35,614
1955	6,793	34,201	19,481	2,984	11,315	30,428
1956	7,612	47,985	20,796	6,267	10,216	43,761
1957	7,759	53,836	18,691	7,018	6,192	38,387
1958	7,833	43,075	28,031	5,735	12,763	30,029
1959	9,992	28,616	30,663	7,603	13,453	27,072
1960	9,739	37,833	33,549	7,753	14,923	23,718
1961	9,030	36,383	34,598	7,337	13,165	24,851
1962	8,860	35,370	36,590	7,150	15,900	26,670
1963	9,480	46,210	37,450	7,170	19,730	30,040
1964	16,530	40,220	38,620	5,110	18,020	27,980
1965	8,026	40,484	35,185	6,652	20,629	33,504
1966	9,461	42,613	38,742	6,882	18,890	33,383
1967	9,348	32,479	38,995	6,206	17,748	37,097
1968	8,761	38,664	44,000	6,601	18,258	36,281
1969	11,083	47,945	51,067	7,073	18,957	38,901
1970	10,318	47,311	44,588	6,544	20,937	42,606
1971	11,721	48,238	44,185	7,072	22,426	44,528
1972	11,201	50,499	45,365	6,825	20,342	38,604
1973	11,276	54,597	50,681	8,515	17,885	44,193
1974	12,272	48,909	53,120	5,899	19,541	39,506
1975	17,135	53,431	48,089	Closed	18,971	37,741
1976	17,883	47,569	55,722	Closed	15,231	39,382
1977	17,072	49,420	44,370	Closed	16,228	43,122
1978	16,769	48,491	47,286	Closed	18,456	42,052
1979	16,055	35,518	52,650	Closed	19,004	46,197
1980	15,068	48,856	45,169	Closed	19,156	38,735
1981	18,630	42,040	50,566	Closed	15,931	41,135
1982	21,793	54,661	52,193	Closed	15,931	41,470
1983	22,123	51,237	54,087	Closed	15,392	44,436
1984	18,724	54,323	50,681	4,044	16,323	47,623
1985	18,723	64,382	50,458	4,755	21,619	42,737
1986	14,714	64,371	56,735	5,870	18,480	44,125
1987	15,067	62,811	57,634	5,938	16,620	45,069
1988	14,907	62,956	61,083	6,549	17,032	43,826
1989	14,698	61,756	63,406	6,746	17,242	36,085
1990	18,430	61,248	57,660	10,849	18,115	28,746
1991	16,122	58,189	57,442	10,279	19,267	42,895
1992	13,146	61,306	64,502	10,997	19,666	48,388
1993	15,074	54,005	60,517	8,138	17,699	48,906
1994	14,412	58,837	64,545	6,804	16,516	48,314
1995	14,074	59,543	66,517	7,594	17,388	50,034
1996	16,661	61,211	66,151	7,781	17,519	49,640
1997	14,293	59,792	63,618	7,275	18,991	51,718
1998	15,182	60,864	66,123	7,024	19,114	52,876
1999	14,156	63,348	70,555	8,509	19,337	52,846
2000	15,063	66,243	74,130	8,475	20,673	49,504
2001	15,780	62,364	72,027	8,261	20,785	53,423
2002	15,788	64,301	69,963	7,822	22,779	58,529
2003	16,035	62,644	72,562	7,412	23,958	60,033
2004	15,765	61,685	73,932	6,885	21,855	54,165
2005	16,362	62,692	73,344	7,390	24,035	52,475
2006	16,157	61,143	73,767	7,262	23,254	48,345
2007	15,747	57,437	77,759	7,705	24,433	48,208
2008	15,002	56,179	75,460	7,165	22,346	45,405
2009	Closed	54,941	75,108	16,467	24,237	47,695
2010	Closed	54,690	74,064	15,792	23,882	49,731
2011	8,696	52,173	74,717	8,722	21,636	45,345
2012	13,396	54,518	76,023	8,116	23,612	47,735
2013	12,265	55,690	77,868	8,026	26,630	47,945
2014	13,274	52,437	73,993	7,960	24,854	47,825
2015	13,615	53,778	75,001	7,598	25,025	48,337
2016	14,863	53,025	75,716	8,044	25,874	47,954

\* North Channel Bridge.

**Queens Bridges (cont'd) ~ Average Daily Traffic Volumes  
1948 - 2016**

<i>Year</i>	<i>Midtown Highway Bridge</i>	<i>Rikers Island Bridge</i>	<i>Roosevelt Avenue Bridge</i>	<i>Roosevelt Island Bridge</i>	<i>Whitestone Expressway Bridge</i>	<i>Totals</i>
1948	28,754	<i>Bridge opened</i>	14,044	<i>Bridge opened</i>	27,290	147,106
1949	27,963		18,907		31,558	173,925
1950	32,429	11/22/1966	20,451	05/18/1955	38,771	180,610
1951	31,812		9,330		39,368	200,163
1952	35,088		23,596		44,219	212,687
1953	34,513		20,473		47,455	220,866
1954	30,495		18,007		50,089	221,700
1955	39,650		20,123	2,144	51,577	218,696
1956	49,944		17,987	2,689	57,982	265,239
1957	47,481		20,984	2,157	58,606	261,111
1958	45,593		19,653	3,137	60,687	256,536
1959	55,665		29,616	2,760	58,761	264,201
1960	62,051		18,153	3,014	48,615	259,348
1961	62,520		21,475	2,947	53,542	265,848
1962	57,600		24,440	3,220	41,340	257,140
1963	57,770		29,500	3,220	47,620	288,190
1964	60,610		18,110	3,440	83,450	312,090
1965	60,973		20,143	3,791	81,201	310,588
1966	68,752		18,728	4,133	71,795	313,379
1967	72,962	1,973	21,493	5,973	110,363	354,637
1968	69,058	2,809	21,352	4,987	136,741	387,512
1969	62,712	2,983	19,588	4,675	122,162	387,146
1970	84,844	3,543	21,656	6,201	111,833	400,381
1971	75,706	3,594	21,587	6,182	117,614	402,853
1972	65,481	3,680	20,754	7,007	118,050	387,808
1973	73,292	4,850	20,910	7,944	113,395	407,538
1974	68,127	4,794	19,545	8,656	123,204	403,573
1975	67,933	4,784	19,256	6,417	116,750	390,507
1976	64,438	4,891	17,351	7,031	118,164	387,662
1977	60,501	4,423	18,776	7,809	125,682	387,403
1978	85,223	4,728	19,058	6,851	121,123	410,037
1979	70,893	5,491	19,980	6,838	121,123	393,749
1980	74,334	6,066	19,090	7,501	110,606	384,581
1981	100,182	6,085	17,911	8,383	132,023	432,886
1982	100,182	6,946	16,944	8,064	120,944	439,128
1983	88,132	7,807	15,051	8,940	139,721	446,926
1984	89,000	9,487	20,292	8,787	129,834	449,118
1985	73,315	6,019	25,548	8,190	134,650	450,396
1986	71,938	8,056	23,219	9,199	139,464	456,171
1987	70,079	12,386	19,567	8,754	153,040	466,965
1988	71,761	12,070	22,567	10,207	150,777	473,735
1989	65,160	11,493	24,440	9,501	151,292	461,819
1990	66,269	11,195	23,285	9,275	145,247	450,319
1991	74,328	12,491	23,466	10,236	141,824	466,539
1992	72,144	15,579	23,687	9,751	145,669	484,835
1993	64,368	14,206	28,012	9,830	146,440	467,195
1994	66,633	12,494	24,631	9,638	155,969	478,793
1995	67,810	12,213	22,758	9,382	147,029	474,342
1996	69,394	11,906	22,543	9,489	163,578	495,873
1997	69,273	12,461	24,566	9,302	172,034	503,323
1998	70,486	15,672	22,994	10,048	182,516	522,899
1999	72,749	14,240	23,784	9,491	192,099	541,114
2000	79,662	13,150	22,749	9,198	192,482	551,329
2001	82,431	14,503	22,856	9,655	189,031	551,116
2002	81,392	13,447	22,235	9,444	188,758	554,458
2003	84,243	16,966	20,281	9,203	188,770	562,107
2004	82,732	14,979	19,652	9,100	188,869	549,619
2005	89,559	13,811	19,360	9,929	191,563	560,520
2006	83,379	13,146	19,420	9,685	197,084	552,642
2007	85,997	13,496	18,975	9,895	202,410	562,062
2008	84,769	15,621	18,859	10,161	193,122	544,089
2009	84,048	15,436	17,168	9,454	198,124	542,678
2010	87,692	13,186	17,268	9,800	192,092	538,197
2011	84,148	12,580	16,084	9,103	199,803	533,007
2012	88,184	12,265	17,439	9,516	204,909	555,713
2013	87,827	14,065	17,994	9,550	205,790	563,650
2014	87,878	13,578	16,352	8,212	204,401	550,764
2015	84,989	13,780	17,834	8,583	208,962	557,502
2016	83,342	14,817	15,964	8,393	218,227	566,219

## Borden Avenue Bridge - 2016

### Eastbound

	Commuter			Commercial			Totals
	Autos	Buses	Vans	Trucks	Vans	Totals	
12-1am	---	---	---	---	---	46	
1-2am	---	---	---	---	---	46	
2-3am	---	---	---	---	---	52	
3-4am	---	---	---	---	---	73	
4-5am	---	---	---	---	---	121	
5-6am	---	---	---	---	---	148	
6-7am	---	---	---	---	---	180	
7-8am	107	8	4	50	26	195	
8-9am	117	7	6	75	36	241	
9-10am	108	7	3	72	41	231	
10-11am	159	4	8	43	19	233	
11-12am	119	4	3	89	39	254	
12-1pm	168	4	3	30	15	220	
1-2pm	208	2	3	42	20	275	
2-3pm	157	2	21	89	41	310	
3-4pm	281	3	9	29	11	333 **	
4-5pm	242	6	16	31	23	318	
5-6pm	186	2	6	26	12	232	
6-7pm	97	0	6	18	12	133	
7-8pm	---	---	---	---	---	100	
8-9pm	---	---	---	---	---	85	
9-10pm	---	---	---	---	---	64	
10-11pm	---	---	---	---	---	60	
11-12pm	---	---	---	---	---	52	
Totals	---	---	---	---	---	4,002	

### Westbound

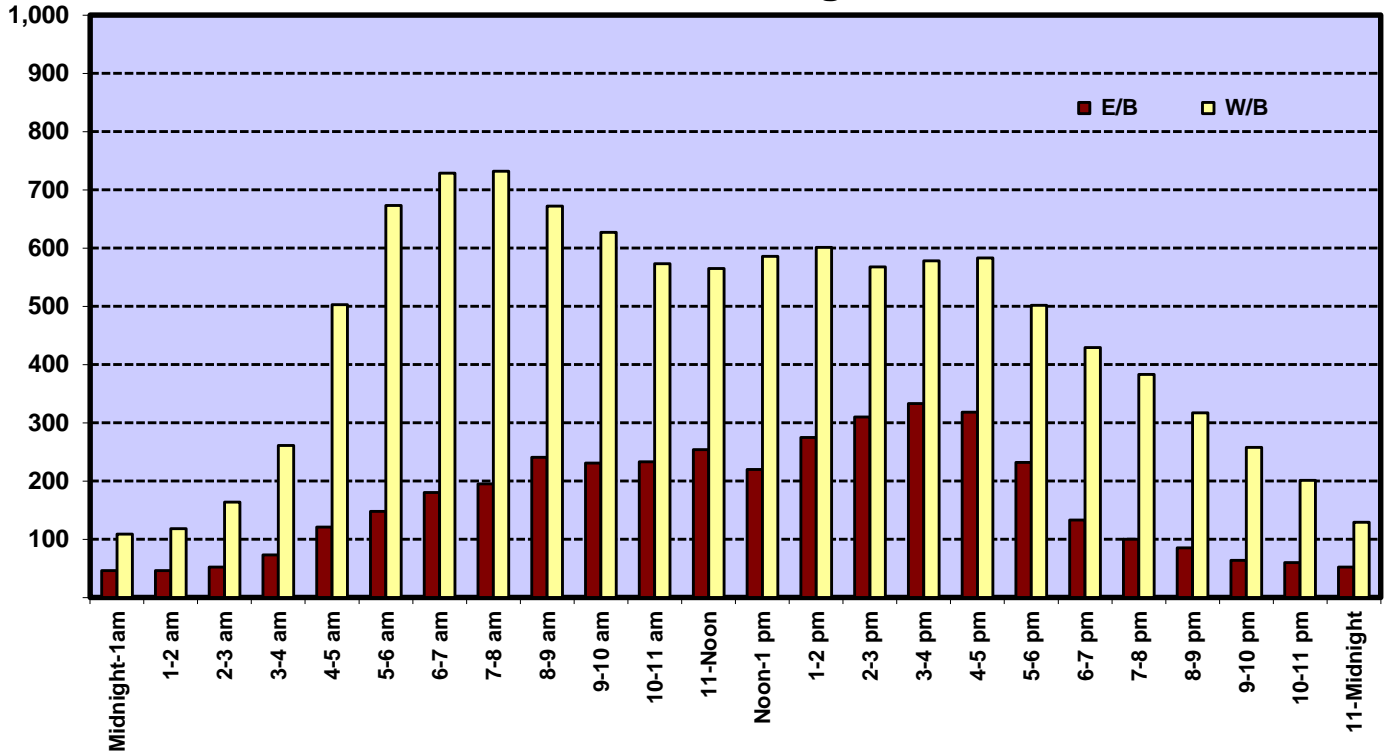
	Commuter			Commercial			Totals
	Autos	Buses	Vans	Trucks	Vans	Totals	
12-1am	---	---	---	---	---	109	
1-2am	---	---	---	---	---	118	
2-3am	---	---	---	---	---	164	
3-4am	---	---	---	---	---	261	
4-5am	---	---	---	---	---	503	
5-6am	---	---	---	---	---	673	
6-7am	---	---	---	---	---	729	
7-8am	559	11	21	70	71	732 **	
8-9am	578	6	8	56	24	672	
9-10am	486	4	9	78	50	627	
10-11am	502	9	4	44	14	573	
11-12am	392	7	8	115	43	565	
12-1pm	497	6	5	60	18	586	
1-2pm	483	6	5	66	41	601	
2-3pm	404	11	9	107	37	568	
3-4pm	479	37	4	39	19	578	
4-5pm	436	39	11	76	21	583	
5-6pm	430	19	7	25	21	502	
6-7pm	359	14	10	29	17	429	
7-8pm	---	---	---	---	---	383	
8-9pm	---	---	---	---	---	317	
9-10pm	---	---	---	---	---	258	
10-11pm	---	---	---	---	---	201	
11-12pm	---	---	---	---	---	129	
Totals	---	---	---	---	---	10,861	

		2-Way Totals					
7-10am	332	22	13	197	103	667	
10am-1pm	446	12	14	162	73	707	
1-4pm	646	7	33	160	72	918	
4-7pm	525	8	28	75	47	683	
7am-7pm	1,949	49	88	594	295	2,975	
6-10am	---	---	---	---	---	847	
3-7pm	806	11	37	104	58	1,016	
6am-7pm	---	---	---	---	---	3,155	
Totals	---	---	---	---	---	14,863	
Totals	---	---	---	---	---	2,031	
Totals	---	---	---	---	---	1,724	
Totals	---	---	---	---	---	2,665	
Totals	---	---	---	---	---	2,197	
Totals	---	---	---	---	---	9,991	
Totals	---	---	---	---	---	3,607	
Totals	---	---	---	---	---	3,108	
Totals	---	---	---	---	---	10,900	

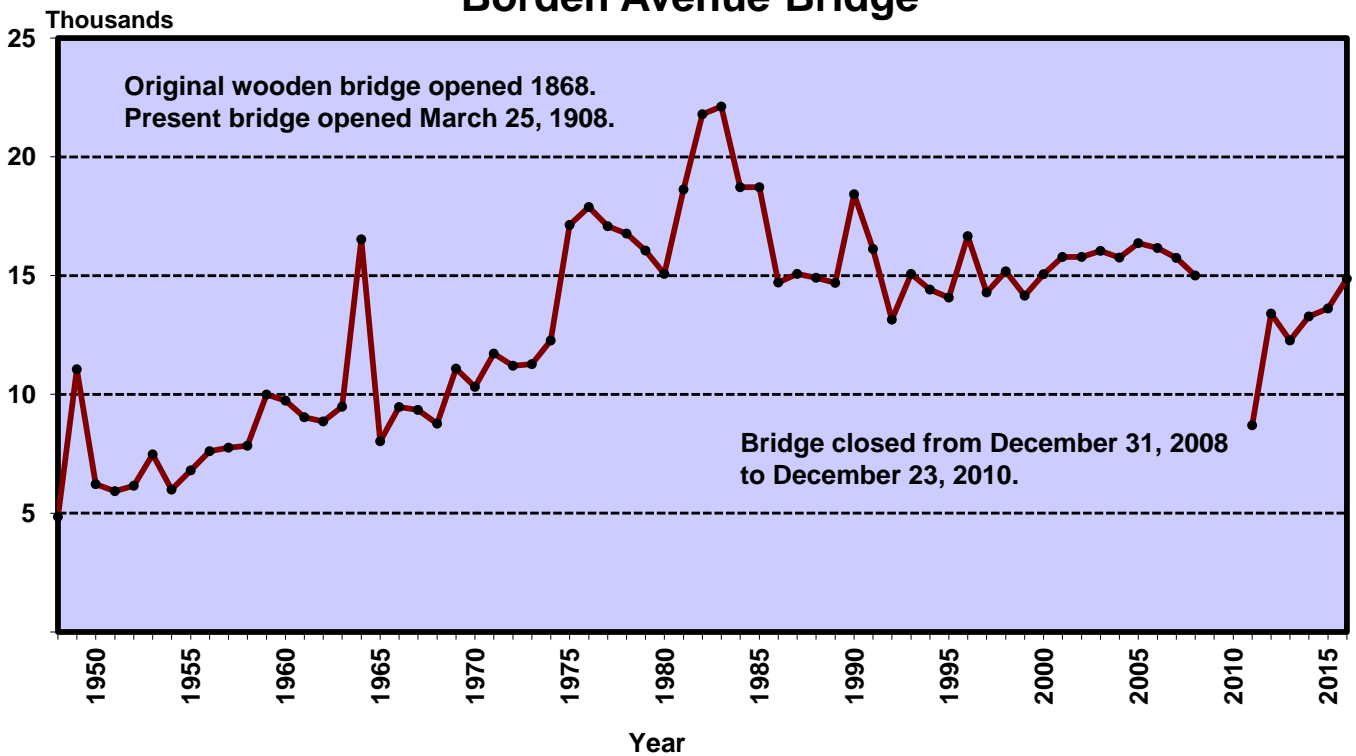
Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Borden Avenue Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Borden Avenue Bridge



# Hourly Vehicular Volumes Flushing Bridge - 2016

## Eastbound

## Westbound

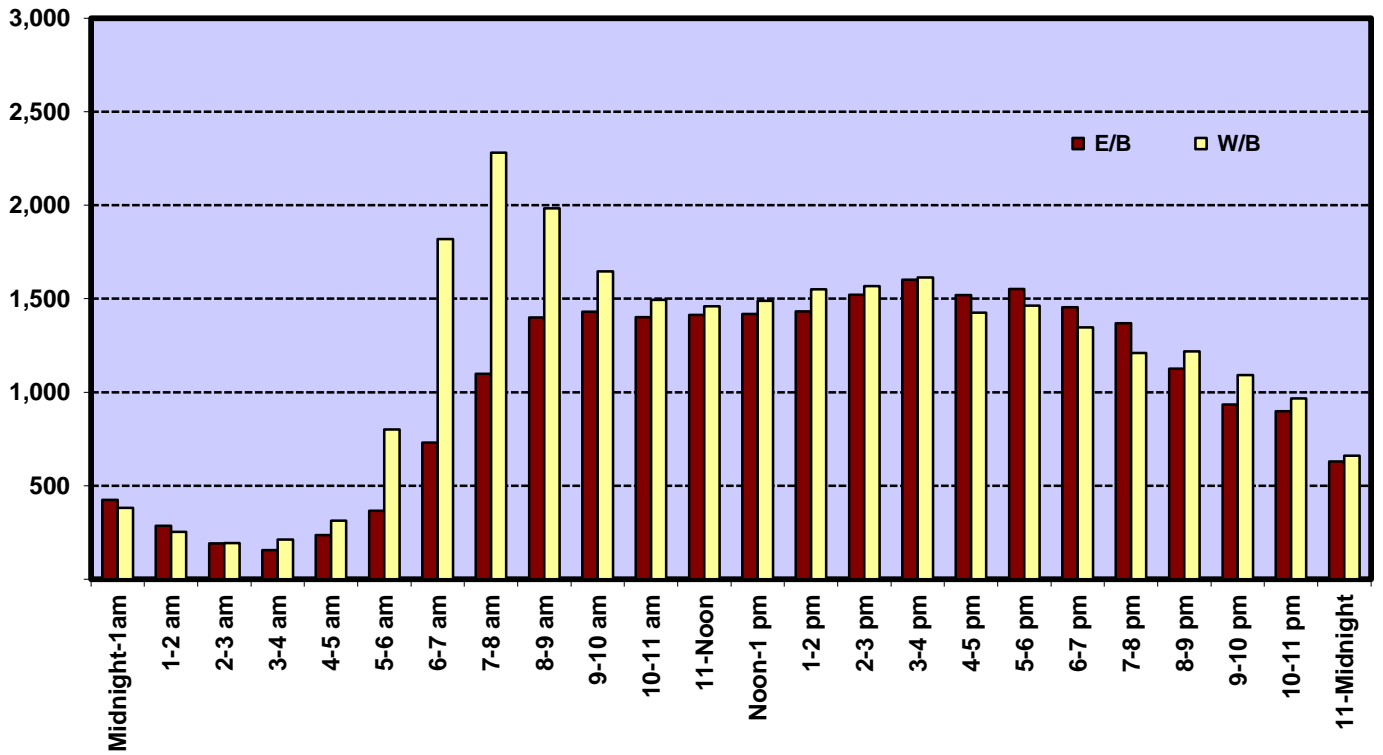
FHWA Classes ▲	Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups,					Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups,					2-way Grand Totals	
	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles	SUVs, Family Vans	Taxis, Liveries, Limos	Police, Fleet Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks		Total Vehicles
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		
12-1am	368	33	11	3	9	0	424	339	21	12	5	2	2	381	805							
1-2am	231	31	8	5	10	0	285	230	6	5	6	6	1	254	539							
2-3am	141	30	10	3	4	4	192	157	22	6	4	4	1	194	386							
3-4am	109	21	9	4	9	3	155	162	18	7	10	8	7	212	367							
4-5am	180	30	8	12	2	5	237	255	35	11	6	1	6	314	551							
5-6am	284	23	19	12	23	5	366	658	68	30	21	4	19	800	1,166							
6-7am	632	23	13	32	23	8	731	1,444	114	86	102	33	40	1,819	2,550							
7-8am	954	26	24	38	43	13	1,098	1,860	90	98	74	122	36	2,280	3,378							**
8-9am	1,162	66	60	40	46	25	1,399	1,611	69	113	38	129	23	1,983	3,382							**
9-10am	1,145	77	83	31	67	28	1,431	1,252	104	83	30	148	29	1,646	3,077							
10-11am	1,095	84	91	39	71	22	1,402	1,135	66	119	33	122	18	1,493	2,895							
11-12am	1,104	63	53	30	136	28	1,414	1,081	72	173	24	92	18	1,460	2,874							
12-1pm	1,130	76	58	25	105	25	1,419	1,127	96	140	21	83	21	1,488	2,907							
1-2pm	1,108	81	43	25	148	27	1,432	1,201	78	116	21	118	16	1,550	2,982							
2-3pm	1,200	77	45	67	124	8	1,521	1,283	74	116	23	69	2	1,567	3,088							
3-4pm	1,277	123	71	56	78	7	1,602	1,280	79	119	56	70	10	1,614	3,216							
4-5pm	1,255	71	73	35	79	6	1,519	1,123	108	101	33	54	6	1,425	2,944							
5-6pm	1,336	63	71	24	51	6	1,551	1,260	79	70	11	43	0	1,463	3,014							
6-7pm	1,273	43	54	30	51	3	1,454	1,196	26	56	22	47	0	1,347	2,801							
7-8pm	1,233	18	65	32	20	1	1,369	1,098	19	37	25	30	0	1,209	2,578							
8-9pm	1,026	27	47	10	14	1	1,125	1,129	34	19	23	12	1	1,218	2,343							
9-10pm	868	17	16	10	22	1	934	1,035	26	11	13	6	0	1,091	2,025							
10-11pm	808	23	32	9	24	3	899	906	30	8	16	7	0	967	1,866							
11-12pm	574	30	15	5	6	0	630	597	34	12	9	8	1	661	1,291							
Totals	20,493	1,156	979	577	1,155	229	24,589	23,419	1,368	1,548	626	1,218	257	28,436	53,025							
7-10am	3,261	169	167	109	156	66	3,928	4,723	263	294	142	399	88	5,909	9,837							
10am-1pm	3,329	223	202	94	312	75	4,235	3,343	234	432	78	297	57	4,441	8,676							
1-4pm	3,585	281	159	148	340	42	4,555	3,764	231	351	100	257	28	4,731	9,286							
4-7pm	3,864	177	198	89	181	15	4,524	3,579	213	227	66	144	6	4,235	8,759							
7am-7pm	14,039	850	726	440	989	198	17,242	15,409	941	1,304	386	1,097	179	19,316	36,558							
6-10am	3,893	192	180	141	179	74	4,659	6,167	377	380	244	432	128	7,728	12,387							
3-7pm	5,141	300	269	145	249	22	6,126	4,859	292	346	122	214	16	5,849	11,975							
6am-7pm	14,671	873	739	472	1,012	206	17,973	16,853	1,055	1,390	488	1,130	219	21,135	39,108							

Based on November 2014 Classification Survey Data.

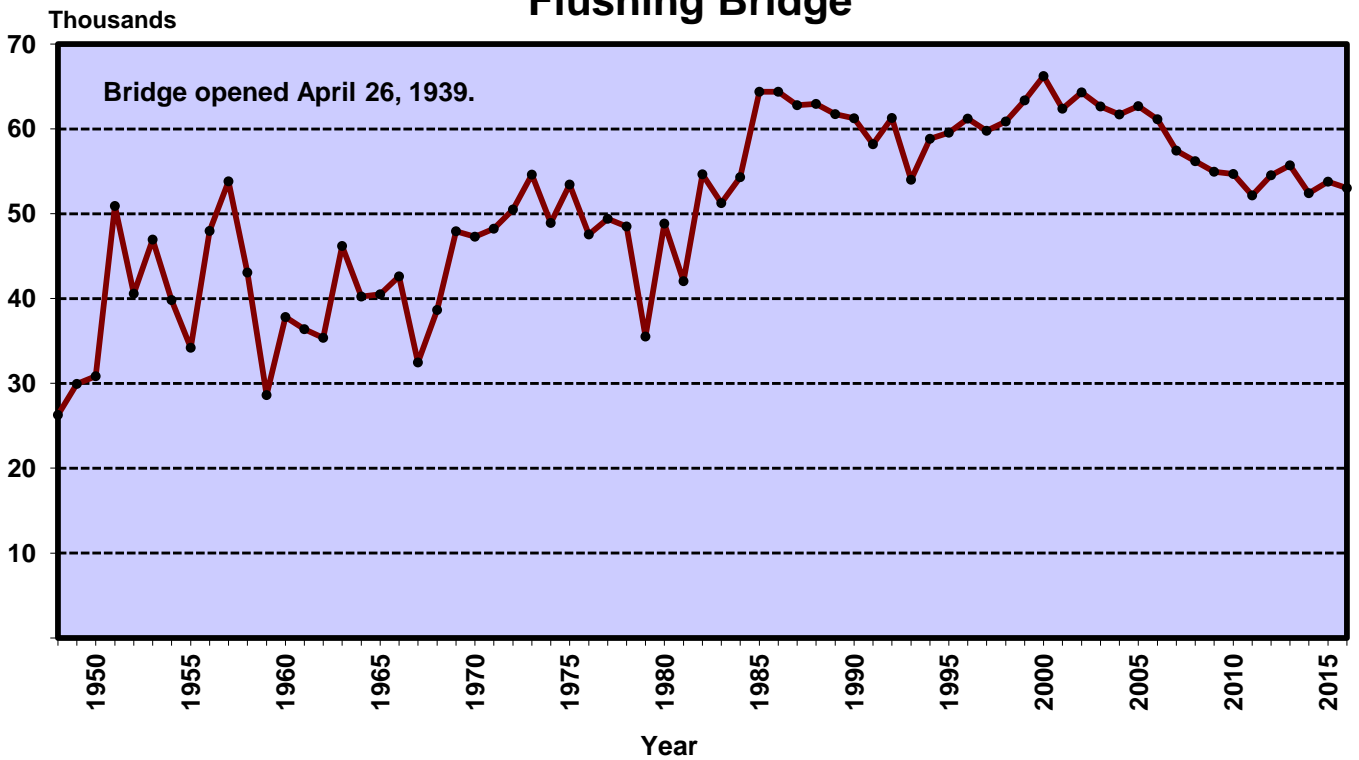
\*\* Peak Volumes



## Hourly Vehicular Volumes Flushing Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Flushing Bridge



# Hourly Vehicular Volumes Hook Creek Bridge - 2016

## Northbound

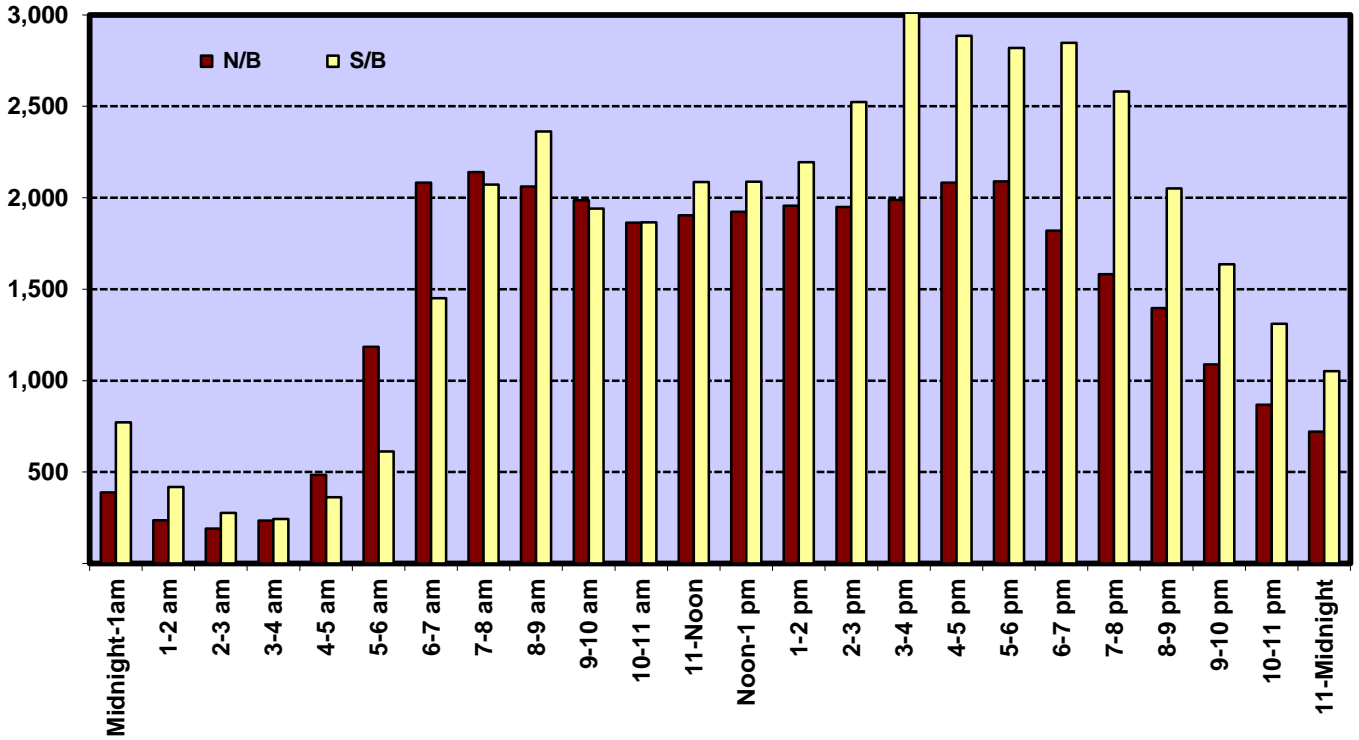
## Southbound

	Northbound				Southbound				2-Way Totals			
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses		Commuter Vans	Trucks	Commercial Vans
12-1am	---	---	---	---	---	388	---	---	---	---	---	771
1-2am	---	---	---	---	---	237	---	---	---	---	---	419
2-3am	---	---	---	---	---	191	---	---	---	---	---	277
3-4am	---	---	---	---	---	235	---	---	---	---	---	243
4-5am	---	---	---	---	---	485	---	---	---	---	---	362
5-6am	---	---	---	---	---	1,185	---	---	---	---	---	613
6-7am	---	---	---	---	---	2,082	---	---	---	---	---	1,451
7-8am	1,982	14	48	61	35	2,140 **	1,648	15	150	150	109	2,072
8-9am	1,827	14	67	98	56	2,062	1,938	10	147	170	97	2,362
9-10am	1,725	6	60	132	64	1,987	1,638	7	81	130	84	1,940
10-11am	1,756	2	13	50	42	1,863	1,742	2	12	60	50	1,866
11-12am	1,589	9	43	180	83	1,904	1,853	3	15	119	96	2,086
12-1pm	1,813	9	25	57	20	1,924	2,001	0	13	46	28	2,088
1-2pm	1,785	13	40	69	50	1,957	1,934	6	68	132	55	2,195
2-3pm	1,746	15	43	77	69	1,950	2,285	4	37	107	90	2,523
3-4pm	1,909	31	10	24	14	1,988	2,912	4	24	46	54	3,040 **
4-5pm	1,974	10	24	42	32	2,082	2,701	3	46	63	73	2,886
5-6pm	1,928	11	36	37	78	2,090	2,626	7	63	43	80	2,819
6-7pm	1,730	11	39	22	18	1,820	2,719	4	55	40	29	2,847
7-8pm	---	---	---	---	---	1,582	---	---	---	---	---	2,581
8-9pm	---	---	---	---	---	1,396	---	---	---	---	---	2,051
9-10pm	---	---	---	---	---	1,089	---	---	---	---	---	1,637
10-11pm	---	---	---	---	---	868	---	---	---	---	---	1,310
11-12pm	---	---	---	---	---	721	---	---	---	---	---	1,051
Totals	---	---	---	---	---	34,226	---	---	---	---	---	41,490
7-10am	5,534	34	175	291	155	6,189	5,224	32	378	450	290	6,374
10am-1pm	5,158	20	81	287	145	5,691	5,596	5	40	225	174	6,040
1-4pm	5,440	59	93	170	133	5,895	7,131	14	129	285	199	7,758
4-7pm	5,632	32	99	101	128	5,992	8,046	14	164	146	182	8,552
7am-7pm	21,764	145	448	849	561	23,767	25,997	65	711	1,106	845	28,724
6-10am	---	---	---	---	---	8,271	---	---	---	---	---	7,825
3-7pm	7,541	63	109	125	142	7,980	10,958	18	188	192	236	11,592
6am-7pm	---	---	---	---	---	25,849	---	---	---	---	---	30,175

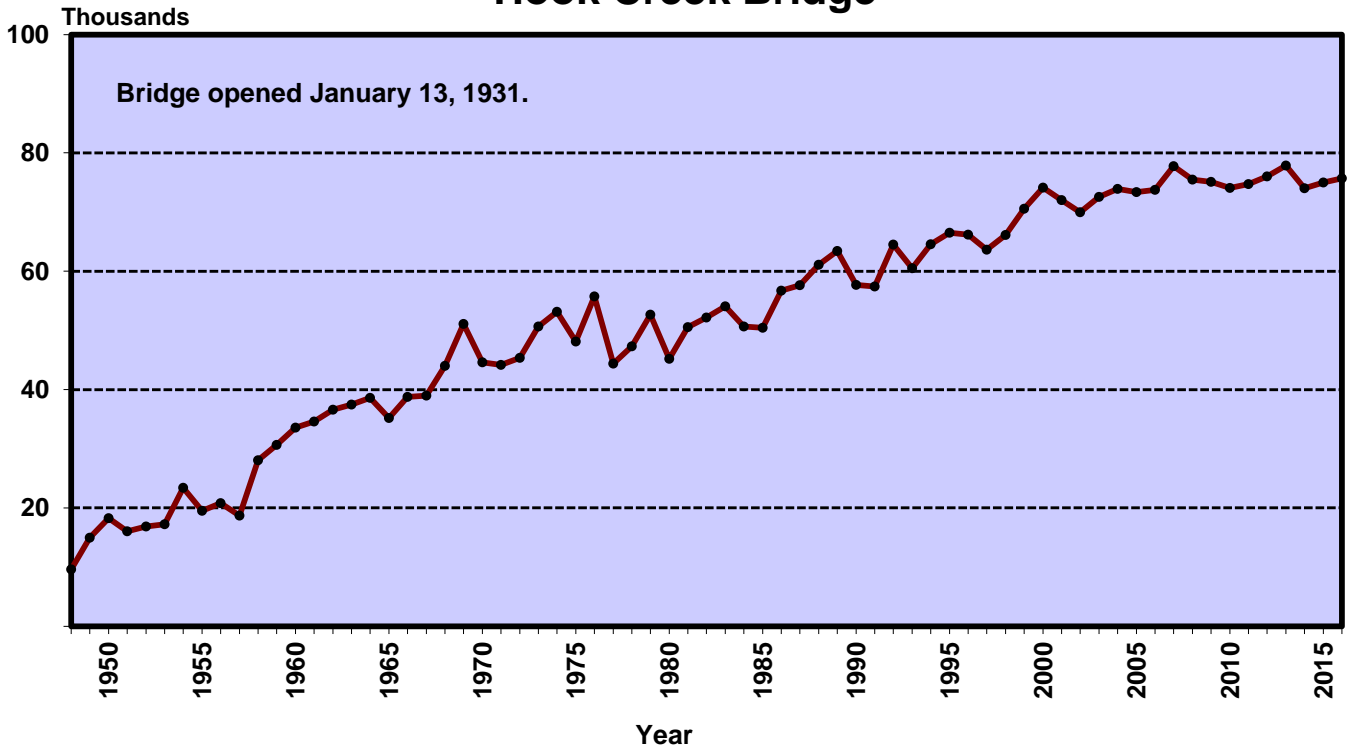
Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Hook Creek Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Hook Creek Bridge



# Hourly Vehicular Volumes Hunters Point Bridge - 2016

## Eastbound

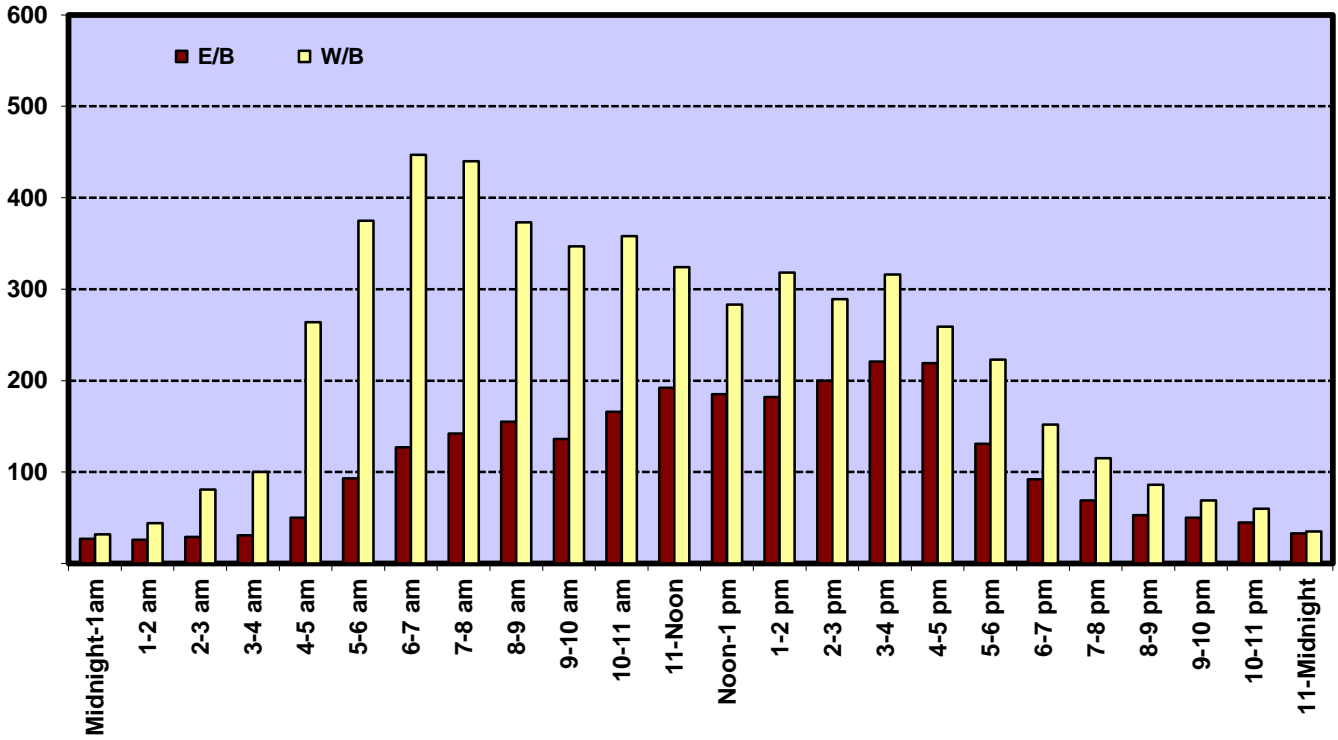
## Westbound

	Eastbound					Westbound					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	27	---	---	---	---	---	32
1-2am	---	---	---	---	---	26	---	---	---	---	---	44
2-3am	---	---	---	---	---	29	---	---	---	---	---	81
3-4am	---	---	---	---	---	31	---	---	---	---	---	100
4-5am	---	---	---	---	---	50	---	---	---	---	---	264
5-6am	---	---	---	---	---	93	---	---	---	---	---	375
6-7am	---	---	---	---	---	127	---	---	---	---	---	447 **
7-8am	101	0	14	15	12	142	328	1	18	29	64	440
8-9am	87	0	5	23	40	155	314	0	6	26	27	373
9-10am	84	0	2	23	27	136	247	0	3	46	51	347
10-11am	137	0	4	19	6	166	302	0	2	33	21	358
11-12am	122	1	9	34	26	192	232	0	2	56	34	324
12-1pm	136	0	7	21	21	185	225	0	2	34	22	283
1-2pm	132	0	10	19	21	182	253	4	4	28	29	318
2-3pm	119	0	17	32	32	200	207	10	2	36	34	289
3-4pm	186	0	8	20	7	221 **	297	4	1	10	4	316
4-5pm	159	0	12	17	31	219	181	39	2	9	28	259
5-6pm	112	0	6	1	12	131	183	10	1	14	15	223
6-7pm	77	1	1	4	9	92	129	3	2	5	13	152
7-8pm	---	---	---	---	---	69	---	---	---	---	---	115
8-9pm	---	---	---	---	---	53	---	---	---	---	---	86
9-10pm	---	---	---	---	---	50	---	---	---	---	---	69
10-11pm	---	---	---	---	---	45	---	---	---	---	---	60
11-12pm	---	---	---	---	---	33	---	---	---	---	---	35
Totals	---	---	---	---	---	2,654	---	---	---	---	---	5,390
7-10am	272	0	21	61	79	433	889	1	27	101	142	1,160
10am-1pm	395	1	20	74	53	543	759	0	6	123	77	965
1-4pm	437	0	35	71	60	603	757	18	7	74	67	923
4-7pm	348	1	19	22	52	442	493	52	5	28	56	634
7am-7pm	1,452	2	95	228	244	2,021	2,898	71	45	326	342	3,682
6-10am	---	---	---	---	---	560	---	---	---	---	---	1,607
3-7pm	534	1	27	42	59	663	790	56	6	38	60	950
6am-7pm	---	---	---	---	---	2,148	---	---	---	---	---	4,129

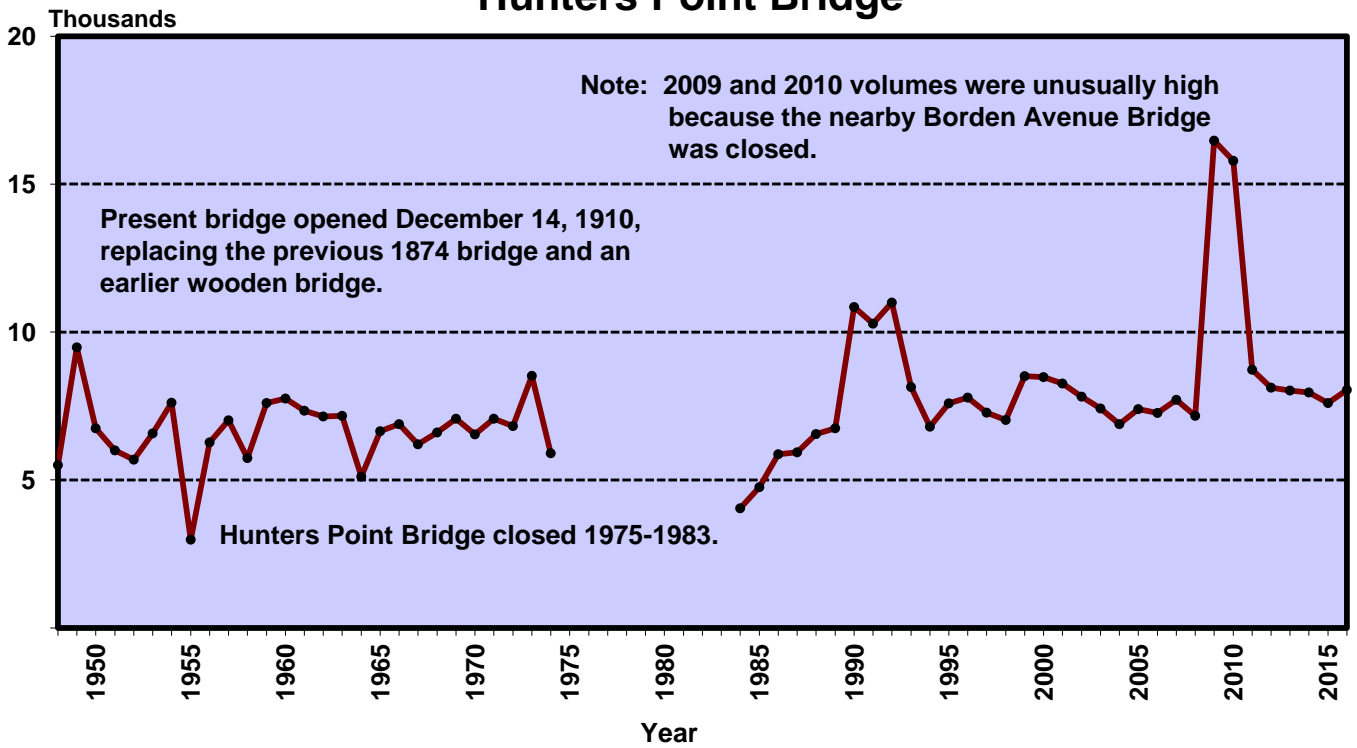
Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Hunters Point Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Hunters Point Bridge



# Hourly Vehicular Volumes

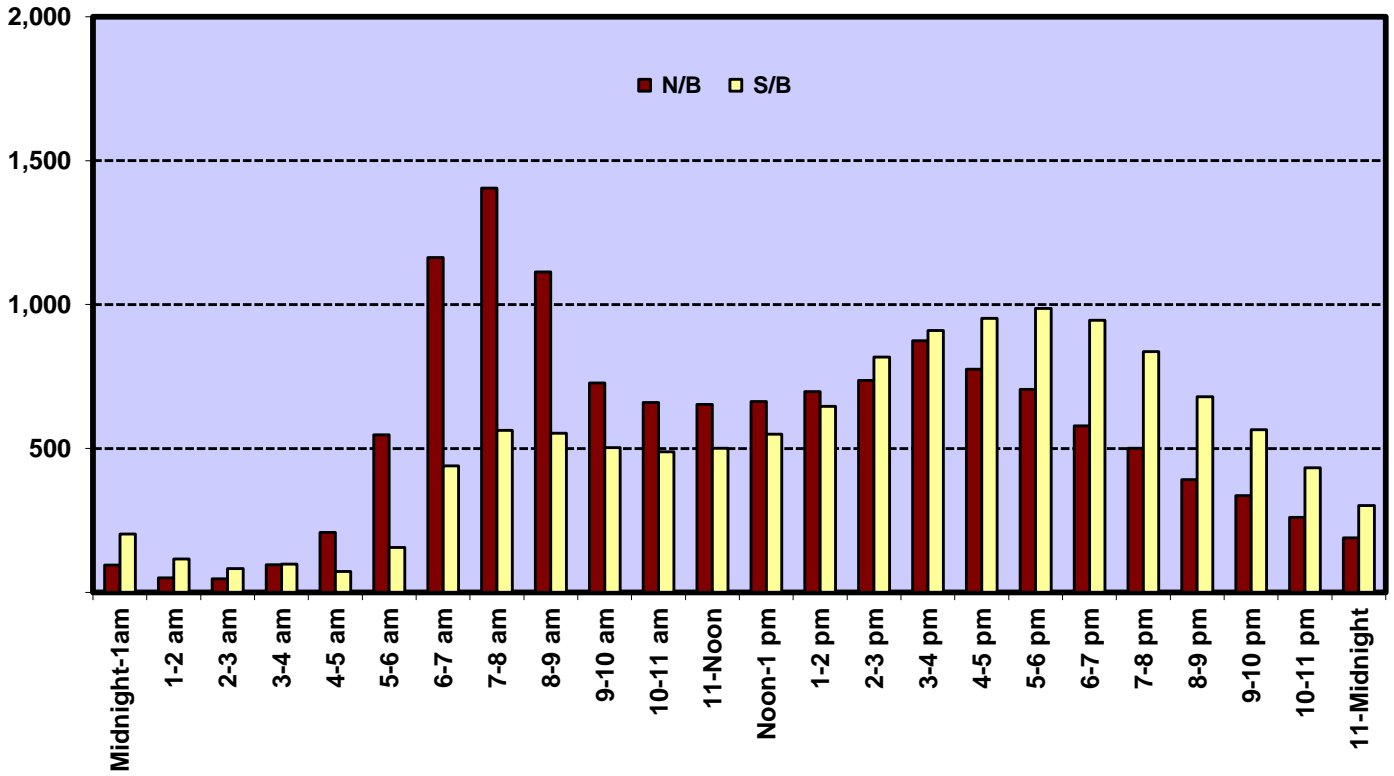
## Joseph P. Addabbo Memorial Bridge - 2016 (North Channel Bridge)

	Northbound					Southbound					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	95	---	---	---	---	---	203
1-2am	---	---	---	---	---	50	---	---	---	---	---	116
2-3am	---	---	---	---	---	47	---	---	---	---	---	83
3-4am	---	---	---	---	---	96	---	---	---	---	---	98
4-5am	---	---	---	---	---	208	---	---	---	---	---	73
5-6am	---	---	---	---	---	547	---	---	---	---	---	156
6-7am	---	---	---	---	---	1,163	---	---	---	---	---	440
7-8am	1,283	36	22	25	39	1,405 **	411	28	7	44	73	563
8-9am	940	32	22	45	74	1,113	409	29	1	45	69	553
9-10am	603	9	8	68	40	728	346	20	4	62	71	503
10-11am	600	12	8	30	10	660	422	13	0	20	33	488
11-12am	520	9	9	63	52	653	365	9	0	53	74	501
12-1pm	574	18	0	37	34	663	492	12	0	18	28	550
1-2pm	647	5	5	22	19	698	591	7	0	16	32	646
2-3pm	606	22	11	53	44	736	654	33	5	33	93	818
3-4pm	785	27	13	24	25	874	795	26	0	26	63	910
4-5pm	644	35	14	47	35	775	808	10	3	33	98	952
5-6pm	619	10	18	31	27	705	898	7	0	20	61	986 **
6-7pm	486	9	20	25	39	579	851	7	4	11	72	945
7-8pm	---	---	---	---	---	501	---	---	---	---	---	836
8-9pm	---	---	---	---	---	392	---	---	---	---	---	680
9-10pm	---	---	---	---	---	336	---	---	---	---	---	565
10-11pm	---	---	---	---	---	261	---	---	---	---	---	433
11-12pm	---	---	---	---	---	189	---	---	---	---	---	302
Totals	---	---	---	---	---	13,474	---	---	---	---	---	12,400
7-10am	2,826	77	52	138	153	3,246	1,166	77	12	151	213	4,865
10am-1pm	1,694	39	17	130	96	1,976	1,279	34	0	91	135	3,515
1-4pm	2,038	54	29	99	88	2,308	2,040	66	5	75	188	4,682
4-7pm	1,749	54	52	103	101	2,059	2,557	24	7	64	231	4,942
7am-7pm	8,307	224	150	470	438	9,589	7,042	201	24	381	767	18,004
6-10am	---	---	---	---	---	4,409	---	---	---	---	---	2,059
3-7pm	2,534	81	65	127	126	2,933	3,352	50	7	90	294	6,726
6am-7pm	---	---	---	---	---	10,752	---	---	---	---	---	8,855

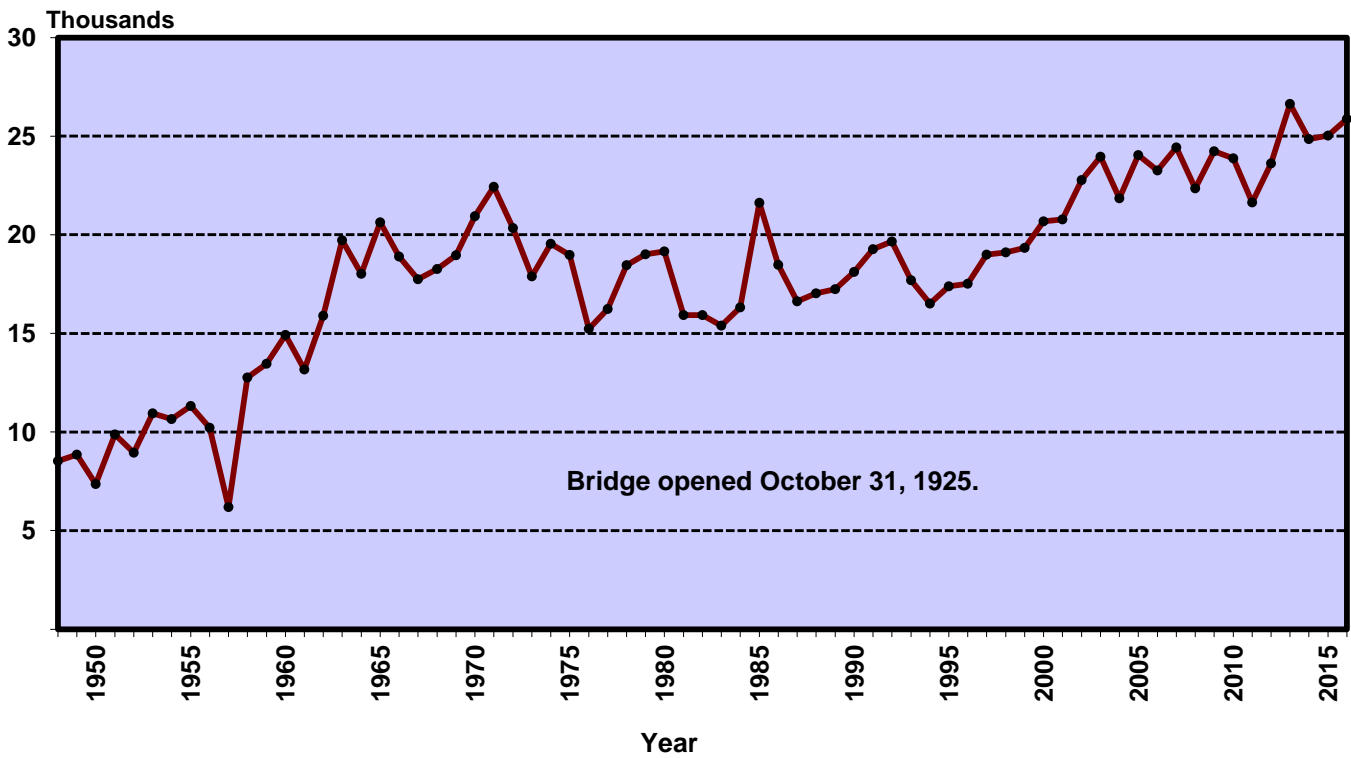
Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Joseph P. Addabbo Memorial Bridge ~ 2016



## Average Daily Traffic Volumes Joseph P. Addabbo Memorial Bridge ~ Total of Both Directions



# Hourly Vehicular Volumes

## Little Neck Bridge - 2016

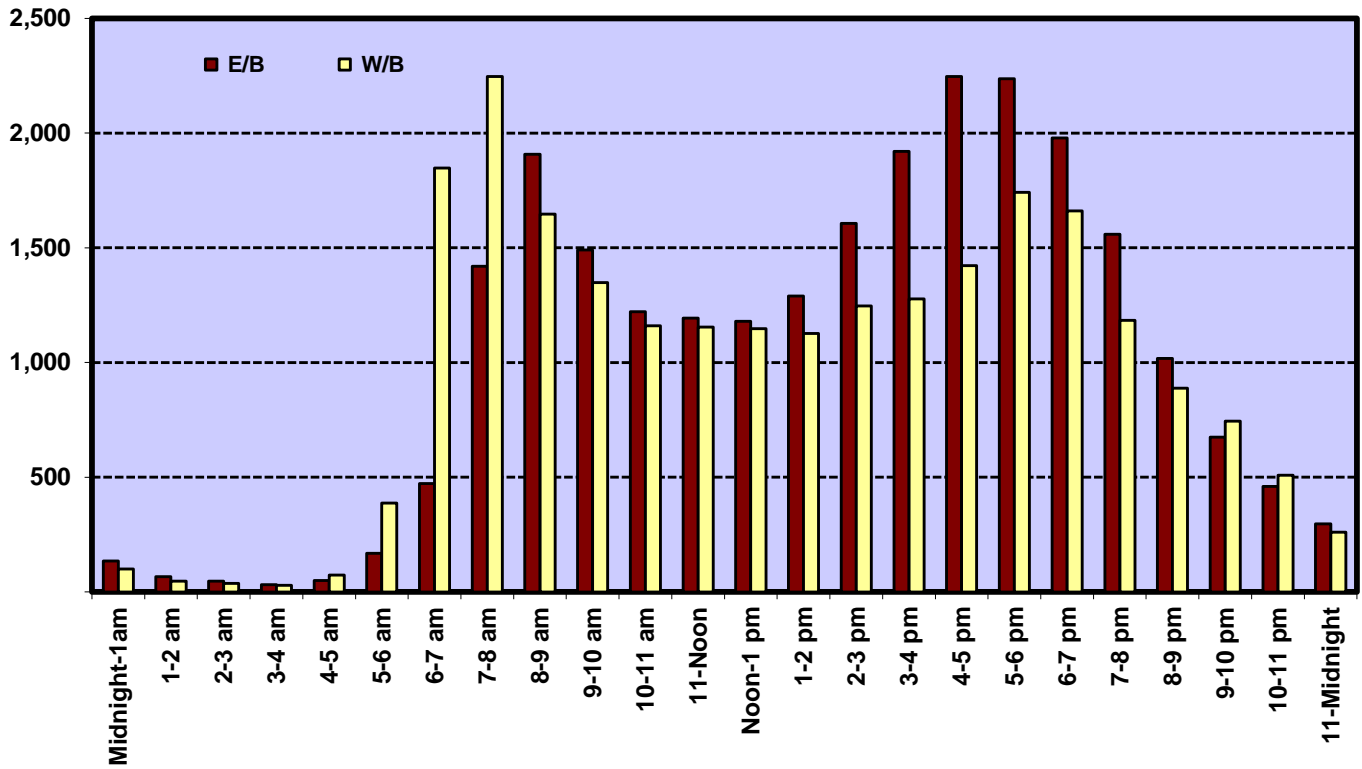
	<b>Eastbound</b>					<b>Westbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	135	---	---	---	---	---	100
1-2am	---	---	---	---	---	67	---	---	---	---	---	47
2-3am	---	---	---	---	---	47	---	---	---	---	---	37
3-4am	---	---	---	---	---	32	---	---	---	---	---	29
4-5am	---	---	---	---	---	50	---	---	---	---	---	73
5-6am	---	---	---	---	---	169	---	---	---	---	---	388
6-7am	---	---	---	---	---	473	---	---	---	---	---	1,848
7-8am	1,155	37	65	100	62	1,419	2,011	83	7	41	104	2,246 **
8-9am	1,680	26	79	70	52	1,907	1,507	42	2	31	65	1,647
9-10am	1,313	19	59	72	27	1,490	1,237	7	0	36	68	1,348
10-11am	1,113	9	27	43	29	1,221	1,096	10	0	24	30	1,160
11-12am	1,048	12	26	60	48	1,194	1,030	7	0	64	54	1,155
12-1pm	1,108	12	9	39	11	1,179	1,072	10	0	25	41	1,148
1-2pm	1,194	9	21	32	33	1,289	1,075	2	0	20	30	1,127
2-3pm	1,367	17	66	90	66	1,606	1,118	9	0	40	79	1,246
3-4pm	1,814	22	20	41	23	1,920	1,211	9	0	14	43	1,277
4-5pm	1,891	16	86	153	101	2,247 **	1,277	15	0	38	92	1,422
5-6pm	2,003	22	61	50	101	2,237	1,656	12	0	10	63	1,741
6-7pm	1,823	19	56	44	37	1,979	1,586	9	0	7	58	1,660
7-8pm	---	---	---	---	---	1,559	---	---	---	---	---	1,183
8-9pm	---	---	---	---	---	1,018	---	---	---	---	---	888
9-10pm	---	---	---	---	---	675	---	---	---	---	---	744
10-11pm	---	---	---	---	---	460	---	---	---	---	---	509
11-12pm	---	---	---	---	---	297	---	---	---	---	---	261
Totals	---	---	---	---	---	24,670	---	---	---	---	---	23,284
7-10am	4,148	82	203	242	141	4,816	4,755	132	9	108	237	5,241
10am-1pm	3,269	33	62	142	88	3,594	3,198	27	0	113	125	3,463
1-4pm	4,375	48	107	163	122	4,815	3,404	20	0	74	152	3,650
4-7pm	5,717	57	203	247	239	6,463	4,519	36	0	55	213	4,823
7am-7pm	17,509	220	575	794	590	19,688	15,876	215	9	350	727	17,177
6-10am	---	---	---	---	---	5,289	---	---	---	---	---	7,089
3-7pm	7,531	79	223	288	262	8,383	5,730	45	0	69	256	6,100
6am-7pm	---	---	---	---	---	20,161	---	---	---	---	---	19,025

Based on 1989 Classification Survey Data

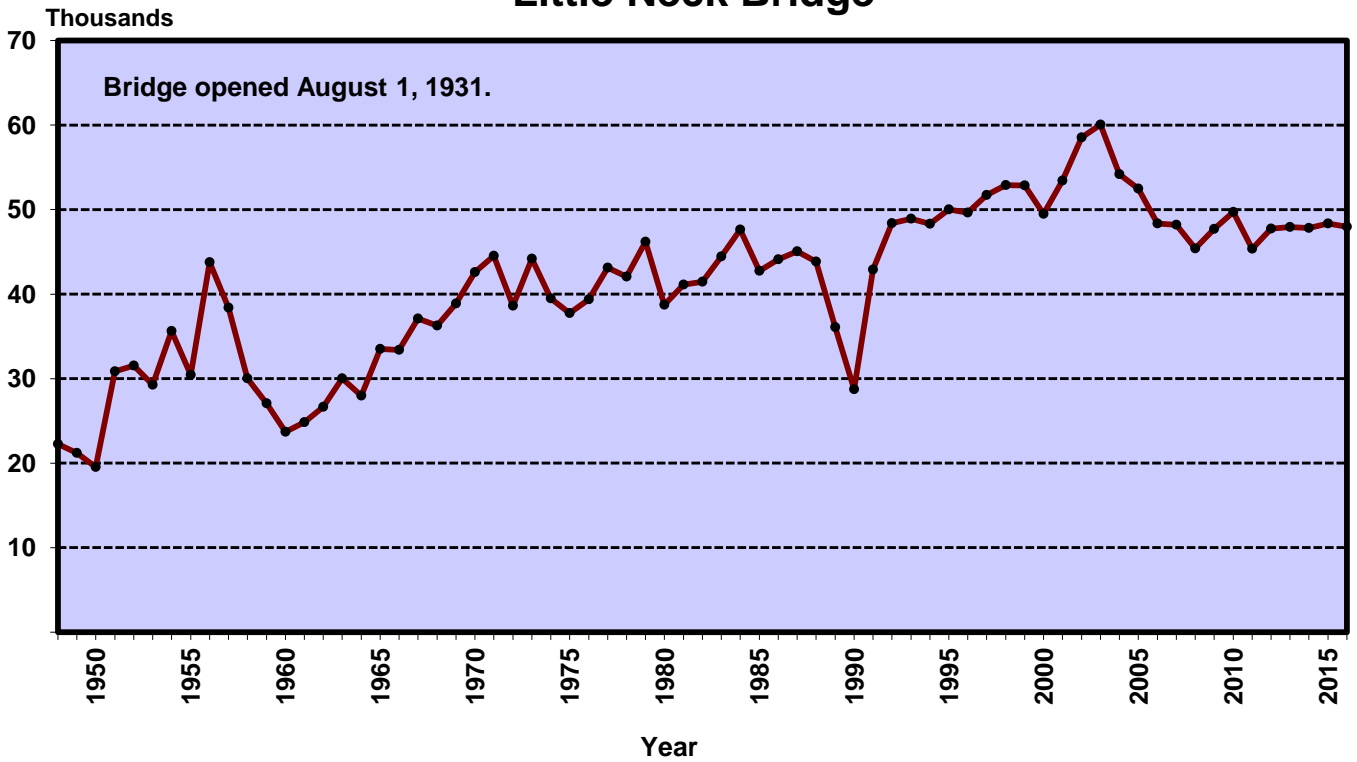
\*\* Peak Volumes



## Hourly Vehicular Volumes Little Neck Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Little Neck Bridge



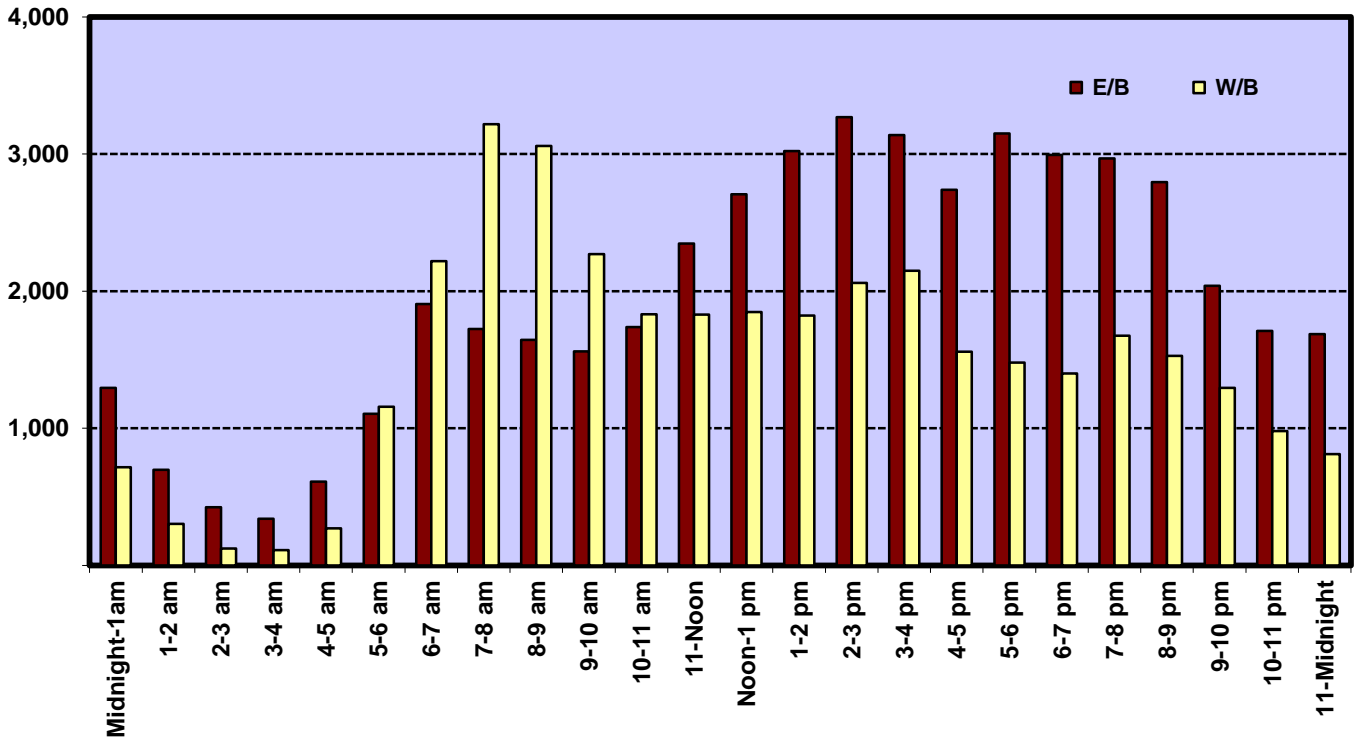
# Hourly Vehicular Volumes Midtown Highway Bridge - 2016

	<i>Eastbound</i>					<i>Westbound</i>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	1,295	---	---	---	---	---	717
1-2am	---	---	---	---	---	698	---	---	---	---	---	303
2-3am	---	---	---	---	---	424	---	---	---	---	---	124
3-4am	---	---	---	---	---	340	---	---	---	---	---	113
4-5am	---	---	---	---	---	611	---	---	---	---	---	272
5-6am	---	---	---	---	---	1,107	---	---	---	---	---	1,157
6-7am	---	---	---	---	---	1,907	---	---	---	---	---	2,218
7-8am	1,408	72	15	139	91	1,725	2,632	144	66	117	259	3,218 **
8-9am	1,322	107	15	114	87	1,645	2,581	60	59	120	239	3,059
9-10am	1,189	128	11	139	94	1,561	1,827	54	79	128	182	2,270
10-11am	1,565	56	3	50	65	1,739	1,671	21	24	49	66	1,831
11-12am	2,031	55	7	133	121	2,347	1,530	14	85	95	106	1,830
12-1pm	2,446	33	24	98	105	2,706	1,666	7	56	64	56	1,849
1-2pm	2,390	40	88	189	314	3,021	1,451	18	114	123	116	1,822
2-3pm	2,792	17	71	168	220	3,268 **	1,636	79	98	138	110	2,061
3-4pm	2,899	29	33	55	123	3,139	1,861	73	75	58	83	2,150
4-5pm	2,305	20	66	83	266	2,740	1,190	124	100	34	111	1,559
5-6pm	2,799	24	22	54	251	3,150	1,217	62	70	64	67	1,480
6-7pm	2,730	10	29	64	161	2,994	1,270	19	37	34	39	1,399
7-8pm	---	---	---	---	---	2,968	---	---	---	---	---	1,676
8-9pm	---	---	---	---	---	2,796	---	---	---	---	---	1,529
9-10pm	---	---	---	---	---	2,039	---	---	---	---	---	1,295
10-11pm	---	---	---	---	---	1,711	---	---	---	---	---	981
11-12pm	---	---	---	---	---	1,687	---	---	---	---	---	811
Totals	---	---	---	---	---	47,618	---	---	---	---	---	35,724
7-10am	3,919	307	41	392	272	4,931	7,040	258	204	365	680	8,547
10am-1pm	6,042	144	34	281	291	6,792	4,867	42	165	208	228	5,510
1-4pm	8,081	86	192	412	657	9,428	4,948	170	287	319	309	6,033
4-7pm	7,834	54	117	201	678	8,884	3,677	205	207	132	217	4,438
7am-7pm	25,876	591	384	1,286	1,898	30,035	20,532	675	863	1,024	1,434	24,528
6-10am	10,733	83	150	256	801	6,838	5,538	278	282	190	300	10,765
3-7pm	---	---	---	---	---	12,023	---	---	---	---	---	6,588
6am-7pm	---	---	---	---	---	31,942	---	---	---	---	---	26,746

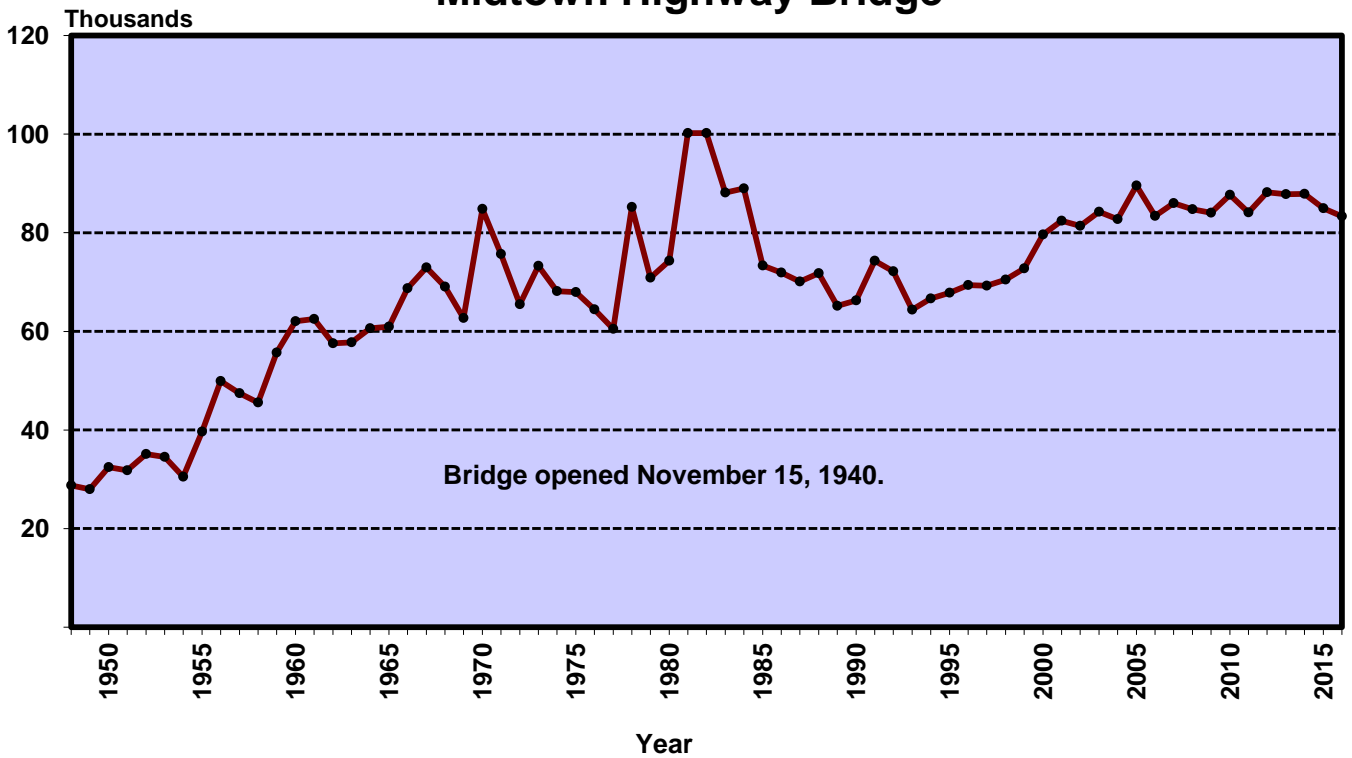
Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Midtown Highway Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Midtown Highway Bridge



# Hourly Vehicular Volumes

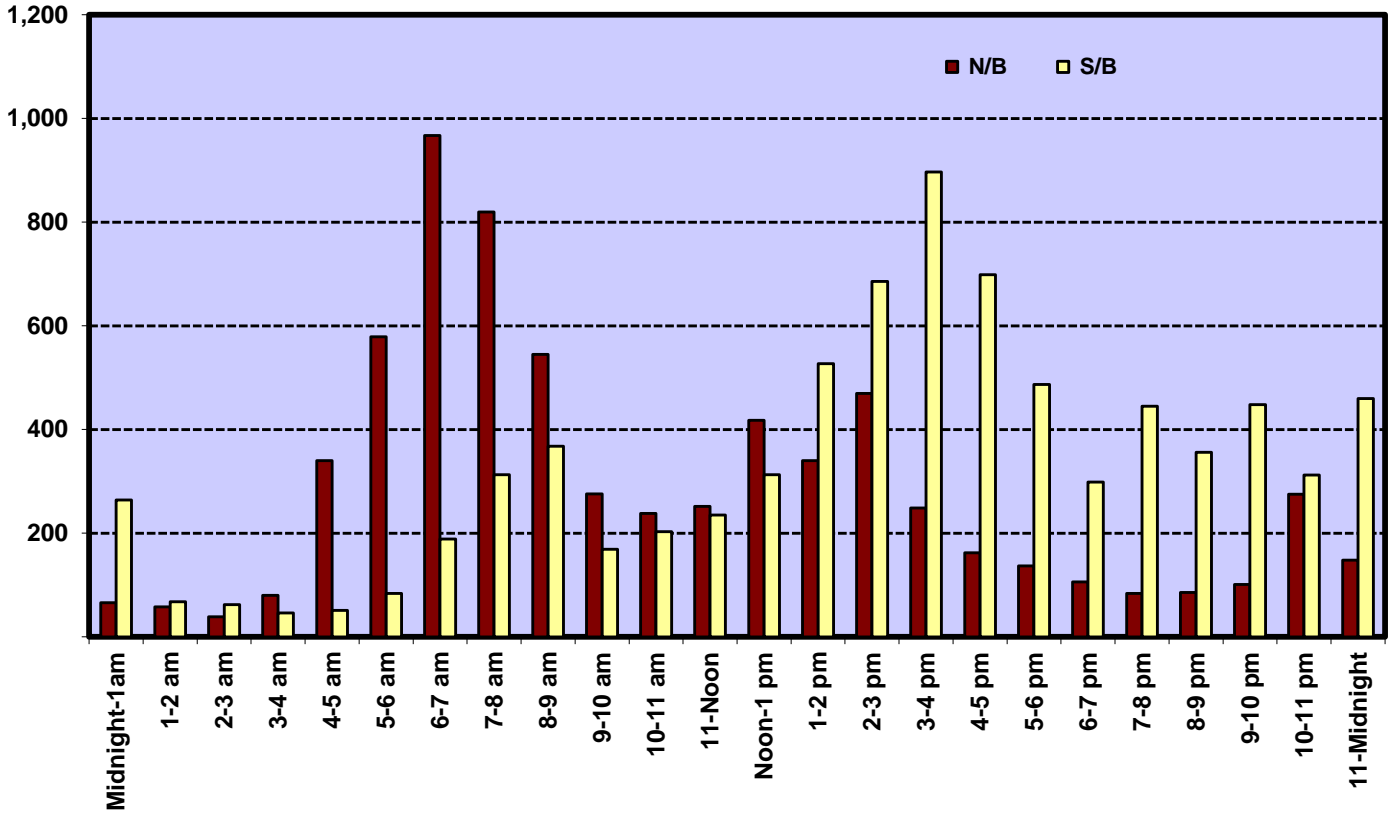
## Rikers Island Bridge - 2016

	<b>Northbound</b>					<b>Southbound</b>					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	66	---	---	---	---	---	264
1-2am	---	---	---	---	---	58	---	---	---	---	---	68
2-3am	---	---	---	---	---	39	---	---	---	---	---	62
3-4am	---	---	---	---	---	80	---	---	---	---	---	46
4-5am	---	---	---	---	---	340	---	---	---	---	---	51
5-6am	---	---	---	---	---	579	---	---	---	---	---	84
6-7am	---	---	---	---	---	967 **	---	---	---	---	---	189
7-8am	680	10	3	44	83	820	270	19	10	10	4	313
8-9am	467	10	2	28	38	545	299	16	19	24	10	368
9-10am	192	27	1	25	31	276	122	13	3	24	7	169
10-11am	183	14	0	19	22	238	166	17	4	14	2	203
11-12am	176	15	3	26	32	252	154	25	16	28	12	235
12-1pm	365	17	2	12	22	418	272	12	13	10	6	313
1-2pm	292	26	1	8	13	340	460	19	25	16	7	527
2-3pm	414	11	1	13	31	470	594	17	33	28	14	686 **
3-4pm	222	9	1	6	11	249	837	16	27	16	1	897 **
4-5pm	138	11	1	4	8	162	648	10	26	15	0	699
5-6pm	111	11	1	0	14	137	439	14	24	4	6	487
6-7pm	68	23	3	5	7	106	253	8	32	6	0	299
7-8pm	---	---	---	---	---	84	---	---	---	---	---	445
8-9pm	---	---	---	---	---	86	---	---	---	---	---	356
9-10pm	---	---	---	---	---	101	---	---	---	---	---	448
10-11pm	---	---	---	---	---	275	---	---	---	---	---	312
11-12pm	---	---	---	---	---	148	---	---	---	---	---	460
Totals	---	---	---	---	---	6,836	---	---	---	---	---	7,981
7-10am	1,339	47	6	97	152	1,641	691	48	32	58	21	850
10am-1pm	724	46	5	57	76	908	592	54	33	52	20	751
1-4pm	928	46	3	27	55	1,059	1,891	52	85	60	22	2,110
4-7pm	317	45	5	9	29	405	1,340	32	82	25	6	1,485
7am-7pm	3,308	184	19	190	312	4,013	4,514	186	232	195	69	5,196
6-10am	---	---	---	---	---	2,608	---	---	---	---	---	1,039
3-7pm	539	54	6	15	40	654	2,177	48	109	41	7	2,382
6am-7pm	---	---	---	---	---	4,980	---	---	---	---	---	5,385

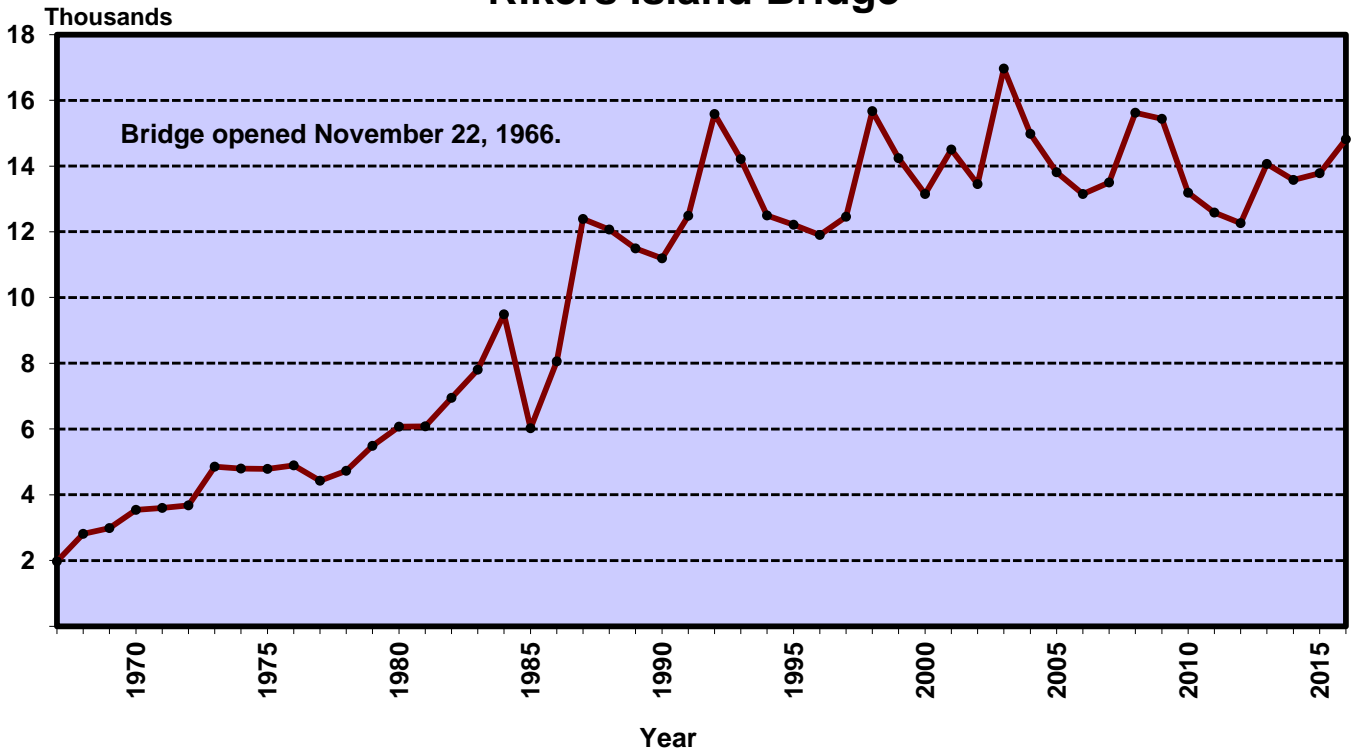
Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Rikers Island Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Rikers Island Bridge



# Roosevelt Avenue Bridge - 2016

## Eastbound

	Commuter				Commercial		Totals
	Autos	Buses	Vans	Trucks	Vans	Trucks	
12-1am	---	---	---	---	---	---	89
1-2am	---	---	---	---	---	---	70
2-3am	---	---	---	---	---	---	49
3-4am	---	---	---	---	---	---	48
4-5am	---	---	---	---	---	---	77
5-6am	---	---	---	---	---	---	126
6-7am	---	---	---	---	---	---	244
7-8am	275	23	10	26	16	16	350
8-9am	332	14	9	33	36	36	424
9-10am	330	6	9	34	39	39	418
10-11am	367	5	8	18	22	22	420
11-12am	332	9	9	32	37	37	419
12-1pm	396	5	7	13	11	11	432
1-2pm	392	24	2	7	17	17	442
2-3pm	348	23	11	40	36	36	458
3-4pm	452	10	7	20	24	24	513
4-5pm	432	8	23	42	67	67	572
5-6pm	539	4	19	24	69	69	655
6-7pm	540	4	14	23	55	55	636
7-8pm	---	---	---	---	---	---	531
8-9pm	---	---	---	---	---	---	411
9-10pm	---	---	---	---	---	---	321
10-11pm	---	---	---	---	---	---	294
11-12pm	---	---	---	---	---	---	175
Totals	---	---	---	---	---	---	8,174

## Westbound

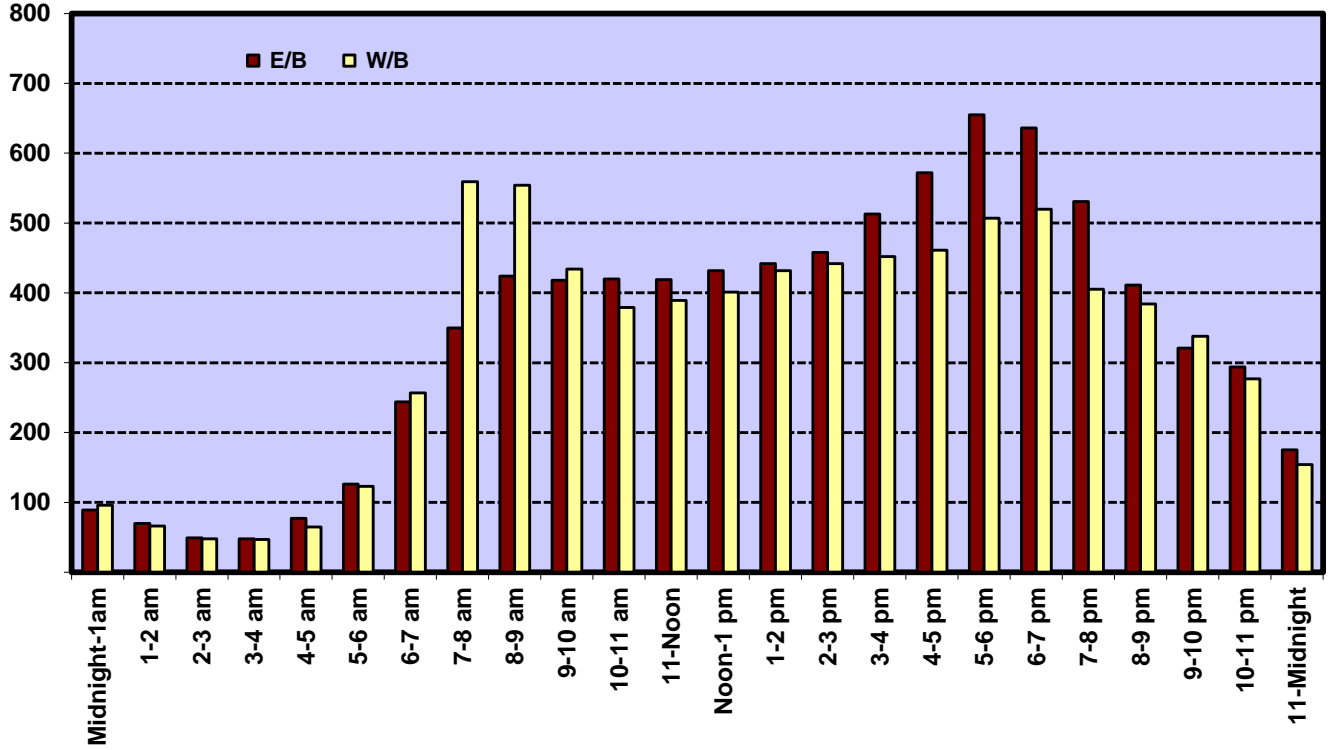
	Commuter				Commercial		Totals
	Autos	Buses	Vans	Trucks	Vans	Trucks	
12-1am	---	---	---	---	---	---	96
1-2am	---	---	---	---	---	---	66
2-3am	---	---	---	---	---	---	48
3-4am	---	---	---	---	---	---	47
4-5am	---	---	---	---	---	---	65
5-6am	---	---	---	---	---	---	123
6-7am	---	---	---	---	---	---	257
7-8am	474	4	14	35	32	32	559
8-9am	490	14	8	16	26	26	554
9-10am	348	37	8	19	22	22	434
10-11am	353	6	2	13	5	5	379
11-12am	353	12	2	15	7	7	389
12-1pm	387	8	1	2	3	3	401
1-2pm	417	10	0	1	4	4	432
2-3pm	412	7	2	11	10	10	442
3-4pm	383	53	1	7	8	8	452
4-5pm	431	11	3	8	8	8	461
5-6pm	484	6	2	9	6	6	507
6-7pm	474	24	5	9	8	8	520
7-8pm	---	---	---	---	---	---	405
8-9pm	---	---	---	---	---	---	384
9-10pm	---	---	---	---	---	---	338
10-11pm	---	---	---	---	---	---	277
11-12pm	---	---	---	---	---	---	154
Totals	---	---	---	---	---	---	7,790

7-10am	937	43	28	93	91	80	1,547
10am-1pm	1,095	19	24	63	70	15	1,169
1-4pm	1,192	57	20	67	77	22	1,326
4-7pm	1,511	16	56	89	191	22	1,488
7am-7pm	4,735	135	128	312	429	139	5,530
6-10am	---	---	---	---	---	---	1,804
3-7pm	1,963	26	63	109	215	30	1,940
6am-7pm	---	---	---	---	---	---	5,787
Totals	---	---	---	---	---	---	15,964

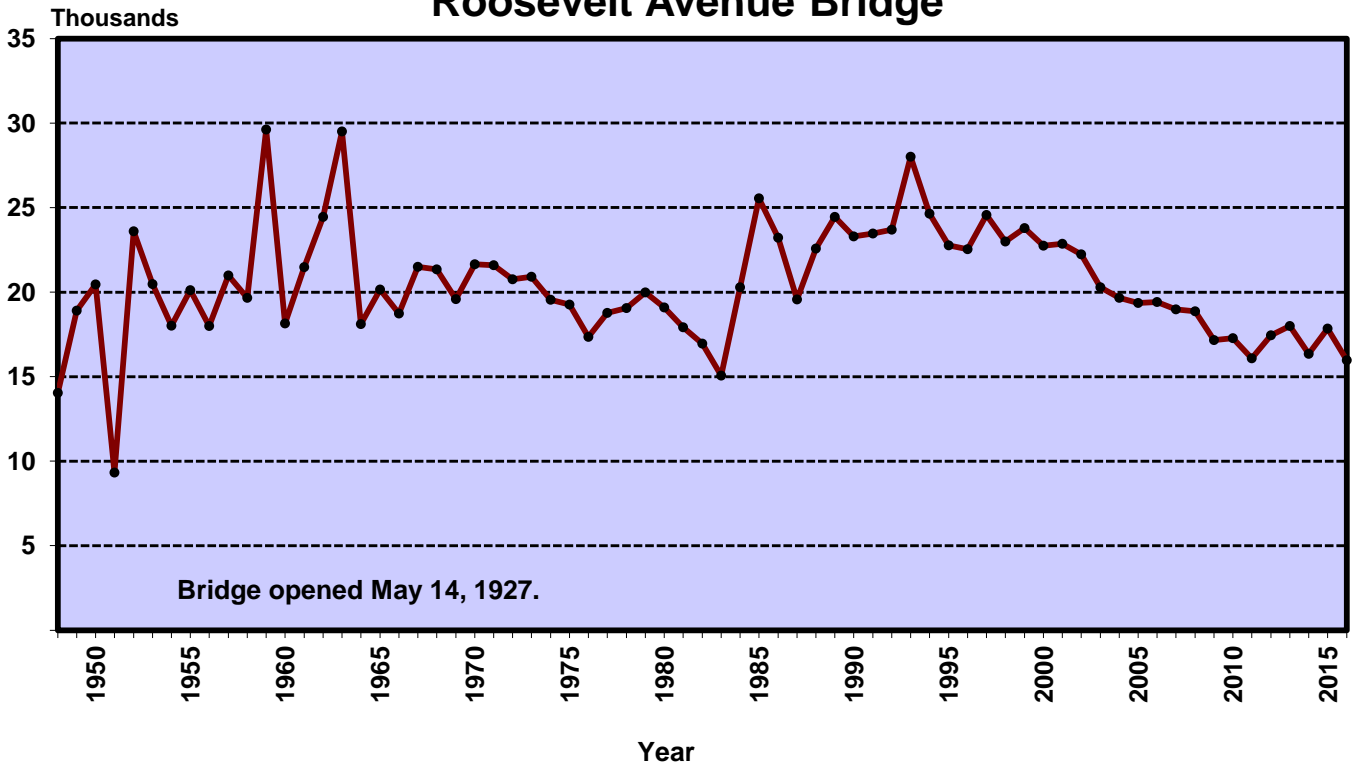
Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Roosevelt Avenue Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Roosevelt Avenue Bridge



# Hourly Vehicular Volumes Roosevelt Island Bridge - 2016

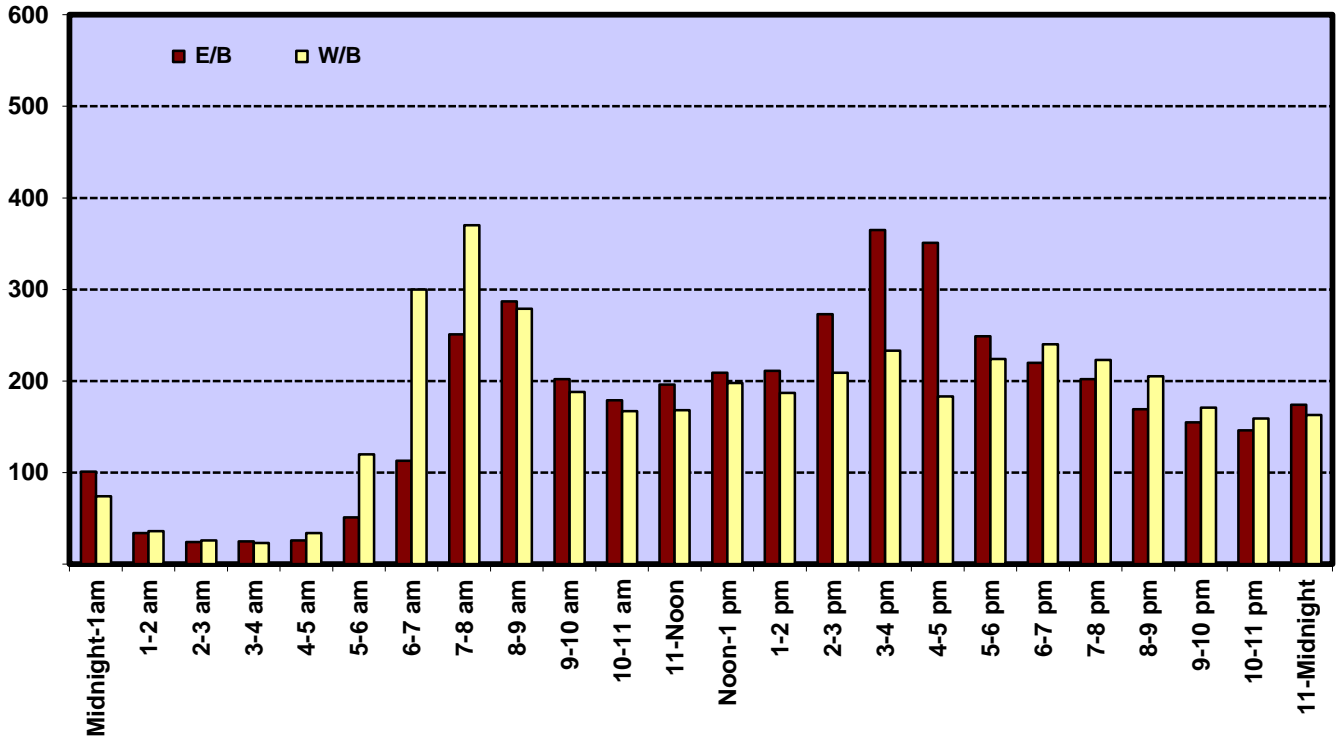
	<b>Eastbound</b>					<b>Westbound</b>					<b>2-Way Totals</b>	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	101	---	---	---	---	---	74
1-2am	---	---	---	---	---	34	---	---	---	---	---	36
2-3am	---	---	---	---	---	24	---	---	---	---	---	26
3-4am	---	---	---	---	---	25	---	---	---	---	---	23
4-5am	---	---	---	---	---	26	---	---	---	---	---	34
5-6am	---	---	---	---	---	51	---	---	---	---	---	120
6-7am	---	---	---	---	---	113	---	---	---	---	---	300
7-8am	221	12	11	4	3	251	329	6	20	9	6	370
8-9am	230	15	19	15	8	287	260	4	2	10	3	279
9-10am	154	9	10	23	6	202	163	4	8	11	2	188
10-11am	159	2	4	9	5	179	143	5	1	10	8	167
11-12am	152	5	8	15	16	196	125	4	8	23	8	168
12-1pm	184	4	2	13	6	209	163	23	3	5	4	198
1-2pm	191	6	2	5	7	211	166	6	1	8	6	187
2-3pm	235	4	4	23	7	273	184	6	4	8	7	209
3-4pm	332	18	1	6	8	365	218	6	4	3	2	233
4-5pm	331	4	8	1	7	351	164	7	5	2	5	183
5-6pm	234	4	0	3	8	249	206	7	0	4	7	224
6-7pm	204	2	1	1	12	220	229	4	3	3	1	240
7-8pm	---	---	---	---	---	202	---	---	---	---	---	223
8-9pm	---	---	---	---	---	169	---	---	---	---	---	205
9-10pm	---	---	---	---	---	155	---	---	---	---	---	171
10-11pm	---	---	---	---	---	146	---	---	---	---	---	159
11-12pm	---	---	---	---	---	174	---	---	---	---	---	163
Totals	---	---	---	---	---	4,213	---	---	---	---	---	4,180
7-10am	605	36	40	42	17	740	752	14	30	30	11	837
10am-1pm	495	11	14	37	27	584	431	32	12	38	20	533
1-4pm	758	28	7	34	22	849	568	18	9	19	15	629
4-7pm	769	10	9	5	27	820	599	18	8	9	13	647
7am-7pm	2,627	85	70	118	93	2,993	2,350	82	59	96	59	2,646
6-10am	---	---	---	---	---	853	---	---	---	---	---	1,137
3-7pm	1,101	28	10	11	35	1,185	817	24	12	12	15	880
6am-7pm	---	---	---	---	---	3,106	---	---	---	---	---	2,946

Based on 1989 Classification Survey Data

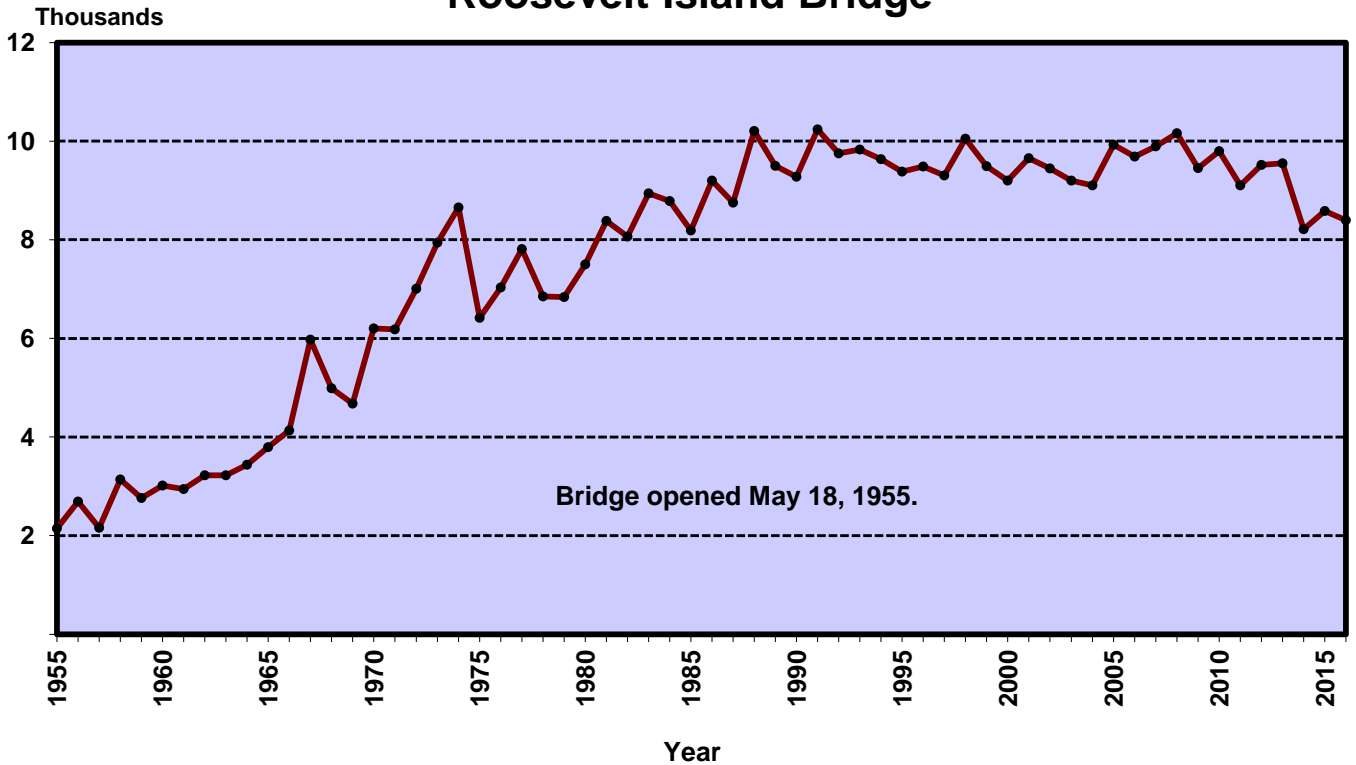
\*\* Peak Volumes



## Hourly Vehicular Volumes Roosevelt Island Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Roosevelt Island Bridge



# Hourly Vehicular Volumes

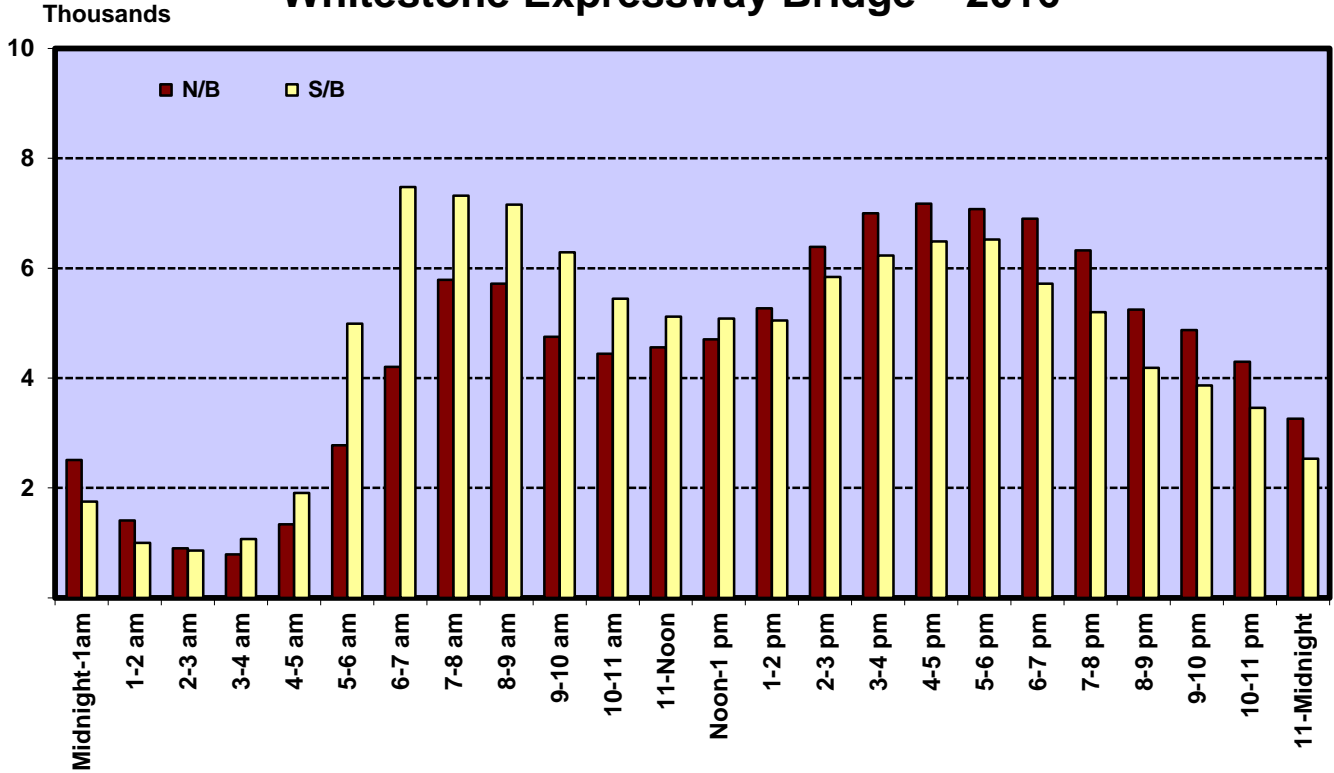
## Whitestone Expressway Bridge - 2016

	<b>Northbound</b>					<b>Southbound</b>					2-Way Totals	
	Autos	Buses	Commuter Vans	Trucks	Commercial Vans	Totals	Autos	Buses	Commuter Vans	Trucks		Commercial Vans
12-1am	---	---	---	---	---	2,508	---	---	---	---	---	1,752
1-2am	---	---	---	---	---	1,410	---	---	---	---	---	998
2-3am	---	---	---	---	---	901	---	---	---	---	---	859
3-4am	---	---	---	---	---	788	---	---	---	---	---	1,067
4-5am	---	---	---	---	---	1,338	---	---	---	---	---	1,906
5-6am	---	---	---	---	---	2,774	---	---	---	---	---	4,988
6-7am	---	---	---	---	---	4,202	---	---	---	---	---	7,476 **
7-8am	4,875	92	176	300	347	5,790	5,845	61	238	521	655	7,320
8-9am	4,750	74	283	378	233	5,718	5,941	77	202	505	431	7,156
9-10am	3,822	75	179	451	225	4,752	4,927	85	222	580	474	6,288
10-11am	3,883	40	92	265	162	4,442	4,936	23	123	231	132	5,445
11-12am	3,473	30	171	590	297	4,561	4,100	26	221	504	268	5,119
12-1pm	4,158	73	67	271	135	4,704	4,512	33	109	253	175	5,082
1-2pm	4,777	65	46	249	134	5,271	4,422	64	100	284	178	5,048
2-3pm	5,181	73	157	532	444	6,387	4,687	83	188	547	335	5,840
3-4pm	6,371	30	88	252	256	6,997	5,588	102	126	242	173	6,231
4-5pm	6,199	26	172	352	422	7,171 **	5,444	65	237	425	318	6,489
5-6pm	6,194	35	168	269	407	7,073	5,902	29	172	244	177	6,524
6-7pm	6,167	53	171	175	332	6,898	5,272	10	179	109	150	5,720
7-8pm	---	---	---	---	---	6,323	---	---	---	---	---	5,197
8-9pm	---	---	---	---	---	5,244	---	---	---	---	---	4,187
9-10pm	---	---	---	---	---	4,872	---	---	---	---	---	3,863
10-11pm	---	---	---	---	---	4,298	---	---	---	---	---	3,460
11-12pm	---	---	---	---	---	3,260	---	---	---	---	---	2,530
Totals	---	---	---	---	---	107,682	---	---	---	---	---	110,545
7-10am	13,447	241	638	1,129	805	16,260	16,713	223	662	1,606	1,560	20,764
10am-1pm	11,514	143	330	1,126	594	13,707	13,548	82	453	988	575	15,646
1-4pm	16,329	168	291	1,033	834	18,655	14,697	249	414	1,073	686	17,119
4-7pm	18,560	114	511	796	1,161	21,142	16,618	104	588	778	645	18,733
7am-7pm	59,850	666	1,770	4,084	3,394	69,764	61,576	658	2,117	4,445	3,466	72,262
6-10am	---	---	---	---	---	20,462	---	---	---	---	---	28,240
3-7pm	24,931	144	599	1,048	1,417	28,139	22,206	206	714	1,020	818	24,964
6am-7pm	---	---	---	---	---	73,966	---	---	---	---	---	79,738

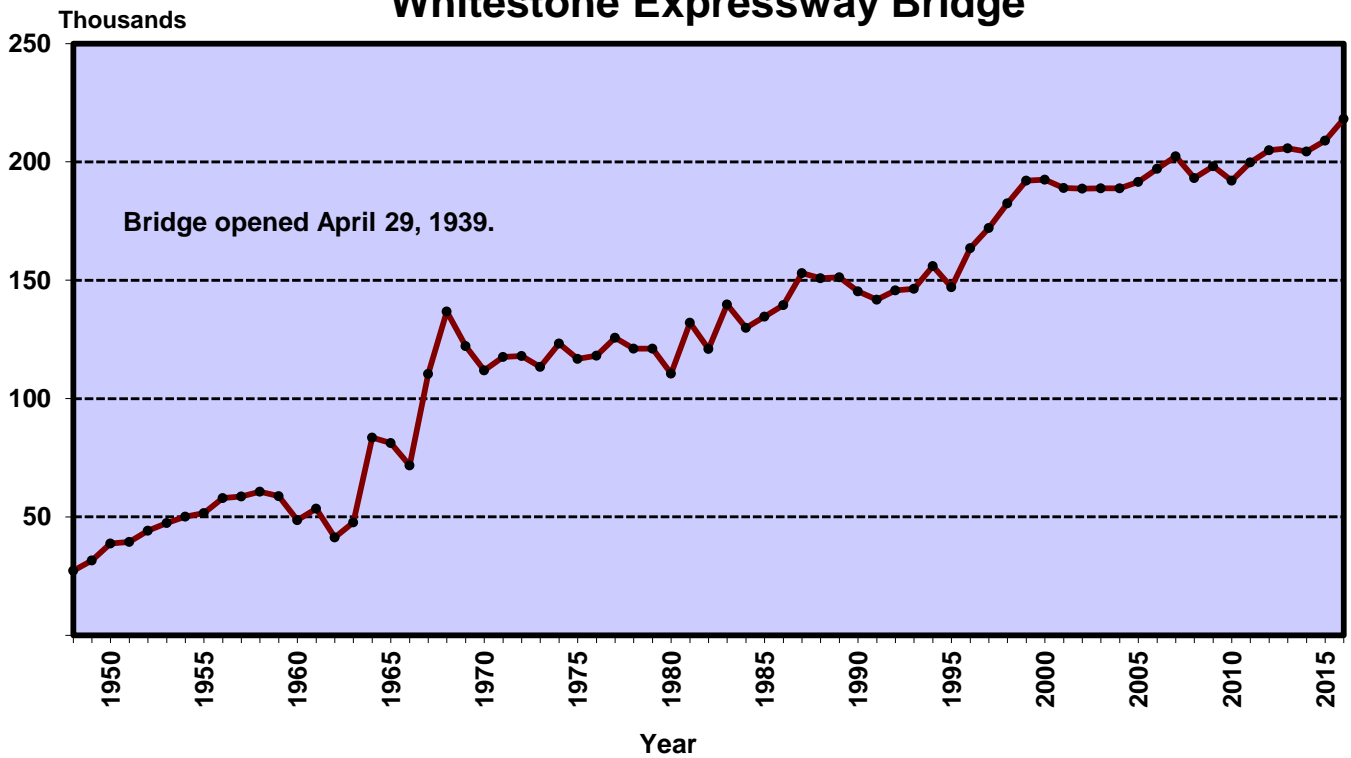
Based on 1989 Classification Survey Data

\*\* Peak Volumes

## Hourly Vehicular Volumes Whitestone Expressway Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Whitestone Expressway Bridge





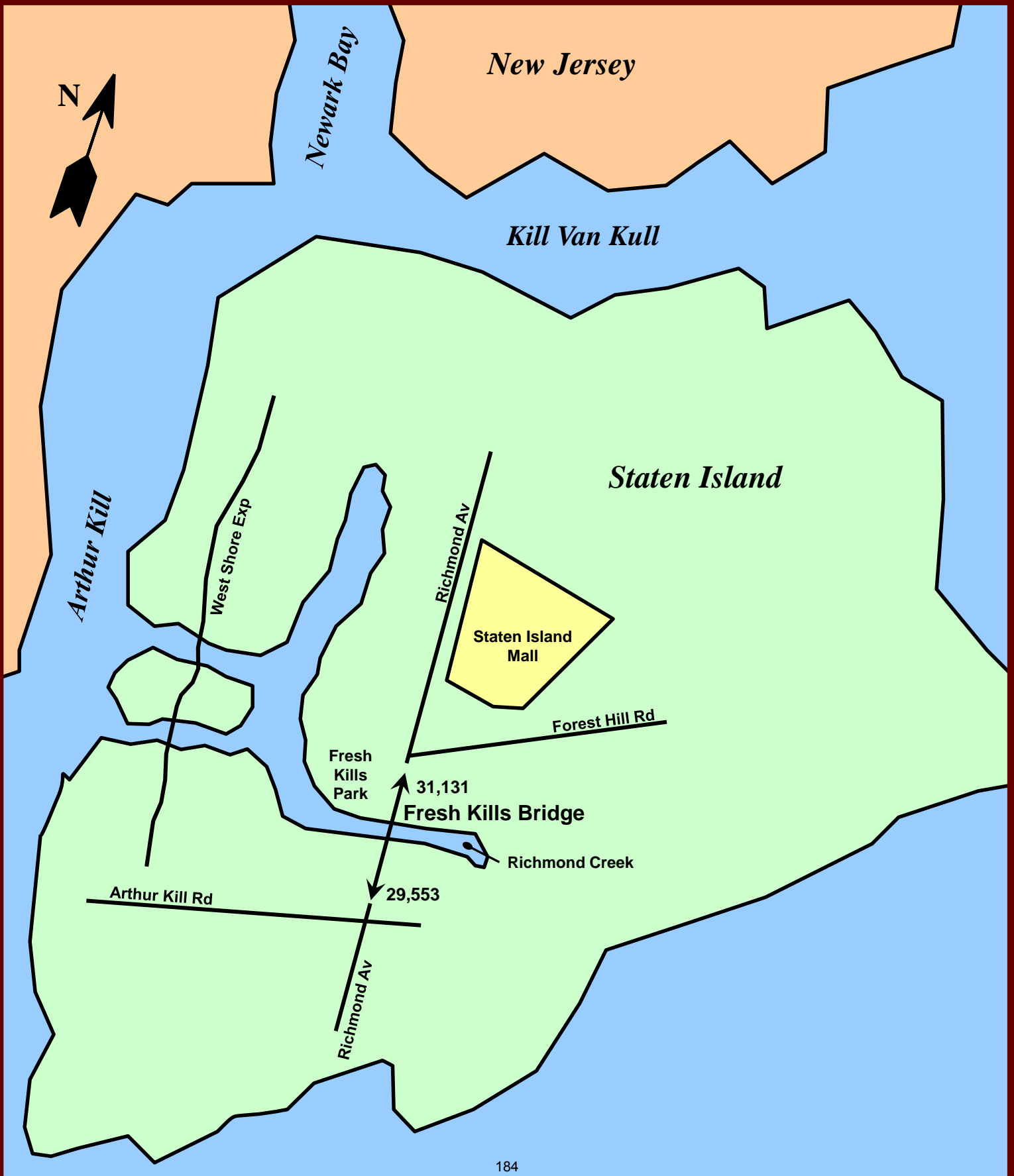
# Staten Island ~ Fresh Kills Bridge



**Fresh Kills Bridge**

# Staten Island ~ Fresh Kills Bridge

2016 Daily Volumes



**Staten Island Bridges**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<b>Year</b>	<b>Fresh Kills Bridge</b>
1948	5,597
1949	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	26,744
1972	28,455
1973	37,213
1974	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
1993	49,969
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
2005	66,816
2006	65,274
2007	68,997
2008	64,724
2009	64,490
2010	65,612
2011	60,678
2012	58,026
2013	60,240
2014	59,602
2015	57,538
2016	60,684

# Hourly Vehicular Volumes Fresh Kills Bridge - 2016

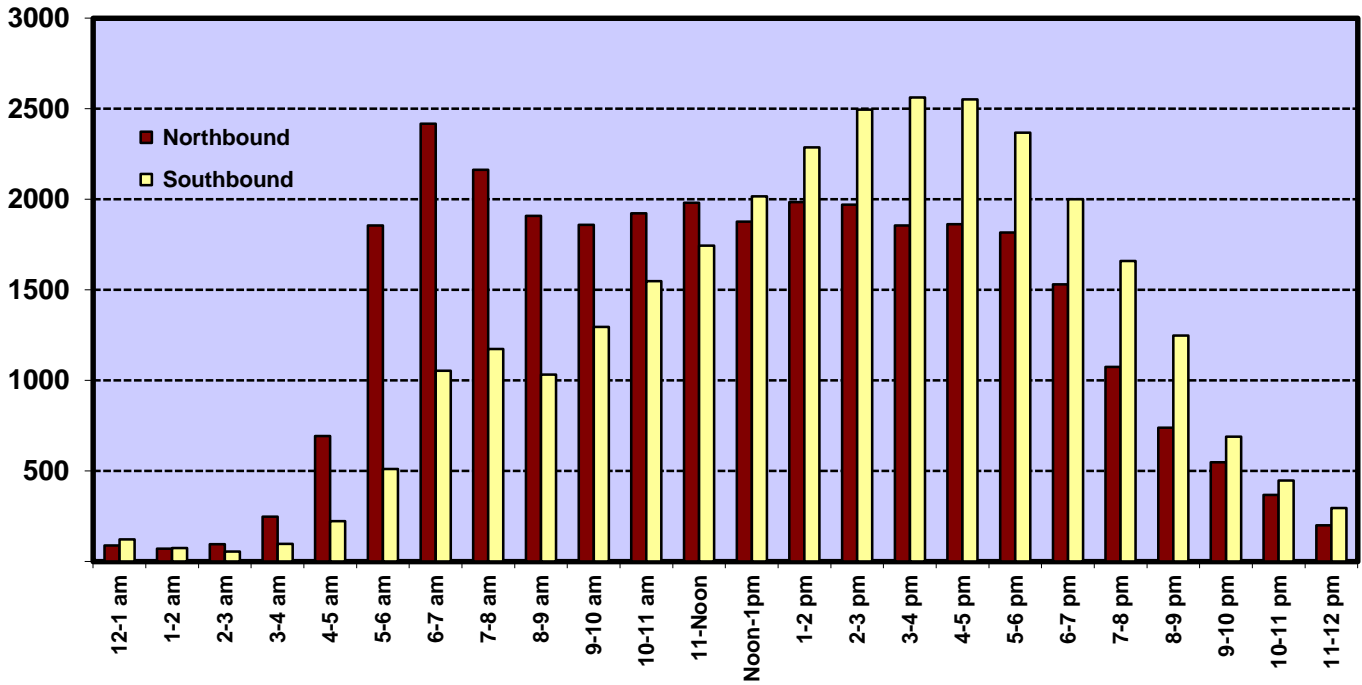
FHWA Classes ▶	Northbound										Southbound										2-way Grand Totals
	Autos, Motorcycles, SUVs, Family Vans					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Autos, Motorcycles, SUVs, Family Vans					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	Buses	Single Unit Trucks	Multiple Unit Trucks	Total Vehicles
12-1am	86	0	1	2	0	0	89				99	12	0	7	0	4	122				211
1-2am	66	0	1	3	2	0	72				55	6	0	10	2	1	74				146
2-3am	89	1	2	2	1	1	96				38	7	2	7	1	1	56				152
3-4am	203	0	0	11	17	17	248				81	6	5	0	0	5	97				345
4-5am	553	0	7	118	15	0	693				190	20	2	4	1	6	223				916
5-6am	1,316	0	18	402	82	37	1,855				483	5	9	11	3	512	2,367				2,367
6-7am	1,695	0	29	606	59	29	2,418	**			977	8	26	36	3	3	1,053				3,471
7-8am	1,823	4	64	182	64	26	2,163				1,111	6	20	31	2	3	1,173				3,336
8-9am	1,613	2	95	122	62	14	1,908				944	10	30	37	3	8	1,032				2,940
9-10am	1,655	0	87	45	50	22	1,859				1,231	6	12	34	8	5	1,296				3,155
10-11am	1,764	1	55	41	26	35	1,922				1,435	24	33	39	12	5	1,548				3,470
11-12am	1,853	3	68	28	18	11	1,981				1,619	23	33	25	10	14	1,744				3,725
12-1pm	1,768	0	49	25	20	15	1,877				1,919	18	36	26	5	13	2,017				3,894
1-2pm	1,850	8	42	56	17	11	1,984				2,088	34	69	55	22	19	2,287				4,271
2-3pm	1,852	2	38	51	17	11	1,971				2,333	26	59	59	8	10	2,495				4,466
3-4pm	1,741	0	52	39	11	12	1,855				2,407	16	45	74	13	8	2,563	**			4,418
4-5pm	1,770	2	39	33	13	5	1,862				2,442	8	20	68	12	1	2,551				4,413
5-6pm	1,745	3	32	31	5	0	1,816				2,257	11	34	58	6	2	2,368				4,184
6-7pm	1,466	2	26	26	6	4	1,530				1,896	19	28	54	2	2	2,001				3,531
7-8pm	1,034	3	14	18	5	0	1,074				1,544	15	28	61	6	5	1,659				2,733
8-9pm	719	1	8	9	1	2	740				1,174	8	14	47	1	4	1,248				1,988
9-10pm	538	1	4	4	2	0	549				654	2	8	24	0	2	690				1,239
10-11pm	359	2	3	4	1	0	369				423	4	8	10	0	3	448				817
11-12pm	197	0	0	3	0	0	200				282	1	4	7	1	1	296				496
Totals	27,755	35	734	1,861	494	252	31,131				27,682	295	545	784	119	128	29,553				60,684
7-10am	5,091	6	246	349	176	62	5,930				3,286	22	62	102	13	16	3,501				9,431
10am-1pm	5,385	4	172	94	64	61	5,780				4,973	65	122	90	27	32	5,309				11,089
1-4pm	5,443	10	132	146	45	34	5,810				6,828	76	173	188	43	37	7,345				13,155
4-7pm	4,981	7	97	90	24	9	5,208				6,595	38	82	180	20	5	6,920				12,128
7am-7pm	20,900	27	647	679	309	166	22,728				21,682	201	439	560	103	90	23,075				45,803
6-10am	6,786	6	275	955	235	91	8,348				4,263	30	88	138	16	19	4,554				12,902
3-7pm	6,722	7	149	129	35	21	7,063				9,002	54	127	254	33	13	9,483				16,546
6am-7pm	22,595	27	676	1,285	368	195	25,146				22,659	209	465	596	106	93	24,128				49,274

Based on September 2015 Classification Survey Data.

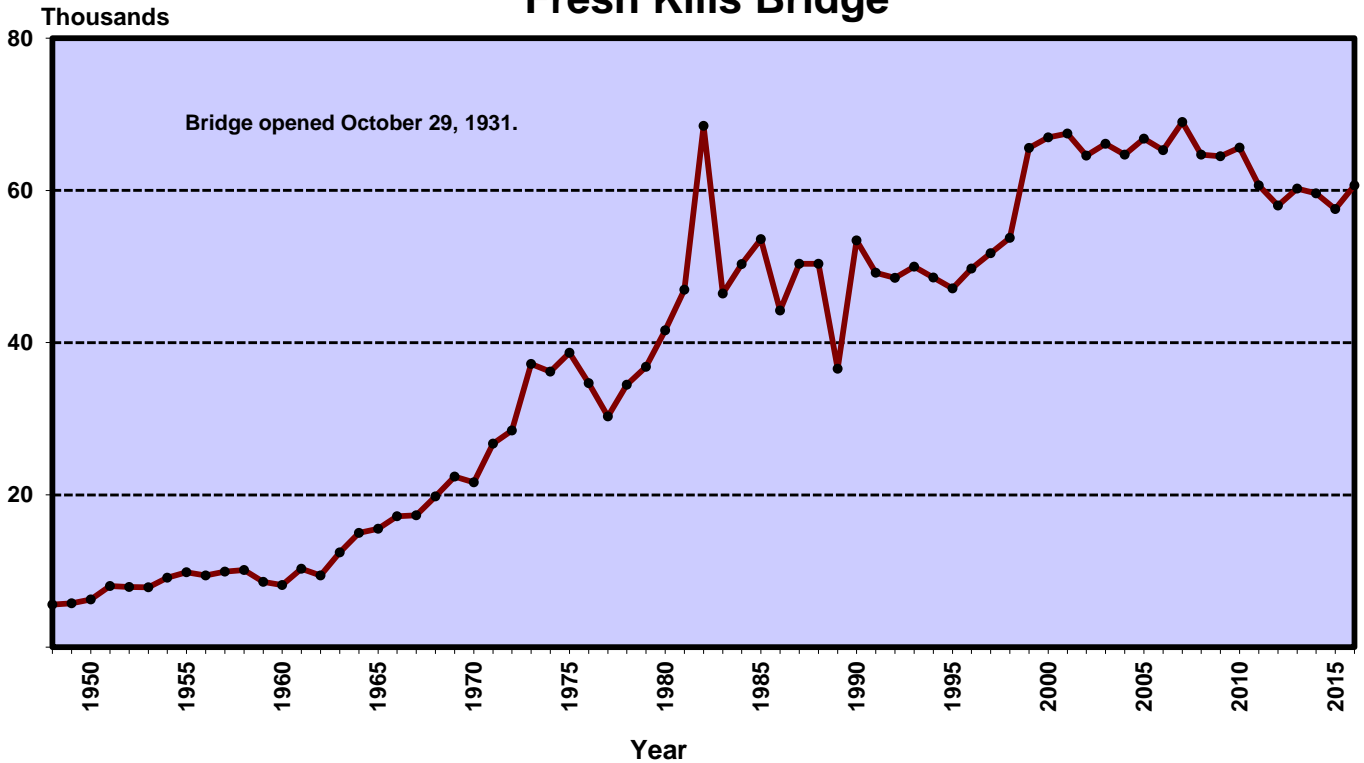
\*\* Peak Volumes



## Hourly Vehicular Volumes Fresh Kills Bridge ~ 2016

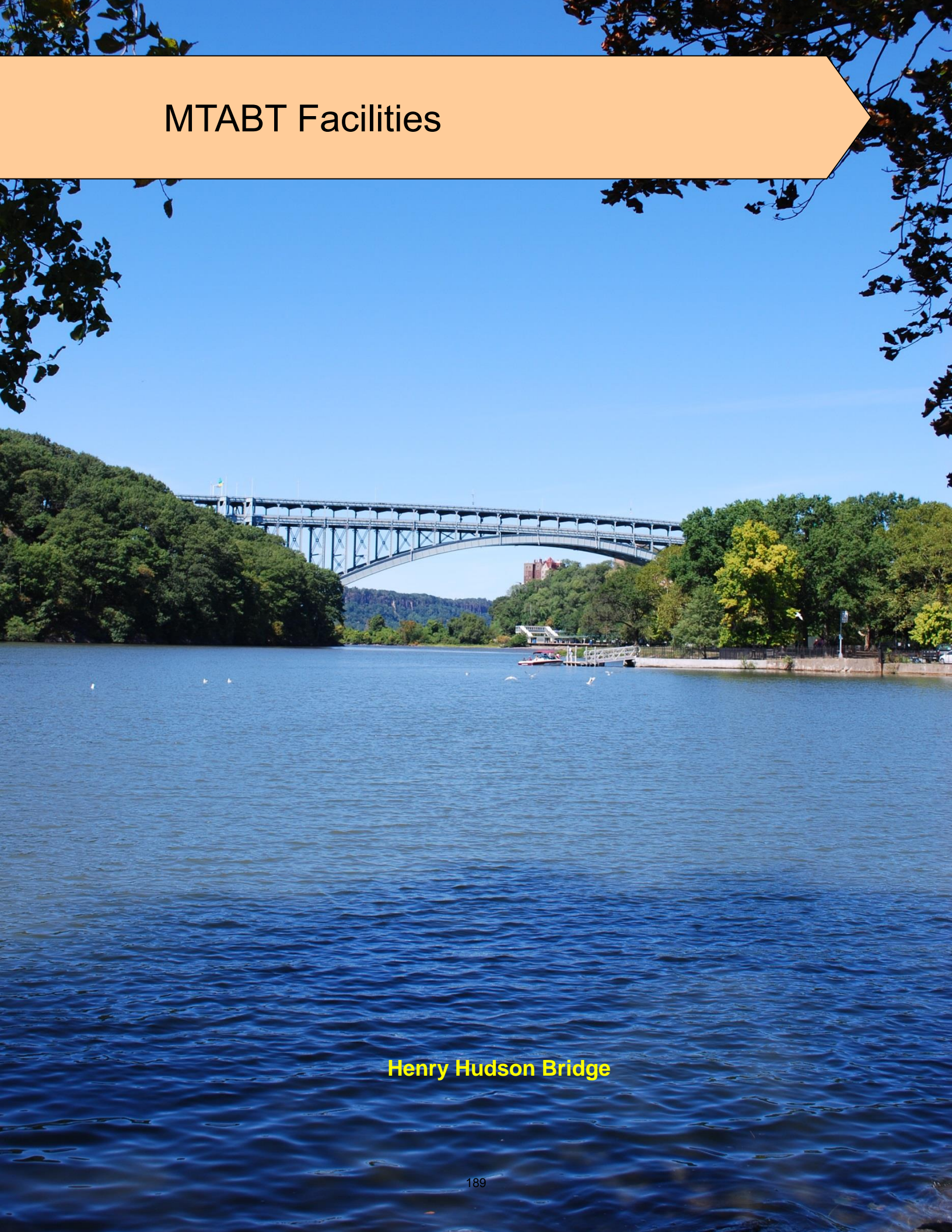


## Average Daily Traffic Volumes ~ Total of Both Directions Fresh Kills Bridge





# MTABT Facilities

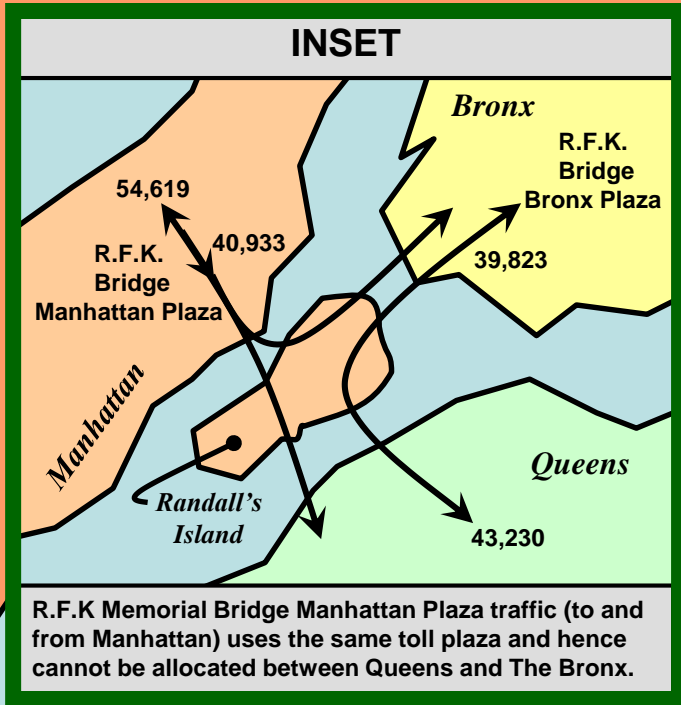


**Henry Hudson Bridge**



# MTABT FACILITIES

2016 Daily volumes



**MTABT Manhattan Facilities ~ Average Daily Traffic Volumes  
1948 - 2016**

Year	Hugh L. Carey Tunnel			Robert F. Kennedy Memorial Bridge	
	Henry Hudson Bridge	(Brooklyn-Battery Tunnel)	Queens-Midtown Tunnel	Manh. Plz. (Triborough Bridge)	Manhattan Totals
1948	40,050	<i>Opened</i>	26,462	26,465	92,977
1949	47,472	<i>05/25/1950</i>	30,045	32,554	110,071
1950	53,559	37,258	34,044	36,995	161,856
1951	57,700	41,253	36,680	44,639	180,272
1952	61,592	45,366	38,866	48,503	194,327
1953	65,432	47,999	38,509	48,595	200,535
1954	69,025	45,120	38,185	52,286	204,616
1955	71,240	45,843	39,839	59,913	216,835
1956	69,477	48,054	49,544	64,460	231,535
1957	62,865	54,490	54,311	64,677	236,343
1958	57,321	53,789	58,321	62,982	232,413
1959	56,529	49,468	61,115	64,389	231,501
1960	56,675	48,970	62,008	63,115	230,768
1961	57,140	48,197	62,301	59,603	227,241
1962	59,548	48,173	65,038	60,251	233,010
1963	52,803	48,271	63,038	60,988	225,100
1964	50,768	51,893	67,713	66,139	236,513
1965	45,353	56,455	69,386	69,755	240,949
1966	44,043	57,674	69,850	71,540	243,107
1967	43,409	57,611	69,416	73,602	244,038
1968	44,908	60,652	66,432	75,932	247,924
1969	45,382	62,116	68,884	78,481	254,863
1970	46,720	62,042	77,180	85,121	271,063
1971	50,541	64,032	81,747	90,372	286,692
1972	45,818	52,065	74,936	80,052	252,871
1973	41,871	49,916	74,214	85,592	251,593
1974	38,331	46,620	75,219	82,676	242,846
1975	30,603	45,636	65,315	72,566	214,120
1976	30,557	52,444	65,881	68,325	217,207
1977	31,840	53,500	71,150	73,276	229,766
1978	33,605	58,252	72,696	76,572	241,125
1979	33,387	60,445	69,827	87,885	251,544
1980	31,817	62,386	73,216	88,439	255,858
1981	36,625	58,657	81,211	93,361	269,854
1982	30,923	56,189	78,229	88,158	253,499
1983	31,279	61,130	78,134	92,967	263,510
1984	34,898	58,032	74,808	95,247	262,985
1985	41,680	63,469	76,065	94,644	275,858
1986	49,005	60,778	71,478	93,432	274,693
1987	52,778	63,256	77,813	95,795	289,642
1988	54,910	62,959	76,243	99,438	293,550
1989	50,556	59,254	72,828	92,720	275,358
1990	57,528	60,512	71,186	99,840	289,066
1991	56,279	63,883	80,616	94,487	295,265
1992	58,660	62,510	81,835	97,198	300,203
1993	54,650	57,561	77,288	92,660	282,159
1994	58,291	57,013	68,511	79,536	263,351
1995	62,899	61,097	73,882	95,696	293,574
1996	58,759	57,091	72,285	92,981	281,116
1997	59,660	54,690	78,023	91,313	283,686
1998	59,339	61,091	79,697	93,863	293,990
1999	61,165	63,307	80,941	98,553	303,966
2000	66,304	63,242	80,879	103,079	313,504
2001	69,087	13,762	72,864	102,224	257,937
2002	70,731	56,976	82,834	94,759	305,300
2003	72,209	56,271	85,377	93,177	307,034
2004	73,114	54,488	86,599	97,958	312,159
2005	70,407	49,043	86,063	91,898	297,411
2006	71,761	57,436	89,972	98,582	317,751
2007	70,094	56,539	88,379	97,241	312,253
2008	69,101	55,037	86,709	95,146	305,993
2009	66,607	50,674	85,144	91,731	294,156
2010	69,641	54,187	88,014	93,455	305,297
2011	63,433	54,481	87,662	88,717	294,293
2012	63,434	54,299	87,937	90,956	296,626
2013	59,087	55,145	86,737	91,386	292,355
2014	58,809	54,007	86,081	91,509	290,406
2015	62,554	57,299	86,217	91,724	297,794
2016	62,648	54,076	73,470	95,552	285,746

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

**MTABT Outer Borough Bridges ~ Average Daily Traffic Volumes  
1948 - 2016**

Year	Robert F. Kennedy							Outer Boroughs Totals
	Bronx- Whitstone Bridge	Cross Bay Bridge	Marine Parkway Gil Hodges Memorial Bridge	Memorial Bridge Bronx Plz. (Triborough Bridge)	Throgs Neck Bridge	Verrazano- Narrows Bridge		
1948	33,343	11,421	10,216	25,997	<i>Opened</i>	<i>Opened</i>	80,977	
1949	41,485	12,579	11,743	31,310	<i>01/11/1961</i>	<i>11/21/1964</i>	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	66,055	15,460	15,620	46,738			143,873	
1954	72,061	15,348	16,113	50,289			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	55,100	15,518	16,657	57,325			144,600	
1962	47,532	15,939	17,301	57,949	60,697		199,418	
1963	45,352	16,421	17,978	58,657	75,532		213,940	
1964	64,573	16,594	18,145	61,152	76,245		236,709	
1965	72,053	16,864	18,855	67,090	77,755	48,842	301,459	
1966	71,382	17,684	19,745	68,806	80,647	58,720	316,984	
1967	73,931	17,448	19,904	70,791	81,237	66,607	329,918	
1968	78,773	18,367	21,424	73,232	83,634	77,393	352,823	
1969	79,416	17,608	21,406	75,482	85,708	86,114	365,734	
1970	81,582	17,908	22,076	81,868	83,734	96,953	384,121	
1971	86,573	18,399	22,426	83,804	84,279	106,014	401,495	
1972	80,704	16,813	20,956	74,777	89,595	105,898	388,743	
1973	81,548	16,783	21,502	75,552	95,326	111,385	402,096	
1974	82,699	16,769	19,734	76,673	89,622	109,671	395,168	
1975	81,081	15,019	18,715	70,338	87,725	108,572	381,450	
1976	82,060	14,281	17,804	67,887	89,520	110,761	382,313	
1977	81,992	14,489	16,724	67,590	90,635	113,040	384,470	
1978	86,537	13,955	17,750	64,746	89,847	125,799	398,634	
1979	90,394	13,690	17,404	63,046	86,315	124,667	395,516	
1980	88,346	13,903	16,472	63,219	87,011	130,904	399,855	
1981	84,475	11,583	16,510	76,200	91,511	137,695	417,974	
1982	90,312	13,072	17,119	74,092	93,867	143,811	432,273	
1983	97,945	13,412	18,003	78,885	97,706	140,645	446,596	
1984	97,636	14,835	19,749	79,300	90,153	155,892	457,565	
1985	109,012	15,279	20,595	83,747	84,517	162,632	475,782	
1986	102,567	15,162	19,965	80,703	94,395	162,426	475,218	
1987	102,115	14,289	20,512	81,424	93,770	170,319	482,429	
1988	98,235	14,989	21,098	83,002	102,333	174,416	494,073	
1989	95,762	14,466	19,666	78,877	94,147	172,529	475,447	
1990	104,377	14,645	21,489	80,346	91,237	175,948	488,042	
1991	99,054	14,925	20,893	81,364	94,377	178,340	488,953	
1992	96,830	14,821	21,042	77,125	98,135	183,218	491,171	
1993	93,712	14,578	20,137	70,458	101,402	178,416	478,703	
1994	104,819	14,442	20,623	71,777	97,471	181,156	490,288	
1995	108,185	15,423	20,568	72,012	97,282	184,634	498,104	
1996	101,048	14,845	21,212	74,522	97,629	184,557	493,813	
1997	93,018	14,221	19,782	76,937	102,094	182,871	488,923	
1998	104,125	16,286	19,583	81,913	99,471	194,592	515,970	
1999	120,170	16,975	19,904	80,019	90,986	194,623	522,677	
2000	117,583	17,962	21,609	79,243	98,357	202,580	537,334	
2001	111,764	19,626	19,527	77,631	104,429	218,971	551,948	
2002	123,258	20,010	21,684	72,259	104,535	212,491	554,237	
2003	113,441	20,233	21,745	74,113	111,092	206,444	547,068	
2004	117,591	20,460	21,556	82,810	112,001	205,544	559,962	
2005	105,059	19,852	19,456	77,257	114,973	193,687	530,284	
2006	110,708	22,036	22,363	81,840	116,427	207,353	560,727	
2007	111,739	22,337	21,356	79,019	112,985	201,116	548,552	
2008	117,015	21,876	21,357	77,606	114,319	203,507	555,680	
2009	112,978	21,762	22,067	78,459	107,324	202,052	544,642	
2010	103,366	21,135	22,215	82,189	112,712	204,181	545,798	
2011	100,666	20,566	21,812	77,242	111,384	194,758	526,428	
2012	105,718	21,595	21,290	78,437	108,858	193,100	528,998	
2013	104,511	22,016	22,010	79,006	110,753	192,033	530,329	
2014	104,509	21,953	21,217	82,084	112,548	187,438	529,749	
2015	109,862	23,393	22,626	84,220	116,658	198,123	554,882	
2016	124,337	24,150	21,990	83,053	119,249	202,523	575,302	

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

# Hourly Vehicular Volumes

## Metropolitan Transportation Authority Bridges & Tunnels 2016

	Henry Hudson Bridge		Hugh L. Carey Tunnel (Brooklyn-BatteryTunnel)		Queens-Midtown Tunnel		Robert F. Kennedy Memorial Bridge (Triborough Bridge)		Totals	
	S/B	N/B	N/B	S/B	W/B	E/B	W/B	E/B	Entering Manhattan	Leaving Manhattan
12-1am	112	329	221	607	454	713	483	519	1,270	2,168
1-2am	57	147	85	288	197	364	213	277	552	1,076
2-3am	33	64	51	181	111	231	110	182	305	658
3-4am	63	46	78	135	139	194	146	194	426	569
4-5am	133	52	249	159	315	429	337	513	1,034	1,153
5-6am	744	125	832	185	1,174	800	1,450	1,075	4,200	2,185
6-7am	2,870	434	2,383	388	2,738	1,173	3,756	1,484	11,747	3,479
7-8am	3,030 **	1,196	2,972 **	633	3,479 **	1,218	4,095 **	1,894	13,576 **	4,941
8-9am	2,644	1,629	2,711	800	3,120	1,109	3,283	2,202	11,758	5,740
9-10am	2,148	1,130	2,226	821	2,835	1,107	2,959	2,022	10,168	5,080
10-11am	1,955	995	1,808	884	2,389	1,229	2,957	1,860	9,109	4,968
11-12am	1,761	1,017	1,675	972	1,952	1,684	2,770	1,947	8,158	5,620
12-1pm	1,723	1,080	1,547	1,094	1,814	1,949	2,826	2,058	7,910	6,181
1-2pm	1,695	1,257	1,480	1,206	1,802	2,174	2,925	2,341	7,902	6,978
2-3pm	1,998	1,643	1,394	1,401	1,969	2,394	3,311	2,591	8,672	8,029
3-4pm	2,424	2,235	1,417	1,974	2,055	2,487 **	3,528	2,709	9,424	9,405
4-5pm	2,448	2,618	1,311	2,275	2,010	2,401	3,334	2,888	9,103	10,182
5-6pm	2,428	2,809 **	1,193	2,698 **	2,070	2,449	3,266	2,963 **	8,957	10,919 **
6-7pm	2,264	2,558	1,102	2,535	2,174	2,240	3,166	2,459	8,706	9,792
7-8pm	1,537	1,976	957	2,056	1,926	2,111	2,755	2,243	7,175	8,386
8-9pm	1,001	1,513	690	1,438	1,780	2,157	2,271	2,076	5,742	7,184
9-10pm	761	1,381	603	1,364	1,194	1,301	1,982	1,840	4,540	5,886
10-11pm	462	1,068	473	1,129	870	1,238	1,740	1,635	3,545	5,070
11-12pm	230	825	440	955	694	1,057	956	961	2,320	3,798
<b>Totals</b>	<b>34,521</b>	<b>28,127</b>	<b>27,898</b>	<b>26,178</b>	<b>39,261</b>	<b>34,209</b>	<b>54,619</b>	<b>40,933</b>	<b>156,299</b>	<b>129,447</b>
7-10am	7,822	3,955	7,909	2,254	9,434	3,434	10,337	6,118	35,502	15,761
10am-1pm	5,439	3,092	5,030	2,950	6,155	4,862	8,553	5,865	25,177	16,769
1-4pm	6,117	5,135	4,291	4,581	5,826	7,055	9,764	7,641	25,998	24,412
4-7pm	7,140	7,985	3,606	7,508	6,254	7,090	9,766	8,310	26,766	30,893
7am-7pm	26,518	20,167	20,836	17,293	27,669	22,441	38,420	27,934	113,443	87,835
6-10am	10,692	4,389	10,292	2,642	12,172	4,607	14,093	7,602	47,249	19,240
3-7pm	9,564	10,220	5,023	9,482	8,309	9,577	13,294	11,019	36,190	40,298
6am-7pm	29,388	20,601	23,219	17,681	30,407	23,614	42,176	29,418	125,190	91,314

\*\* Peak Volumes



# Hourly Vehicular Volumes

## Metropolitan Transportation Authority Bridges & Tunnels 2016

	Robert F. Kennedy																
	Bronx-Whitestone Bridge			Cross Bay Veterans Memorial Bridge			Marine Parkway Memorial Bridge			Memorial Bridge (Triborough Bridge)							
	N/B	S/B		N/B	S/B		N/B	S/B		N/B	S/B						
12-1am	922	838		97	265		41	115		799	474		572	776		2,739	1,740
1-2am	580	510		60	140		32	53		423	311		376	505		1,420	983
2-3am	394	429		61	83		25	47		287	267		322	397		772	662
3-4am	418	515		86	73		24	24		331	397		438	441		624	562
4-5am	708	1,080		228	68		76	43		597	748		853	672		637	711
5-6am	1,834	2,436		593	135		366	129		1,066	1,853		2,709	1,444		1,026	1,521
6-7am	3,194	4,032		1,051	355		940	340		2,064	3,005 **		4,588	2,806		3,526	2,919
7-8am	4,077	3,387	**	1,281 **	548		1,495 **	426		2,796 **	2,482		4,737 **	3,535		8,662	3,796
8-9am	4,388	3,461		906	537		997	444		2,613	2,387		3,907	3,314		10,078 **	4,608
9-10am	2,920	3,437		659	453		690	394		2,338	2,139		3,888	2,771		8,209	4,171
10-11am	2,776	3,192		597	416		553	406		2,351	2,314		3,157	2,646		6,295	3,863
11-12am	2,629	3,044		593	471		524	435		2,197	2,122		2,859	2,654		5,020	3,746
12-1pm	2,493	3,105		612	500		537	500		1,932	2,136		2,705	2,731		4,434	4,213
1-2pm	2,596	3,305		645	570		547	574		1,975	2,193		2,566	3,019		4,215	4,809
2-3pm	3,164	4,061		702	775		581	743		2,187	2,471		2,808	3,831		4,441	6,116
3-4pm	3,727	4,155		847	924		694	989		2,334	2,749		2,896	4,784		4,933	7,984
4-5pm	3,807	4,389 **		701	952 **		676	1,065		2,312	2,874		3,088	4,745		5,901	8,175 **
5-6pm	3,696	4,124		721	942		610	1,078 **		2,234	2,705		2,824	4,785 **		6,294	7,801
6-7pm	3,381	3,930		558	874		519	1,007		1,966	2,617		2,737	4,460		6,292	7,468
7-8pm	2,929	3,640		411	759		355	747		1,845	2,303		2,769	3,926		5,555	6,152
8-9pm	2,561	2,789		316	620		264	569		1,485	1,666		2,318	2,810		4,515	5,067
9-10pm	2,254	2,356		253	480		212	404		1,402	1,419		1,841	2,138		3,663	3,962
10-11pm	1,999	2,008		260	431		158	261		1,244	898		1,349	1,647		3,369	3,081
11	1,278	1,389		190	351		117	164		1,045	700		829	1,276		3,300	2,493
<b>Totals</b>	<b>58,725</b>	<b>65,612</b>		<b>12,428</b>	<b>11,722</b>		<b>11,033</b>	<b>10,957</b>		<b>39,823</b>	<b>43,230</b>		<b>57,136</b>	<b>62,113</b>		<b>105,920</b>	<b>96,603</b>
7-10am	11,385	10,285		2,846	1,538		3,182	1,264		7,747	7,008		12,532	9,620		26,949	12,575
10am-1pm	7,898	9,341		1,802	1,387		1,614	1,341		6,480	6,572		8,721	8,031		15,749	11,822
1-4pm	9,487	11,521		2,194	2,269		1,822	2,306		6,496	7,413		8,270	11,634		13,589	18,909
4-7pm	10,884	12,443		1,980	2,768		1,805	3,150		6,512	8,196		8,649	13,990		18,487	23,444
7am-7pm	39,654	43,590		8,822	7,962		8,423	8,061		27,235	29,189		38,172	43,275		74,774	66,750
6-10am	14,579	14,317		3,897	1,893		4,122	1,604		9,811	10,013		17,120	12,426		30,475	15,494
3-7pm	14,611	16,598		2,827	3,692		2,499	4,139		8,846	10,945		11,545	18,774		23,420	31,428
6am-7pm	42,848	47,622		9,873	8,317		9,363	8,401		29,299	32,194		42,760	46,081		78,300	69,669

\*\* Peak Volumes

# Hugh L. Carey Tunnel - 2016

## Northbound to Manhattan

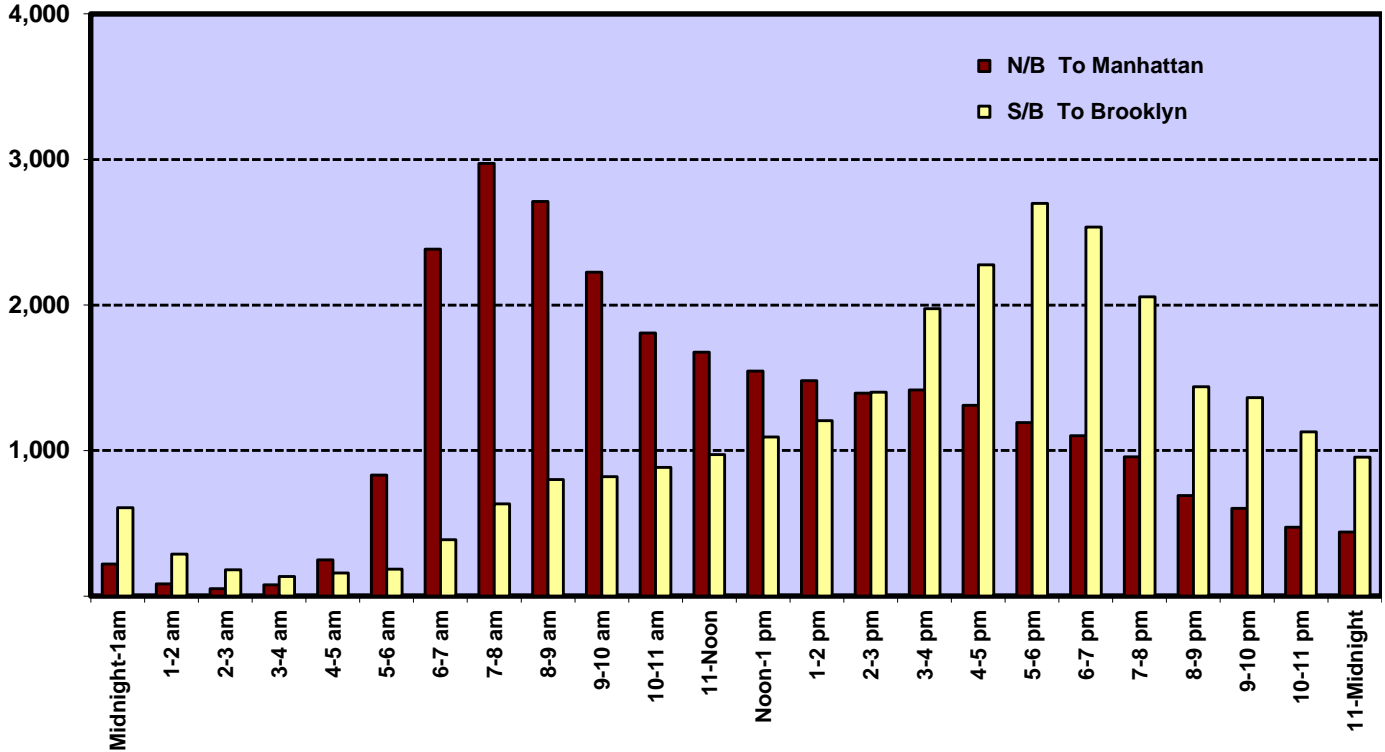
## Southbound to Brooklyn

FHWA Classes ▲	Commuter Vans					Total Vehicles	Commuter Vans					Total Vehicles						
	Autos & Motorcycles	Commercial Vans Pickups	Large SUVs	Buses	Single Unit Trucks		Tractor Trailers	8 - 13	Autos & Motorcycles	Commercial Vans Pickups	Large SUVs		Buses	Single Unit Trucks	Tractor Trailers	8 - 13		
	1 & 2	3	4	5 - 7	8 - 13		1 & 2	3	4	5 - 7	8 - 13		1 & 2	3	4	5 - 7	8 - 13	2-Way Grand Totals
12-1am	190	7	12	12	0	221	553	12	36	6	0	607						
1-2am	74	4	6	1	0	85	275	0	12	1	0	288						
2-3am	46	0	3	2	0	51	173	2	4	2	0	181						
3-4am	66	1	8	3	0	78	132	0	0	3	0	135						
4-5am	161	9	61	18	0	249	147	0	9	3	0	159						
5-6am	749	8	67	8	0	832	164	2	13	6	0	185						
6-7am	2,127	15	214	27	0	2,383	289	6	81	12	0	388						
7-8am	2,608	16	308	40	0	2,972	456	7	153	17	0	633						
8-9am	2,370	14	295	32	0	2,711	585	6	190	19	0	800						
9-10am	2,032	16	145	33	0	2,226	629	8	161	23	0	821						
10-11am	1,645	22	92	48	1	1,808	772	10	83	18	1	884						
11-12am	1,552	15	69	38	1	1,675	877	9	66	20	0	972						
12-1pm	1,422	16	75	33	1	1,547	1,007	12	55	20	0	1,094						
1-2pm	1,338	13	91	38	0	1,480	1,088	13	78	27	0	1,206						
2-3pm	1,253	10	106	25	0	1,394	1,282	14	80	25	0	1,401						
3-4pm	1,266	5	134	12	0	1,417	1,800	13	137	24	0	1,974						
4-5pm	1,143	4	154	9	1	1,311	2,063	7	186	19	0	2,275						
5-6pm	1,063	2	120	6	2	1,193	2,399	7	276	15	1	2,698						
6-7pm	1,023	3	69	6	1	1,102	2,329	6	188	11	1	2,535						
7-8pm	909	1	44	3	0	957	1,938	5	105	8	0	2,056						
8-9pm	655	4	26	5	0	690	1,343	7	80	8	0	1,438						
9-10pm	573	1	27	2	0	603	1,289	4	57	14	0	1,364						
10-11pm	448	1	21	3	0	473	1,084	5	31	9	0	1,129						
11-12pm	389	0	37	14	0	440	902	7	37	9	0	955						
Totals	25,102	187	2,184	418	7	27,898	23,576	162	2,118	319	3	26,178						
7-10am	7,010	46	748	105	0	7,909	1,670	21	504	59	0	2,254						
10am-1pm	4,619	53	236	119	3	5,030	2,656	31	204	58	1	2,950						
1-4pm	3,857	28	331	75	0	4,291	4,170	40	295	76	0	4,581						
4-7pm	3,229	9	343	21	4	3,606	6,791	20	650	45	2	7,508						
7am-7pm	18,715	136	1,658	320	7	20,836	15,287	112	1,653	238	3	17,293						
6-10am	9,137	61	962	132	0	10,292	1,959	27	585	71	0	2,642						
3-7pm	4,495	14	477	33	4	5,023	8,591	33	787	69	2	9,482						
7am-7pm	20,842	151	1,872	347	7	23,219	15,576	118	1,734	250	3	17,681						
Totals	40,900	287	3,112	603	11	44,713	39,132	250	2,397	389	5	41,915						

Based on May 2006 Classification Survey Data.

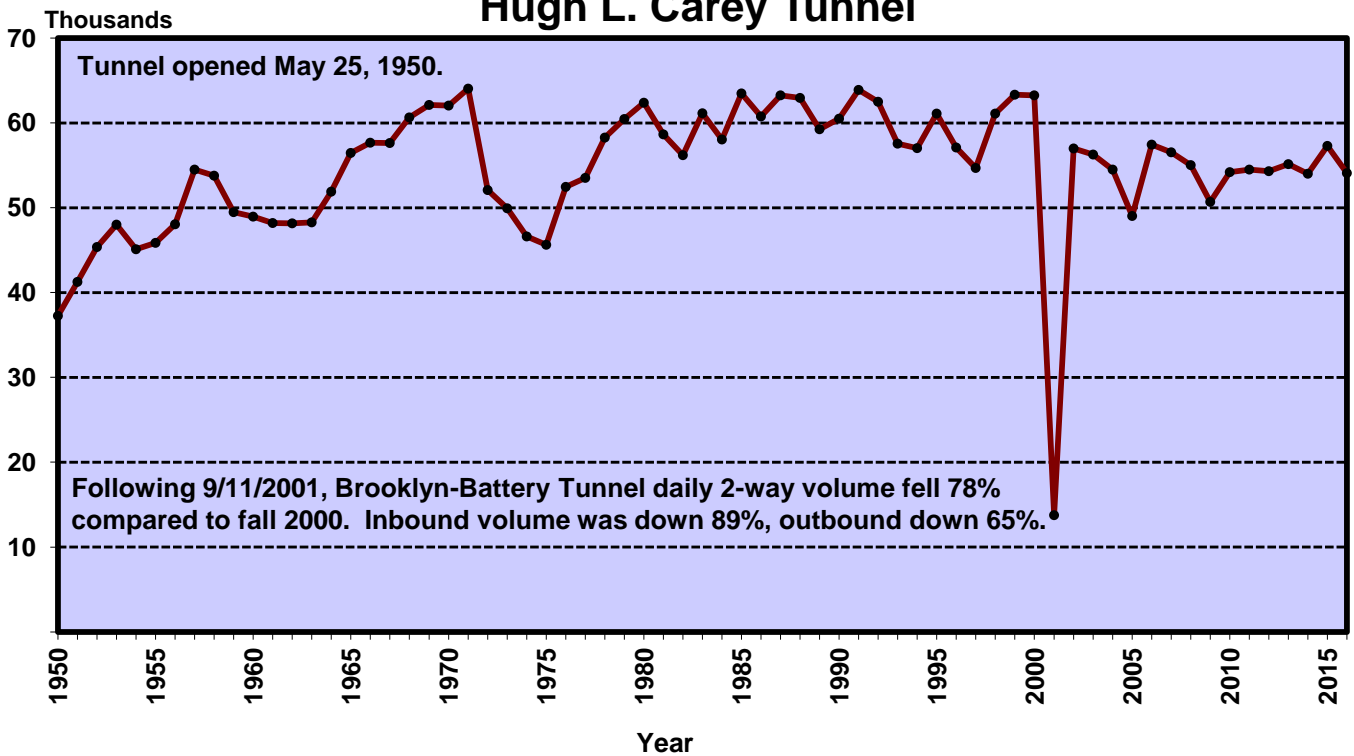
\*\* Peak Volumes

## Hourly Vehicular Volumes Hugh L. Carey Tunnel ~ 2016



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

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



# Hourly Vehicular Volumes Queens-Midtown Tunnel - 2016

## Westbound to Manhattan

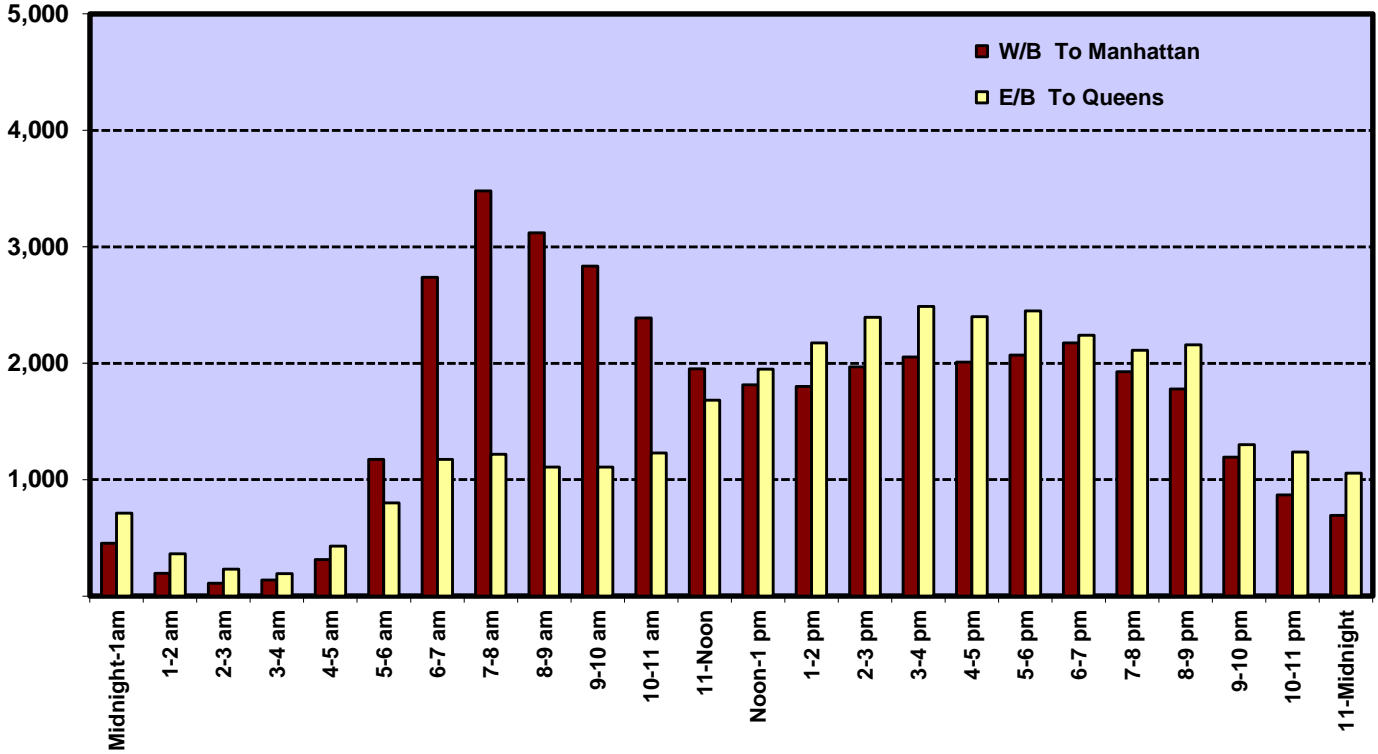
## Eastbound to Queens

FHWA Classes ▲	Commuter Vans					Total Vehicles	Commuter Vans					Total Vehicles	2-Way Grand Totals
	Autos & Motorcycles	Pickups Large SUVs	Buses	Single Unit Trucks	Tractor Trailers		Autos & Motorcycles	Pickups Large SUVs	Buses	Single Unit Trucks	Tractor Trailers		
	1 & 2	3	4	5 - 7	8 - 13		1 & 2	3	4	5 - 7	8 - 13		
12-1am	439	2	3	10	0	454	687	7	1	18	0	713	1,167
1-2am	188	2	0	7	0	197	346	4	0	14	0	364	561
2-3am	103	1	1	6	0	111	216	5	0	10	0	231	342
3-4am	125	1	3	10	0	139	173	9	0	12	0	194	333
4-5am	253	6	17	39	0	315	352	30	4	41	2	429	744
5-6am	1,023	12	58	81	0	1,174	714	20	12	54	0	800	1,974
6-7am	2,339	96	173	130	0	2,738	1,062	32	46	33	0	1,173	3,911
7-8am	2,999	123	220	136	1	3,479	1,083	46	58	31	0	1,218	4,697
8-9am	2,805	88	110	117	0	3,120	968	36	67	38	0	1,109	4,229
9-10am	2,555	72	128	77	3	2,835	971	42	56	38	0	1,107	3,942
10-11am	2,169	66	80	72	2	2,389	1,066	50	59	54	0	1,229	3,618
11-12am	1,810	48	46	48	0	1,952	1,496	57	72	59	0	1,684	3,636
12-1pm	1,683	28	41	62	0	1,814	1,746	62	54	87	0	1,949	3,763
1-2pm	1,643	51	54	54	0	1,802	1,931	69	55	89	0	2,174	3,976
2-3pm	1,788	47	90	44	0	1,969	2,220	68	41	65	0	2,394	4,363
3-4pm	1,827	42	134	52	0	2,055	2,300	56	57	74	0	2,487	4,542
4-5pm	1,836	25	123	26	0	2,010	2,214	66	56	65	0	2,401	4,411
5-6pm	1,945	13	95	17	0	2,070	2,310	39	63	37	0	2,449	4,519
6-7pm	2,078	15	61	20	0	2,174	2,129	27	51	33	0	2,240	4,414
7-8pm	1,856	12	44	14	0	1,926	2,013	21	57	20	0	2,111	4,037
8-9pm	1,692	23	32	33	0	1,780	2,050	25	40	42	0	2,157	3,937
9-10pm	1,148	11	14	21	0	1,194	1,248	13	14	26	0	1,301	2,495
10-11pm	833	6	9	22	0	870	1,193	13	7	25	0	1,238	2,108
11-12pm	673	6	3	12	0	694	1,029	3	3	22	0	1,057	1,751
<b>Totals</b>	<b>35,810</b>	<b>796</b>	<b>1,539</b>	<b>1,110</b>	<b>6</b>	<b>39,261</b>	<b>31,517</b>	<b>830</b>	<b>873</b>	<b>987</b>	<b>2</b>	<b>34,209</b>	<b>73,470</b>
7-10am	8,359	283	458	330	4	9,434	3,022	124	181	107	0	3,434	12,868
10am-1pm	5,662	142	167	182	2	6,155	4,308	169	185	200	0	4,862	11,017
1-4pm	5,258	140	278	150	0	5,826	6,451	223	153	228	0	7,055	12,881
4-7pm	5,859	53	279	63	0	6,254	6,653	132	170	135	0	7,090	13,344
7am-7pm	25,138	618	1,182	725	6	27,669	20,434	648	689	670	0	22,441	50,110
6-10am	10,698	379	631	460	4	12,172	4,084	156	227	140	0	4,607	16,779
3-7pm	7,686	95	413	115	0	8,309	8,953	188	227	209	0	9,577	17,886
7am-7pm	27,477	714	1,355	855	6	30,407	21,496	680	735	703	0	23,614	54,021

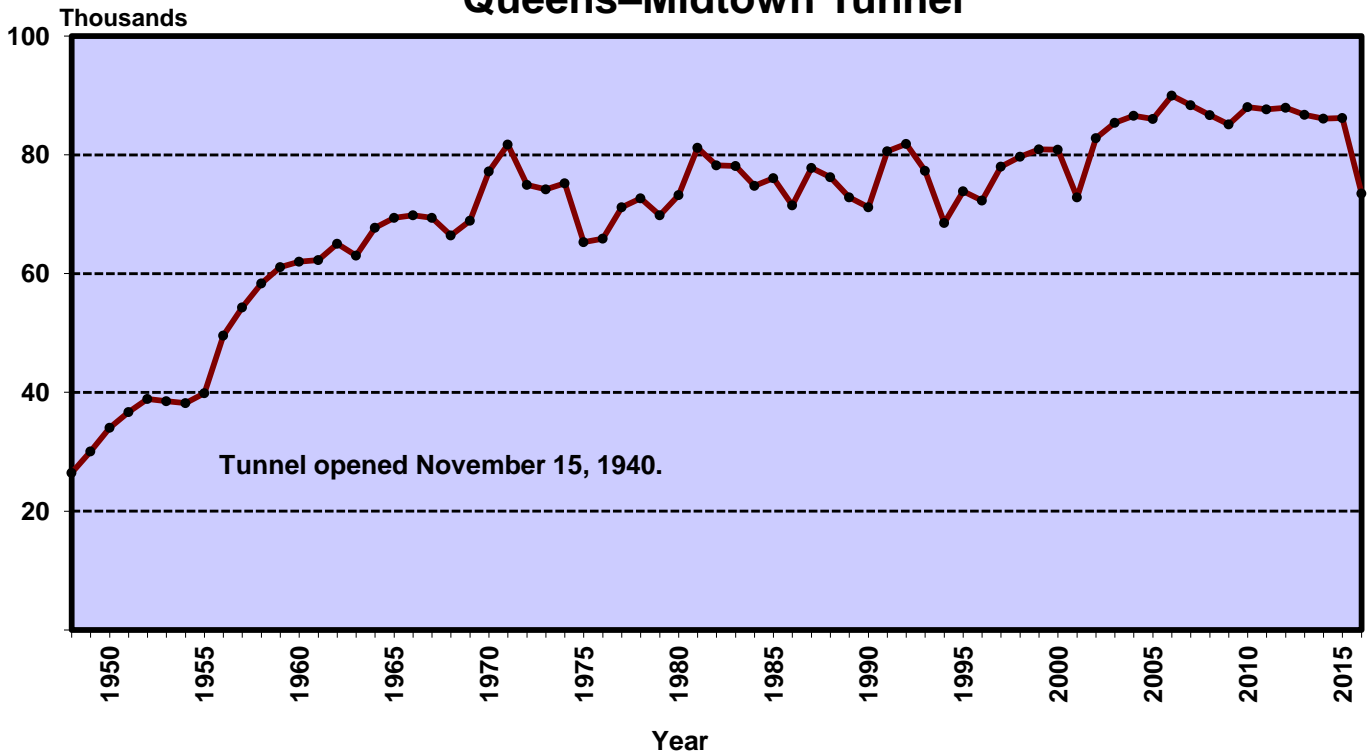
Based on May 2006 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Queens-Midtown Tunnel ~ 2016



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



## Hourly Vehicular Volumes Robert F. Kennedy Memorial Bridge Manhattan Plaza - 2016

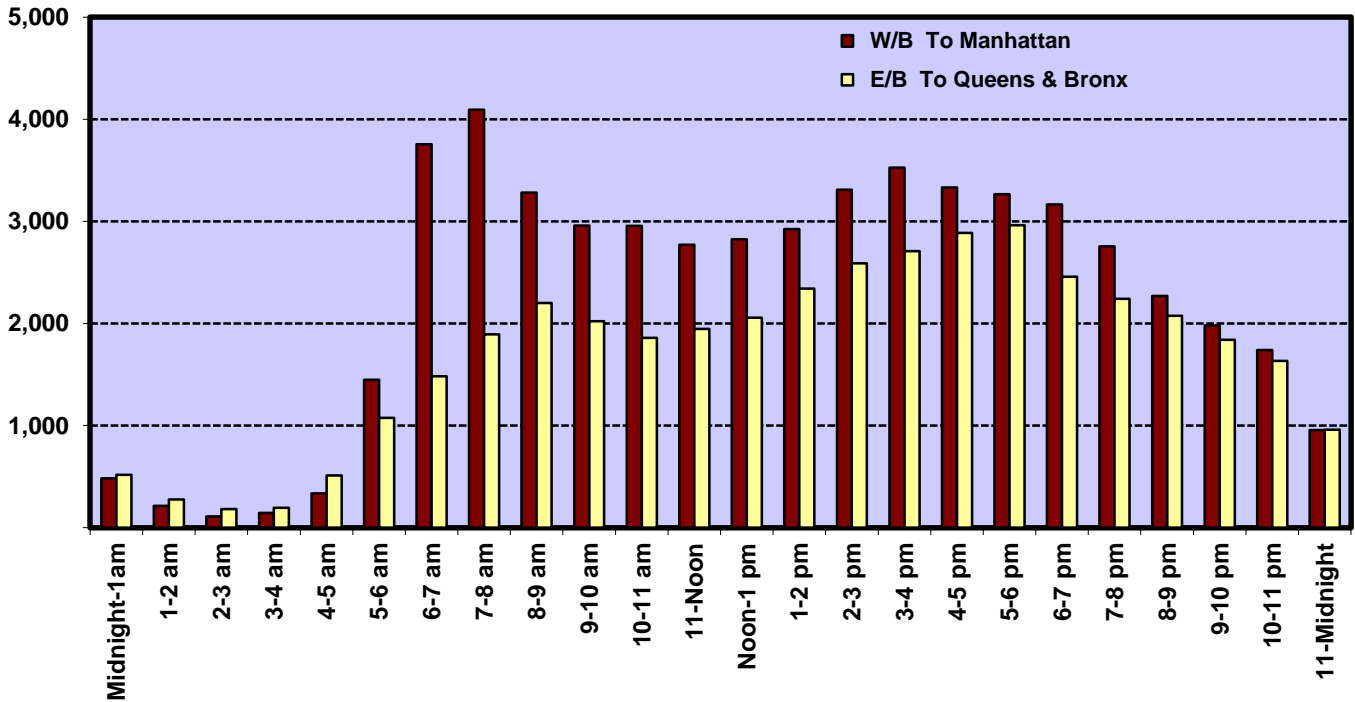
### Eastbound to Queens & Bronx

### Westbound to Manhattan

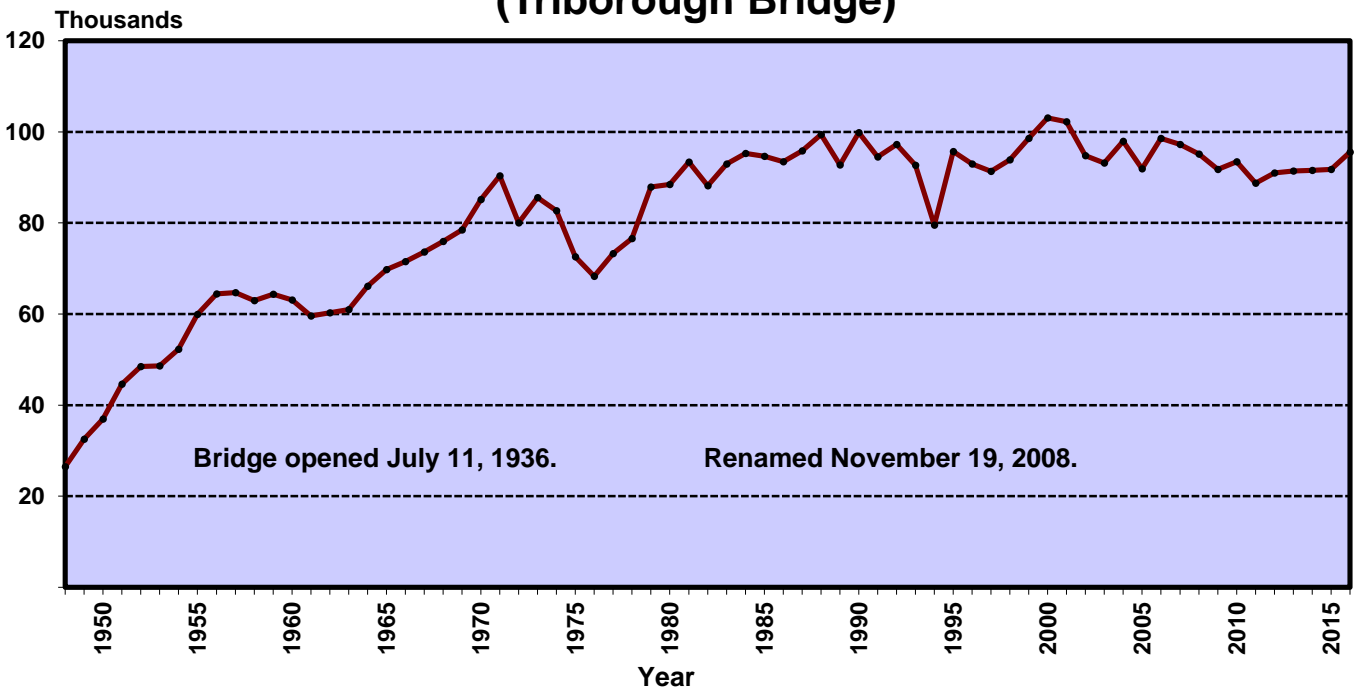
FHWA Classes ▲	Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					2-way Grand Totals
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	
12-1am	443	19	12	4	32	9	519	320	128	9	4	15	7	483							1,002
1-2am	199	14	6	2	49	7	277	153	38	3	2	10	7	213							490
2-3am	134	10	4	1	24	9	182	75	9	8	1	10	7	110							292
3-4am	138	10	11	1	23	11	194	106	8	7	0	13	12	146							340
4-5am	362	79	9	4	40	19	513	261	26	12	3	17	18	337							850
5-6am	770	122	32	9	84	58	1,075	1,162	94	49	13	84	48	1,450							2,525
6-7am	1,039	174	48	26	150	47	1,484	3,005	214	197	66	163	111	3,756							5,240
7-8am	1,350	182	118	43	146	55	1,894	3,124	309	273	100	181	108	4,095							5,989
8-9am	1,662	186	149	34	146	25	2,202	2,372	283	260	60	206	102	3,283							5,485
9-10am	1,514	166	131	19	143	49	2,022	2,078	356	209	38	173	105	2,959							4,981
10-11am	1,323	157	123	22	182	53	1,860	1,931	504	192	38	171	101	2,957							4,817
11-12am	1,325	207	139	12	203	61	1,947	1,886	461	142	33	139	109	2,770							4,717
12-1pm	1,461	220	137	13	187	40	2,058	1,877	446	151	43	185	124	2,826							4,884
1-2pm	1,615	284	163	18	215	46	2,341	1,982	379	216	43	181	124	2,925							5,266
2-3pm	1,826	323	161	33	210	38	2,591	2,327	511	184	50	144	95	3,311							5,902
3-4pm	1,952	293	200	40	200	24	2,709	2,553	552	178	53	122	70	3,528							6,237
4-5pm	2,135	283	220	52	177	21	2,888	2,421	499	201	53	111	49	3,334							6,222
5-6pm	2,430	210	162	21	121	19	2,963	2,476	492	131	43	85	39	3,266							6,229
6-7pm	2,027	168	122	24	96	22	2,459	2,527	458	82	24	53	22	3,166							5,625
7-8pm	1,881	111	113	32	79	27	2,243	2,189	424	45	32	39	26	2,755							4,998
8-9pm	1,749	128	80	27	42	50	2,076	1,837	317	45	19	33	20	2,271							4,347
9-10pm	1,567	139	52	21	39	22	1,840	1,557	351	19	21	19	15	1,982							3,822
10-11pm	1,399	113	31	12	67	13	1,635	1,206	464	18	12	20	20	1,740							3,375
11-12pm	829	51	29	8	33	11	961	588	315	14	8	15	16	956							1,917
<b>Totals</b>	31,130	3,649	2,252	478	2,688	736	40,933	40,013	7,638	2,645	759	2,189	1,375	54,619							95,552
7-10am	4,526	534	398	96	435	129	6,118	7,574	948	742	198	560	315	10,337							16,455
10am-1pm	4,109	584	399	47	572	154	5,865	5,694	1,411	485	114	495	354	8,553							14,418
1-4pm	5,393	900	524	91	625	108	7,641	6,862	1,442	578	146	447	289	9,764							17,405
4-7pm	6,592	661	504	97	394	62	8,310	7,424	1,449	414	120	249	110	9,766							18,076
7am-7pm	20,620	2,679	1,825	331	2,026	453	27,934	27,554	5,250	2,219	578	1,751	1,068	38,420							66,354
6-10am	5,565	708	446	122	585	176	7,602	10,579	1,162	939	264	723	426	14,093							21,695
3-7pm	8,544	954	704	137	594	86	11,019	9,977	2,001	592	173	371	180	13,294							24,313
6am-7pm	21,659	2,853	1,873	357	2,176	500	29,418	30,559	5,464	2,416	644	1,914	1,179	42,176							71,594

Based on October 2013 Classification Survey Data. \*\* Peak Volumes

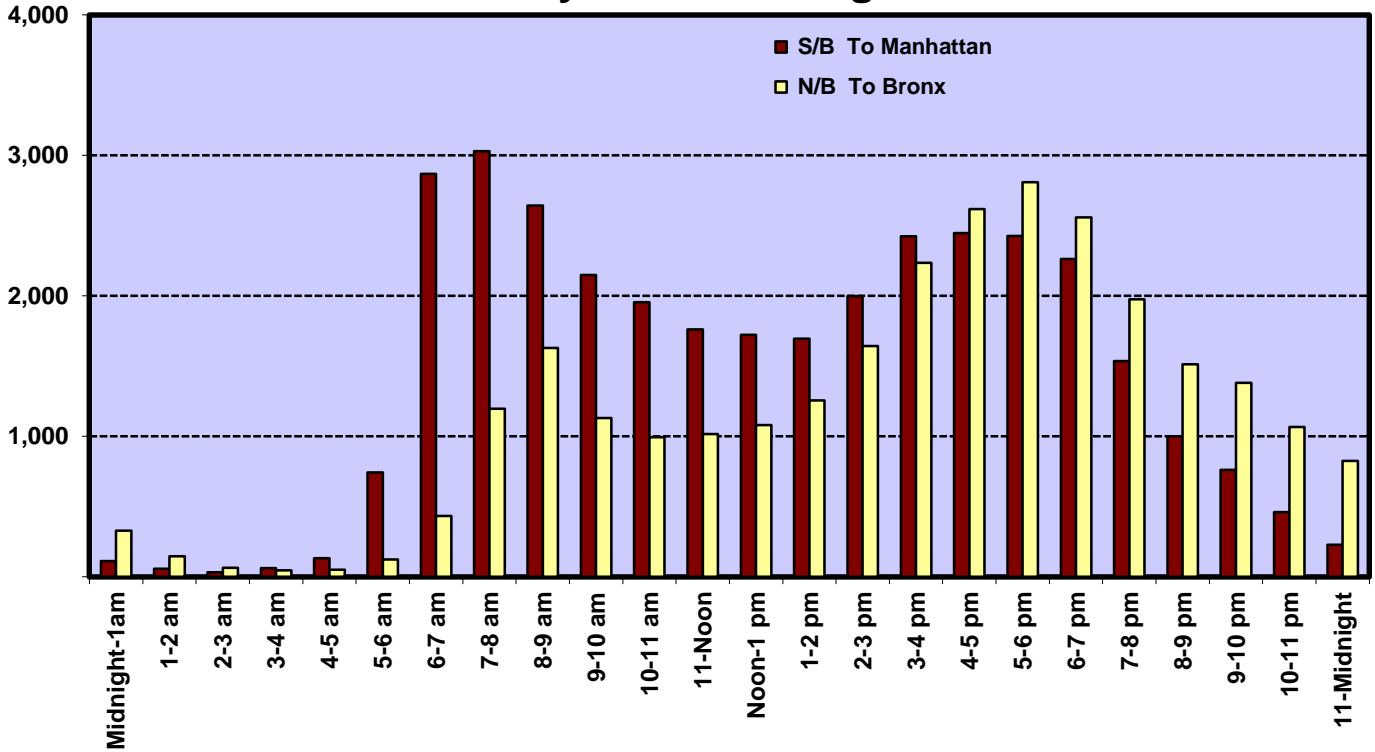
## Hourly Vehicular Volumes Robert F. Kennedy Memorial Bridge, Manhattan Plaza ~ 2016 (Triborough Bridge)



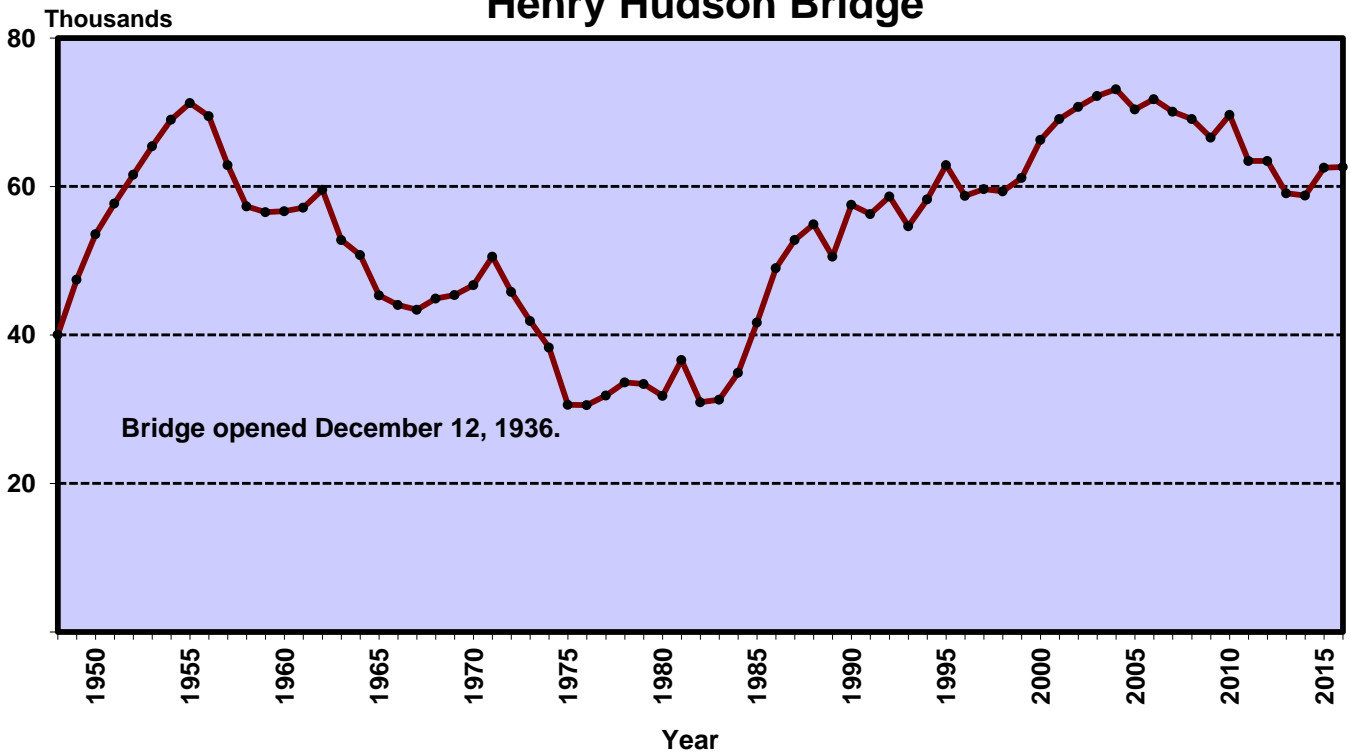
## Average Daily Traffic Volumes ~ Total of Both Directions Robert F. Kennedy Memorial Bridge, Manhattan Plaza (Triborough Bridge)



## Hourly Vehicular Volumes Henry Hudson Bridge ~ 2016



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







## Hourly Vehicular Volumes Bronx-Whitestone Bridge - 2016

### Northbound to Bronx

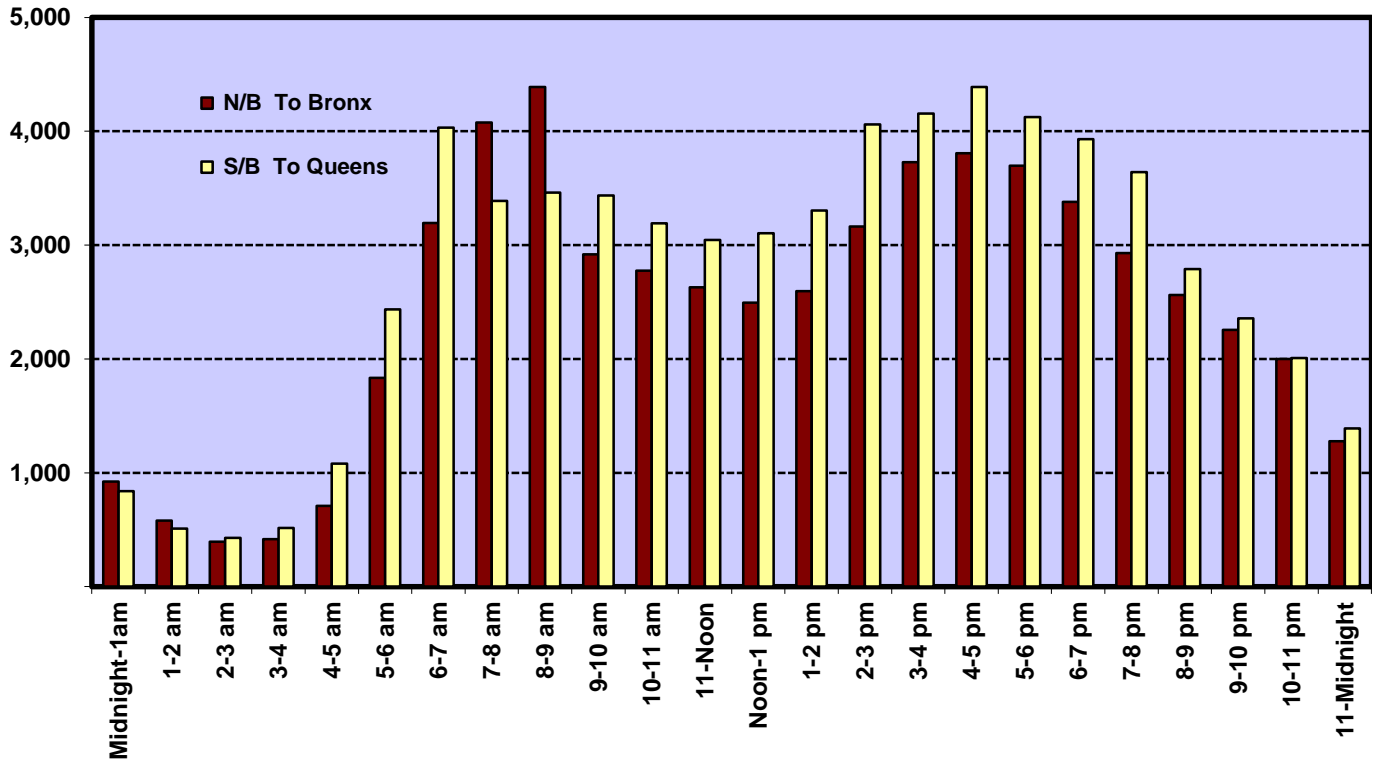
### Southbound to Queens

FHWA Classes ▲	Northbound to Bronx						Southbound to Queens						2-way Grand Totals	
	Autos, Motorcycles SUVs, Family Vans			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Autos, Motorcycles SUVs, Family Vans			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles				
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles
12-1am	697	80	26	7	50	62	922	688	44	29	12	12	53	838
1-2am	394	51	30	4	36	65	580	404	24	15	6	14	47	510
2-3am	201	46	24	5	54	64	394	279	17	16	2	34	81	429
3-4am	218	35	22	4	73	66	418	338	26	26	6	36	83	515
4-5am	423	69	36	7	104	69	708	806	48	69	7	56	94	1,080
5-6am	1,315	166	85	37	134	97	1,834	1,924	85	151	33	81	162	2,436
6-7am	2,470	160	252	67	173	72	3,194	3,065	188	345	71	193	170	4,032
7-8am	3,252	192	300	82	164	87	4,077	2,710	142	254	47	115	119	3,387
8-9am	3,576	116	392	39	156	109	4,388	2,838	144	227	24	159	69	3,461
9-10am	2,285	99	265	30	160	81	2,920	2,716	150	230	39	181	121	3,437
10-11am	2,088	81	335	29	120	123	2,776	2,482	130	218	33	194	135	3,192
11-12am	1,972	75	244	24	164	150	2,629	2,307	129	267	15	202	124	3,044
12-1pm	1,849	95	232	36	136	145	2,493	2,446	121	263	14	158	103	3,105
1-2pm	1,994	84	216	28	150	124	2,596	2,560	130	294	28	197	96	3,305
2-3pm	2,422	137	334	42	133	96	3,164	3,206	204	291	55	228	77	4,061
3-4pm	2,929	165	333	67	136	97	3,727	3,266	211	350	91	164	73	4,155
4-5pm	3,021	193	297	81	111	104	3,807	3,648	171	309	53	137	71	4,389
5-6pm	2,935	204	342	40	97	78	3,696	3,390	204	338	27	103	62	4,124
6-7pm	2,864	197	185	28	47	60	3,381	3,323	213	274	20	59	41	3,930
7-8pm	2,568	157	104	26	22	52	2,929	3,061	196	253	26	51	53	3,640
8-9pm	2,217	143	73	22	50	56	2,561	2,391	147	144	18	24	65	2,789
9-10pm	1,950	142	60	20	32	50	2,254	2,036	110	94	21	41	54	2,356
10-11pm	1,680	133	70	13	36	67	1,999	1,726	121	74	20	18	49	2,008
11-12pm	1,022	121	35	12	35	53	1,278	1,173	76	56	17	11	56	1,389
<b>Totals</b>	<b>46,342</b>	<b>2,941</b>	<b>4,292</b>	<b>750</b>	<b>2,373</b>	<b>2,027</b>	<b>58,725</b>	<b>52,783</b>	<b>3,031</b>	<b>4,587</b>	<b>685</b>	<b>2,468</b>	<b>2,058</b>	<b>65,612</b>
7-10am	9,113	407	957	151	480	277	11,385	8,264	436	711	110	455	309	10,285
10am-1pm	5,909	251	811	89	420	418	7,898	7,235	380	748	62	554	362	9,341
1-4pm	7,345	386	893	137	419	317	9,487	9,032	545	935	174	589	246	11,521
4-7pm	8,820	594	824	149	255	242	10,884	10,361	588	921	100	299	174	12,443
7am-7pm	31,187	1,638	3,475	526	1,574	1,254	39,654	34,892	1,949	3,315	446	1,897	1,091	43,590
6-10am	11,583	567	1,209	218	653	349	14,579	11,329	624	1,056	181	648	479	14,317
3-7pm	11,749	759	1,157	216	391	339	14,611	13,627	799	1,271	191	463	247	16,598
6am-7pm	33,657	1,798	3,727	593	1,747	1,326	42,848	37,957	2,137	3,660	517	2,090	1,261	47,622

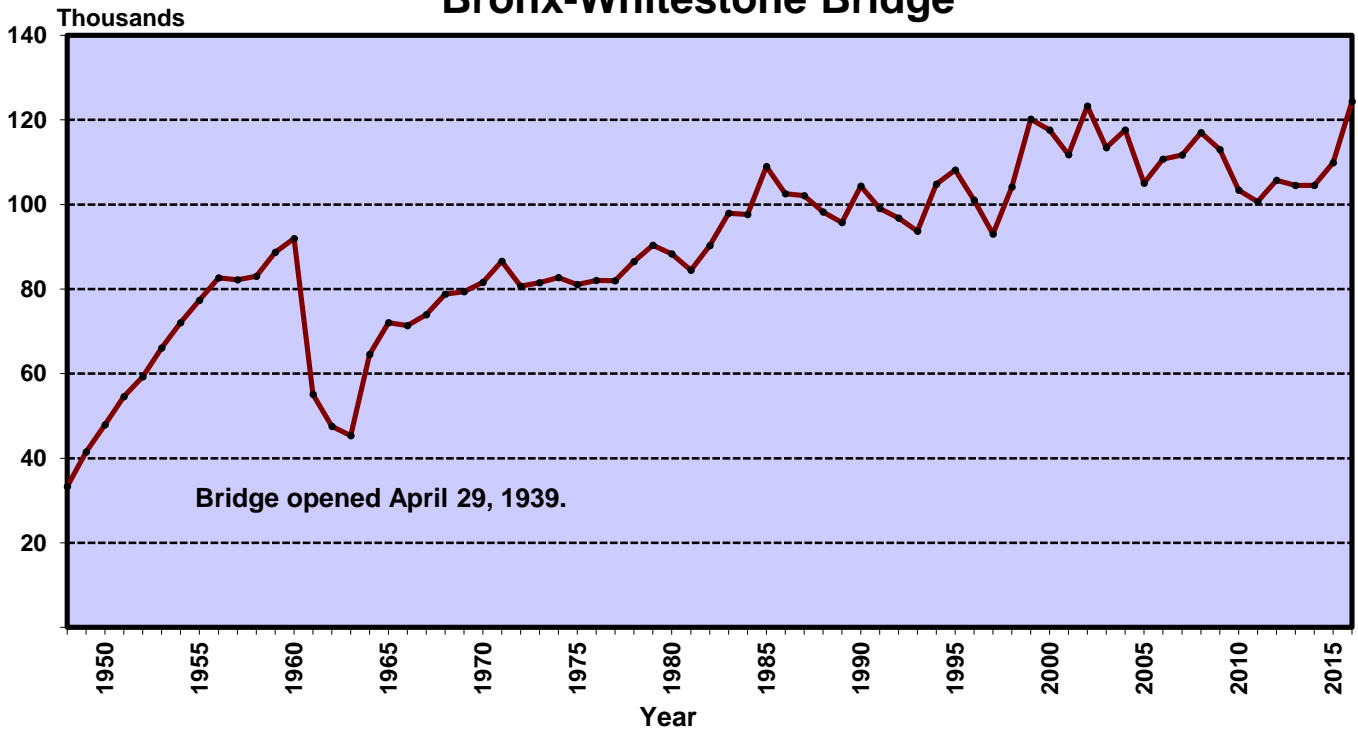
Based on November 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Bronx-Whitestone Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Bronx-Whitestone Bridge



# Hourly Vehicular Volumes

## Robert F. Kennedy Memorial Bridge Bronx Plaza - 2016

### Northbound to Bronx

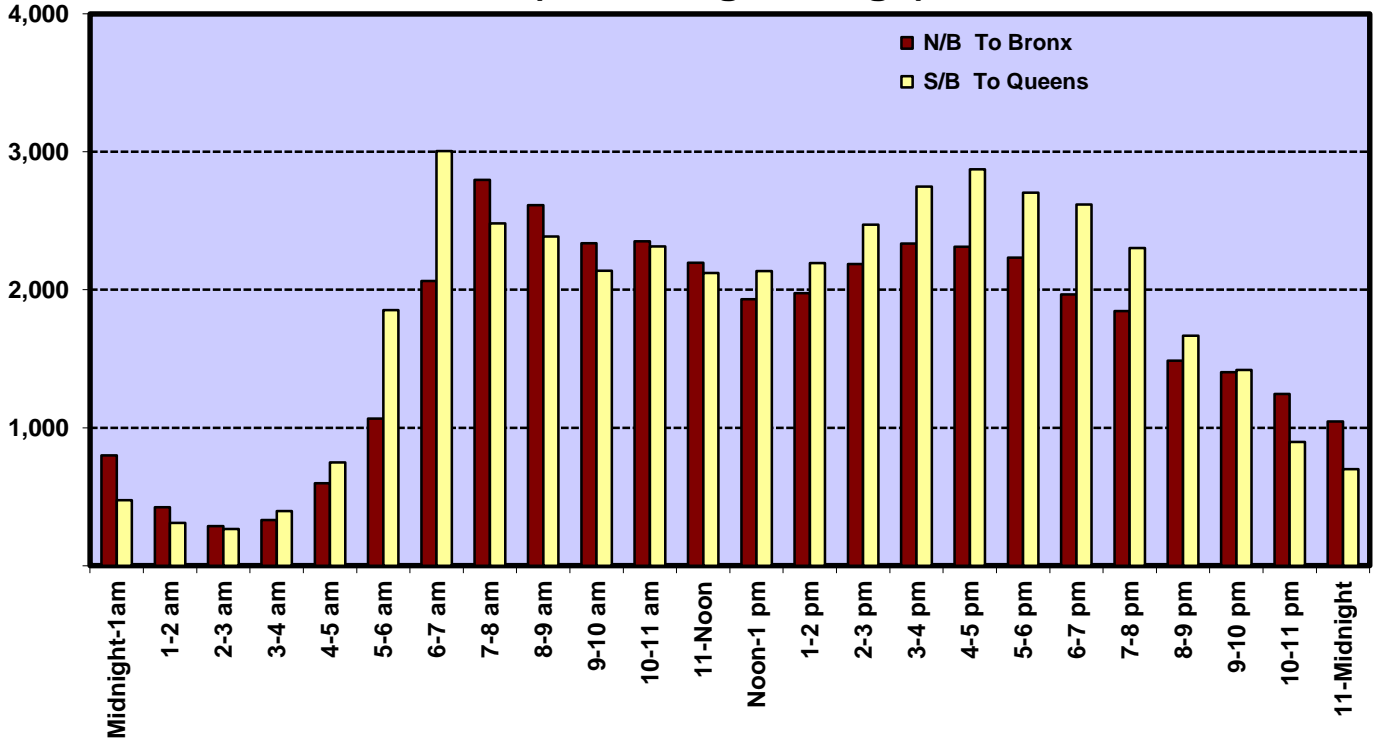
### Southbound to Queens

FHWA Classes ▲	Northbound to Bronx							Southbound to Queens							2-way Grand Totals
	Autos, Motorcycles SUVs, Family Vans			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Total Vehicles	Autos, Motorcycles SUVs, Family Vans			Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles			Total Vehicles	
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		1, 2, 3	2	2 & 3	4	5 - 7	8 - 13		
12-1am	528	212	16	7	25	11	799	402	18	11	4	30	9	474	
1-2am	304	75	6	4	20	14	423	223	16	6	3	55	8	311	
2-3am	197	23	21	2	25	19	287	195	14	6	2	36	14	267	
3-4am	239	18	16	1	30	27	331	283	20	23	2	47	22	397	
4-5am	460	47	22	6	30	32	597	526	116	14	6	58	28	748	
5-6am	855	69	36	10	61	35	1,066	1,327	211	55	15	144	101	1,853	
6-7am	1,651	118	108	36	90	61	2,064	2,103	353	97	53	304	95	3,005	
7-8am	2,134	211	186	68	123	74	2,796	1,767	239	155	57	192	72	2,482	
8-9am	1,889	225	207	47	164	81	2,613	1,802	202	161	37	158	27	2,387	
9-10am	1,641	282	165	30	137	83	2,338	1,602	176	138	20	151	52	2,139	
10-11am	1,535	401	153	30	136	96	2,351	1,648	195	152	27	226	66	2,314	
11-12am	1,494	366	113	26	111	87	2,197	1,444	226	152	13	221	66	2,122	
12-1pm	1,283	305	103	30	126	85	1,932	1,517	228	142	14	194	41	2,136	
1-2pm	1,338	256	146	29	122	84	1,975	1,513	266	153	16	201	44	2,193	
2-3pm	1,538	337	121	33	95	63	2,187	1,741	308	154	32	200	36	2,471	
3-4pm	1,690	365	118	35	80	46	2,334	1,991	297	203	41	203	24	2,749	
4-5pm	1,679	346	139	37	77	34	2,312	2,125	281	219	52	176	21	2,874	
5-6pm	1,692	337	90	30	58	27	2,234	2,218	192	148	19	111	17	2,705	
6-7pm	1,569	284	51	15	33	14	1,966	2,158	179	130	25	102	23	2,617	
7-8pm	1,466	284	30	22	26	17	1,845	1,931	114	116	33	81	28	2,303	
8-9pm	1,202	207	29	12	22	13	1,485	1,405	102	64	21	34	40	1,666	
9-10pm	1,101	248	14	15	13	11	1,402	1,209	107	40	16	30	17	1,419	
10-11pm	861	332	13	8	15	15	1,244	769	62	17	6	37	7	898	
11-12pm	643	345	15	8	16	18	1,045	604	37	21	6	24	8	700	
Totals	28,989	5,693	1,918	541	1,635	1,047	39,823	32,493	3,959	2,377	520	3,015	866	43,230	
7-10am	5,664	718	558	145	424	238	7,747	5,171	617	454	114	501	151	7,008	
10am-1pm	4,312	1,072	369	86	373	268	6,480	4,609	649	446	54	641	173	6,572	
1-4pm	4,566	958	355	97	297	193	6,496	5,235	871	510	89	604	104	7,413	
4-7pm	4,940	967	280	82	168	75	6,512	6,501	652	497	96	389	61	8,196	
7am-7pm	19,482	3,715	1,592	410	1,262	774	27,235	21,516	2,789	1,907	353	2,135	489	29,189	
6-10am	7,315	836	666	181	514	299	9,811	7,274	970	551	167	805	246	10,013	
3-7pm	6,630	1,332	398	117	248	121	8,846	8,482	949	700	137	592	85	10,945	
6am-7pm	21,133	3,833	1,700	446	1,352	835	29,239	23,619	3,142	2,004	406	2,439	584	32,194	

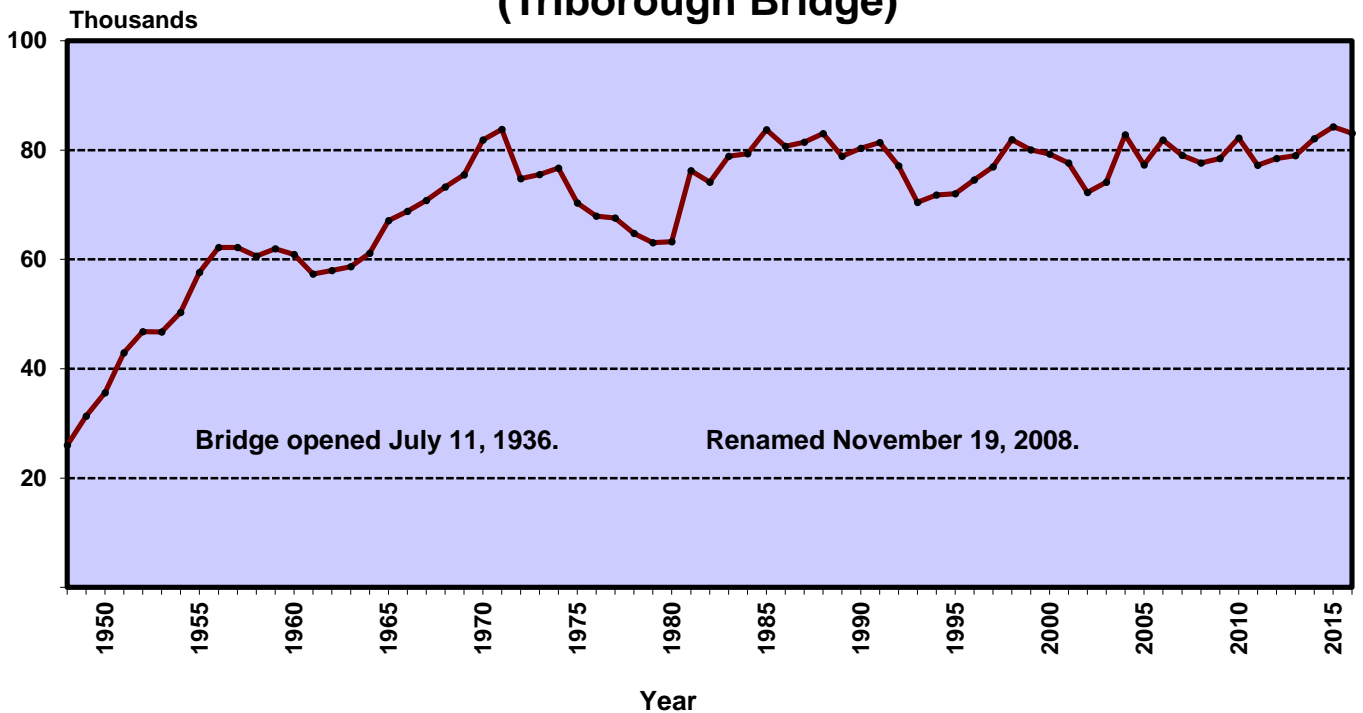
Based on October 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Robert F. Kennedy Memorial Bridge, Bronx Plaza ~ 2016 (Triborough Bridge)



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



# Hourly Vehicular Volumes Throgs Neck Bridge - 2016

## Northbound to Bronx

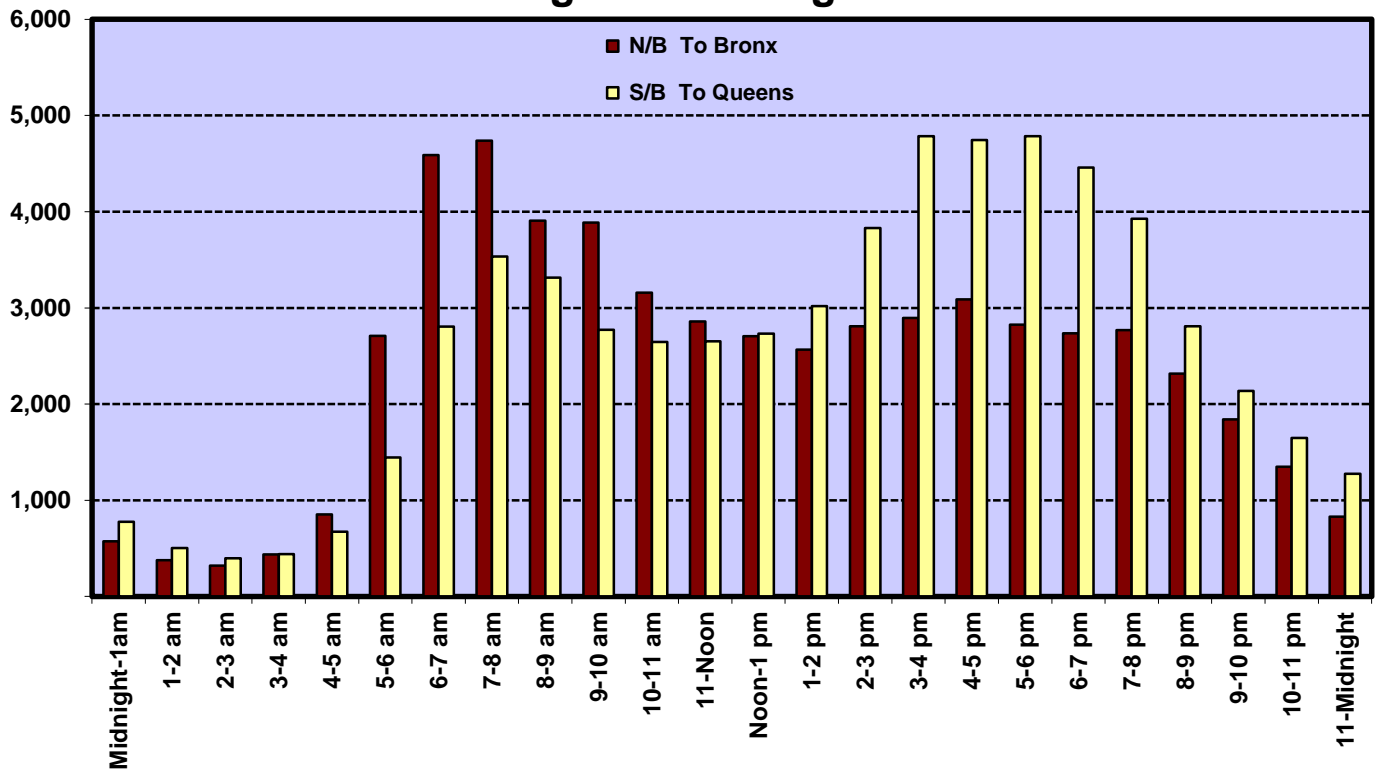
## Southbound to Queens

FHWA Classes ▲	Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					Autos, Motorcycles					Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles					2-way Grand Totals
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	Total Vehicles		
12-1am	355	57	32	0	33	95	588	45	6	1	13	123	572	588	45	6	1	13	123	776	
1-2am	198	25	30	0	25	98	313	29	11	1	34	117	376	313	29	11	1	34	117	505	
2-3am	136	26	23	0	23	114	202	18	14	0	40	123	322	202	18	14	0	40	123	397	
3-4am	189	29	33	0	60	127	204	25	15	1	43	153	438	204	25	15	1	43	153	441	
4-5am	461	50	72	1	76	193	287	25	16	0	93	251	853	287	25	16	0	93	251	672	
5-6am	2,013	104	178	2	165	247	758	39	50	6	194	397	2,709	758	39	50	6	194	397	1,444	
6-7am	3,684	106	360	16	220	202	1,985	47	168	14	229	383	4,588	1,985	47	168	14	229	383	2,806	
7-8am	4,037	38	316	42	158	146	2,891	28	182	29	199	206	4,737	2,891	28	182	29	199	206	3,535	
8-9am	3,229	48	247	30	153	200	2,720	50	161	14	174	182	3,907	2,720	50	161	14	174	182	3,314	
9-10am	3,158	40	230	44	156	260	2,148	30	170	17	186	220	3,888	2,148	30	170	17	186	220	2,771	
10-11am	2,287	37	220	18	190	405	1,951	18	186	27	180	284	3,157	1,951	18	186	27	180	284	2,646	
11-12am	2,136	32	148	9	176	358	1,978	14	172	8	194	288	2,859	1,978	14	172	8	194	288	2,654	
12-1pm	2,005	33	159	21	171	316	2,028	25	252	15	207	204	2,705	2,028	25	252	15	207	204	2,731	
1-2pm	1,866	46	166	23	174	291	2,260	18	306	46	201	188	2,566	2,260	18	306	46	201	188	3,019	
2-3pm	2,154	53	156	13	177	255	3,079	28	313	27	205	179	2,808	3,079	28	313	27	205	179	3,831	
3-4pm	2,319	50	159	26	163	179	4,115	32	312	44	166	115	2,896	4,115	32	312	44	166	115	4,784	
4-5pm	2,574	85	147	18	123	141	4,156	29	298	18	146	98	3,088	4,156	29	298	18	146	98	4,745	
5-6pm	2,432	75	122	11	83	101	4,317	48	211	12	113	84	2,824	4,317	48	211	12	113	84	4,785	
6-7pm	2,374	61	117	7	64	114	4,033	53	172	11	101	90	2,737	4,033	53	172	11	101	90	4,460	
7-8pm	2,356	79	131	5	62	136	3,515	54	144	8	80	125	2,769	3,515	54	144	8	80	125	3,926	
8-9pm	1,950	72	109	4	45	138	2,523	39	87	6	41	114	2,318	2,523	39	87	6	41	114	2,810	
9-10pm	1,568	57	53	0	26	137	1,854	43	80	1	29	131	1,841	1,854	43	80	1	29	131	2,138	
10-11pm	1,077	44	46	4	19	159	1,481	46	60	3	20	37	1,349	1,481	46	60	3	20	37	1,647	
11-12pm	664	36	31	0	14	84	1,067	30	30	3	15	131	829	1,067	30	30	3	15	131	1,276	
Totals	45,222	1,283	3,285	294	2,556	4,496	50,433	813	3,416	325	2,903	4,223	57,136	50,433	813	3,416	325	2,903	4,223	62,113	
7-10am	10,424	126	793	116	467	606	7,759	108	513	73	559	608	12,532	7,759	108	513	73	559	608	9,620	
10am-1pm	6,428	102	527	48	537	1,079	5,957	57	610	50	581	776	8,721	5,957	57	610	50	581	776	8,031	
1-4pm	6,339	149	481	62	514	725	9,454	78	931	117	572	482	8,270	9,454	78	931	117	572	482	11,634	
4-7pm	7,380	221	386	36	270	356	12,506	130	681	41	360	272	8,649	12,506	130	681	41	360	272	13,990	
7am-7pm	30,571	598	2,187	262	1,788	2,766	35,676	373	2,735	281	2,072	2,138	38,172	35,676	373	2,735	281	2,072	2,138	43,275	
6-10am	14,108	232	1,153	132	687	808	9,724	155	681	87	788	991	17,120	9,724	155	681	87	788	991	12,426	
3-7pm	9,699	271	545	62	433	535	16,621	162	993	85	526	387	11,545	16,621	162	993	85	526	387	18,774	
6am-7pm	34,255	704	2,547	278	2,008	2,968	37,641	420	2,903	295	2,301	2,521	42,760	37,641	420	2,903	295	2,301	2,521	46,081	

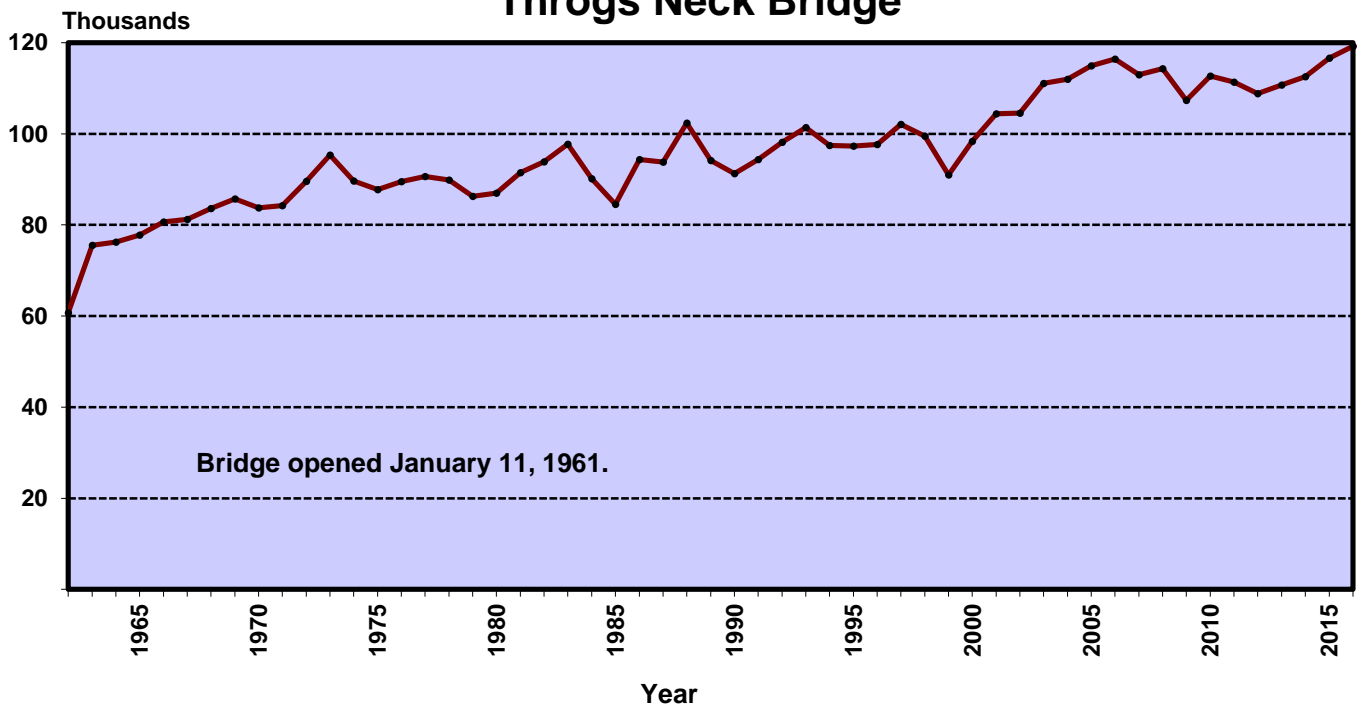
Based on November 2013 Classification Survey Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Throgs Neck Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Throgs Neck Bridge



## Hourly Vehicular Volumes Verrazano-Narrows Bridge - 2016

### Eastbound to Brooklyn

### Westbound to Staten Island

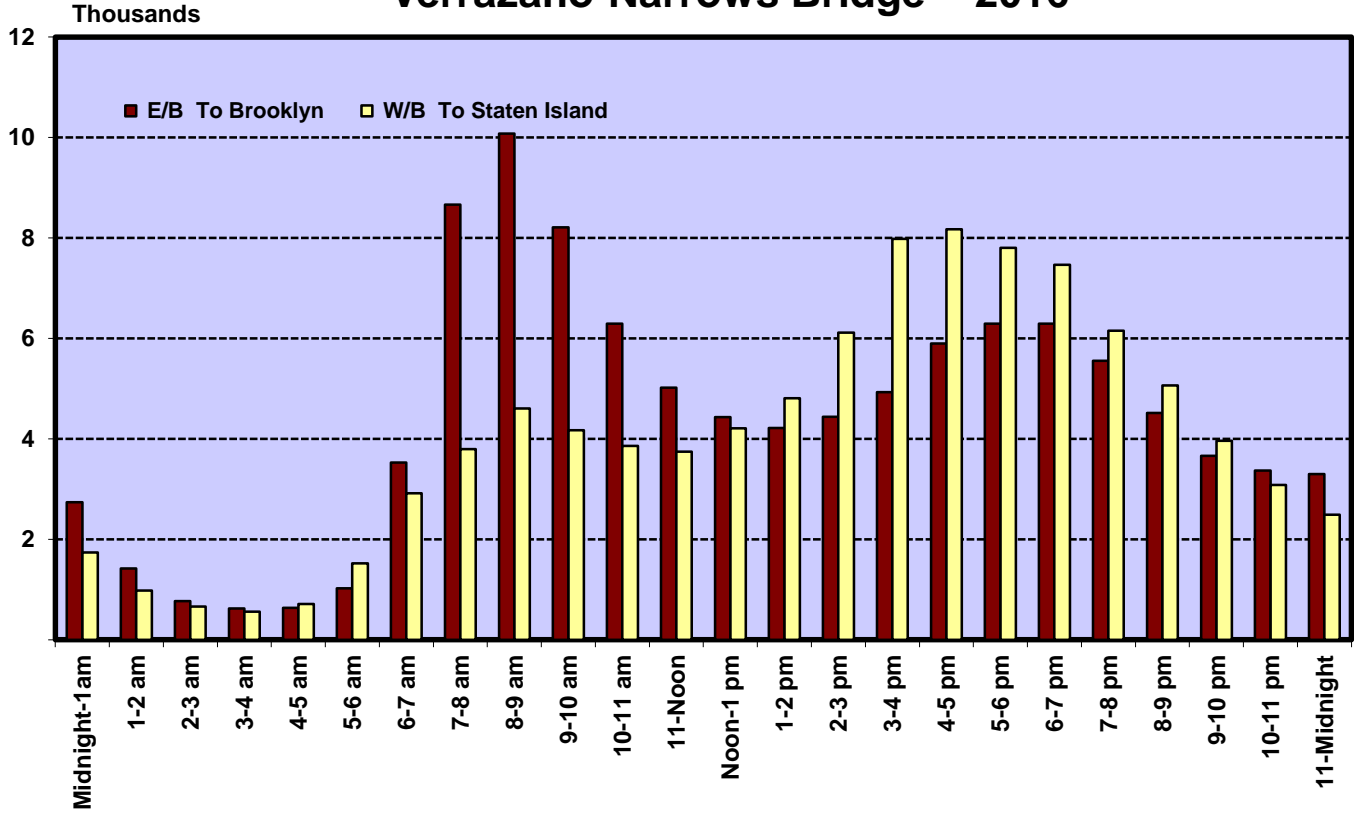
FHWA Classes ▲	Autos, Motorcycles, SUVs, Family Vans						Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles				Autos, Motorcycles, SUVs, Family Vans				Commercial Vans, Panel Trucks, Pickups, Police, Fleet Vehicles				2-way Grand Totals
	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	1, 2, 3	2	2 & 3	4	5 - 7	8 - 13	
12-1am	2,369	52	27	33	58	200	1,601	33	27	12	30	37	1,740						4,479
1-2am	1,096	34	10	27	55	198	872	32	13	14	17	35	983						2,403
2-3am	489	16	14	10	58	185	547	20	12	9	39	35	662						1,434
3-4am	449	11	6	4	43	111	439	14	13	21	51	24	562						1,186
4-5am	491	9	5	6	37	89	562	9	16	15	53	56	711						1,348
5-6am	877	51	6	11	26	55	1,245	20	28	40	128	60	1,521						2,547
6-7am	3,114	91	93	59	72	97	2,440	18	80	110	152	119	2,919						6,445
7-8am	7,694	89	340	222	140	177	3,282	19	147	127	153	88	3,796						12,458
8-9am	8,754	139	427	204	285	269	4,001	17	162	148	171	109	4,608						14,686 **
9-10am	7,090	65	252	135	337	330	3,502	27	169	160	194	119	4,171						12,380
10-11am	5,482	81	260	89	214	169	3,177	15	150	88	231	202	3,863						10,158
11-12am	4,241	30	176	61	231	281	3,123	21	149	50	217	186	3,746						8,766
12-1pm	3,795	36	181	48	162	212	3,549	31	148	68	253	164	4,213						8,647
1-2pm	3,659	43	129	69	175	140	4,234	33	130	63	207	142	4,809						9,024
2-3pm	3,880	56	125	59	212	109	5,584	27	122	70	218	125	6,116						10,557
3-4pm	4,305	50	137	124	195	122	7,335	23	187	79	229	131	7,984						12,917
4-5pm	5,057	81	216	216	196	135	7,491	36	217	151	171	109	8,175						14,076
5-6pm	5,636	82	100	156	181	139	7,334	35	94	168	102	68	7,801						14,095
6-7pm	5,741	62	89	118	133	149	7,006	45	111	173	81	52	7,468						13,760
7-8pm	5,064	45	84	66	89	207	5,779	31	89	125	63	65	6,152						11,707
8-9pm	4,107	39	55	55	82	177	4,749	35	48	69	60	106	5,067						9,582
9-10pm	3,307	30	28	53	65	180	3,699	28	43	65	52	75	3,962						7,625
10-11pm	3,006	23	34	35	68	203	2,868	30	19	32	42	90	3,081						6,450
11-12pm	2,855	26	44	51	62	262	2,247	21	22	34	53	116	2,493						5,793
Totals	92,558	1,241	2,838	1,911	3,176	4,196	86,616	620	2,196	1,891	2,967	2,313	96,603						202,523
7-10am	23,538	293	1,019	561	762	776	10,765	63	478	435	518	316	12,575						39,524
10am-1pm	13,518	147	617	198	607	662	9,849	67	447	206	701	552	11,822						27,571
1-4pm	11,844	149	391	252	582	371	17,123	83	439	212	654	398	18,909						32,498
4-7pm	16,434	225	405	490	510	423	21,831	116	422	492	354	229	23,444						41,931
7am-7pm	65,334	814	2,432	1,501	2,461	2,232	59,568	329	1,786	1,345	2,227	1,495	66,750						141,524
6-10am	26,652	384	1,112	620	834	873	13,205	81	558	545	670	435	15,494						45,969
3-7pm	20,739	275	542	614	705	545	29,166	139	609	571	583	360	31,428						54,848
6am-7pm	68,448	905	2,525	1,560	2,533	2,329	62,008	347	1,866	1,455	2,379	1,614	69,669						147,959

Based on November 2013 Classification Survey Data.

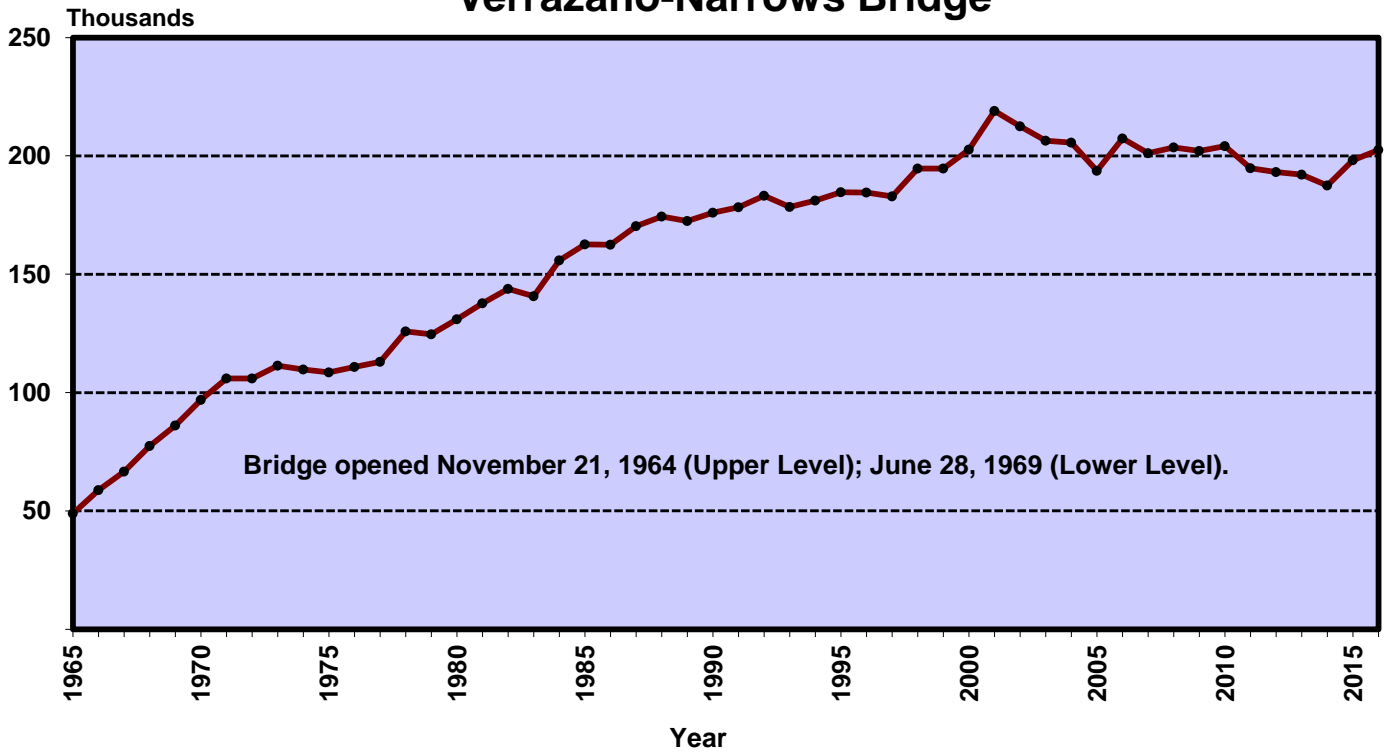
\*\* Peak Volumes



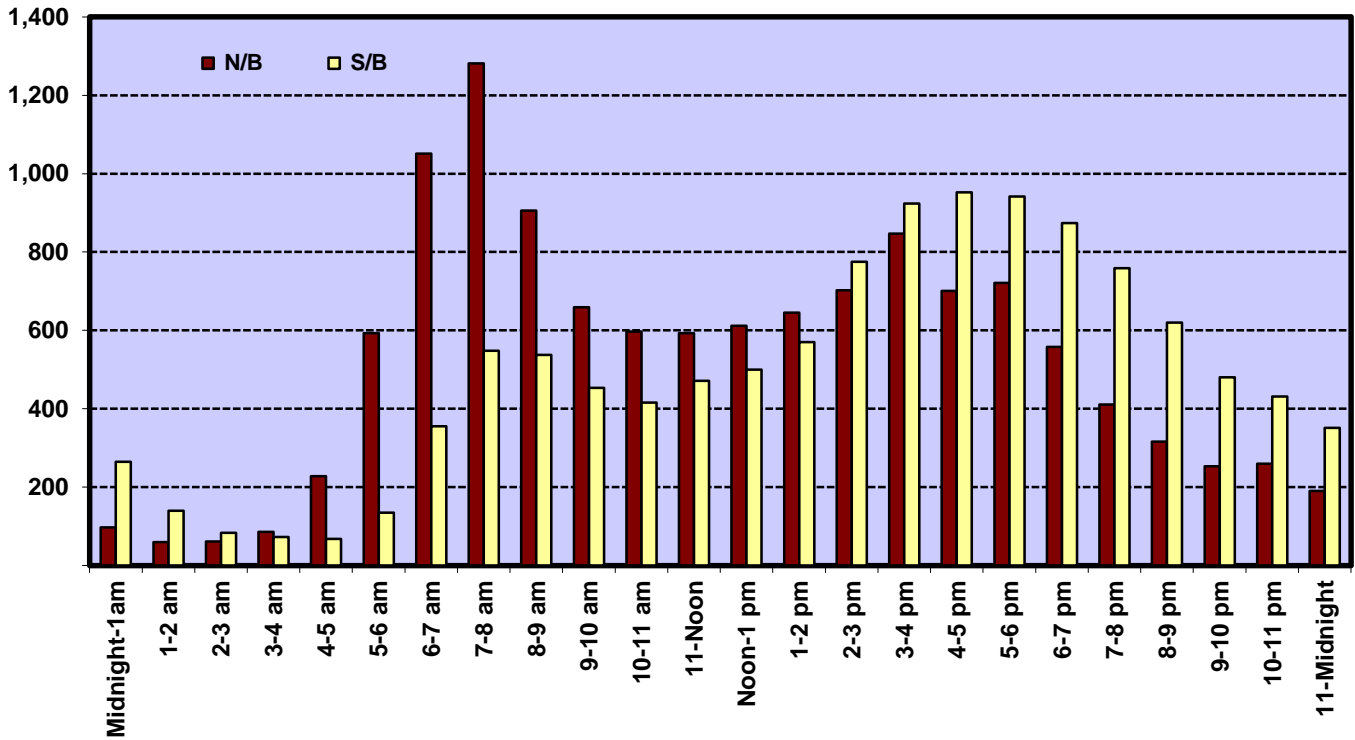
## Hourly Vehicular Volumes Verrazano-Narrows Bridge ~ 2016



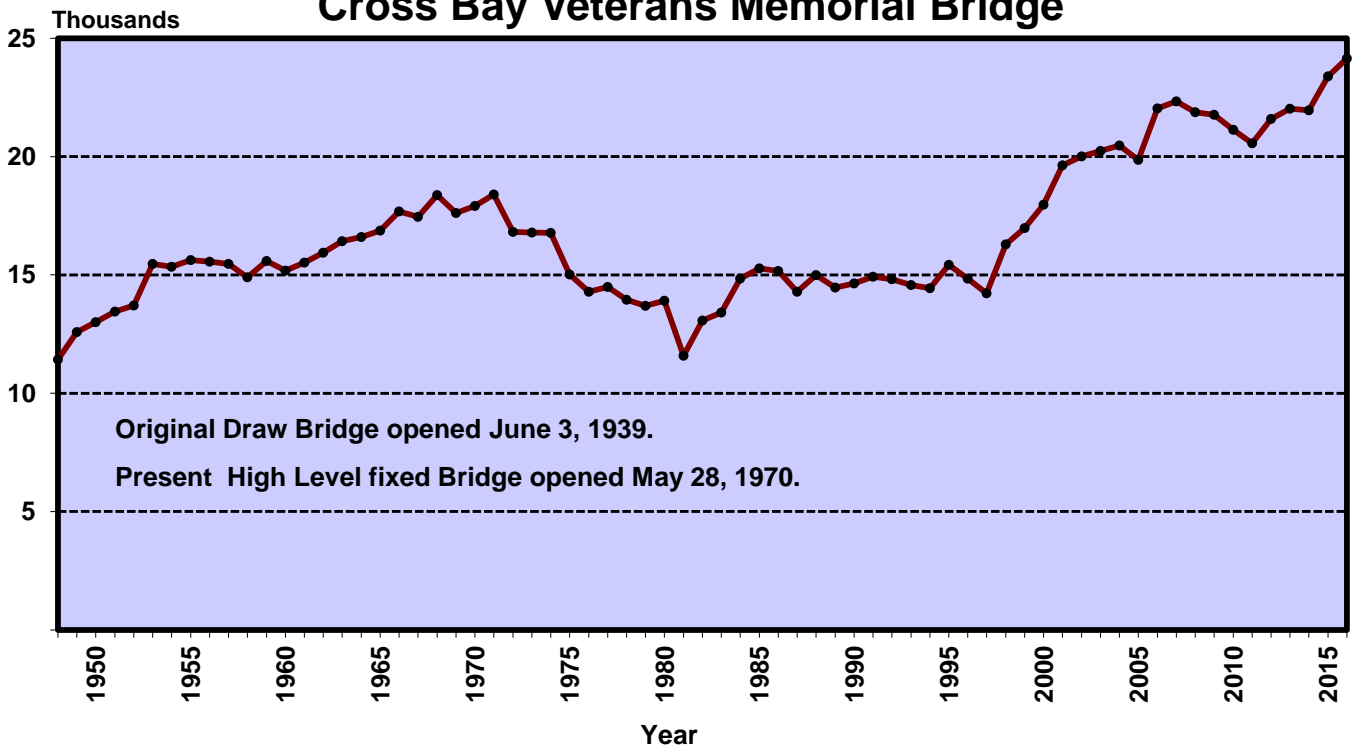
## Average Daily Traffic Volumes ~ Total of Both Directions Verrazano-Narrows Bridge



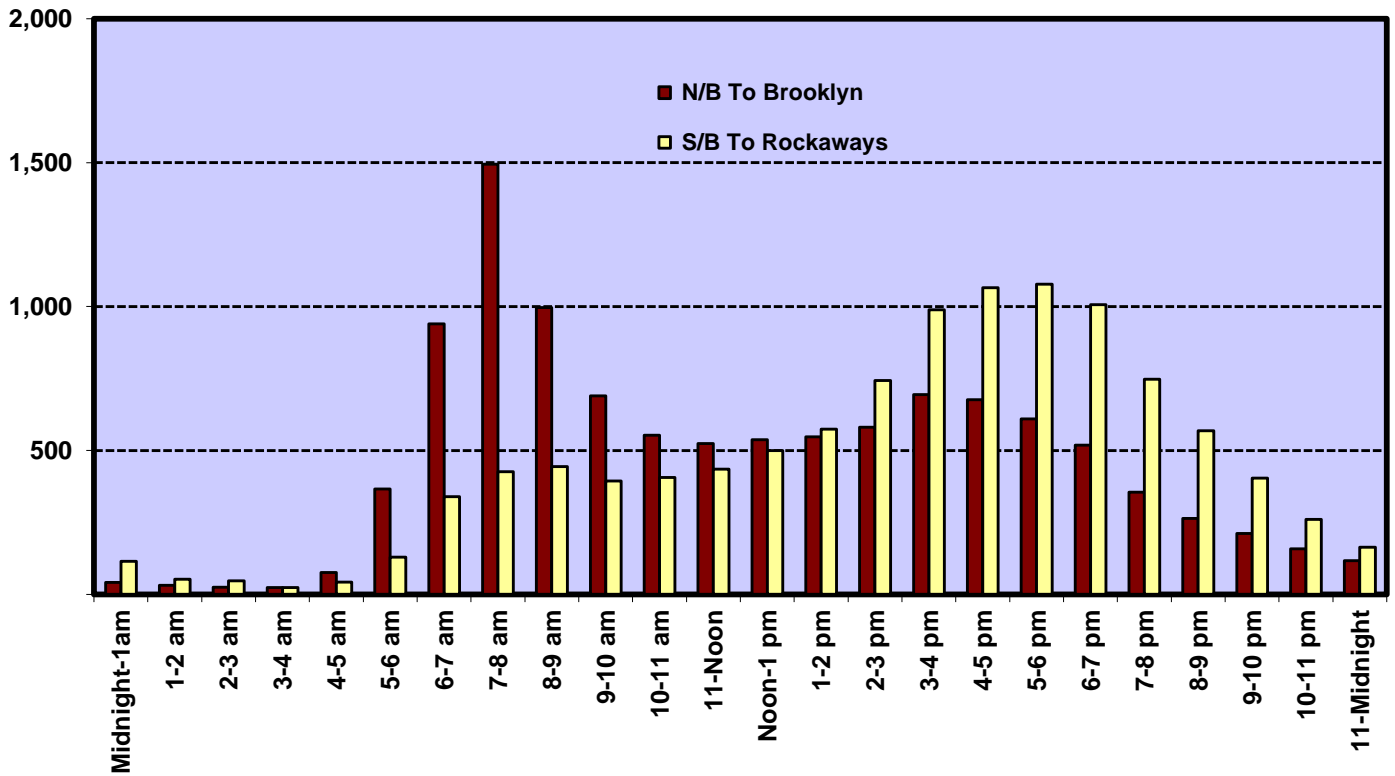
## Hourly Vehicular Volumes Cross Bay Veterans Memorial Bridge ~ 2016



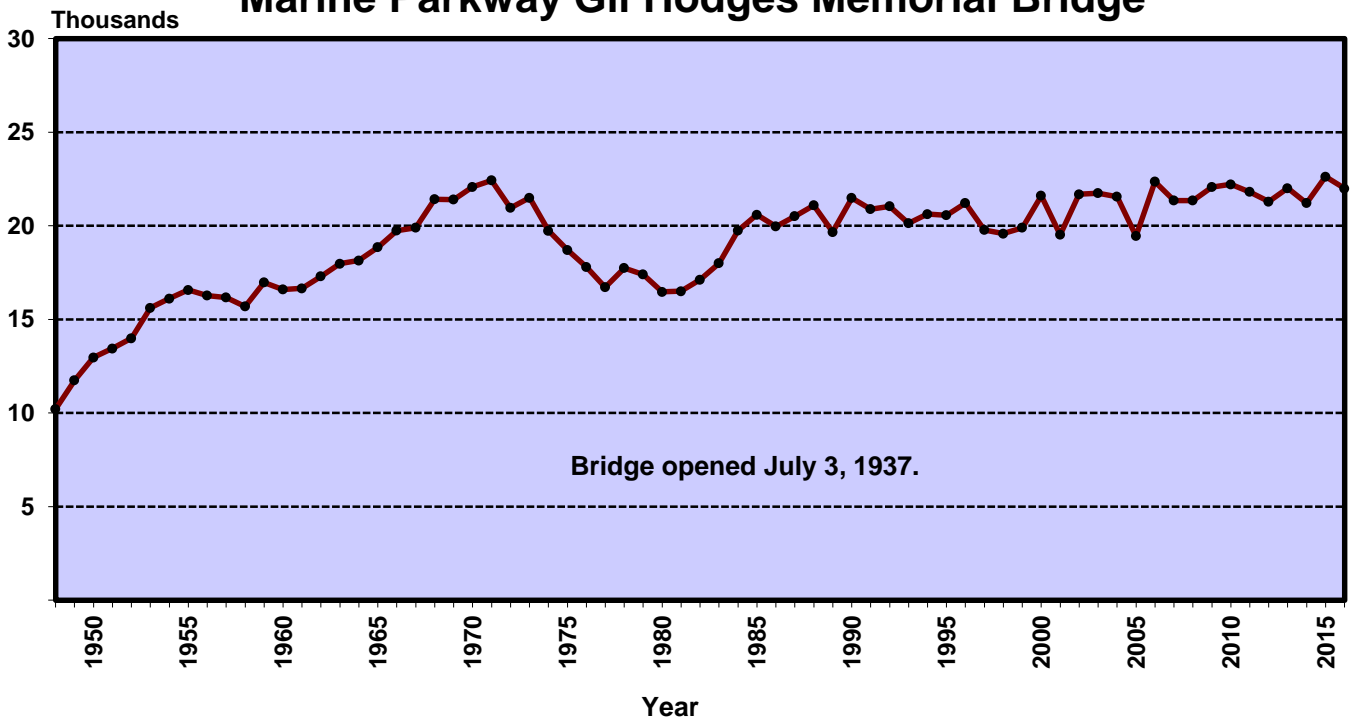
## Average Daily Traffic Volumes ~ Total of Both Directions Cross Bay Veterans Memorial Bridge



## Hourly Vehicular Volumes Marine Parkway Gil Hodges Memorial Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Marine Parkway Gil Hodges Memorial Bridge





# PANYNJ Facilities

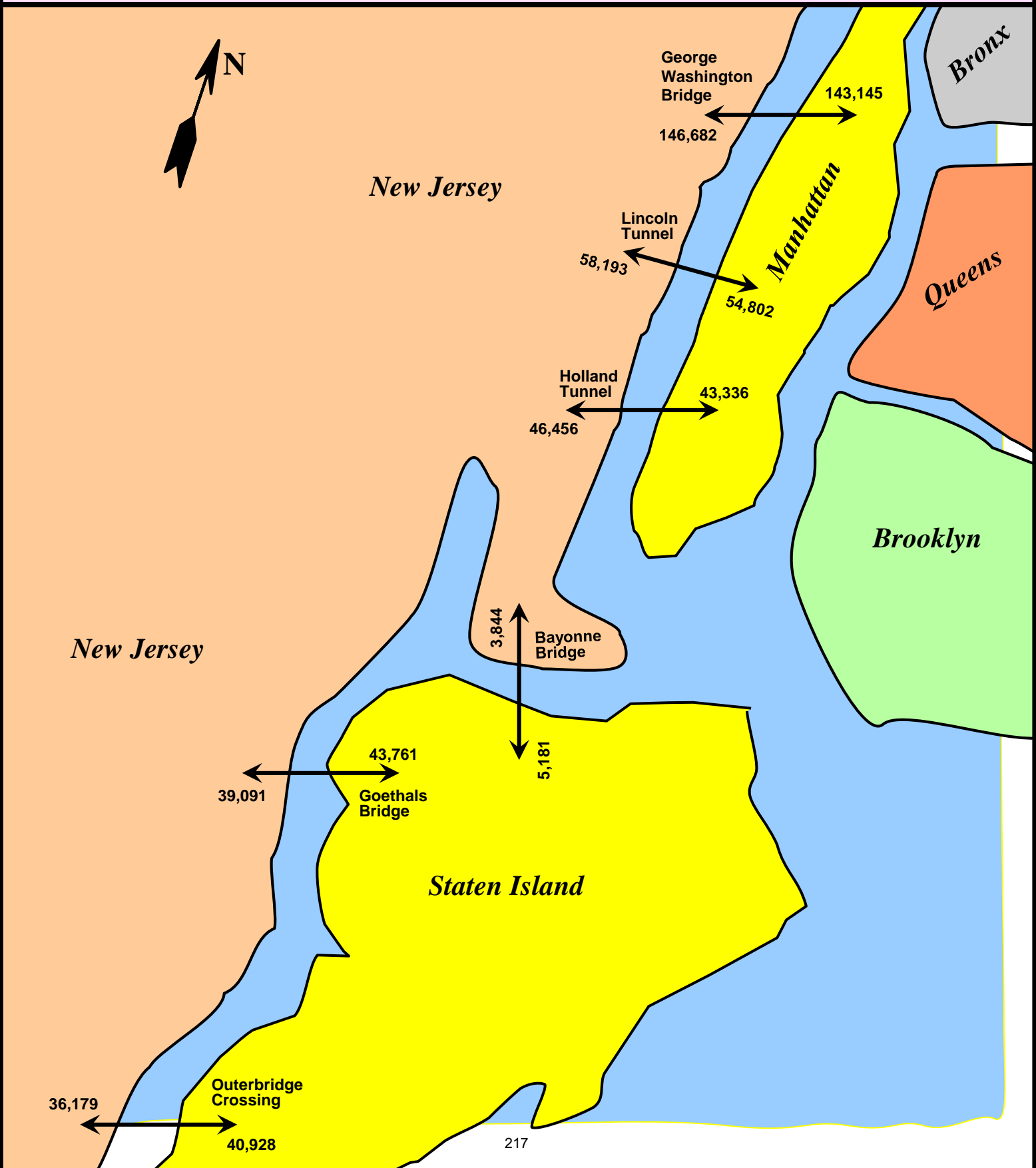


**Outerbridge Crossing**



# PANYNJ Facilities

## 2016 Daily Volumes



**PANYNJ Manhattan - New Jersey Facilities**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<i>Year</i>	<i>George Washington Bridge</i>	<i>Holland Tunnel</i>	<i>Lincoln Tunnel</i>	<i>Totals</i>
1948	42,306	42,623	30,856	115,785
1949	49,261	45,167	35,515	129,943
1950	54,437	49,660	42,556	146,653
1951	64,516	53,792	47,842	166,150
1952	76,446	51,317	53,490	181,253
1953	84,398	53,270	56,909	194,577
1954	90,306	54,560	57,528	202,394
1955	98,013	55,445	58,468	211,926
1956	97,059	56,961	59,068	213,088
1957	98,110	56,801	63,712	218,623
1958	97,435	55,881	68,178	221,494
1959	105,334	57,926	73,761	237,021
1960	106,245	57,678	75,697	239,620
1961	104,107	56,277	76,449	236,833
1962	111,090	58,518	81,038	250,646
1963	127,452	58,814	79,337	265,603
1964	143,193	59,702	82,929	285,824
1965	155,967	55,060	82,312	293,339
1966	167,304	55,559	81,118	303,981
1967	173,093	54,181	80,879	308,153
1968	182,934	53,962	83,396	320,292
1969	189,817	54,438	84,868	329,123
1970	194,910	58,574	94,354	347,838
1971	210,749	57,968	93,346	362,063
1972	221,172	61,485	95,963	378,620
1973	232,686	64,731	99,786	397,203
1974	211,955	64,765	99,827	376,547
1975	215,927	62,381	96,399	374,707
1976	215,136	64,663	101,451	381,250
1977	222,897	63,015	99,101	385,013
1978	229,666	66,405	103,441	399,512
1979	232,739	61,403	99,582	393,724
1980	235,615	64,417	104,702	404,734
1981	250,804	68,750	107,827	427,381
1982	249,294	73,997	110,453	433,744
1983	254,728	76,226	110,210	441,164
1984	258,723	71,819	123,233	453,775
1985	275,934	76,121	116,397	468,452
1986	286,398	77,300	122,053	485,751
1987	288,642	73,655	124,342	486,639
1988	284,984	84,626	120,569	490,179
1989	281,812	84,429	121,452	487,693
1990	272,556	87,976	121,711	482,243
1991	262,491	87,502	117,508	467,501
1992	268,007	90,206	118,659	476,872
1993	260,732	92,685	119,652	473,069
1994	259,863	94,637	119,299	473,799
1995	266,029	96,310	119,759	482,098
1996	275,469	96,798	120,927	493,194
1997	282,293	100,986	121,509	504,788
1998	297,188	100,872	124,452	522,512
1999	317,640	103,020	128,692	549,352
2000	317,618	101,137	129,710	548,465
2001	309,310	43,377	106,257	458,944
2002	310,771	92,557	129,511	532,839
2003	319,029	101,097	127,323	547,449
2004	315,066	96,171	125,159	536,396
2005	304,302	96,960	126,455	527,717
2006	312,078	98,425	127,245	537,748
2007	291,391	100,491	122,092	513,974
2008	293,059	97,057	118,153	508,269
2009	289,694	96,184	118,982	504,860
2010	292,047	94,667	119,832	506,546
2011	279,896	93,560	117,653	491,109
2012	276,648	92,743	113,166	482,557
2013	277,645	90,012	112,162	479,819
2014	280,784	87,232	109,796	477,812
2015	295,120	89,367	113,783	498,270
2016	289,827	89,792	112,995	492,614

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

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



**PANYNJ Staten Island - New Jersey Bridges**  
**Average Daily Traffic Volumes**  
**1948 - 2016**

<i>Year</i>	<i>Bayonne Bridge</i>	<i>Goethals Bridge</i>	<i>Outerbridge Crossing</i>	<i>Totals</i>
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	21,953
1959	6,780	10,441	5,757	22,978
1960	6,519	10,331	6,006	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	12,458	56,850	11,726	81,034
1974	12,418	53,964	14,162	80,544
1975	11,860	53,206	15,994	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	138,436
1987	14,890	65,452	59,392	139,734
1988	14,676	66,136	62,250	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	23,631	78,196	75,424	177,251
2002	21,327	81,384	76,429	179,140
2003	20,208	75,724	78,650	174,582
2004	22,510	71,532	80,226	174,268
2005	21,755	68,790	81,108	171,653
2006	24,230	65,378	86,306	175,914
2007	21,451	72,999	75,778	170,228
2008	20,058	72,834	72,884	165,776
2009	19,422	71,230	74,852	165,504
2010	19,981	73,486	74,665	168,132
2011	18,665	75,580	75,291	169,536
2012	18,755	73,135	71,816	163,706
2013	18,541	72,986	66,740	158,267
2014	15,166	70,419	70,033	155,618
2015	10,840	78,605	73,773	163,218
2016	9,025	82,852	77,107	168,984

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

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

# Hourly Vehicular Volumes

## Port Authority of New York & New Jersey 2016

	George Washington Bridge		Holland Tunnel		Lincoln Tunnel		Totals	
	E/B	W/B	E/B	W/B	E/B	W/B	Entering Manhattan	Leaving Manhattan
12-1am	1,926	2,840	682	876	900	1,694	3,508	5,410
1-2am	1,359	1,792	483	925	608	971	2,450	3,688
2-3am	1,144	1,293	347	732	477	612	1,968	2,637
3-4am	1,358	1,236	394	573	533	398	2,285	2,207
4-5am	2,386	1,622	750	811	982	552	4,118	2,985
5-6am	6,988	3,377	2,308	1,578	3,272	808	12,568	5,763
6-7am	11,474 **	5,382	2,739 **	2,113	4,860 **	1,427	19,073 **	8,922
7-8am	9,833	6,578	2,706	2,477	4,145	1,928	16,684	10,983
8-9am	8,156	7,287	2,641	2,369	3,994	1,876	14,791	11,532
9-10am	8,242	6,523	2,569	2,063	3,778	1,797	14,589	10,383
10-11am	8,055	6,177	2,386	2,154	3,369	1,855	13,810	10,186
11-12am	7,294	6,330	2,072	2,131	2,897	2,241	12,263	10,702
12-1pm	6,888	6,803	1,908	2,057	2,540	2,400	11,336	11,260
1-2pm	6,867	7,197	1,853	2,397	2,445	2,877	11,165	12,471
2-3pm	7,103	8,387	1,962	2,475	2,559	3,348	11,624	14,210
3-4pm	7,509	10,266	2,122	2,297	2,364	3,923	11,995	16,486
4-5pm	7,522	9,247	2,465	2,297	2,058	4,795 **	12,045	16,339
5-6pm	7,756	10,864 **	2,587	1,995	1,738	4,676	12,081	17,535 **
6-7pm	7,773	10,224	2,536	2,171	2,040	4,720	12,349	17,115
7-8pm	6,523	8,553	2,091	2,351	2,108	4,243	10,722	15,147
8-9pm	5,308	7,341	1,658	2,521 **	1,898	3,160	8,864	13,022
9-10pm	4,680	6,630	1,556	2,510	1,964	2,925	8,200	12,065
10-11pm	4,041	6,075	1,453	2,398	1,853	2,813	7,347	11,286
11-12pm	2,960	4,658	1,068	2,185	1,420	2,154	5,448	8,997
Totals	143,145	146,682	43,336	46,456	54,802	58,193	241,283	251,331
7-10am	26,231	20,388	7,916	6,909	11,917	5,601	46,064	32,898
10am-1pm	22,237	19,310	6,366	6,342	8,806	6,496	37,409	32,148
1-4pm	21,479	25,850	5,937	7,169	7,368	10,148	34,784	43,167
4-7pm	23,051	30,335	7,588	6,463	5,836	14,191	36,475	50,989
7am-7pm	92,998	95,883	27,807	26,883	33,927	36,436	154,732	159,202
6-10am	37,705	25,770	10,655	9,022	16,777	7,028	65,137	41,820
3-7pm	30,560	40,601	9,710	8,760	8,200	18,114	48,470	67,475
6am-7pm	104,472	101,265	30,546	28,996	38,787	37,863	173,805	168,124

\*\* Peak Volumes

Note: NYC DOT uses the averages of vehicular volumes from selected representative fall weekdays. Publications from other sources may be based on alternative computation methodologies, yielding different results for some facilities, notably the tolled bridges and tunnels.

# Hourly Vehicular Volumes

## Port Authority of New York & New Jersey 2016

	Bayonne Bridge		Goethals Bridge		Outerbridge Crossing		Totals	
	S/B	N/B	E/B	W/B	E/B	W/B	To Staten Island	To New Jersey
12-1am	10	0	736	440	516	439	1,262	879
1-2am	6	2	490	275	310	235	806	512
2-3am	7	2	396	221	263	202	666	425
3-4am	7	0	432	231	360	158	799	389
4-5am	47	55	618	474	827	279	1,492	808
5-6am	176	242	1,523	1,128	2,100	713	3,799	2,083
6-7am	339	562	2,440	1,825	2,831	1,395	5,610	3,782
7-8am	416	841	2,003	2,559	2,649	2,249	5,068	5,649
8-9am	425	689	1,980	2,875	2,308	2,442	4,713	6,006 **
9-10am	33	34	2,143	2,504	2,221	2,083	4,397	4,621
10-11am	16	5	2,148	2,326	1,950	1,839	4,114	4,170
11-12am	19	6	1,995	2,137	1,804	1,895	3,818	4,038
12-1pm	13	7	2,015	1,946	1,789	1,717	3,817	3,670
1-2pm	19	1	2,215	2,130	1,890	1,766	4,124	3,897
2-3pm	107	54	2,408	2,339	1,987	2,166	4,502	4,559
3-4pm	643	341	2,511	2,343	2,160	2,575	5,314	5,259
4-5pm	743	344	2,806	2,693	2,399	2,583	5,948	5,620
5-6pm	1,031 **	321	3,012	2,851	2,770	2,661 **	6,813 **	5,833
6-7pm	1,017	292	3,055 **	2,176	2,610	2,340	6,682	4,808
7-8pm	88	37	2,630	1,616	2,022	1,962	4,740	3,615
8-9pm	18	3	1,988	1,421	1,720	1,523	3,726	2,947
9-10pm	1	1	1,713	1,008	1,497	1,213	3,211	2,222
10-11pm	0	0	1,432	920	1,139	984	2,571	1,904
11-12pm	0	5	1,072	653	806	760	1,878	1,418
Totals	5,181	3,844	43,761	39,091	40,928	36,179	89,870	79,114
7-10am	874	1,564	6,126	7,938	7,178	6,774	14,178	16,276
10am-1pm	48	18	6,158	6,409	5,543	5,451	11,749	11,878
1-4pm	769	396	7,134	6,812	6,037	6,507	13,940	13,715
4-7pm	2,791	957	8,873	7,720	7,779	7,584	19,443	16,261
7am-7pm	4,482	2,935	28,291	28,879	26,537	26,316	59,310	58,130
6-10am	1,213	2,126	8,566	9,763	10,009	8,169	19,788	20,058
3-7pm	3,434	1,298	11,384	10,063	9,939	10,159	24,757	21,520
6am-7pm	4,821	3,497	30,731	30,704	29,368	27,711	64,920	61,912

\*\* Peak Volumes

Note: NYC DOT uses the averages of vehicular volumes from selected representative fall weekdays. Publications from other sources may be based on alternative computation methodologies, yielding different results for some facilities, notably the tolled bridges and tunnels.

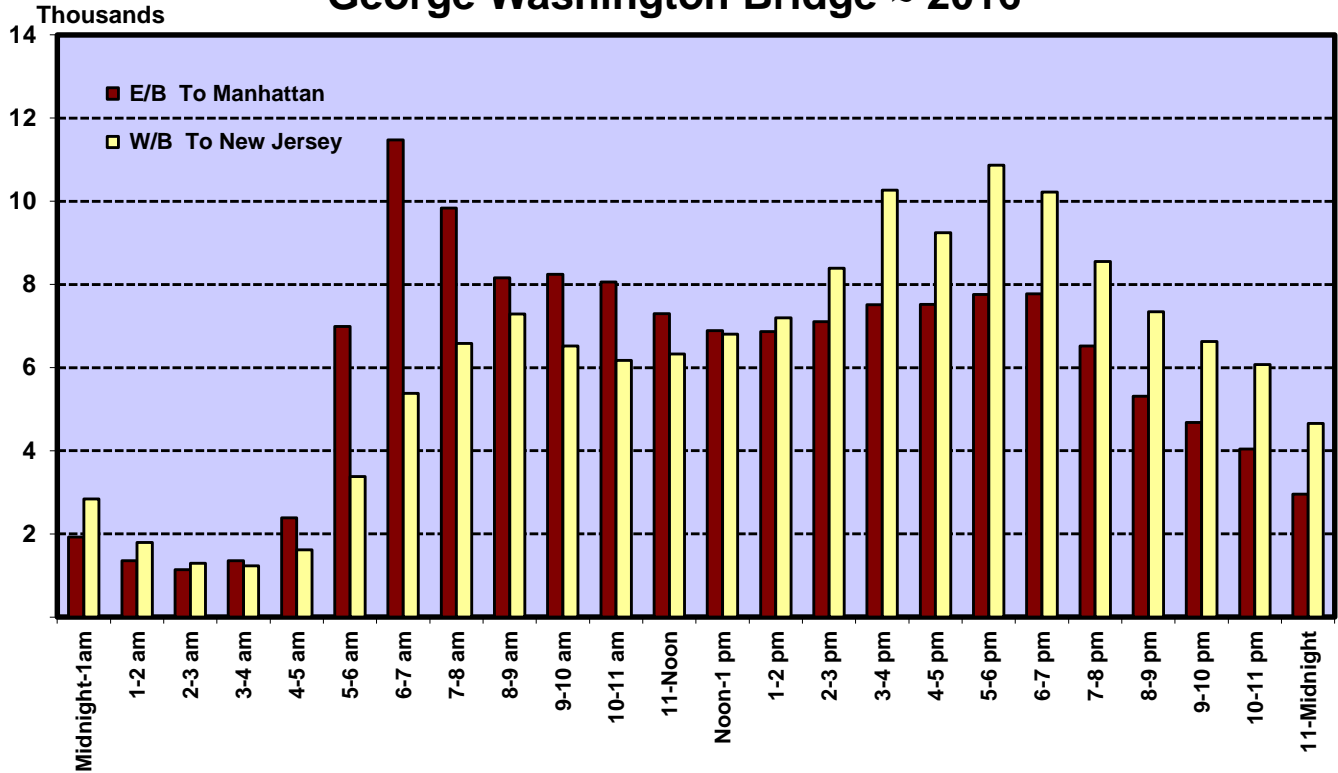
## Hourly Vehicular Volumes George Washington Bridge - 2016

	Eastbound to Manhattan					Westbound to New Jersey					2-Way Grand Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	1,580	8	64	274	1,926	2,377	12	77	374	2,840	4,766
1-2am	990	5	69	295	1,359	1,352	4	89	347	1,792	3,151
2-3am	720	5	72	347	1,144	920	1	78	294	1,293	2,437
3-4am	793	4	120	441	1,358	742	3	95	396	1,236	2,594
4-5am	1,586	12	187	601	2,386	1,025	5	136	456	1,622	4,008
5-6am	5,746	35	437	770	6,988	2,490	17	252	618	3,377	10,365
6-7am	10,377	88	509	500	11,474	4,578	44	347	413	5,382	16,856
7-8am	9,071	92	343	327	9,833	5,786	87	324	381	6,578	16,411
8-9am	7,397	87	347	325	8,156	6,437	115	378	357	7,287	15,443
9-10am	7,388	92	368	394	8,242	5,545	89	378	511	6,523	14,765
10-11am	7,221	65	356	413	8,055	5,068	61	384	664	6,177	14,232
11-12am	6,522	60	312	400	7,294	5,128	50	394	758	6,330	13,624
12-1pm	6,201	58	288	341	6,888	5,338	61	455	949	6,803	13,691
1-2pm	6,216	72	273	306	6,867	6,015	53	500	629	7,197	14,064
2-3pm	6,520	77	248	258	7,103	7,203	71	492	621	8,387	15,490
3-4pm	6,952	107	225	225	7,509	9,229	55	450	532	10,266	17,775
4-5pm	7,072	91	179	180	7,522	8,574	63	280	330	9,247	16,769
5-6pm	7,355	101	141	159	7,756	10,079	86	335	364	10,864	18,620
6-7pm	7,370	88	127	188	7,773	9,558	66	294	306	10,224	17,997
7-8pm	6,109	73	108	233	6,523	8,002	60	199	292	8,553	15,076
8-9pm	4,951	52	78	227	5,308	6,851	48	114	328	7,341	12,649
9-10pm	4,338	42	70	230	4,680	6,242	31	84	273	6,630	11,310
10-11pm	3,681	27	56	277	4,041	5,682	36	69	288	6,075	10,116
11-12pm	2,607	18	56	279	2,960	4,154	20	72	412	4,658	7,618
<b>Totals</b>	<b>128,763</b>	<b>1,359</b>	<b>5,033</b>	<b>7,990</b>	<b>143,145</b>	<b>128,375</b>	<b>1,138</b>	<b>6,276</b>	<b>10,893</b>	<b>146,682</b>	<b>289,827</b>
7-10am	23,856	271	1,058	1,046	26,231	17,768	291	1,080	1,249	20,388	46,619
10am-1pm	19,944	183	956	1,154	22,237	15,534	172	1,233	2,371	19,310	41,547
1-4pm	19,688	256	746	789	21,479	22,447	179	1,442	1,782	25,850	47,329
4-7pm	21,797	280	447	527	23,051	28,211	215	909	1,000	30,335	53,386
7am-7pm	85,285	990	3,207	3,516	92,998	83,960	857	4,664	6,402	95,883	188,881
6-10am	34,233	359	1,567	1,546	37,705	22,346	335	1,427	1,662	25,770	63,475
3-7pm	28,749	387	672	752	30,560	37,440	270	1,359	1,532	40,601	71,161
6am-7pm	95,662	1,078	3,716	4,016	104,472	88,538	901	5,011	6,815	101,265	205,737

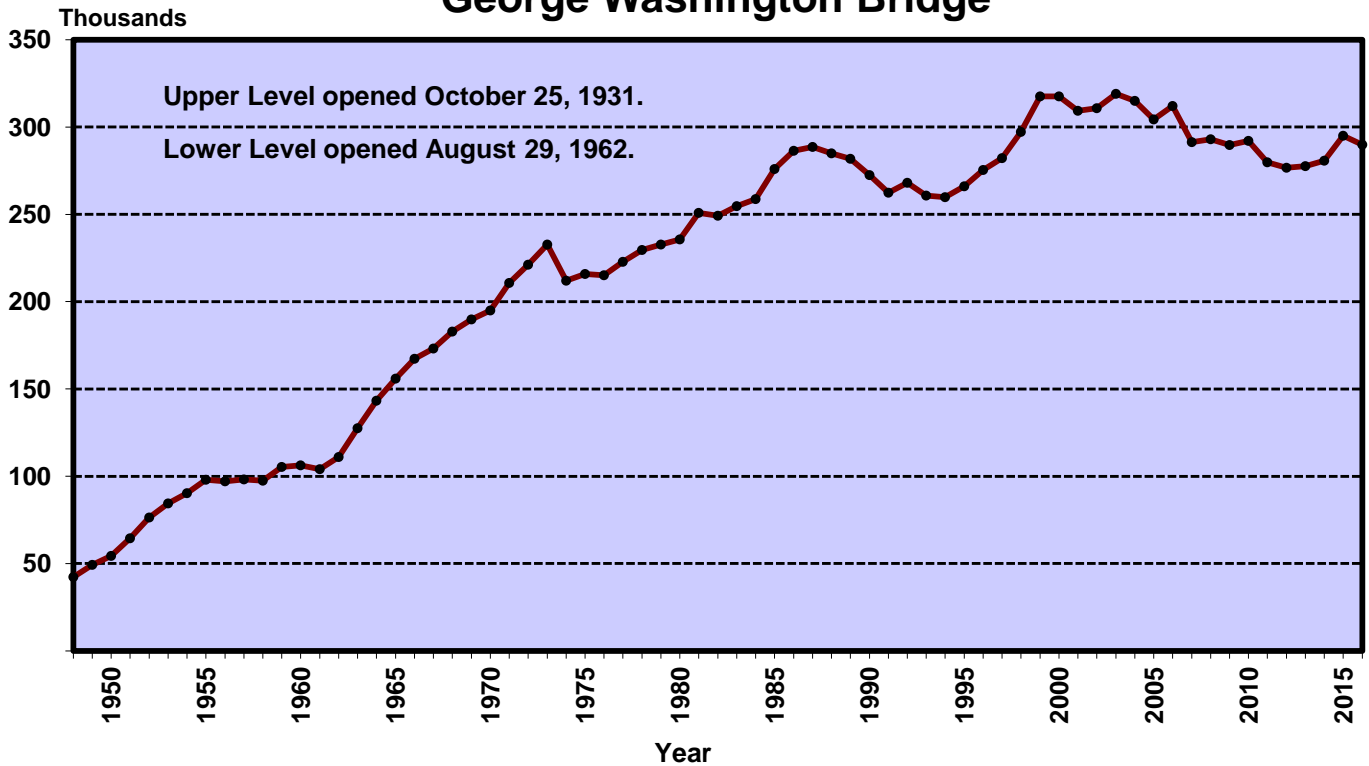
Classification based on 2016 classification data.

\*\* Peak Volumes

## Hourly Vehicular Volumes George Washington Bridge ~ 2016



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



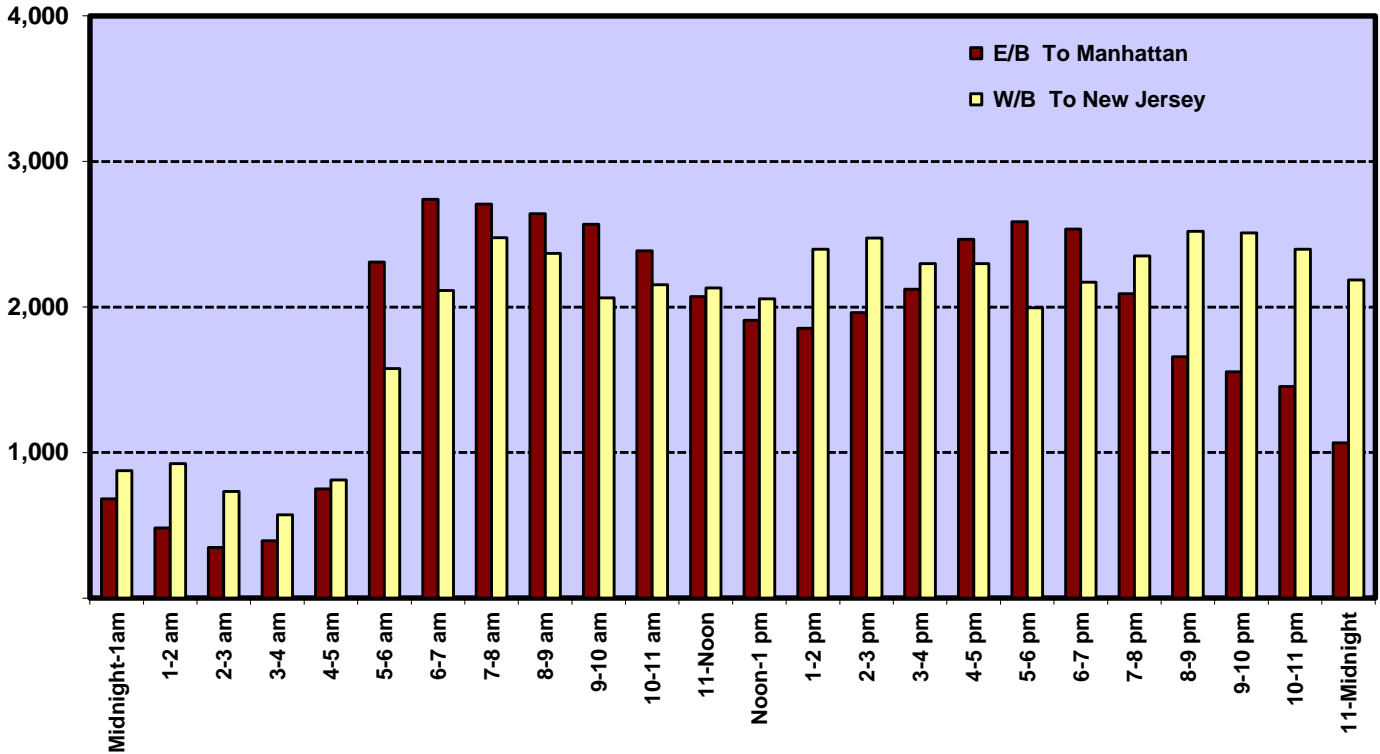
## Hourly Vehicular Volumes Holland Tunnel - 2016

	<i>Eastbound to Manhattan</i>					<i>Westbound to New Jersey</i>					<b>2-Way Grand Totals</b>
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	660	4	18	0	682	865	2	9	0	876	1,558
1-2am	456	3	24	0	483	908	3	14	0	925	1,408
2-3am	314	3	30	0	347	707	0	25	0	732	1,079
3-4am	347	5	42	0	394	524	0	49	0	573	967
4-5am	668	8	73	1	750	739	1	71	0	811	1,561
5-6am	2,130	22	154	2	2,308	1,478	10	90	0	1,578	3,886
6-7am	2,561	47	129	2	2,739	1,990	24	99	0	2,113	4,852
7-8am	2,505	55	145	1	2,706	2,356	32	89	0	2,477	5,183
8-9am	2,413	66	159	3	2,641	2,170	71	127	1	2,369	5,010
9-10am	2,396	62	109	2	2,569	1,864	65	134	0	2,063	4,632
10-11am	2,239	29	117	1	2,386	1,948	30	176	0	2,154	4,540
11-12am	1,977	18	76	1	2,072	1,957	9	165	0	2,131	4,203
12-1pm	1,831	14	62	1	1,908	1,877	15	165	0	2,057	3,965
1-2pm	1,769	19	64	1	1,853	2,191	18	188	0	2,397	4,250
2-3pm	1,873	22	66	1	1,962	2,309	16	150	0	2,475	4,437
3-4pm	2,018	45	58	1	2,122	2,123	26	148	0	2,297	4,419
4-5pm	2,353	66	46	0	2,465	2,159	32	106	0	2,297	4,762
5-6pm	2,500	55	32	0	2,587	1,869	54	72	0	1,995	4,582
6-7pm	2,474	37	25	0	2,536	2,037	54	79	1	2,171	4,707
7-8pm	2,042	25	24	0	2,091	2,255	30	66	0	2,351	4,442
8-9pm	1,623	14	21	0	1,658	2,454	31	36	0	2,521	4,179
9-10pm	1,523	10	22	1	1,556	2,462	18	30	0	2,510	4,066
10-11pm	1,424	10	18	1	1,453	2,357	15	26	0	2,398	3,851
11-12pm	1,042	5	21	0	1,068	2,144	16	25	0	2,185	3,253
<b>Totals</b>	<b>41,138</b>	<b>644</b>	<b>1,535</b>	<b>19</b>	<b>43,336</b>	<b>43,743</b>	<b>572</b>	<b>2,139</b>	<b>2</b>	<b>46,456</b>	<b>89,792</b>
7-10am	7,314	183	413	6	7,916	6,390	168	350	1	6,909	14,825
10am-1pm	6,047	61	255	3	6,366	5,782	54	506	0	6,342	12,708
1-4pm	5,660	86	188	3	5,937	6,623	60	486	0	7,169	13,106
4-7pm	7,327	158	103	0	7,588	6,065	140	257	1	6,463	14,051
7am-7pm	26,348	488	959	12	27,807	24,860	422	1,599	2	26,883	54,690
6-10am	9,875	230	542	8	10,655	8,380	192	449	1	9,022	19,677
3-7pm	9,345	203	161	1	9,710	8,188	166	405	1	8,760	18,470
6am-7pm	28,909	535	1,088	14	30,546	26,850	446	1,698	2	28,996	59,542

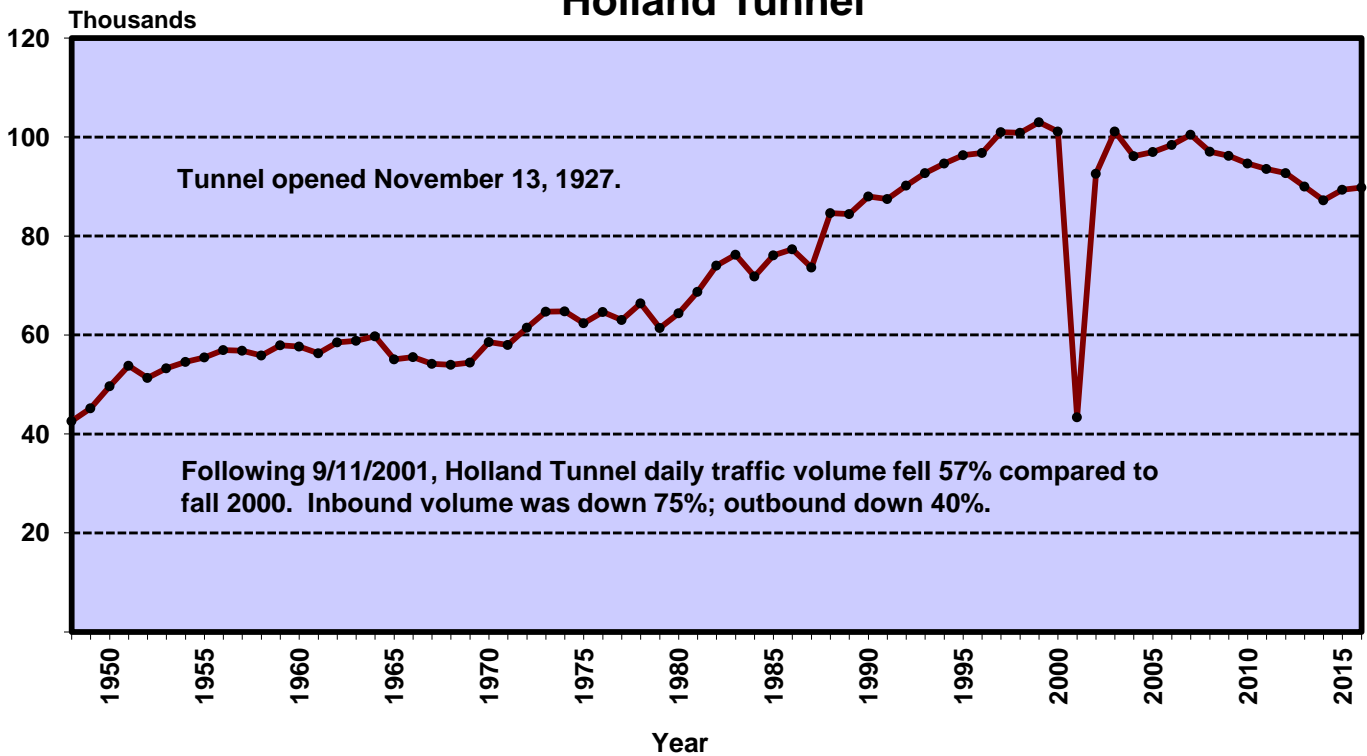
Classification based on 2016 classification data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Holland Tunnel ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Holland Tunnel



## Hourly Vehicular Volumes Lincoln Tunnel - 2016

### Eastbound to Manhattan

### Westbound to New Jersey

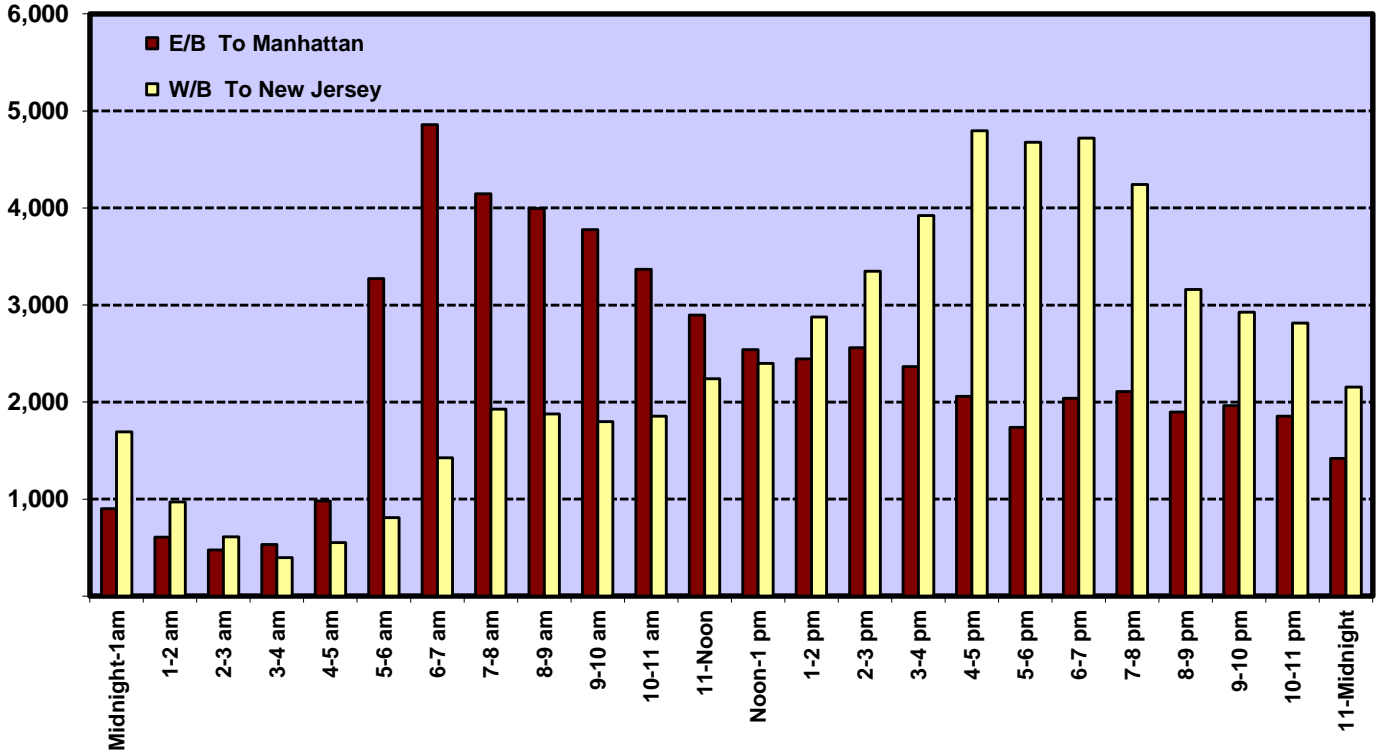
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	2-Way Grand Totals
12-1am	790	51	40	19	900	1,496	93	67	38	1,694	2,594
1-2am	510	27	43	28	608	836	39	60	36	971	1,579
2-3am	383	9	55	30	477	505	19	55	33	612	1,089
3-4am	364	13	101	55	533	274	12	60	52	398	931
4-5am	690	25	175	92	982	406	18	66	62	552	1,534
5-6am	2,594	189	372	117	3,272	571	74	95	68	808	4,080
6-7am	3,878	519	408	55	4,860	982	304	97	44	1,427	6,287
7-8am	3,011	821	282	31	4,145	1,152	573	155	48	1,928	6,073
8-9am	2,775	935	266	18	3,994	903	707	218	48	1,876	5,870
9-10am	2,859	655	247	17	3,778	933	649	176	39	1,797	5,575
10-11am	2,860	288	203	18	3,369	1,269	328	213	45	1,855	5,224
11-12am	2,517	216	149	15	2,897	1,713	219	258	51	2,241	5,138
12-1pm	2,218	185	123	14	2,540	1,897	171	278	54	2,400	4,940
1-2pm	2,118	213	100	14	2,445	2,316	206	313	42	2,877	5,322
2-3pm	2,191	272	89	7	2,559	2,817	195	297	39	3,348	5,907
3-4pm	1,950	337	72	5	2,364	3,318	276	294	35	3,923	6,287
4-5pm	1,490	504	61	3	2,058	4,021	461	292	21	4,795	6,853
5-6pm	1,223	476	35	4	1,738	3,755	679	223	19	4,676	6,414
6-7pm	1,552	442	38	8	2,040	3,773	763	172	12	4,720	6,760
7-8pm	1,720	318	52	18	2,108	3,624	470	138	11	4,243	6,351
8-9pm	1,588	226	60	24	1,898	2,740	321	78	21	3,160	5,058
9-10pm	1,697	176	62	29	1,964	2,602	236	63	24	2,925	4,889
10-11pm	1,615	149	62	27	1,853	2,493	218	66	36	2,813	4,666
11-12pm	1,243	105	47	25	1,420	1,919	139	62	34	2,154	3,574
Totals	43,836	7,151	3,142	673	54,802	46,315	7,170	3,796	912	58,193	112,995
7-10am	8,645	2,411	795	66	11,917	2,988	1,929	549	135	5,601	17,518
10am-1pm	7,595	689	475	47	8,806	4,879	718	749	150	6,496	15,302
1-4pm	6,259	822	261	26	7,368	8,451	677	904	116	10,148	17,516
4-7pm	4,265	1,422	134	15	5,836	11,549	1,903	687	52	14,191	20,027
7am-7pm	26,764	5,344	1,665	154	33,927	27,867	5,227	2,889	453	36,436	70,363
6-10am	12,523	2,930	1,203	121	16,777	3,970	2,233	646	179	7,028	23,805
3-7pm	6,215	1,759	206	20	8,200	14,867	2,179	981	87	18,114	26,314
6am-7pm	30,642	5,863	2,073	209	38,787	28,849	5,531	2,986	497	37,863	76,650

Classification based on 2016 classification data.

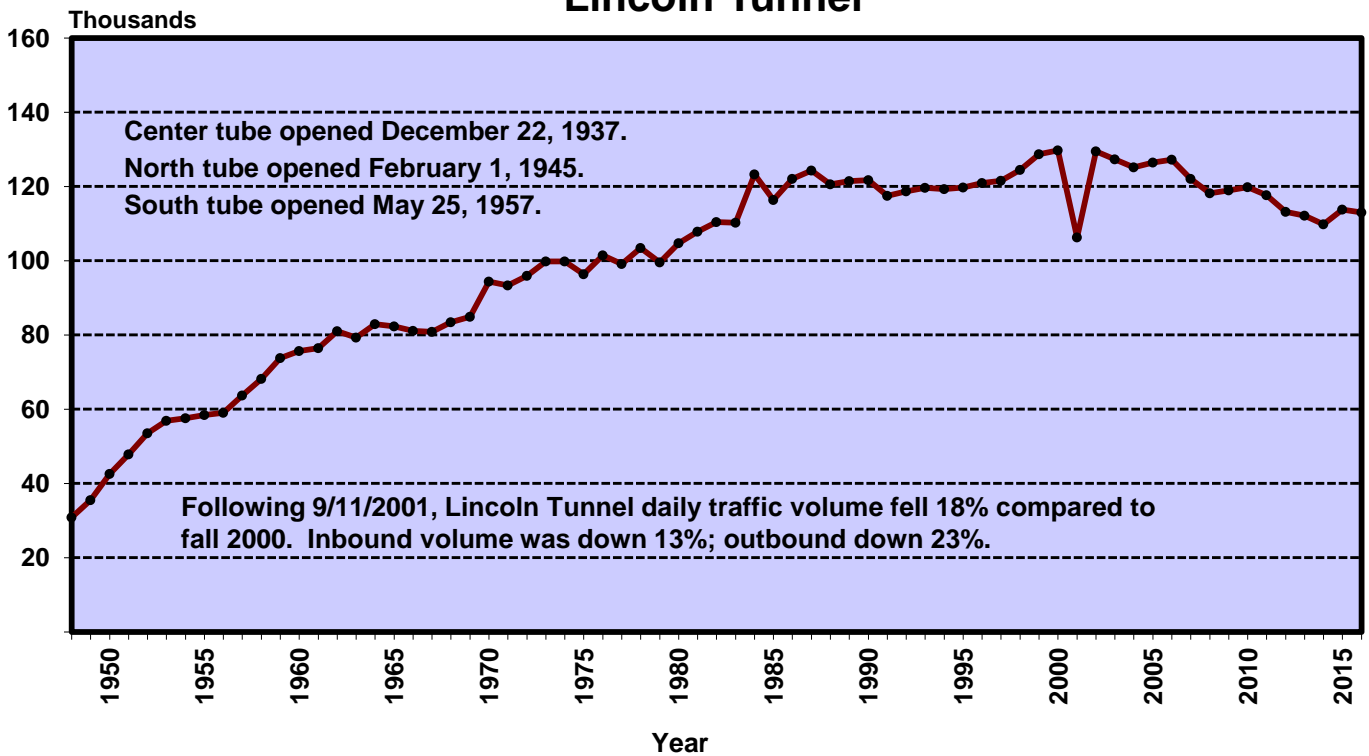
\*\* Peak Volumes



## Hourly Vehicular Volumes Lincoln Tunnel ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Lincoln Tunnel



# Hourly Vehicular Volumes Bayonne Bridge - 2016

## Southbound to Staten Island

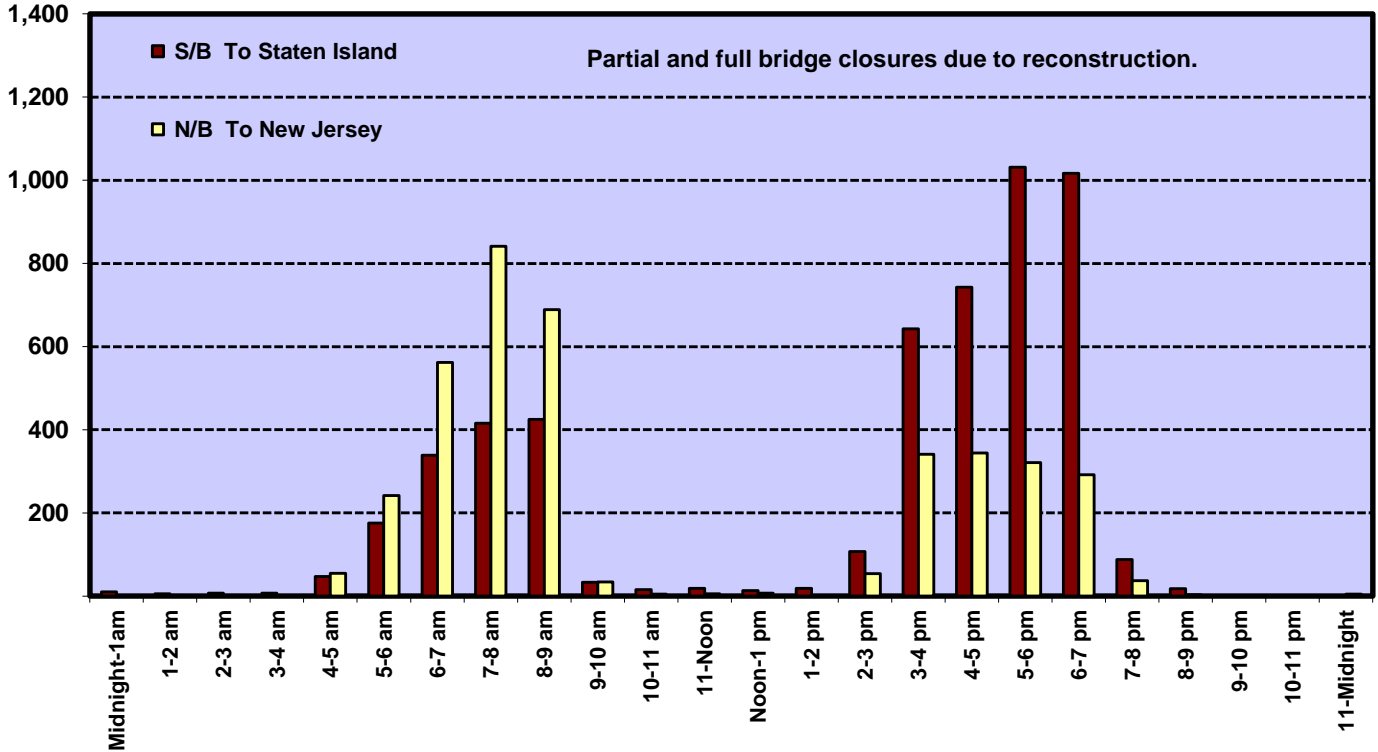
## Northbound to New Jersey

	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	2-Way Grand Totals
12-1am	9	0	1	0	10	0	0	0	0	0	10
1-2am	6	0	0	0	6	2	0	0	0	2	8
2-3am	5	0	2	0	7	0	0	0	2	2	9
3-4am	5	0	1	1	7	0	0	0	0	0	7
4-5am	37	0	3	7	47	50	0	1	4	55	102
5-6am	135	1	16	24	176	226	1	8	7	242	418
6-7am	297	4	17	21	339	546	6	6	4	562	901
7-8am	369	4	23	20	416	811	5	15	10	841	1,257
8-9am	381	7	20	17	425	659	5	15	10	689	1,114
9-10am	28	1	2	2	33	32	1	1	0	34	67
10-11am	14	0	2	0	16	3	0	1	1	5	21
11-12am	16	0	2	1	19	6	0	0	0	6	25
12-1pm	12	0	1	0	13	5	0	2	0	7	20
1-2pm	16	0	2	1	19	1	0	0	0	1	20
2-3pm	103	0	2	2	107	46	0	5	3	54	161
3-4pm	615	1	14	13	643	308	2	23	8	341	984
4-5pm	714	2	17	10	743	309	3	24	8	344	1,087
5-6pm	999	4	20	8	1,031	285	12	22	2	321	1,352
6-7pm	987	5	19	6	1,017	272	4	15	1	292	1,309
7-8pm	85	1	2	0	88	34	2	1	0	37	125
8-9pm	18	0	0	0	18	3	0	0	0	3	21
9-10pm	1	0	0	0	1	0	0	0	1	1	2
10-11pm	0	0	0	0	0	0	0	0	0	0	0
11-12pm	0	0	0	0	0	4	0	0	1	5	5
<b>Totals</b>	<b>4,852</b>	<b>30</b>	<b>166</b>	<b>133</b>	<b>5,181</b>	<b>3,602</b>	<b>41</b>	<b>139</b>	<b>62</b>	<b>3,844</b>	<b>9,025</b>
7-10am	778	12	45	39	874	1,502	11	31	20	1,564	2,438
10am-1pm	42	0	5	1	48	14	0	3	1	18	66
1-4pm	734	1	18	16	769	355	2	28	11	396	1,165
4-7pm	2,700	11	56	24	2,791	866	19	61	11	957	3,748
7am-7pm	4,254	24	124	80	4,482	2,737	32	123	43	2,935	7,417
6-10am	1,075	16	62	60	1,213	2,048	17	37	24	2,126	3,339
3-7pm	3,315	12	70	37	3,434	1,174	21	84	19	1,298	4,732
6am-7pm	4,551	28	141	101	4,821	3,283	38	129	47	3,497	8,318

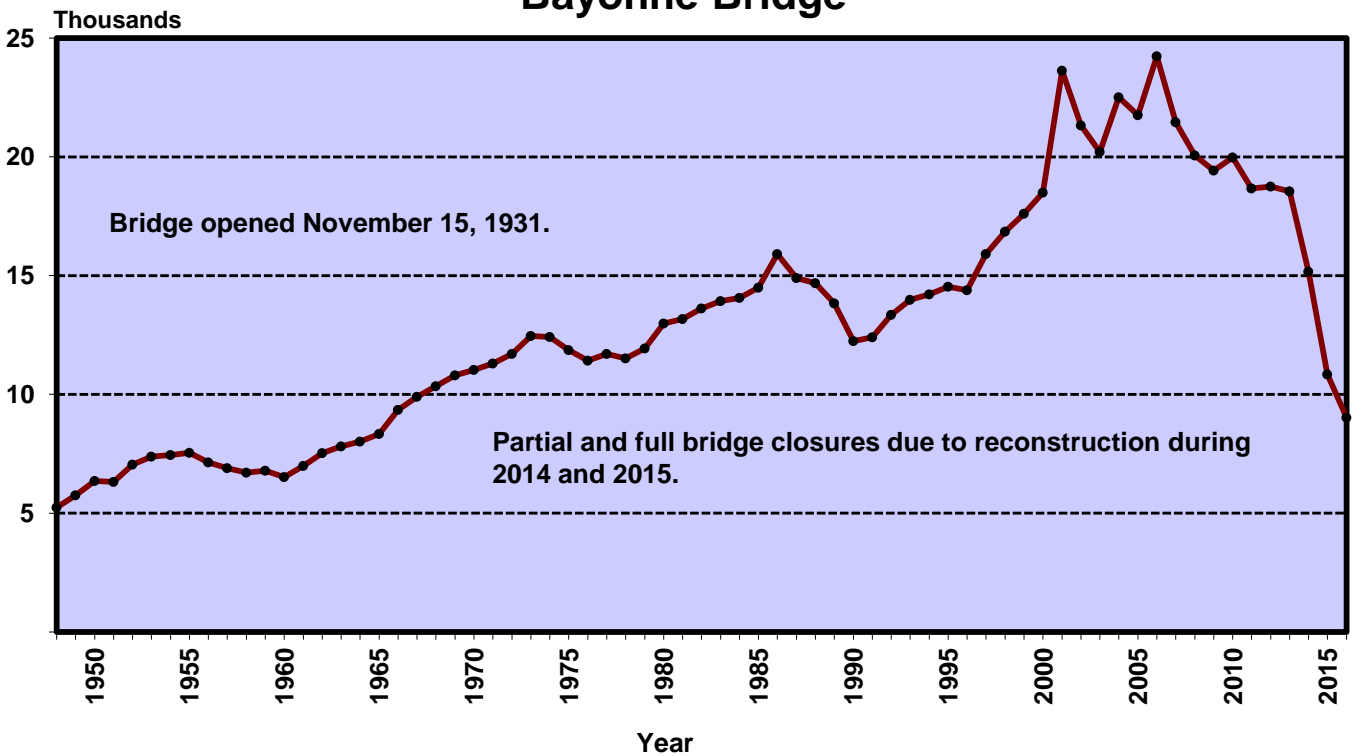
Classification based on Spring 2016 data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Bayonne Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Bayonne Bridge



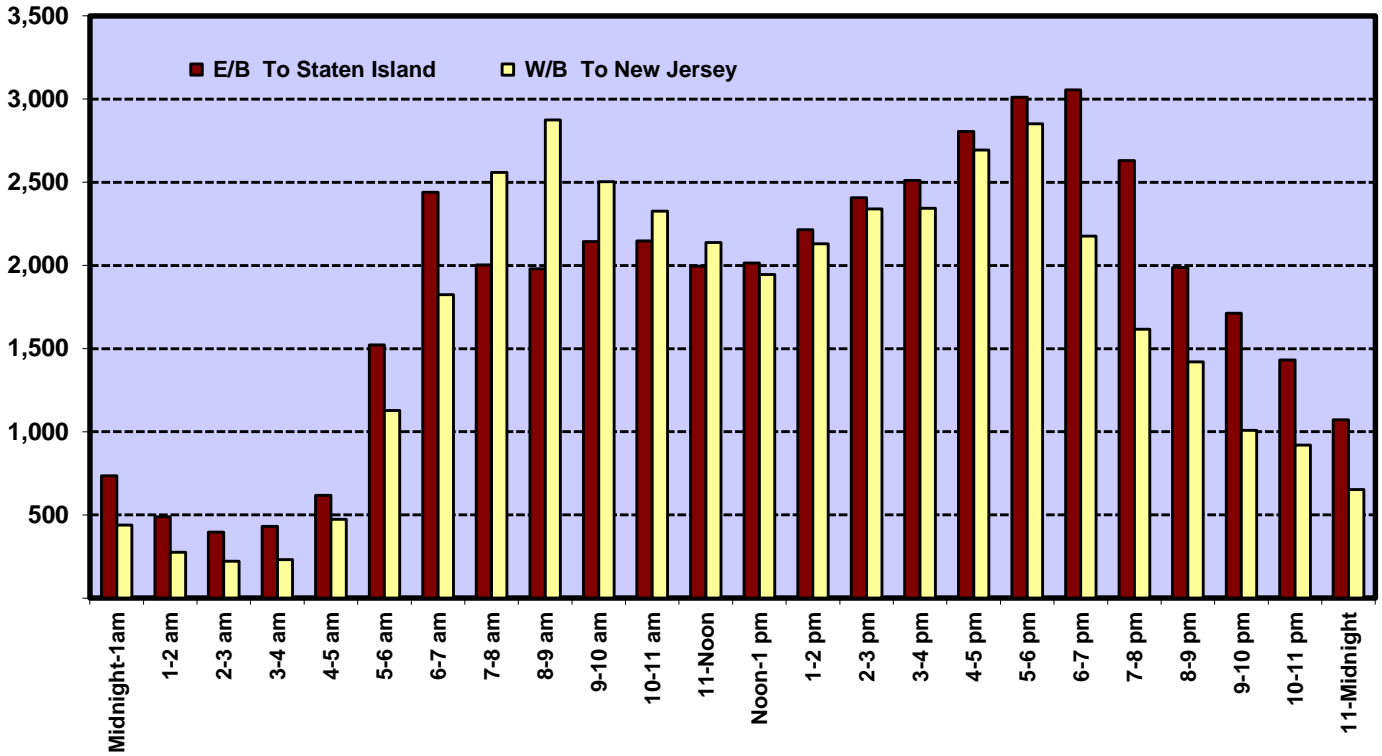
## Hourly Vehicular Volumes Goethals Bridge - 2016

	Eastbound to Staten Island					Westbound to New Jersey					2-Way Grand Totals
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	669	5	16	46	736	395	2	30	13	440	1,176
1-2am	417	3	18	52	490	234	0	20	21	275	765
2-3am	301	5	29	61	396	162	0	30	29	221	617
3-4am	298	3	54	77	432	191	0	14	26	231	663
4-5am	438	4	59	117	618	407	1	35	31	474	1,092
5-6am	1,203	8	132	180	1,523	1,029	13	52	34	1,128	2,651
6-7am	2,103	13	174	150	2,440	1,640	32	85	68	1,825	4,265
7-8am	1,686	17	139	160	2,003	2,328	73	89	69	2,559	4,562
8-9am	1,653	17	147	163	1,980	2,624	48	120	83	2,875	4,855
9-10am	1,772	32	158	181	2,143	2,132	38	171	163	2,504	4,647
10-11am	1,759	32	158	199	2,148	1,947	7	180	192	2,326	4,474
11-12am	1,701	23	120	151	1,995	1,755	4	196	182	2,137	4,132
12-1pm	1,765	8	108	134	2,015	1,672	3	155	116	1,946	3,961
1-2pm	1,949	16	106	144	2,215	1,745	29	219	137	2,130	4,345
2-3pm	2,173	12	103	120	2,408	1,908	23	225	183	2,339	4,747
3-4pm	2,303	26	88	94	2,511	2,001	7	197	138	2,343	4,854
4-5pm	2,639	28	76	63	2,806	2,434	12	154	93	2,693	5,499
5-6pm	2,864	43	52	53	3,012	2,653	7	138	53	2,851	5,863 **
6-7pm	2,912	50	47	46	3,055	2,038	11	85	42	2,176	5,231
7-8pm	2,514	41	37	38	2,630	1,518	6	65	27	1,616	4,246
8-9pm	1,903	20	31	34	1,988	1,360	1	34	26	1,421	3,409
9-10pm	1,643	9	23	38	1,713	953	3	26	26	1,008	2,721
10-11pm	1,369	7	18	38	1,432	866	1	33	20	920	2,352
11-12pm	1,011	5	14	42	1,072	608	1	22	22	653	1,725
Totals	39,045	428	1,907	2,381	43,761	34,600	322	2,375	1,794	39,091	82,852
7-10am	5,111	67	444	504	6,126	7,084	159	380	315	7,938	14,064
10am-1pm	5,225	63	386	484	6,158	5,374	14	531	490	6,409	12,567
1-4pm	6,425	54	297	358	7,134	5,654	59	641	458	6,812	13,946
4-7pm	8,415	121	175	162	8,873	7,125	30	377	188	7,720	16,593
7am-7pm	25,176	305	1,302	1,508	28,291	25,237	262	1,929	1,451	28,879	57,170
6-10am	7,214	80	618	654	8,566	8,724	191	465	383	9,763	18,329
3-7pm	10,718	147	263	256	11,384	9,126	37	574	326	10,063	21,447
6am-7pm	27,279	318	1,476	1,658	30,731	26,877	294	2,014	1,519	30,704	61,435

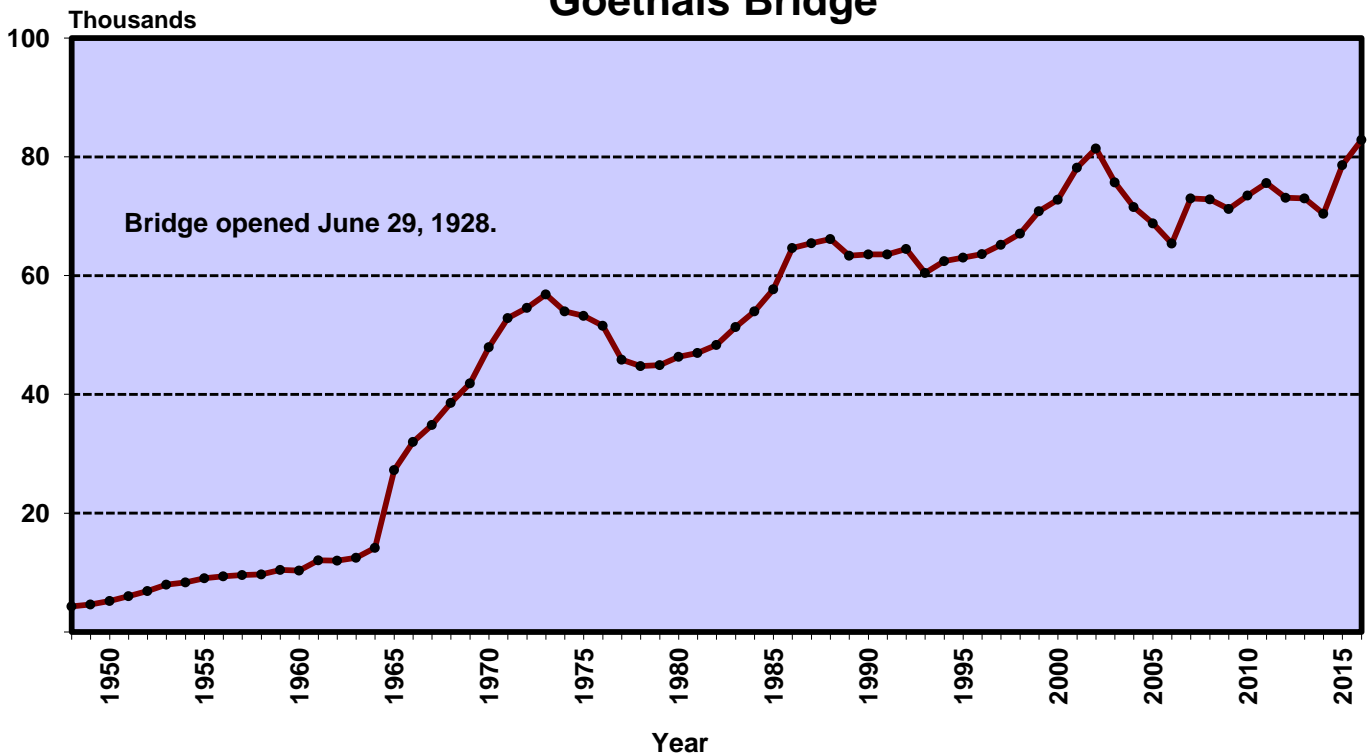
Classification based on Spring 2016 Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Goethals Bridge ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Goethals Bridge



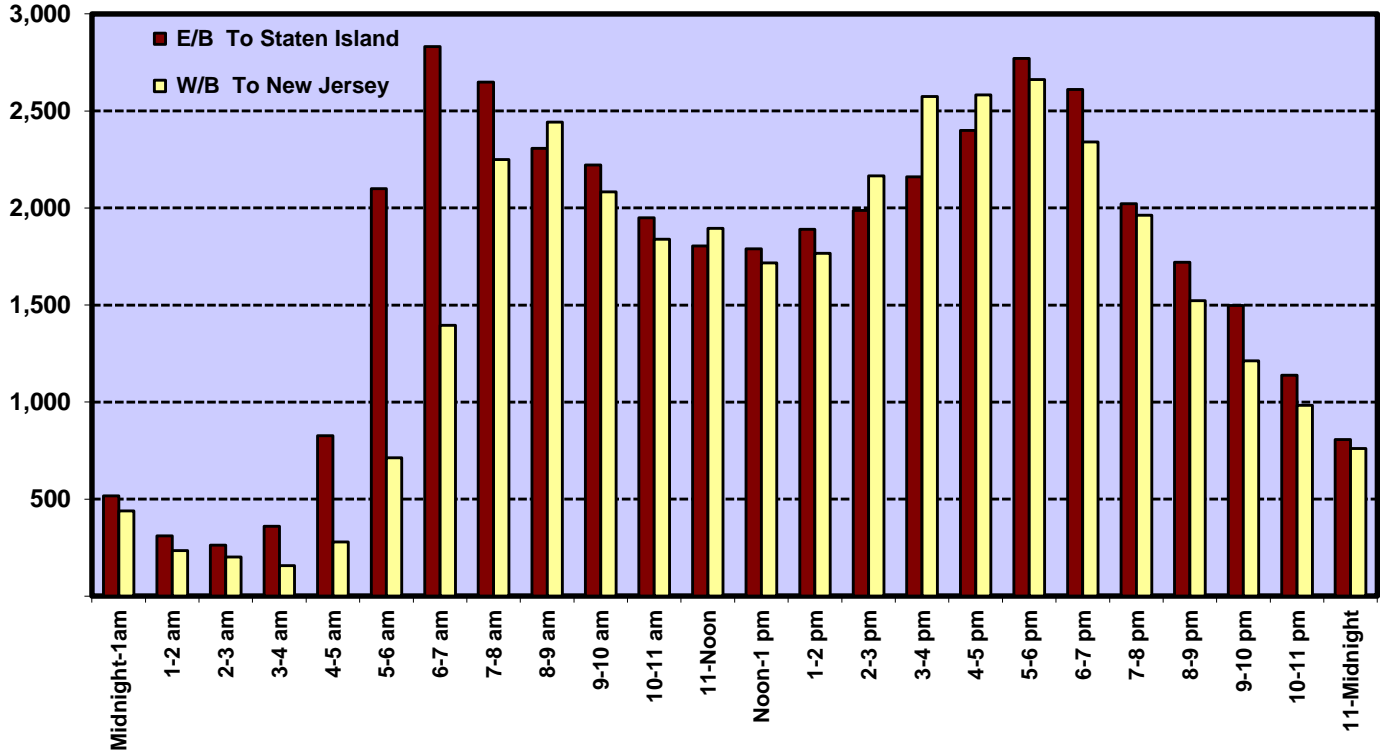
## Hourly Vehicular Volumes Outerbridge Crossing - 2016

	<i>Eastbound to Staten Island</i>					<i>Westbound to New Jersey</i>					<b>2-Way Grand Totals</b>
	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	Autos	Buses	Small Trucks	Large Trucks	Total Vehicles	
12-1am	441	3	11	61	516	401	3	6	29	439	955
1-2am	229	5	11	65	310	179	2	17	37	235	545
2-3am	173	4	15	71	263	147	1	23	31	202	465
3-4am	220	3	35	102	360	113	0	15	30	158	518
4-5am	607	7	57	156	827	222	2	18	37	279	1,106
5-6am	1,845	15	97	143	2,100	611	1	49	52	713	2,813
6-7am	2,639	17	90	85	2,831	1,294	3	48	50	1,395	4,226
7-8am	2,487	5	87	70	2,649	2,118	12	79	40	2,249	4,898
8-9am	2,140	3	95	70	2,308	2,305	10	78	49	2,442	4,750
9-10am	2,031	8	92	90	2,221	1,924	14	81	64	2,083	4,304
10-11am	1,764	6	87	93	1,950	1,687	11	95	46	1,839	3,789
11-12am	1,648	4	71	81	1,804	1,713	6	92	84	1,895	3,699
12-1pm	1,649	4	61	75	1,789	1,564	2	90	61	1,717	3,506
1-2pm	1,769	5	61	55	1,890	1,613	5	89	59	1,766	3,656
2-3pm	1,873	3	64	47	1,987	2,011	1	83	71	2,166	4,153
3-4pm	2,061	7	56	36	2,160	2,454	2	87	32	2,575	4,735
4-5pm	2,318	9	48	24	2,399	2,504	2	52	25	2,583	4,982
5-6pm	2,699	9	37	25	2,770	2,594	5	38	24	2,661	5,431
6-7pm	2,539	7	34	30	2,610	2,267	7	48	18	2,340	4,950
7-8pm	1,945	11	22	44	2,022	1,882	17	38	25	1,962	3,984
8-9pm	1,638	10	18	54	1,720	1,462	11	30	20	1,523	3,243
9-10pm	1,421	4	16	56	1,497	1,152	5	20	36	1,213	2,710
10-11pm	1,054	4	17	64	1,139	924	3	19	38	984	2,123
11-12pm	729	2	13	62	806	701	1	18	40	760	1,566
<b>Totals</b>	<b>37,919</b>	<b>155</b>	<b>1,195</b>	<b>1,659</b>	<b>40,928</b>	<b>33,842</b>	<b>126</b>	<b>1,213</b>	<b>998</b>	<b>36,179</b>	<b>77,107</b>
7-10am	6,658	16	274	230	7,178	6,347	36	238	153	6,774	13,952
10am-1pm	5,061	14	219	249	5,543	4,964	19	277	191	5,451	10,994
1-4pm	5,703	15	181	138	6,037	6,078	8	259	162	6,507	12,544
4-7pm	7,556	25	119	79	7,779	7,365	14	138	67	7,584	15,363
7am-7pm	24,978	70	793	696	26,537	24,754	77	912	573	26,316	52,853
6-10am	9,297	33	364	315	10,009	7,641	39	286	203	8,169	18,178
3-7pm	9,617	32	175	115	9,939	9,819	16	225	99	10,159	20,098
6am-7pm	27,617	87	883	781	29,368	26,048	80	960	623	27,711	57,079

Classification based on Spring 2016 Data.

\*\* Peak Volumes

## Hourly Vehicular Volumes Outerbridge Crossing ~ 2016



## Average Daily Traffic Volumes ~ Total of Both Directions Outerbridge Crossing

