



Mayor



Janette Sadik-Khan Commissioner

A member of the New York Metropolitan Transportation Council

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### **New York City Screenline Traffic Flow 2009**

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# NEW YORK CITY SCREENLINE TRAFFIC FLOW 2009

### TABLE OF CONTENTS

	P	AGE
INTRODUCTION		1
SUMMARY		5
2009 Daily Traffic		7
Bronx - Westchester		7
Queens - Nassau		8
New York – New Jersey		9
Brooklyn - Queens		10
2008-2009 Screenline Daily Traffic Volume Trends		12
Bronx - Westchester		15
Queens - Nassau		16
New York – New Jersey		17
Brooklyn - Queens		18
TEN – YEAR TRENDS ~ 1999 – 2009		19
1999-2009 Screenline Daily Traffic Volume Trends		21
Bronx - Westchester		26
Queens - Nassau		27
New York – New Jersey		28
Brooklyn - Queens		29
NEW YORK CITY SCREENLINE		31
Flow Map		34
Historical Screenline Volumes		35
Hourly Screenline Volumes by Direction		39
BRONX – WESTCHESTER SCREENLINE		41
Flow Map		44

	PAGE
Historical Daily Facility Volumes by Direction	45
Hourly Facility Volumes by Direction	49
Boston Road	52
Broadway	53
Bronx River Parkway	54
Henry Hudson Parkway	55
Hutchinson River Parkway	56
Major Deegan Expressway	57
New England Thruway	58
Riverdale Avenue	59
Van Cortlandt Park East	60
Webster Avenue	61
White Plains Road	62
QUEENS - NASSAU SCREENLINE	63
Flow Map	66
Historical Daily Facility Volumes by Direction	67
Hourly Facility Volumes by Direction	71
Beach Channel Drive	75
Central Avenue	76
Grand Central Parkway	77
Hempstead Avenue	78
Hillside Avenue	79
Jamaica Avenue	80
Laurelton Parkway	81
Linden Boulevard	82
Long Island Expressway	83

	PAGE
Merrick Boulevard	84
Northern Boulevard	85
Rockaway Boulevard	86
Seagirt Boulevard	87
Sunrise Highway	88
Union Turnpike	89
NEW YORK - NEW JERSEY SCREENLINE	91
Flow Map	95
Historical Daily Facility Volumes by Direction	96
Hourly Facility Volumes by Direction	100
Manhattan - New Jersey Crossings	103
George Washington Bridge	103
Holland Tunnel	104
Lincoln Tunnel	105
Staten Island - New Jersey Bridges	106
Bayonne Bridge	106
Goethals Bridge	107
Outerbridge Crossing	108
BROOKLYN - QUEENS SCREENLINE	109
Flow Map	113
Historical Daily Facility Volumes by Direction	114
Hourly Facility Volumes by Direction	119
Newtown Creek Bridges	124
Grand Street Bridge	124
Greenpoint Avenue Bridge	125

		PAGE
	Kosciuszko Bridge	. 126
	Pulaski Bridge	. 127
Other F	Pacilities	. 128
	Atlantic Avenue	. 128
	Cooper Street	. 129
	Cornelia Street	. 130
	Decatur Street	. 131
	DeKalb Avenue	. 132
	Greene Avenue	. 133
	Jackie Robinson Parkway	. 134
	Linden Boulevard	. 135
	Linden Street	. 136
	Shore Parkway	. 137
	Sutter Avenue	. 138

# Introduction



### INTRODUCTION

The 2009 New York City Screenline Traffic Flow report is an annual publication prepared by the New York City Department of Transportation (NYCDOT), and funded by the Unified Planning Work Program (UPWP), and the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU). The report presents vehicular volumes and historical comparisons across the Bronx–Westchester, Queens–Nassau, Manhattan–New Jersey, Staten Island–New Jersey, and Brooklyn–Queens screenlines.

The average hourly volumes by direction for 2009 are presented in tabular form and in histograms for each monitored roadway facility. Historical comparisons are based on screenline data collected in 1963, 1973, 1982, 1986, and 1993-2008. The statistical analysis presented in the report was performed by staff of NYCDOT during the 2009–2010 and 2010–2011 program years.

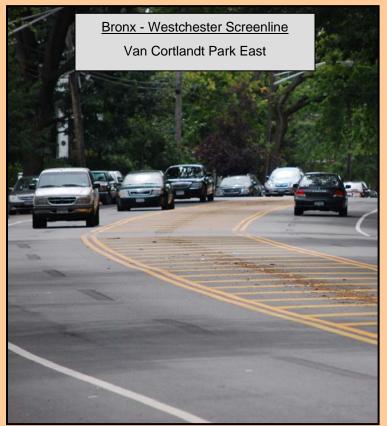
Each of the 47 screenline monitoring locations has been classified under a highway functional classification system. Functional classification is the method by which streets and highways are grouped into classes, or systems, according to the character of service each roadway provides.

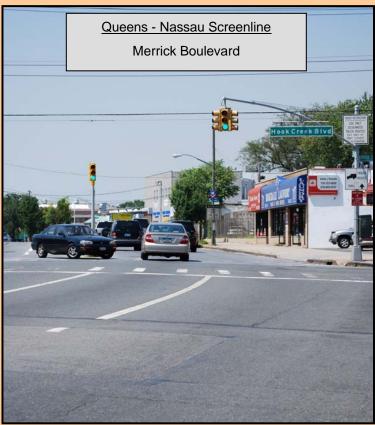
The five functional classifications are defined as follows:

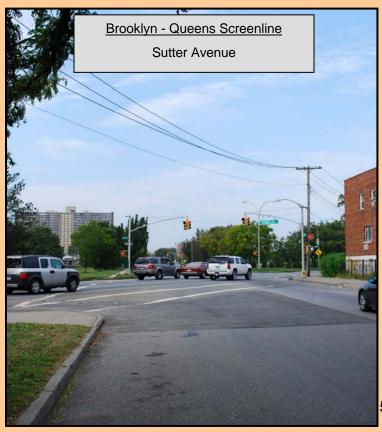
- 1. <u>Interstate</u> connects population centers across state lines.
- 2. <u>Principal Arterial</u> serves major centers of activity of an urban area and carries a high proportion of the total urban area travel on a minimum of mileage.
- 3. <u>Minor Arterial</u> interconnects with and augments urban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

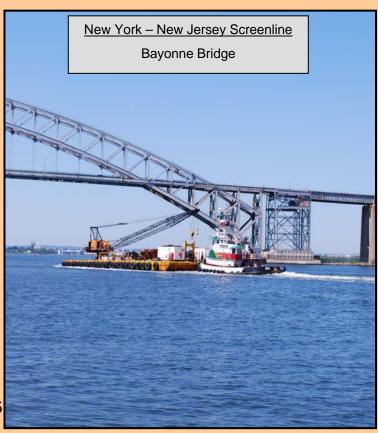
Note: NYCDOT uses the averages of vehicular volumes from selected representative weekdays. Publications from other sources may be based on alternative computation methodologies for some facilities, notably the tolled bridges and tunnels, possibly yielding different results for those facilities.

# Summary









### **SUMMARY**

### **2009 Daily Traffic**

- Just over 2,235,000 daily motor vehicles crossed the 32 New York City border screenline monitoring locations in 2009, 0.5% more than the 2,224,000 daily vehicles recorded in 2008.
- Since the first survey in 1963, the highest volumes have been at the Queens–Nassau border. In 2009, 955,600 daily vehicles were counted at the fifteen Queens–Nassau monitoring locations, 42.7% of the total traffic recorded at the City boundaries. The eleven Bronx–Westchester locations yielded 27.3% of the total (609,300), the three Manhattan–New Jersey river crossings 22.6% (504,900), and the three Staten Island–New Jersey bridges 7.4% (165,500). The six New York–New Jersey facilities are operated by the Port Authority of New York and New Jersey (PANYNJ).
- Morning hourly inbound volume peaked between 7-8 am, when 75,700 vehicles were recorded entering the City limits. Between 6-10 am, a total of 276,000 vehicles entered the City from Nassau and Westchester Counties, and from New Jersey.
- During the 4-5 pm evening peak hour, 75,700 vehicles were recorded leaving the City. Between 3-7 pm, 299,300 vehicles exited the City.
- Traffic crossing the City boundaries was heavy throughout the day. The combined total of entries and departures exceeded 100,000 vehicles per hour continuously from 6 am until 8 pm.

#### **Bronx - Westchester**

- On a typical 2009 weekday, 609,300 vehicles crossed the eleven Bronx-Westchester screenline monitoring locations, 1.8% more than the 598,600 daily vehicles recorded in 2008.
- Nearly 87% of the recorded vehicles (529,700 per day) were on the five limited access highways (interstate and principal arterials) that cross the screenline.
- The New England Thruway, with a total two-way volume of 130,500 daily vehicles, is the most-traveled Bronx-Westchester highway, carrying 21.4% of the total traffic on the monitored thoroughfares. The Major Deegan Expressway (including service roads) is second with 121,900 daily vehicles, 20.0% of the total. The Henry Hudson Parkway serves 96,000 daily vehicles (15.8%), the Hutchinson River Parkway 91,700 (15.0%), and the Bronx River Parkway 89,600 (14.7%).
- Boston Road is the busiest principal arterial monitored, averaging 21,700 vehicles per day, 3.6% of the total.
- The morning inbound (southbound) peak hour occurred during 7-8am, when 23,900 vehicles were recorded entering The Bronx from Westchester. The Bronx River Parkway and Major Deegan Expressway (including service road) each carried 4,600 of those peak hour inbound vehicles, with another 4,400 on the Henry Hudson Parkway.

- During the 6-10 am inbound rush period, 79,800 vehicles were recorded entering The Bronx. Some 15,800 of those vehicles were on the Major Deegan Expressway and its service road, with another 14,800 accommodated by the Henry Hudson Parkway, and 14,000 on the Bronx River Parkway.
- A total of 20,800 vehicles were counted crossing the screenline from The Bronx into Westchester during the 3-4 pm evening peak hour. Over 4,600 of those vehicles used the Major Deegan Expressway and its service road.
- During the 3-7 pm evening rush period, 82,100 vehicles were recorded leaving The Bronx. The Major Deegan Expressway and its service road accommodated 17,800 of those northbound vehicles.
- Reverse traffic was heavy during the 3-7 pm evening period, with an inbound volume of 79,800, compared to the outbound total of 82,100. During this period, the New England Thruway actually carried more inbound than outbound traffic (17,000 inbound vs. 14,900 outbound), consistent with recent screenline counts.
- Reverse traffic was less intense during the 6-10 am morning period: 79,800 inbound vs. 61,600 outbound. New England Thruway traffic was heavier in the reverse direction: 14,300 outbound vs. 13,200 inbound.

### Queens - Nassau

- A total of 955,600 motor vehicles crossed the fifteen Queens-Nassau screenline monitoring locations on a typical 2009 weekday, 0.4% more than the 951,500 daily vehicles recorded in 2008.
- The three limited access highways that cross the screenline accommodated more than half (58.3%) of the recorded vehicles (557,400 per day).
- The Long Island Expressway (including service roads) was the highest volume Queens-Nassau facility in 2009, with a total two-way volume of 239,000 daily vehicles, 25.0% of the total daily traffic on the monitored thoroughfares. The Laurelton Parkway was second with 162,000 daily vehicles (16.9% of the total), followed by 156,400 on the Grand Central Parkway and its service road (16.4%).
- Rockaway Boulevard and Sunrise Highway are the busiest principal arterials, with average daily volumes of 75,100 and 66,400 vehicles, respectively.
- Other high volume principal arterials are Hempstead Avenue and Northern Boulevard, serving 44,500 and 38,600 daily vehicles, respectively.
- The morning inbound peak hour occurred during 7-8 am, when 29,400 vehicles were recorded entering Queens from Nassau. The Long Island Expressway (including service road) was the route for 6,900 of those morning inbound peak hour vehicles, with the Laurelton Parkway accommodating an additional 5,200, and the Grand Central Parkway (including service road) serving another 5,100.
- The morning outbound peak hour occurred during 8-9 am, when 31,300 vehicles were recorded entering Nassau from Queens. The Long Island Expressway (including service road) was the route for 7,600 of those morning outbound peak hour vehicles. The Grand Central Parkway (including service road) accommodated 6,400. Another 4,800 used the Laurelton Parkway.

- During the 6-10 am rush period, 108,900 vehicles entered Queens from Nassau, and 105,100 entered Nassau from Queens. The Long Island Expressway and its service roads carried a total of 53,700 vehicles, 26,500 to Queens and 27,200 to Nassau. The Laurelton Parkway was used by 19,700 Queens-bound vehicles, and 17,100 entering Nassau. On the Grand Central Parkway and its service road, the heavier volume was in the eastbound direction (leaving New York City), with 19,400 entering Queens and 20,800 entering Nassau.
- The evening outbound peak hour occurred during 4-5 pm, when 32,800 vehicles were recorded departing Queens for Nassau. The Long Island Expressway and its service road were used by 7,400 of those evening outbound peak hour vehicles. Another 6,200 used the Laurelton Parkway. The Grand Central Parkway and its service road accommodated an additional 5,200.
- The evening inbound peak hour occurred during 5-6 pm, when 32,400 vehicles were recorded departing Nassau for Queens. The Long Island Expressway (including service road) was used by 7,600 of those inbound evening peak hour vehicles. Another 5,600 used the Grand Central Parkway and its service road, with the Laurelton Parkway accommodating an additional 4,400.
- During the 3-7 pm evening rush period, 129,100 vehicles entered Nassau, and 121,300 entered Queens. The Long Island Expressway and its service roads accommodated 28,900 vehicles to Nassau and 28,700 to Queens. The Laurelton Parkway served 24,300 vehicles entering Nassau and 16,900 entering Queens. The Grand Central Parkway and its service road were used by 20,700 vehicles entering Nassau and 20,900 entering Queens.
- Volumes were heavy crossing the Queens-Nassau screenline throughout the day, with two-way traffic exceeding 40,000 vehicles per hour continuously between 6 am and 9 pm.

### New York – New Jersey

- On a fall 2009 weekday, 670,400 motor vehicles traveled between New York City and New Jersey via the six bridges and tunnels operated by the Port Authority of New York and New Jersey (PANYNJ), 0.5% fewer than the 674,000 recorded in fall of 2008.
- Manhattan-New Jersey traffic decreased 0.7% (to 504,900 daily vehicles in 2009 from 508,300 in 2008), while daily volume between Staten Island and New Jersey decreased 0.2% (to 165,500 from 165,800).
- The George Washington Bridge, with a total two-way volume of 289,700 daily vehicles in 2009, continues to be the highest volume crossing by a wide margin. In fall 2009, this facility carried 43% of total New York City-New Jersey traffic, and 57% of the volume between Manhattan and New Jersey. The George Washington Bridge, with eight lanes on the upper level and six lanes on the lower level, is the busiest of all screenline facilities citywide.
- The Lincoln Tunnel accommodated 119,000 daily vehicles in 2009; the Holland Tunnel, 96,200.
- The Outerbridge Crossing was the busiest Staten Island-New Jersey facility, with an average daily volume of 74,900 vehicles in 2009, up 2.7% from 72,900 in 2008. Traffic on the Goethals Bridge decreased 2.2%, to 71,200 daily vehicles in 2009 from 72,800 in 2008. The Bayonne Bridge accommodated 19,400 daily vehicles in 2009, a decrease of 3.2% from the 20,100 daily vehicles recorded in 2008.

- Some 18,900 vehicles entered Manhattan from New Jersey during the 6-7 am morning peak hour. The George Washington Bridge was used by 10,800 (57%) of those Manhattan-bound peak hour vehicles.
- During the 6-10 am inbound rush period, Manhattan vehicle entries from New Jersey amounted to 68,200. The George Washington Bridge was the route for 56% of these 6-10 am entries (38,400 vehicles).
- Some 17,400 vehicles departed Manhattan for New Jersey during the 6-7 pm evening peak hour, with the George Washington Bridge accommodating 10,200 (59%) of those departing vehicles.
- During the 3-7 pm evening rush period, 67,700 vehicles crossed the Hudson River from Manhattan to New Jersey. The George Washington Bridge carried 59% of that departing traffic (40,000 vehicles).
- Staten Island-New Jersey traffic is predominantly westbound (to New Jersey) during the morning rush period and eastbound (to Staten Island) during the evening rush.
- Between 6-10 am, 20,200 vehicles crossed from Staten Island to New Jersey. During the same period, 19,100 vehicles entered Staten Island.
- Between 3-7 pm, traffic entering Staten Island from New Jersey amounted to 25,000 vehicles, while traffic bound for New Jersey totaled 20,400.

### **Brooklyn - Queens**

- On a typical 2009 weekday, 592,300 vehicles crossed the fifteen monitored Brooklyn-Queens screenline locations. This was 0.4% more than the 590,100 daily vehicles that had been recorded in 2008. Except for the four bridges over Newtown Creek (monitored annually in the *New York City Bridge Traffic Volumes* report), traffic volumes at this screenline were analyzed for the first time in 1993.
- Over two-thirds (70.7%) of the vehicles (418,600 per day) crossing the Brooklyn-Queens screenline used the three limited access (interstate and principal arterial) facilities that cross the screenline: Jackie Robinson Parkway (formerly Interborough Parkway), Kosciuszko Bridge (Brooklyn-Queens Expressway), and Shore (Belt) Parkway. Some 44.5% (263,600 per day) were crossing Newtown Creek via the Grand Street, J.J. Byrne, Kosciuszko, and Pulaski Bridges.
- The highest volume Brooklyn-Queens highway was the Kosciuszko Bridge on the Brooklyn-Queens Expressway, with two-way daily volume of 188,300 vehicles, 31.8% of all traffic on the monitored thoroughfares and 71.4% of Newtown Creek crossings. Belt Parkway (Shore Parkway) was second with 162,800 vehicles per day, 27.5% of the total recorded screenline traffic.
- Belt Parkway (Shore Parkway), Jackie Robinson Parkway, Linden Boulevard, Pulaski Bridge, J.J. Byrne Memorial Bridge (Greenpoint Avenue Bridge), and Atlantic Avenue were the busiest of the principal arterials surveyed, with average daily volumes of 162,800, 67,500, 44,500, 36,100, 26,600, and 21,500 vehicles, respectively.
- A total of 20,100 vehicles were recorded entering Brooklyn from Queens during the 7-8 am morning peak hour. The Kosciuszko Bridge and Belt (Shore) Parkway accommodated 5,200 and 5,500 of those vehicles, respectively.

- Morning traffic to Queens peaked between 8-9 am, at 16,400 vehicles, including 5,300 on the Kosciuszko Bridge and 4,600 on Belt (Shore) Parkway.
- During the 6-10 am rush period, 71,700 vehicles were recorded entering Brooklyn, with the Kosciuszko Bridge and Belt (Shore) Parkway carrying 19,300 and 20,300, respectively. Simultaneously, 61,500 vehicles entered Queens, including 20,100 on the Kosciuszko Bridge and 16,700 on Belt Parkway.
- Evening traffic entering Queens from Brooklyn peaked between 5-6 pm, when 19,700 vehicles were recorded. The Kosciuszko Bridge was the route of 5,100 of those vehicles, while 5,500 used Shore (Belt) Parkway.
- Evening traffic entering Brooklyn from Queens peaked between 4-5 pm, at 17,900 vehicles. The Kosciuszko Bridge was used by 4,800 of those vehicles, while another 5,000 were on Shore (Belt) Parkway.
- During the 3-7 pm evening rush period, 75,700 vehicles were recorded entering Queens, while 68,100 were counted in the opposite direction. The Kosciuszko Bridge carried 19,800 to Queens and 18,800 to Brooklyn, while Shore (Belt) Parkway carried 21,400 to Queens and 19,200 to Brooklyn.

### 2008 vs. 2009 Screenline Traffic Volume Trends

### **Both Directions**

Page 1 of 2

	Highway Functional			Percent
BRONX-WESTCHESTER	Classification	2008	2009	Change
Boston Road	Principal Arterial	23,107	21,702	- 6.1 %
Broadway	Principal Arterial	15,386	15,206	- 1.2 %
Bronx River Parkway	Principal Arterial	87,677	89,628	2.2 %
Henry Hudson Parkway	Principal Arterial	93,705	95,982	2.4 %
Hutchinson River Parkway	Principal Arterial	90,973	91,662	0.8 %
Major Deegan Expressway	Interstate	108,757	111,320	2.4 %
Major Deegan Svce Roads	Principal Arterial	10,901	10,628	- 2.5 %
New England Thruway	Interstate	124,472	130,495	4.8 %
Riverdale Avenue	Principal Arterial	10,905	9,538	- 12.5 %
Van Cortlandt Park East	Minor Arterial	10,374	10,652	2.7 %
Webster Avenue	Local	9,863	10,113	2.5 %
White Plains Road	Principal Arterial	12,478	12,378	- 0.8 %
Total Bronx-Westchester Screenline		598,598	609,304	1.8 %

### **QUEENS-NASSAU**

Beach Channel Drive	Minor Arterial	24,352	23,541	- 3.3 %
Central Avenue	Minor Arterial	13,854	13,516	- 2.4 %
Grand Central Parkway	Principal Arterial	148,708	146,117	- 1.7 %
Grand Central Parkway Svce Road	Minor Arterial	9,900	10,304	4.1 %
Hempstead Avenue	Principal Arterial	46,615	44,494	- 4.6 %
Hillside Avenue	Principal Arterial	24,900	23,561	- 5.4 %
Jamaica Avenue	Principal Arterial	29,074	28,271	- 2.8 %
Laurelton Parkway	Principal Arterial	159,167	162,052	1.8 %
Linden Boulevard	Principal Arterial	24,767	26,349	6.4 %
Long Island Expressway	Interstate	221,943	228,908	3.1 %
Long Island Exp Svce Roads	Principal Arterial	8,461	10,044	18.7 %
Merrick Boulevard	Minor Arterial	19,508	18,566	- 4.8 %
Northern Boulevard	Principal Arterial	39,483	38,624	- 2.2 %
Rockaway Boulevard	Principal Arterial	75,460	75,108	- 0.5 %
Seagirt Boulevard	Principal Arterial	19,907	20,268	1.8 %
Sunrise Highway	Principal Arterial	64,994	66,394	2.2 %
Union Turnpike	Principal Arterial	20,412	19,484	- 4.5 %
Total Queens-Nassau Screenline		951,505	955,601	0.4 %

### 2008 vs. 2009 Screenline Traffic Volume Trends

### **Both Directions**

Page 2 of 2

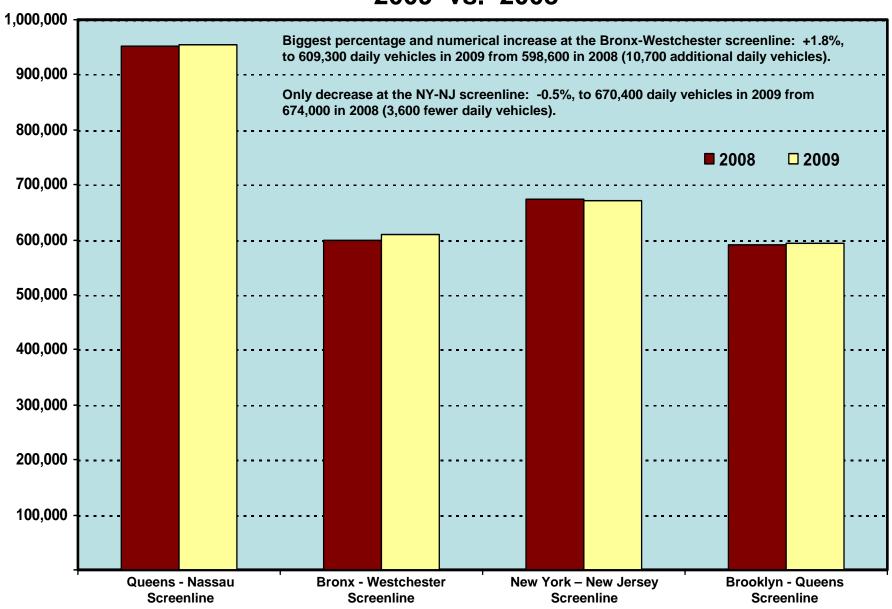
**Highway Functional** 

Percent

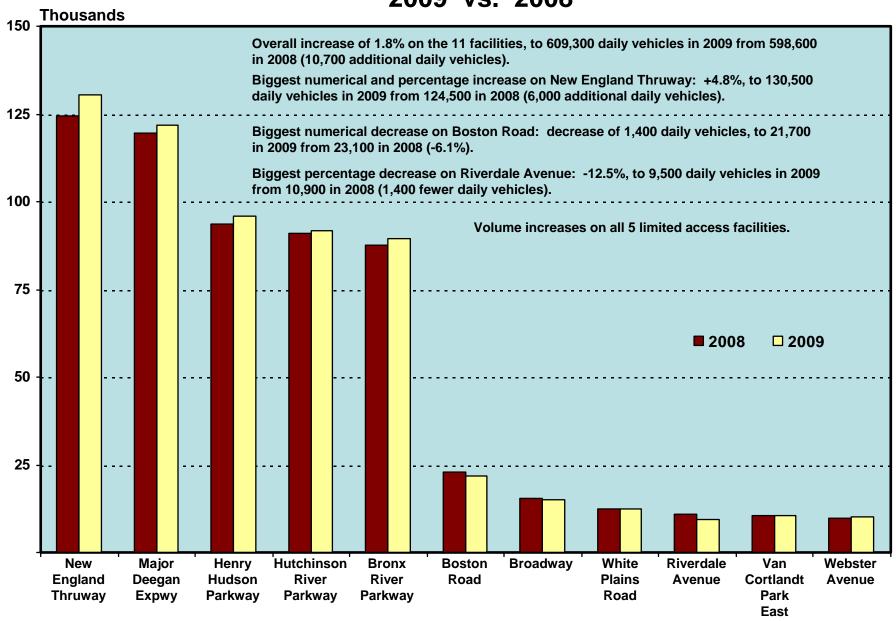
NEW YORK - NEW JERSEY	Classification	2008	2009	Change
George Washington Bridge	Interstate	293,059	289,694	- 1.1 %
Holland Tunnel	Interstate	97,057	96,184	- 0.9 %
Lincoln Tunnel	Principal Arterial	118,153	118,982	0.7 %
Bayonne Bridge	Principal Arterial	20,058	19,422	- 3.2 %
Goethals Bridge	Interstate	72,834	71,230	- 2.2 %
Outerbridge Crossing	Principal Arterial	72,884	74,852	2.7 %
Total New York - New Jersey Screenline		674,045	670,364	- 0.5 %
BROOKLYN - QUEENS				
Newtown Creek Bridges				
Grand Street Bridge	Principal Arterial	13,031	12,576	- 3.5 %
J.J. Byrne Memorial Bridge *	Principal Arterial	26,926	26,637	- 1.1 %
Kosciuszko Bridge	Interstate	181,783	188,322	3.6 %
Pulaski Bridge	Principal Arterial	37,019	36,103	- 2.5 %
Subtotal, Newtown Creek Bridges		258,759	263,638	1.9 %
Other Facilities				
Atlantic Avenue	Principal Arterial	21,560	21,477	- 0.4 %
Cooper Street	Minor Arterial	9,502	9,698	2.1 %
Cornelia Street	Local	1,753	1,847	5.4 %
Decatur Street	Collector	2,203	2,091	- 5.1 %
DeKalb Avenue	Minor Arterial	5,402	5,534	2.4 %
Greene Avenue	Minor Arterial	1,883	1,887	0.2 %
Jackie Robinson Parkway	Principal Arterial	67,735	67,477	- 0.4 %
Linden Boulevard	Principal Arterial	46,721	44,464	- 4.8 %
Linden Street	Collector	1,992	1,936	- 2.8 %
Shore Parkway	Principal Arterial	163,439	162,807	- 0.4 %
Sutter Avenue	Minor Arterial	9,182	9,424	2.6 %
Subtotal, Other Facilities		331,372	328,642	- 0.8 %
Total Brooklyn - Queens Screenline		590,131	592,280	0.4 %

<sup>\*</sup> J.J. Byrne Memorial Bridge also known as Greenpoint Avenue Bridge.

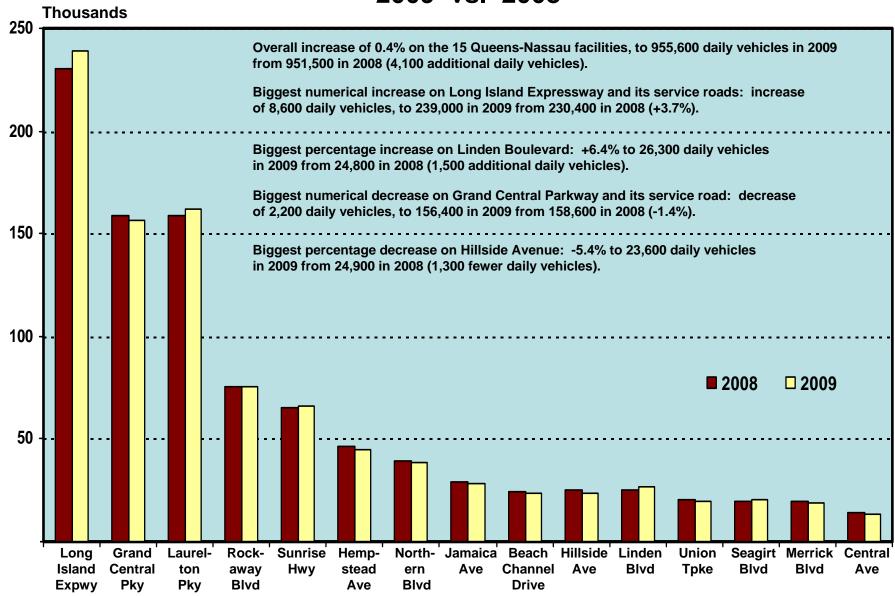
# New York City Screenlines ~ Daily Volumes 2009 vs. 2008



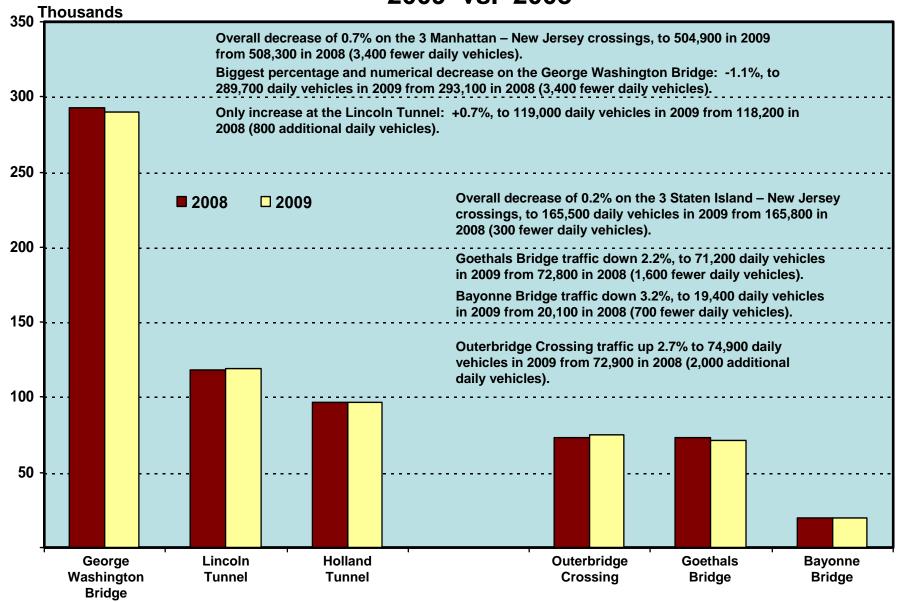
# Bronx – Westchester Screenline Daily Volumes 2009 vs. 2008



# Queens – Nassau Screenline Daily Volumes 2009 vs. 2008



# New York – New Jersey Screenline Daily Volumes 2009 vs. 2008

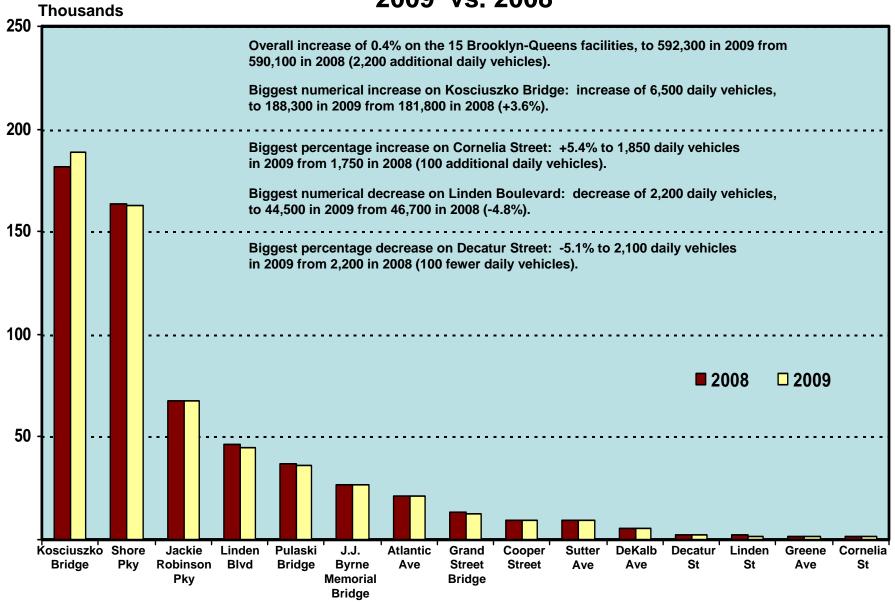


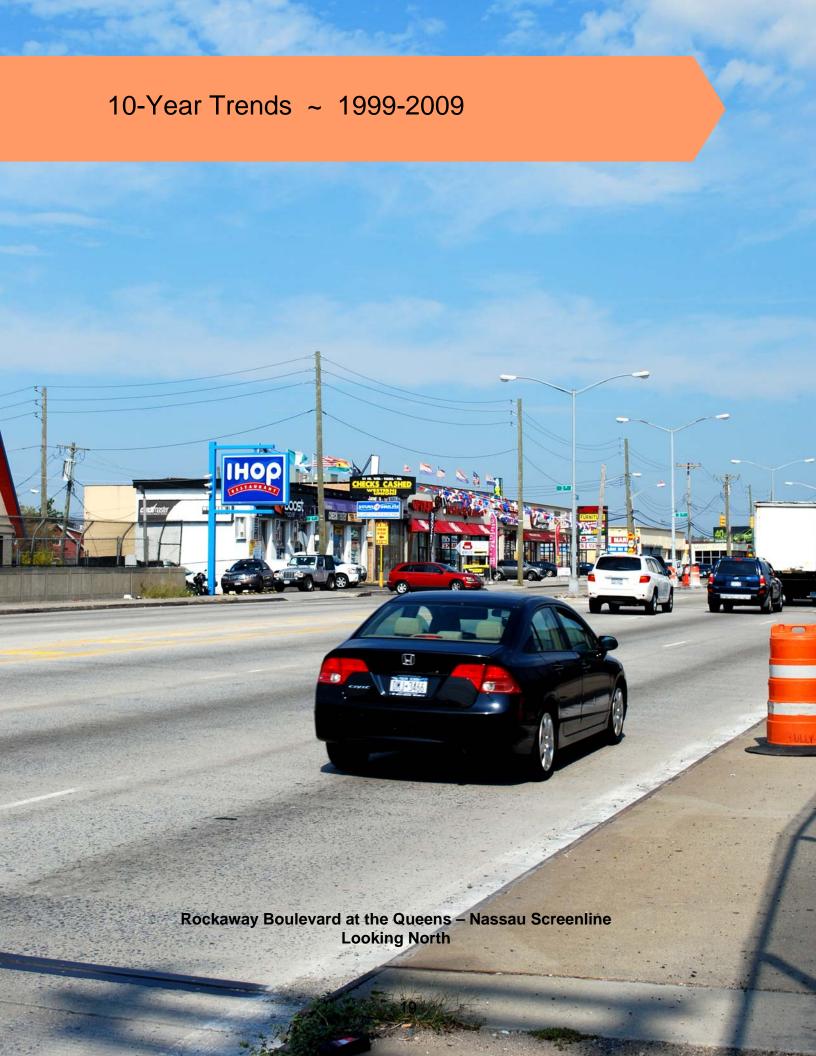
17

Staten Island – New Jersey Crossings

Manhattan – New Jersey Crossings

# Brooklyn - Queens Screenline Daily Volumes 2009 vs. 2008





### **TEN-YEAR TRENDS: 1999-2009**

- Total monitored daily traffic volume at the City boundaries decreased 0.5% during this ten-year period, to 2,235,300 in 2009 from 2,247,300 in 1999.

#### **Bronx - Westchester**

- The eleven Bronx-Westchester monitoring sites showed the largest overall increase of any screenline, as traffic volume was 4.3% higher in 2009 than in 1999: 609,300 daily vehicles vs. 584,000.
- The largest individual numerical and percentage increase in Bronx-Westchester traffic occurred on the Henry Hudson Parkway, where traffic volume was 9.9% higher in 2009 than in 1999 (96,000 daily vehicles vs. 87,300, an increase of 8,700 vehicles per day). Daily volume on the Hutchinson River Parkway was up 8.3%, to 91,700 in 2009 from 84,600 in 1999 (7,100 additional daily vehicles). Traffic on the Major Deegan Expressway and its service roads increased by 7.6%, to 121,900 daily vehicles in 2009 from 113,300 in 1999 (8,600 additional daily vehicles).
- The biggest numerical and percentage decline occurred on Boston Road, where volume was down 11.9%, to 21,700 daily vehicles in 2009 from 24,600 in 1999 (2,900 fewer vehicles per day).

### **Queens - Nassau**

- Between Queens and Nassau, monitored traffic volume has increased just 0.9% during the past ten years, to 955,600 in 2009 from 947,000 in 1999.
- The largest individual Queens-Nassau traffic increase since 1999 occurred on the Long Island Expressway and its service roads: up 21.5% to 239,000 daily vehicles in 2009 from 196,600 in 1999 (42,400 additional daily vehicles). The largest percentage increase was on Seagirt Boulevard: +25.8%, to 20,300 daily vehicles from 16,100 (4,200 additional daily vehicles).
- The most significant declines in Queens-Nassau traffic occurred the Grand Central Parkway and its service road, where daily traffic decreased to 156,400 in 2009 from 168,900 in 1999 (a decrease of 12,500 daily vehicles, or 7.4%), and on Hillside Avenue where daily traffic decreased by 27.1%, to 23,600 daily vehicles in 2009 from 32,300 in 1999 (decrease of 8,700 daily vehicles).

### New York – New Jersey

- Between Manhattan and New Jersey, daily traffic decreased 8.1% during this ten-year period, to 504,900 in 2009 from 549,400 in 1999 (decrease of 44,500 vehicles per day).
- The steepest decline in Manhattan-New Jersey traffic was at the George Washington Bridge, where daily traffic decreased 8.8%, to 289,700 in 2009 from 317,600 in 1999 (27,900 fewer daily vehicles). Traffic using the Holland Tunnel decreased 6.6%, to 96,200 daily vehicles in 2009 from 103,000 in 1999. Daily volume through the Lincoln Tunnel decreased 7.5%, to 119,000 in from 128,700.

- On the three Staten Island-New Jersey bridges, daily volume decreased 0.8%, to 165,500 in 2009 from 166,900 in 1999. Daily traffic on the Bayonne Bridge increased 10.3%, to 19,400 in 2009 from 17,600 in 1999. Traffic using the Outerbridge Crossing decreased 4.6%, to 74,900 vehicles per day in 2009 from 78,400 in 1999.

### Brooklyn – Queens

- At the Brooklyn-Queens screenline, traffic decreased 0.4%, to 592,300 daily vehicles in 2009 from 594,800 in 1999.
- The largest Brooklyn-Queens volume increase since 1999 occurred on the Shore Parkway (increase of 10.4% to 162,800 daily vehicles from 147,500). This was followed by the Pulaski Bridge over Newtown Creek (increase of 16.6% to 36,100 daily vehicles from 31,000).
- The largest decreases in Brooklyn-Queens traffic occurred on the Kosciuszko Bridge (down 3.3%, to 188,300 in 2009 from 194,800 in 1999), on Atlantic Avenue (down 27.9%, to 21,500 from 29,800), and on Linden Boulevard (down 17.3%, to 44,500 from 53,800).

# 10-Year Volume Trends ~ 1999 - 2009 New York City Screenline Traffic Volume Trends Both Directions

Page 1 of 2

BRONX-WESTCHESTER	Highway Functional Classification	1999	2009	Percent Change
Boston Road	Principal Arterial	24,644	21,702	- 11.9 %
Broadway	Principal Arterial	16,393	15,206	- 7.2 %
Bronx River Parkway	Principal Arterial	85,364	89,628	5.0 %
Henry Hudson Parkway	Principal Arterial	87,321	95,982	9.9 %
Hutchinson River Parkway	Principal Arterial	84,613	91,662	8.3 %
Major Deegan Expressway	Interstate	101,927	111,320	9.2 %
Major Deegan Svce Roads	Principal Arterial	11,398	10,628	- 6.8 %
New England Thruway	Interstate	127,770	130,495	2.1 %
Riverdale Avenue	Principal Arterial	10,918	9,538	- 12.6 %
Van Cortlandt Park East	Minor Arterial	10,633	10,652	0.2 %
Webster Avenue	Local	10,274	10,113	- 1.6 %
White Plains Road	Principal Arterial	12,760	12,378	- 3.0 %
Total Bronx-Westchester Screenline		584,015	609,304	4.3 %

#### **QUEENS-NASSAU**

Beach Channel Drive	Minor Arterial	24,723	23,541	- 4.8 %
Central Avenue	Minor Arterial	12,806	13,516	5.5 %
Grand Central Parkway	Principal Arterial	158,237	146,117	- 7.7 %
Grand Central Parkway Svce Road	Minor Arterial	10,629	10,304	- 3.1 %
Hempstead Avenue	Principal Arterial	49,889	44,494	- 10.8 %
Hillside Avenue	Principal Arterial	32,310	23,561	- 27.1 %
Jamaica Avenue	Principal Arterial	28,264	28,271	0.0 %
Laurelton Parkway	Principal Arterial	160,790	162,052	0.8 %
Linden Boulevard	Principal Arterial	29,514	26,349	- 10.7 %
Long Island Expressway	Interstate	173,928	228,908	31.6 %
Long Island Exp Svce Roads	Principal Arterial	22,702	10,044	- 55.8 %
Merrick Boulevard	Minor Arterial	19,158	18,566	- 3.1 %
Northern Boulevard	Principal Arterial	43,644	38,624	- 11.5 %
Rockaway Boulevard	Principal Arterial	70,555	75,108	6.5 %
Seagirt Boulevard	Principal Arterial	16,108	20,268	25.8 %
Sunrise Highway	Principal Arterial	70,668	66,394	- 6.0 %
Union Turnpike	Principal Arterial	23,118	19,484	- 15.7 %
Total Queens-Nassau Screenline		947,043	955,601	0.9 %

### 10-Year Volume Trends ~ 1999 - 2009 New York City Screenline Traffic Volume Trends Both Directions

### Page 2 of 2

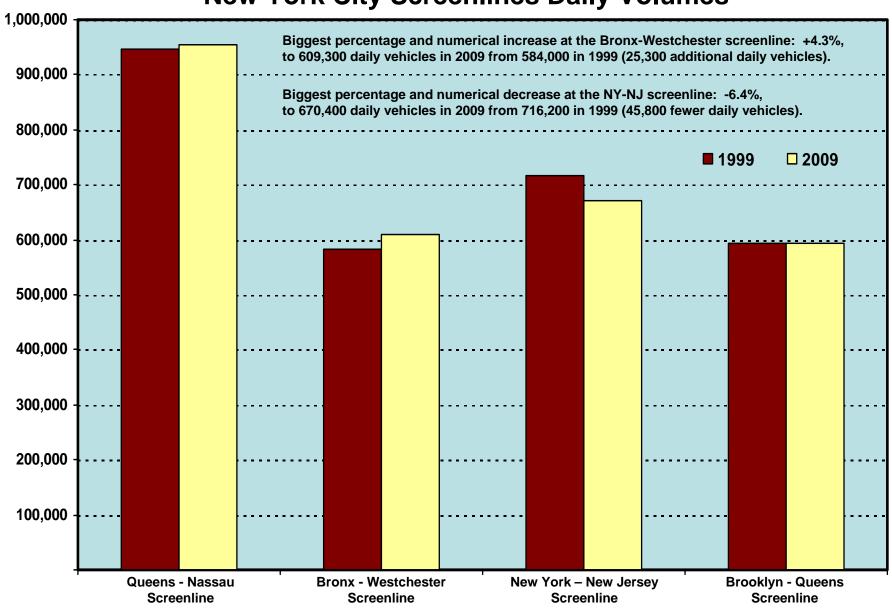
NEW YORK - NEW JERSEY	Highway Functional Classification	1999	2009	Percent Change
George Washington Bridge	Interstate	317,640	289,694	- 8.8 %
Holland Tunnel	Interstate	103,020	96,184	- 6.6 %
Lincoln Tunnel	Principal Arterial	128,692	118,982	- 7.5 %
Bayonne Bridge	Principal Arterial	17,603	19,422	10.3 %
Goethals Bridge	Interstate	70,863	71,230	0.5 %
Outerbridge Crossing	Principal Arterial	78,424	74,852	- 4.6 %
Total New York - New Jersey Screenlin	e	716,242	670,364	- 6.4 %

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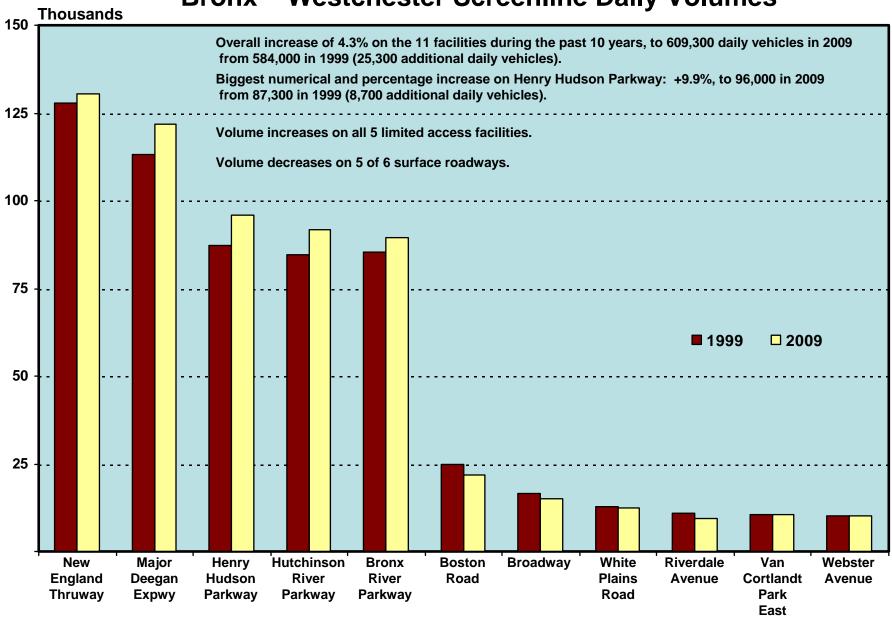
Newtown Creek Bridges				
Grand Street Bridge	Principal Arterial	14,390	12,576	- 12.6 %
J.J. Byrne Memorial Bridge *	Principal Arterial	26,613	26,637	0.1 %
Kosciuszko Bridge	Interstate	194,784	188,322	- 3.3 %
Pulaski Bridge	Principal Arterial	30,975	36,103	16.6 %
Subtotal, Newtown Creek Bridges		266,762	263,638	- 1.2 %
Other Facilities				
Atlantic Avenue	Principal Arterial	29,799	21,477	- 27.9 %
Cooper Street	Minor Arterial	9,313	9,698	4.1 %
Cornelia Street	Local	1,787	1,847	3.4 %
Decatur Street	Collector	2,099	2,091	- 0.4 %
DeKalb Avenue	Minor Arterial	5,103	5,534	8.4 %
Greene Avenue	Minor Arterial	1,922	1,887	- 1.8 %
Jackie Robinson Parkway	Principal Arterial	66,618	67,477	1.3 %
Linden Boulevard	Principal Arterial	53,795	44,464	- 17.3 %
Linden Street	Collector	2,439	1,936	- 20.6 %
Shore Parkway	Principal Arterial	147,453	162,807	10.4 %
Sutter Avenue	Minor Arterial	7,692	9,424	22.5 %
Subtotal, Other Facilities		328,020	328,642	0.2 %
Total Brooklyn - Queens Screenline		594,782	592,280	- 0.4 %

<sup>\*</sup> J.J. Byrne Memorial Bridge also known as Greenpoint Avenue Bridge.

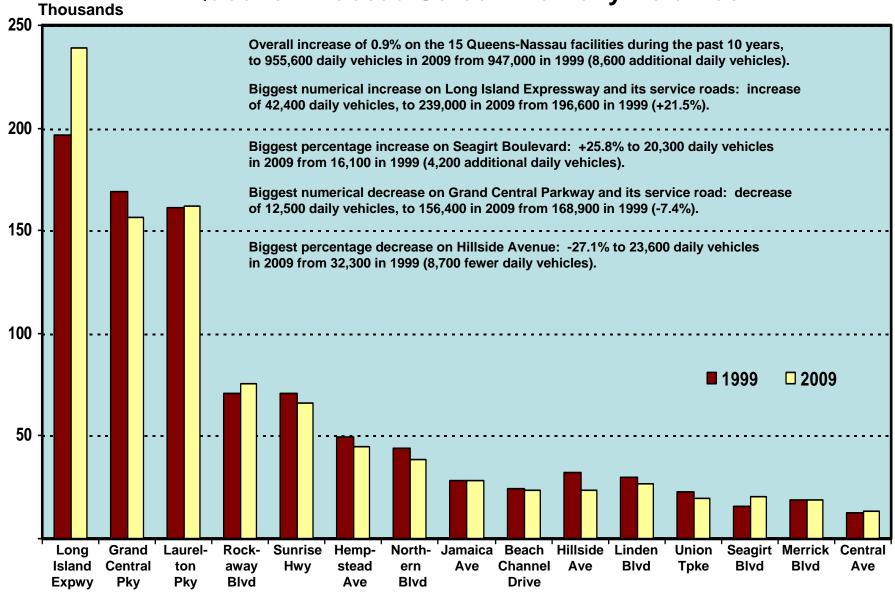
### 10-Year Volume Changes ~ 1999 - 2009 New York City Screenlines Daily Volumes



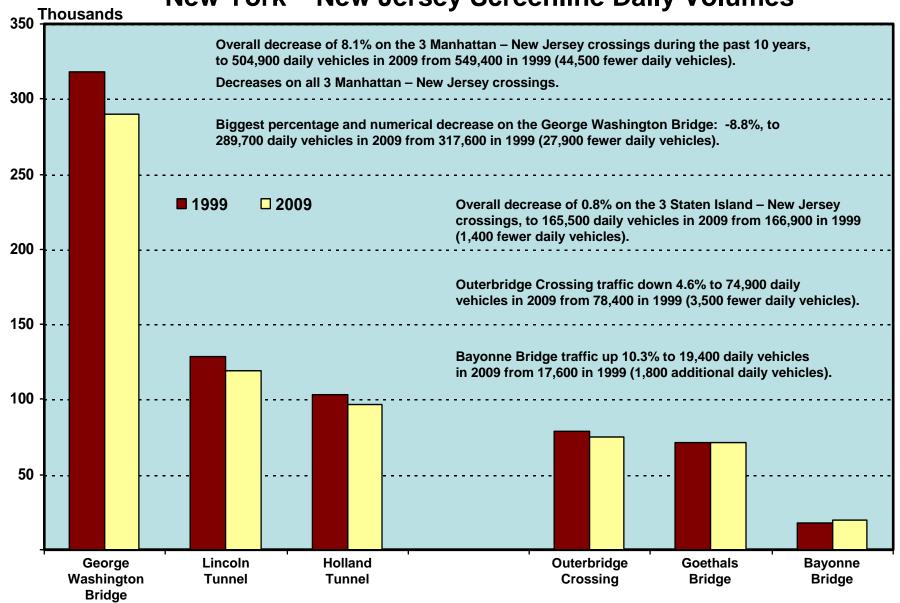
## 10-Year Volume Changes ~ 1999 - 2009 Bronx – Westchester Screenline Daily Volumes



### 10-Year Volume Changes ~ 1999 - 2009 Queens - Nassau Screenline Daily Volumes



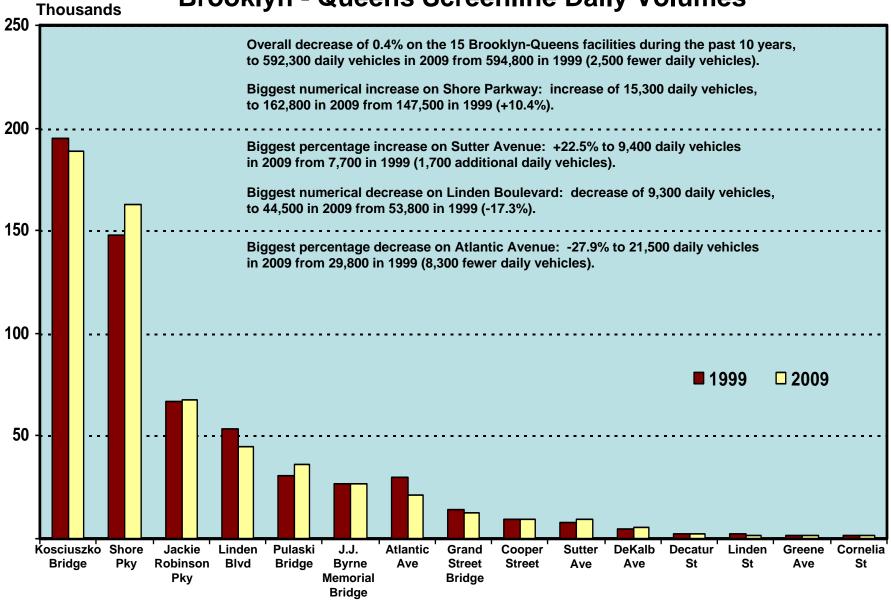
## 10-Year Volume Changes ~ 1999 - 2009 New York – New Jersey Screenline Daily Volumes



Manhattan – New Jersey Crossings

Staten Island – New Jersey Crossings

# 10-Year Volume Changes ~ 1999 - 2009 Brooklyn - Queens Screenline Daily Volumes





#### NEW YORK CITY SCREENLINE

In 1963, when the first comprehensive New York City border screenline data were collected, average daily two-way volume at the 29 locations studied was 1,109,200 (volumes on Van Cortlandt Park East in The Bronx, and Central Avenue and Seagirt Boulevard in Queens were not collected prior to 1986). The 546,600 daily vehicles recorded at the Queens–Nassau border accounted for 49.3% of the total.

During the ten years between 1963 and 1973, volume recorded at the City borders rose 36.2% to an average of 1,510,700 vehicles per day (401,500 additional vehicles), with increases exceeding 20% at all border screenlines. Daily volume on the three Staten Island–New Jersey bridges nearly tripled to 81,000 from 27,400. The largest numerical increase was at the Manhattan–New Jersey screenline, where daily volume rose to 397,200 vehicles from 265,600, an increase of 49.5%. Bronx–Westchester traffic rose 34.1% to 361,700 from 269,700, while traffic between Queens and Nassau was up 22.7% to 670,700 from 546,600.

Growth slowed between 1973 and 1982, with volume recorded at the City borders rising 10.4% during the nine-year period, to 1,667,300 daily vehicles. Traffic continued to increase at all City boundaries: Staten Island–New Jersey up 31.6% to 106,700; Bronx–Westchester up 14.4% to 413,800; Manhattan–New Jersey up 9.2% to 433,700; and Queens-Nassau up 6.3% to 713,100.

Between 1982 and 1986, there was increased growth, as monitored traffic at the City borders increased 14.8% during the four-year period, to 1,914,800 daily vehicles (excluding Van Cortlandt Park East in The Bronx, and Central Avenue and Seagirt Boulevard in Queens where traffic was not counted in 1982). Daily volume was up 29.8% to 138,400 on the Staten Island–New Jersey bridges, up 14.6% to 474,000 at the Bronx–Westchester border, up 14.5% to 816,600 between Queens and Nassau, and up 12.0% to 485,800 crossing the Hudson River between Manhattan and New Jersey.

From 1986 to 1999, monitored traffic at the New York City boundaries increased modestly, rising by 15.2% during that twelve—year period, to 2,247,300 daily vehicles in 1999 from 1,951,000 in 1986. At the Bronx—Westchester screenline, daily volume was up 20.9%, to 584,000 in 1999 from 483,300 in 1986 (+100,700 daily vehicles). Daily traffic between Queens and Nassau increased 12.3%, to 947,000 in 1999 from 843,500 in 1986 (+103,500 daily vehicles). Staten Island—New Jersey daily volume rose 20.6%, to 166,900 from 138,400. Daily traffic between Manhattan and New Jersey increased 13.1%, to 549,400 from 485,800.

From 1963 to 2009, daily two—way traffic at the 29 City border locations monitored throughout the period nearly doubled, to 2,190,800 in 2009 from 1,109,200 in 1963.

Staten Island–New Jersey traffic expanded by 504%, to 165,500 daily vehicles in 2009 from 27,400 in 1963, largely as a result of the opening of the Verrazano–Narrows Bridge in 1964.

Manhattan—New Jersey volume increased 90%, to 504,900 in 2009 from 265,600 in 1963, fostered in part by the opening of the George Washington Bridge's lower level in 1962 and the Alexander Hamilton Bridge/Trans-Manhattan Expressway route in 1963 which facilitated travel between Bronx/Queens/Long Island/New England and New Jersey via upper Manhattan. From 1962 to 1966, George Washington Bridge traffic increased 50.6% to 167,300 daily vehicles from 111,100.

During the 46-year period from 1963 to 2009, continuously monitored daily traffic increased 122% between The Bronx and Westchester (to 598,700 from 269,700), and 69% between Queens and Nassau (to 921,800 from 546,600).



#### New York City Screenline Historical Comparisons Average Daily Traffic Volumes

#### **Entering New York City**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Bronx - Westchester	131,910	179,678	206,402	244,083	258,711	262,045	269,207	276,672	285,235	287,874	297,196	298,464
Queens - Nassau	272,360	334,940	373,479	417,005	448,046	450,332	448,742	445,915	452,167	457,372	473,858	472,861
N.J Manhattan	N/A	196,532	215,979	240,921	234,479	235,840	239,529	246,107	250,864	257,725	263,502	265,463
N.J Staten Island	N/A	40,517	53,336	69,218	75,601	77,266	77,173	78,703	81,449	83,209	86,553	87,705
Totals	N/A	751,667	849,196	971,227	1,016,837	1,025,483	1,034,651	1,047,397	1,069,715	1,086,180	1,121,109	1,124,493

#### **Entering New York City**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bronx - Westchester	308,307	314,460	315,038	320,086	323,025	314,134	325,814	304,452	312,818
Queens - Nassau	473,363	468,813	485,332	480,260	473,349	462,916	469,587	477,437	473,526
N.J Manhattan	222,389	254,895	260,117	262,050	256,289	261,612	258,412	247,975	249,308
N.J Staten Island	94,413	90,510	92,108	90,852	89,928	91,340	92,438	88,392	89,461
Totals	1,098,472	1,128,678	1,152,595	1,153,248	1,142,591	1,130,002	1,146,251	1,118,256	1,125,113

# New York City Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### **Leaving New York City**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Bronx - Westchester	137,740	182,036	207,348	239,169	247,480	253,808	262,734	271,300	269,448	277,872	286,819	292,558
Queens - Nassau	274,190	335,762	339,667	426,533	444,272	446,843	444,001	450,229	454,964	462,031	473,185	467,286
N.J Manhattan	N/A	200,671	217,765	244,830	238,590	237,959	242,569	247,087	253,924	264,787	285,850	283,002
N.J Staten Island *	N/A	40,517	53,336	69,218	65,174	66,609	66,484	67,862	70,129	73,577	80,337	76,963
Totals	N/A	758,986	818,116	979,750	995,516	1,005,219	1,015,788	1,036,478	1,048,465	1,078,267	1,126,191	1,119,809

#### **Leaving New York City**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bronx - Westchester	298,359	305,478	304,411	307,208	310,325	310,424	310,024	294,146	296,486
Queens - Nassau	473,364	475,193	483,362	485,345	485,740	471,633	482,622	474,068	482,075
N.J Manhattan	236,555	277,944	287,332	274,346	271,428	276,136	255,562	260,294	255,552
N.J Staten Island	82,838	88,630	82,474	83,416	81,725	84,574	77,790	77,384	76,043
Totals	1,091,116	1,147,245	1,157,579	1,150,315	1,149,218	1,142,767	1,125,998	1,105,892	1,110,156

<sup>\*</sup> Actual 24 hour westbound volumes from Staten Island to New Jersey not available for 1973, 1982, and 1986; estimated to be the same as eastbound volumes to Staten Island obtained from toll records.

# New York City Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### **Both Directions**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Bronx - Westchester	269,650	361,714	413,750	483,252	506,191	515,853	531,941	547,972	554,683	565,746	584,015	591,022
Queens - Nassau	546,550	670,702	713,146	843,538	892,318	897,175	892,743	896,144	907,131	919,403	947,043	940,147
N.J Manhattan	265,603	397,203	433,744	485,751	473,069	473,799	482,098	493,194	504,788	522,512	549,352	548,465
N.J Staten Island *	27,398	81,034	106,672	138,436	140,775	143,875	143,657	146,565	151,578	156,786	166,890	164,668
Totals	1,109,201	1,510,653	1,667,312	1,950,977	2,012,353	2,030,702	2,050,439	2,083,875	2,118,180	2,164,447	2,247,300	2,244,302

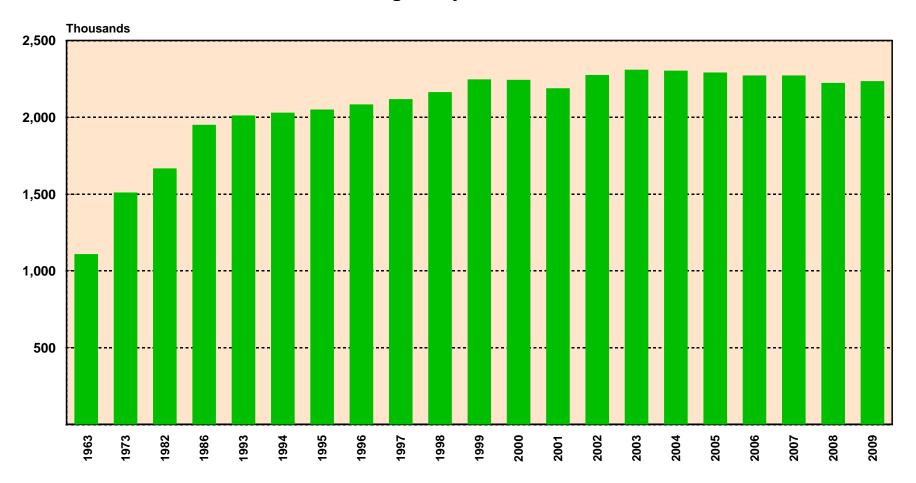
#### **Both Directions**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bronx - Westchester	606,666	619,938	619,449	627,294	633,350	624,558	635,838	598,598	609,304
Queens - Nassau	946,727	944,006	968,694	965,605	959,089	934,549	952,209	951,505	955,601
N.J Manhattan	458,944	532,839	547,449	536,396	527,717	537,748	513,974	508,269	504,860
N.J Staten Island	177,251	179,140	174,582	174,268	171,653	175,914	170,228	165,776	165,504
Totals	2,189,588	2,275,923	2,310,174	2,303,563	2,291,809	2,272,769	2,272,249	2,224,148	2,235,269

<sup>\*</sup> Actual 24 hour westbound volumes from Staten Island to New Jersey not available for 1973, 1982, and 1986; estimated to be the same as eastbound volumes to Staten Island obtained from toll records.

# **New York City Border Screenline**

# **Historical Comparisons Average Daily Traffic Volumes**



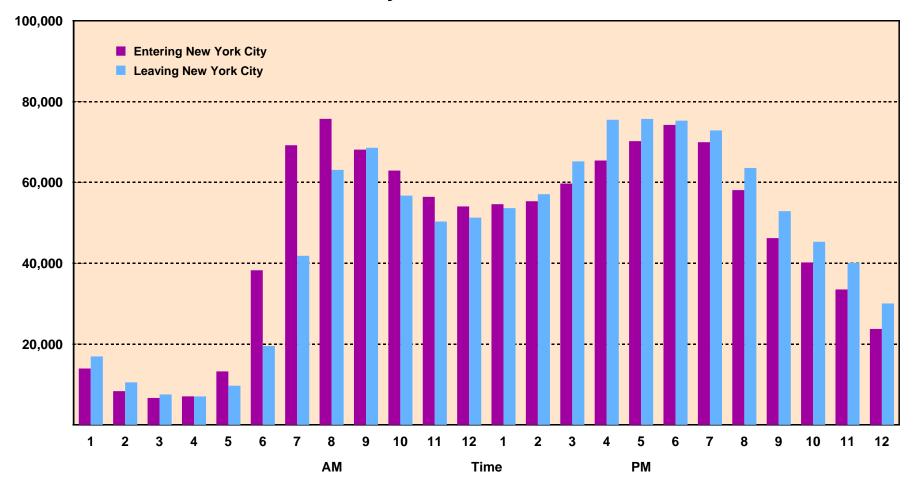
Includes Bronx-Westchester, Queens-Nassau, and New York-New Jersey Screenlines

## **2009 Screenline Volumes New York City**

						New York-I	Vew Jerse	V		
	Bronx-W	estchester	Queens	s-Nassau	Man	hattan	Staten	Island	NYC	Totals
	To Bronx	To W'chstr	To Qns.	To Nas.	To Manh.	To N.J.	To S.I.	To N.J.		From N.Y.C.
Mid-1am	3,818	4,567	5,194	6,743	3,648	4,835	1,275	785	13,935	16,930
1-2am	2,370	2,582	2,911	3,882	2,262	3,541	790	509	8,333	10,514
2-3am	2,006	1,918	2,184	2,775	1,814	2,434	654	404	6,658	7,531
3-4am	1,816	1,860	2,497	2,470	2,068	2,262	676	424	7,057	7,016
4-5am	3,312	2,483	5,089	3,568	3,564	2,989	1,251	640	13,216	9,680
5-6am	8,443	5,158	16,127	8,132	10,607	4,553	3,077	1,669	38,254	19,512
6-7am	18,411	11,508	27,048	18,695	18,858	8,139	4,874	3,492	69,191	41,834
7-8am	23,853	17,333	29,429	28,105	17,462	11,722	4,985	5,947	75,729	63,107
8-9am	20,610	18,570	26,695	31,289	16,117	12,565	4,695	6,138	68,117	68,562
9-10am	16,938	14,177	25,681	27,010	15,730	10,952	4,570	4,591	62,919	56,730
10-11am	14,864	12,782	23,778	23,194	13,763	10,109	4,031	4,237	56,436	50,322
11-Noon	14,661	13,579	23,230	23,209	12,199	10,633	3,962	3,858	54,052	51,279
Noon-1	15,221	14,257	23,945	24,685	11,352	11,009	4,095	3,691	54,613	53,642
1-2pm	15,202	14,819	24,262	26,516	11,384	12,006	4,501	3,742	55,349	57,083
2-3pm	16,738	16,873	26,055	29,967	11,975	14,027	4,951	4,339	59,719	65,206
3-4pm	18,480	20,819	28,230	32,757	13,135	16,449	5,578	5,471	65,423	75,496
4-5pm	19,970	20,507	30,590	32,789	13,503	17,262	6,157	5,157	70,220	75,715
5-6pm	21,420	20,780	32,376	32,421	13,473	16,632	6,950	5,444	74,219	75,277
6-7pm	19,959	19,984	30,134	31,141	13,534	17,354	6,319	4,374	69,946	72,853
7-8pm	16,090	17,374	25,072	27,451	12,023	15,393	4,914	3,361	58,099	63,579
8-9pm	12,455	14,042	20,527	21,685	9,446	14,449	3,774	2,718	46,202	52,894
9-10pm	10,693	12,082	18,165	17,085	8,256	13,971	3,084	2,147	40,198	45,285
10-11pm	8,961	10,836	14,614	15,123	7,435	12,448	2,482	1,674	33,492	40,081
11-Mid	6,527	7,596	9,693	11,383	5,700	9,818	1,816	1,231	23,736	30,028
24 hr Total	312,818	296,486	473,526	482,075	249,308	255,552	89,461	76,043	1,125,113	1,110,156
0.40	70.045	04.500	400.050	405.000	00.407	40.070	10.101	00.400	075.056	000 000
6-10am	79,812	61,588	108,853	105,099	68,167	43,378	19,124	20,168	275,956	230,233
10am-1pm	44,746	40,618	70,953	71,088	37,314	31,751	12,088	11,786	165,101	155,243
1-3pm	31,940	31,692	50,317	56,483	23,359	26,033	9,452	8,081	115,068	122,289
3-7pm	79,829	82,090	121,330	129,108	53,645	67,697	25,004	20,446	279,808	299,341
6am-7pm	236,327	215,988	351,453	361,778	182,485	168,859	65,668	60,481	835,933	807,106

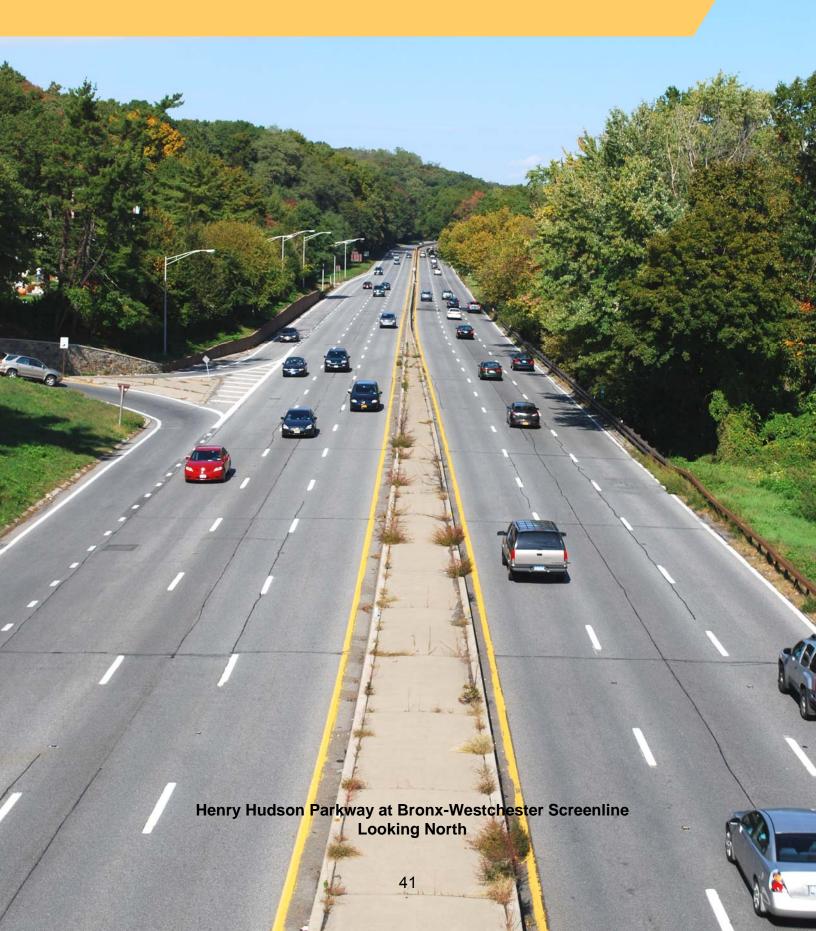
# **New York City Border Screenlines**

#### **Total Hourly Vehicle Volumes - 2009**



Includes Bronx-Westchester, Queens-Nassau, and New York-New Jersey Screenlines

# **Bronx-Westchester Screenline**



#### **BRONX - WESTCHESTER SCREENLINE**

In 1963, the first year that Bronx-Westchester screenline data were analyzed, average daily two-way volume on the ten roadways studied was 269,700 (volumes on Van Cortlandt Park East were not collected prior to 1986). The Major Deegan Expressway and the New England Thruway were the most-traveled facilities, serving 68,300 and 56,100 vehicles per day, respectively.

By 1973, daily volume had risen 34.1% to 361,700, some 92,000 more than in 1963. The Major Deegan Expressway remained the highest volume facility, carrying 90,900 daily vehicles, 33.2% more than in 1963, followed by 82,600 on the New England Thruway, 47.4% above the 1963 count. Daily traffic on the Hutchinson River Parkway jumped 80.1% to 29,100 from 16,200. Traffic on Boston Road doubled, to 22,800 daily vehicles from 11,000.

Between 1973 and 1982, growth moderated, with average daily traffic rising 14.4% to 413,800 daily vehicles. The largest increase occurred on the Hutchinson River Parkway, where daily traffic rose 65.9% to 48,300 from 29,100.

Growth accelerated between 1982 and 1986, boosting Bronx-Westchester traffic to 474,000 daily vehicles, an increase of 14.6% over the four-year period (excluding 9,200 on Van Cortlandt Park East where traffic was not counted in 1982). Large increases in daily volumes were recorded on the Henry Hudson Parkway (up 27.5% to 53,300 from 41,800), the Major Deegan Expressway (up 27.0% to 124,900 from 98,300), and the Bronx River Parkway (up 20.3% to 79,200 from 65,800).

From 1986 to 1999, Bronx-Westchester screenline traffic volume increased 20.9%, to 584,000 from 483,300 (including Van Cortlandt Park East, where traffic was counted for the first time in 1986). The largest increases occurred on the Hutchinson River Parkway (up 55.9%, to 84,600 daily vehicles from 54,300), on the Henry Hudson Parkway (up 63.9%, to 87,300 from 53,300), and on the New England Thruway (up 37.6%, to 127,800 from 92,900). Daily volume on Boston Road increased 19.8%, to 24,600 in 1999 from 20,600 in 1986. The only significant decline was on the Major Deegan Expressway, where daily volume decreased 9.2%, to 113,300 in 1999 from 124,900 in 1986.

During the 46 years from 1963 to 2009, total daily traffic on the ten facilities monitored throughout the period more than doubled, to 598,700 from 269,700.

Most of the growth in Bronx-Westchester traffic since 1963 has occurred on the five limited access highways crossing the screenline. Of the 329,000 additional daily vehicles on the ten continuously-monitored facilities, 316,100 (96% of the total increase) are on the limited access highways. The fastest growth occurred on the Hutchinson River Parkway, where daily volume soared 468%, to 91,700 daily vehicles from 16,200. Henry Hudson Parkway volume more than tripled, to 96,000 from 29,000. New England Thruway volume climbed 133%, to 130,500 from 56,100. On the Bronx River Parkway, volume doubled (to 89,600 from 44,100), while volume on the Major Deegan Expressway and its service roads was up 79% (to 121,900 from 68,300).

Boston Road exhibited the largest change of any arterial facility since 1963, with daily volume rising 98%, to 21,700 from 11,000. Volume on White Plains Road increased 34% to 12,400 daily vehicles from 9,200.

# **Bronx - Westchester Screenline**

**2009 Daily Volumes Shown** 



# Bronx-Westchester Screenline Historical Comparisons Average Daily Traffic Volumes

#### **To Bronx**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Boston Rd	5,080	11,026	9,737	10,514	12,140	11,609	11,068	11,429	12,868	12,443	13,258	11,514
Broadway	6,570	7,169	4,465	7,679	8,017	8,074	8,114	8,113	8,020	8,331	8,096	8,292
Bronx River Pky	23,060	28,100	34,908	40,561	39,855	40,684	41,902	43,106	42,330	41,526	44,719	45,296
Henry Hudson Pky	16,170	18,300	19,728	29,720	34,445	36,721	39,857	41,537	44,136	40,811	46,359	47,922
Hutchinson River Pky	7,110	13,690	23,515	26,737	32,980	34,226	35,461	40,124	40,584	40,878	41,242	41,359
Major Deegan Exp *	28,780	45,520	46,396	59,902	59,934	55,397	54,819	52,995	54,548	55,106	54,438	53,403
New England Thruway	29,460	40,770	51,683	47,288	50,172	53,462	55,084	56,690	59,817	65,314	65,302	67,655
Riverdale Ave	5,130	5,523	4,789	5,878	6,044	5,615	5,794	5,961	6,191	5,994	5,904	5,539
Van Cortlandt Pk E	N/A	N/A	N/A	4,806	4,721	4,554	4,770	4,569	4,686	4,974	5,623	5,015
Webster Ave	5,950	3,650	5,119	5,447	6,393	5,943	6,300	6,289	6,343	6,318	6,093	6,378
White Plains Rd	4,600	5,930	6,062	5,551	4,010	5,760	6,038	5,859	5,712	6,179	6,162	6,091
Totals	131,910	179,678	206,402	244,083	258,711	262,045	269,207	276,672	285,235	287,874	297,196	298,464

#### **To Bronx**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Boston Rd	13,262	12,997	13,839	13,016	12,370	12,537	12,418	12,210	11,578
Broadway	8,143	7,989	8,117	8,125	8,196	8,327	7,971	7,641	7,560
Bronx River Pky	46,681	49,382	47,061	47,666	48,587	47,918	47,563	46,292	48,112
Henry Hudson Pky	51,091	52,378	51,151	51,983	54,310	52,413	55,925	50,068	50,862
Hutchinson River Pky	44,624	46,446	44,690	48,534	46,537	42,783	47,698	45,313	45,184
Major Deegan Exp *	54,052	56,811	59,430	58,735	58,734	59,856	61,525	57,220	59,121
New England Thruway	66,091	64,042	66,454	66,869	68,815	65,776	68,247	62,231	67,328
Riverdale Ave	5,816	5,643	5,490	6,098	6,167	5,965	6,160	5,550	4,835
Van Cortlandt Pk E	5,399	5,816	5,874	6,193	5,952	6,012	5,388	5,636	5,842
Webster Ave	6,605	6,736	6,804	6,885	7,003	6,634	6,412	6,214	6,349
White Plains Rd	6,543	6,220	6,128	5,982	6,354	5,913	6,507	6,077	6,047
Totals	308,307	314,460	315,038	320,086	323,025	314,134	325,814	304,452	312,818

<sup>\*</sup> Incudes service roads

# Bronx-Westchester Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### **To Westchester**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Boston Rd	5,900	11,787	13,073	10,057	10,424	10,366	10,299	12,030	12,227	11,913	11,386	11,627
Broadway	9,130	8,562	7,845	7,905	8,578	8,739	8,122	8,409	8,227	8,182	8,297	8,045
Bronx River Pky	21,060	26,111	30,935	38,633	35,678	36,559	37,672	38,773	37,772	38,693	40,645	41,174
Henry Hudson Pky	12,840	17,090	22,048	23,543	28,644	30,548	37,396	37,332	38,360	37,743	40,962	42,520
Hutchinson River Pky	9,040	15,400	24,748	27,550	33,450	35,807	38,148	42,564	42,444	41,910	43,371	44,356
Major Deegan Exp *	39,500	45,400	51,892	64,970	65,325	63,181	59,176	57,953	54,584	59,612	58,887	60,781
New England Thruway	26,610	41,850	46,771	45,574	44,789	47,810	50,441	53,059	55,179	58,906	62,468	63,289
Riverdale Ave	4,850	5,198	5,032	5,893	5,877	5,636	5,751	5,851	5,731	5,656	5,014	5,235
Van Cortlandt Pk E	N/A	N/A	N/A	4,433	4,261	4,234	4,321	4,430	4,543	4,497	5,010	4,885
Webster Ave	4,200	4,478	2,719	4,363	4,088	4,281	4,112	4,154	3,977	4,272	4,181	3,866
White Plains Rd	4,610	6,160	2,285	6,248	6,366	6,647	7,296	6,745	6,404	6,488	6,598	6,780
Totals	137,740	182,036	207,348	239,169	247,480	253,808	262,734	271,300	269,448	277,872	286,819	292,558

#### **To Westchester**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Boston Rd	12,825	12,296	13,198	11,596	12,099	11,866	11,932	10,897	10,124
Broadway	8,152	8,005	8,353	7,778	8,256	7,611	7,848	7,745	7,646
Bronx River Pky	42,812	45,596	43,908	46,473	45,883	44,205	44,441	41,385	41,516
Henry Hudson Pky	44,236	45,624	47,583	46,067	46,797	46,931	48,400	43,637	45,120
Hutchinson River Pky	44,027	47,490	44,858	47,731	45,718	45,662	42,052	45,660	46,478
Major Deegan Exp *	62,772	62,022	64,285	63,451	62,823	64,320	64,498	62,438	62,827
New England Thruway	61,554	62,469	61,103	63,168	67,393	69,383	69,530	62,241	63,167
Riverdale Ave	6,143	5,187	5,464	5,261	5,636	5,505	5,581	5,355	4,703
Van Cortlandt Pk E	4,961	4,801	4,625	4,577	4,779	4,663	4,537	4,738	4,810
Webster Ave	4,236	4,811	4,630	4,523	4,321	3,901	4,301	3,649	3,764
White Plains Rd	6,641	7,177	6,404	6,583	6,620	6,377	6,904	6,401	6,331
Totals	298,359	305,478	304,411	307,208	310,325	310,424	310,024	294,146	296,486

<sup>\*</sup> Incudes service roads

# Bronx-Westchester Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### **Both Directions**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Boston Rd	10,980	22,813	22,810	20,571	22,564	21,975	21,367	23,459	25,095	24,356	24,644	23,141
Broadway	15,700	15,731	12,310	15,584	16,595	16,813	16,236	16,522	16,247	16,513	16,393	16,337
Bronx River Pky	44,120	54,211	65,843	79,194	75,533	77,243	79,574	81,879	80,102	80,219	85,364	86,470
Henry Hudson Pky	29,010	35,390	41,776	53,263	63,089	67,269	77,253	78,869	82,496	78,554	87,321	90,442
Hutchinson River Pky	16,150	29,090	48,263	54,287	66,430	70,033	73,609	82,688	83,028	82,788	84,613	85,715
Major Deegan Exp *	68,280	90,920	98,288	124,872	125,259	118,578	113,995	110,948	109,132	114,718	113,325	114,184
New England Thruway	56,070	82,620	98,454	92,862	94,961	101,272	105,525	109,749	114,996	124,220	127,770	130,944
Riverdale Ave	9,980	10,721	9,821	11,771	11,921	11,251	11,545	11,812	11,922	11,650	10,918	10,774
Van Cortlandt Pk E	N/A	N/A	N/A	9,239	8,982	8,788	9,091	8,999	9,229	9,471	10,633	9,900
Webster Ave	10,150	8,128	7,838	9,810	10,481	10,224	10,412	10,443	10,320	10,590	10,274	10,244
White Plains Rd	9,210	12,090	8,347	11,799	10,376	12,407	13,334	12,604	12,116	12,667	12,760	12,871
Totals	269,650	361,714	413,750	483,252	506,191	515,853	531,941	547,972	554,683	565,746	584,015	591,022

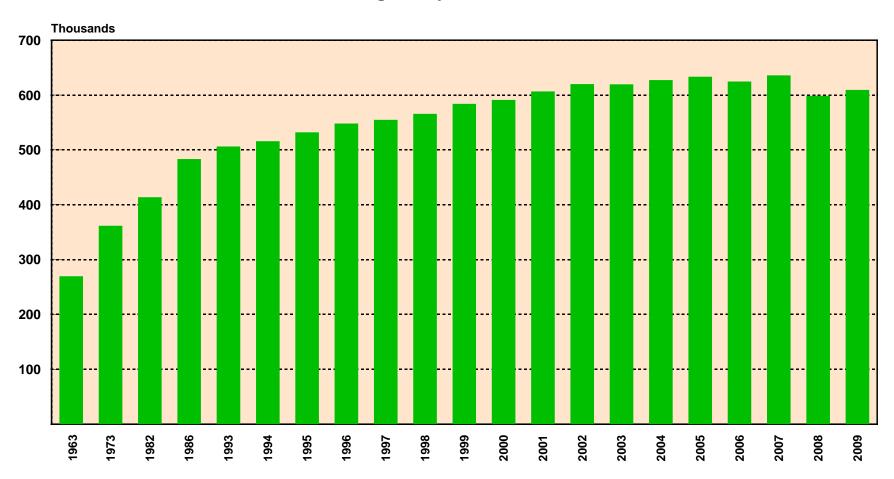
#### **Both Directions**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Boston Rd	26,087	25,293	27,037	24,612	24,469	24,403	24,350	23,107	21,702
Broadway	16,295	15,994	16,470	15,903	16,452	15,938	15,819	15,386	15,206
Bronx River Pky	89,493	94,978	90,969	94,139	94,470	92,123	92,004	87,677	89,628
Henry Hudson Pky	95,327	98,002	98,734	98,050	101,107	99,344	104,325	93,705	95,982
Hutchinson River Pky	88,651	93,936	89,548	96,265	92,255	88,445	89,750	90,973	91,662
Major Deegan Exp *	116,824	118,833	123,715	122,186	121,557	124,176	126,023	119,658	121,948
New England Thruway	127,645	126,511	127,557	130,037	136,208	135,159	137,777	124,472	130,495
Riverdale Ave	11,959	10,830	10,954	11,359	11,803	11,470	11,741	10,905	9,538
Van Cortlandt Pk E	10,360	10,617	10,499	10,770	10,731	10,675	9,925	10,374	10,652
Webster Ave	10,841	11,547	11,434	11,408	11,324	10,535	10,713	9,863	10,113
White Plains Rd	13,184	13,397	12,532	12,565	12,974	12,290	13,411	12,478	12,378
Totals	606,666	619,938	619,449	627,294	633,350	624,558	635,838	598,598	609,304

<sup>\*</sup> Incudes service roads

## **Bronx-Westchester Screenline**

# **Historical Comparisons Average Daily Traffic Volumes**



#### 2009 Screenline Volumes Bronx - Westchester

	Bos	ton Rd	Bro	adway		x River rkway	-	Hudson kway		son River kway	•	Deegan Sessway	•	Deegan vice Rd)
	S/B*	N/B	S/B*	N/B	S/B*	N/B	S/B*	N/B	S/B*	N/B	S/B*	N/B	S/B*	N/B
Mid-1am	100	82	105	166	496	462	374	685	383	569	755	1,134	47	71
1-2am	56	51	76	117	236	246	195	346	184	291	519	585	31	48
2-3am	50	45	53	71	204	186	127	209	132	170	531	442	21	37
3-4am	59	58	53	49	180	171	128	144	142	137	327	412	19	41
4-5am	88	62	76	63	358	247	276	153	407	271	688	557	33	67
5-6am	204	134	144	97	1,144	588	1,030	374	1,124	926	2,032	1,045	125	175
6-7am	418	329	324	194	3,346	1,687	3,141	1,216	2,581	2,446	4,049	2,117	249	272
7-8am	767	557	635	326	4,614	2,735	4,406	2,248	3,537	3,218	4,285	2,857	318	327
8-9am	756	667	598	384	3,351	2,951	3,949	2,660	3,342	3,076	3,601	3,029	254	295
9-10am	613	629	375	359	2,706	1,786	3,322	1,916	2,635	2,585	2,856	2,494	209	284
10-11am	582	533	344	349	2,107	1,511	2,701	1,713	2,132	2,257	2,493	2,263	206	321
11-Noon	665	591	343	345	1,939	1,620	2,548	1,854	2,063	2,176	2,436	2,657	218	337
Noon-1	734	671	371	375	1,981	1,715	2,469	1,988	2,232	2,337	2,525	2,831	215	311
1-2pm	693	647	365	388	2,037	1,887	2,275	2,162	2,340	2,493	2,540	2,817	222	355
2-3pm	704	697	449	417	2,359	2,403	2,504	2,533	2,611	2,974	2,751	3,053	221	479
3-4pm	816	800	463	471	2,867	3,675	2,868	3,289	2,930	3,010	2,910	4,108	229	530
4-5pm	815	723	482	522	3,139	3,382	3,357	3,498	3,127	2,667	3,145	3,985	242	522
5-6pm	816	678	493	538	3,444	3,542	3,737	3,572	3,003	2,548	3,462	3,995	235	495
6-7pm	707	594	437	562	3,076	3,150	3,565	3,658	2,780	2,752	3,227	3,751	239	413
7-8pm	599	486	381	491	2,411	2,337	2,563	3,100	2,346	2,659	2,635	3,334	190	356
8-9pm	487	406	323	443	1,931	1,726	1,763	2,351	1,758	2,218	2,209	2,717	161	279
9-10pm	364	298	264	368	1,738	1,380	1,497	1,987	1,524	1,919	2,104	2,321	138	251
10-11pm	257	228	231	311	1,391	1,273	1,250	1,965	1,130	1,647	1,754	2,276	118	196
11-Mid	228	158	175	240	1,057	856	817	1,499	741	1,132	1,267	1,439	80	146
24 hr Total	11,578	10,124	7,560	7,646	48,112	41,516	50,862	45,120	45,184	46,478	55,101	56,219	4,020	6,608
6-10am	2,554	2,182	1,932	1,263	14,017	9,159	14,818	8,040	12,095	11,325	14,791	10,497	1,030	1,178
10am-1pm	1,981	1,795	1,058	1,069	6,027	4,846	7,718	5,555	6,427	6,770	7,454	7,751	639	969
1-3pm	1,397	1,344	814	805	4,396	4,290	4,779	4,695	4,951	5,467	5,291	5,870	443	834
3-7pm	3,154	2,795	1,875	2,093	12,526	13,749	13,527	14,017	11,840	10,977	12,744	15,839	945	1,960
6am-7pm	9,086	8,116	5,679	5,230	36,966	32,044	40,842	32,307	35,313	34,539	40,280	39,957	3,057	4,941

<sup>\*</sup> To Bronx

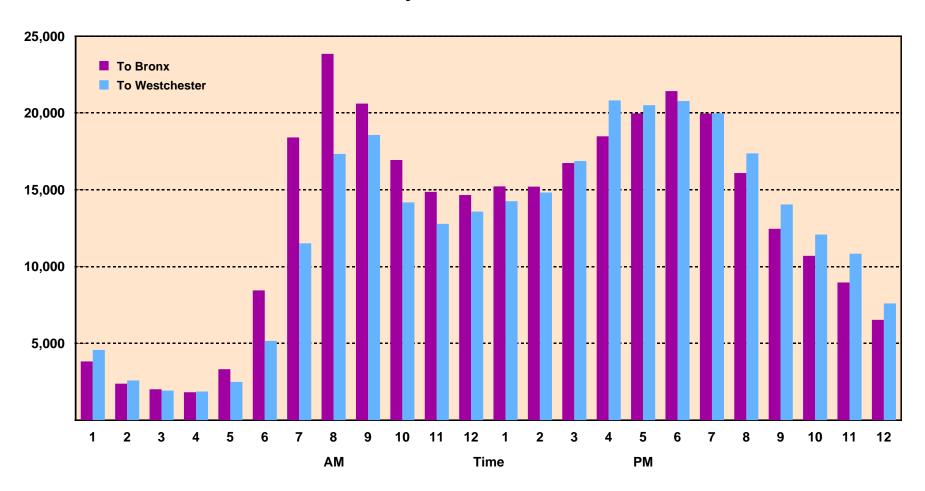
## 2009 Screenline Volumes Bronx - Westchester (cont'd)

		England	Diver	dala Assa		ortlandt	14/04	-4 <b>A</b>	14//-:4	District Del		4010	
	Thruway		Riverdale Ave		Park East		Webster Ave		White Plains Rd			tals	
	S/B*	N/B	S/B*	N/B	S/B*	N/B	S/B*	N/B	S/B*	N/B	To Bronx	To Westchester	
Mid-1am	1,269	1,087	33	57	72	68	66	50	118	136	3,818	4,567	
1-2am	888	703	26	35	38	43	43	26	78	91	2,370	2,582	
2-3am	735	617	15	21	31	24	32	23	75	73	2,006	1,918	
3-4am	788	735	11	14	24	25	27	12	58	62	1,816	1,860	
4-5am	1,209	931	17	18	36	24	50	15	74	75	3,312	2,483	
5-6am	2,210	1,569	75	37	116	65	124	33	115	115	8,443	5,158	
6-7am	3,344	2,691	220	114	222	124	308	90	209	228	18,411	11,508	
7-8am	3,658	4,099	409	223	358	243	571	186	295	314	23,853	17,333	
8-9am	3,133	4,310	426	303	349	257	522	259	329	379	20,610	18,570	
9-10am	3,065	3,168	285	258	276	228	321	176	275	294	16,938	14,177	
10-11am	3,251	2,957	231	208	259	216	300	174	258	280	14,864	12,782	
11-Noon	3,339	3,058	242	218	267	224	303	182	298	317	14,661	13,579	
Noon-1	3,475	2,984	265	264	306	250	323	198	325	333	15,221	14,257	
1-2pm	3,531	2,989	243	269	315	266	327	213	314	333	15,202	14,819	
2-3pm	3,759	3,109	292	288	365	301	389	232	334	387	16,738	16,873	
3-4pm	3,875	3,535	335	347	388	337	407	294	392	423	18,480	20,819	
4-5pm	4,055	3,754	351	352	429	371	406	309	422	422	19,970	20,507	
5-6pm	4,602	3,877	340	358	470	422	415	338	403	417	21,420	20,780	
6-7pm	4,458	3,688	276	348	431	391	368	278	395	399	19,959	19,984	
7-8pm	3,764	3,500	232	289	322	298	303	206	344	318	16,090	17,374	
8-9pm	2,801	2,958	172	241	288	254	256	172	306	277	12,455	14,042	
9-10pm	2,262	2,827	133	187	218	163	201	136	250	245	10,693	12,082	
10-11pm	2,181	2,366	130	150	154	116	168	91	197	217	8,961	10,836	
11-Mid	1,676	1,655	76	104	108	100	119	71	183	196	6,527	7,596	
24 hr Total	67,328	63,167	4,835	4,703	5,842	4,810	6,349	3,764	6,047	6,331	312,818	296,486	
6-10am	13,200	14,268	1,340	898	1,205	852	1,722	711	1,108	1,215	79,812	61,588	
10am-1pm	10,065	8,999	738	690	832	690	926	554	881	930	44,746	40,618	
1-3pm	7,290	6,098	535	557	680	567	716	445	648	720	31,940	31,692	
3-7pm	16,990	14,854	1,302	1,405	1,718	1,521	1,596	1,219	1,612	1,661	79,829	82,090	
6am-7pm	47,545	44,219	3,915	3,550	4,435	3,630	4,960	2,929	4,249	4,526	236,327	215,988	

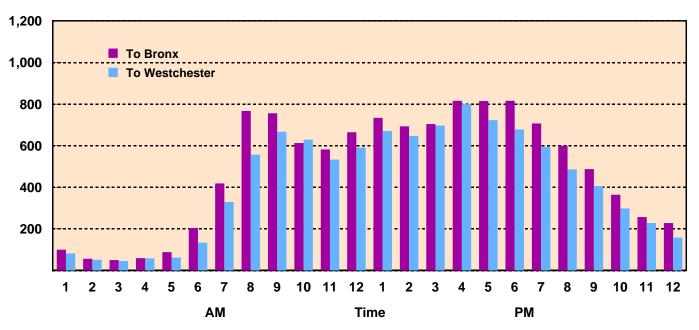
<sup>\*</sup> To Bronx

## **Bronx-Westchester Screenline**

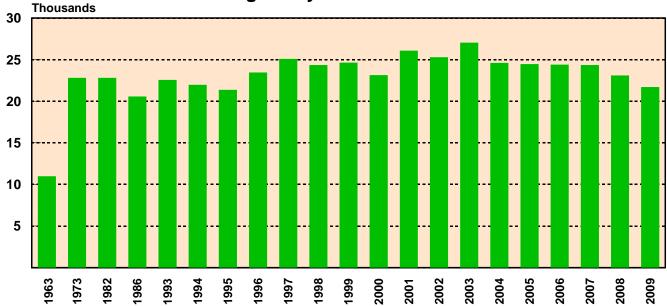
#### **Total Hourly Vehicle Volumes - 2009**



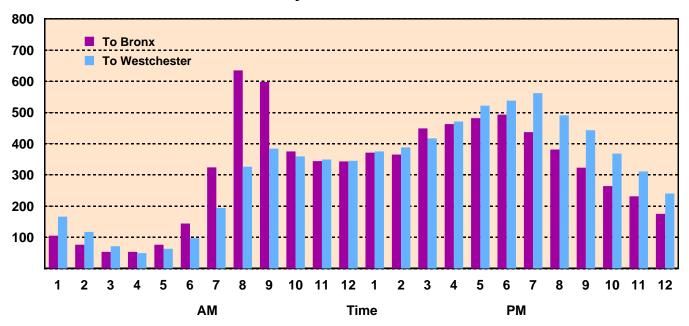
**Boston Road - 2009 Hourly Vehicular Volumes** 



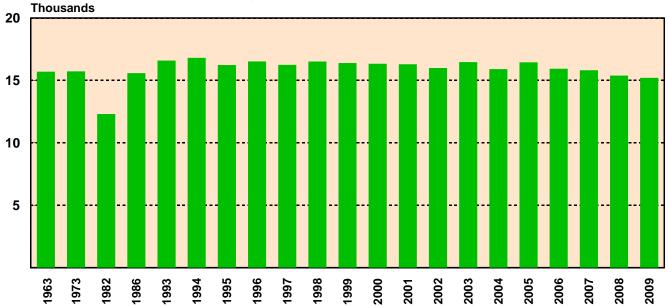
Boston Road Average Daily Traffic Volumes



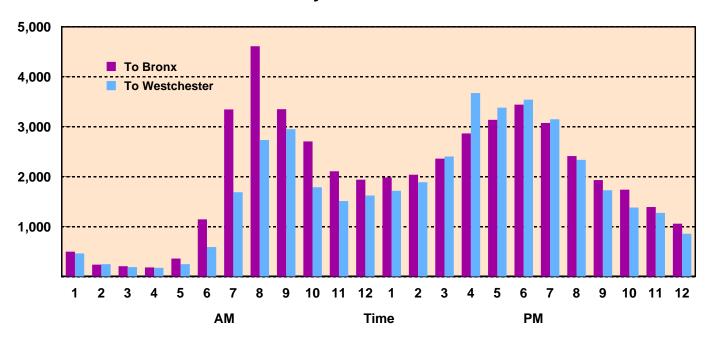
**Broadway - 2009**Hourly Vehicular Volumes



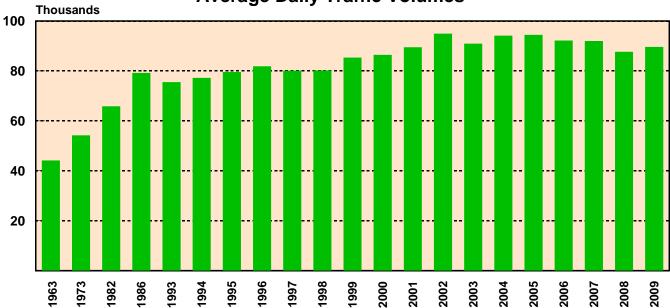
Broadway
Average Daily Traffic Volumes



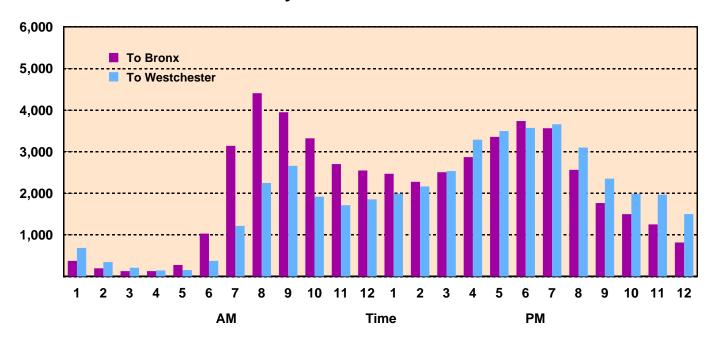
#### Bronx River Parkway - 2009 Hourly Vehicular Volumes



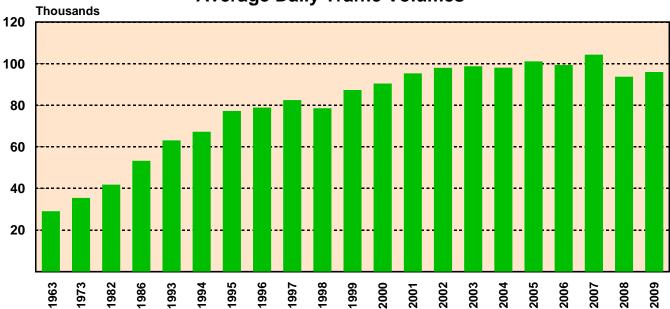
# Bronx River Parkway Average Daily Traffic Volumes



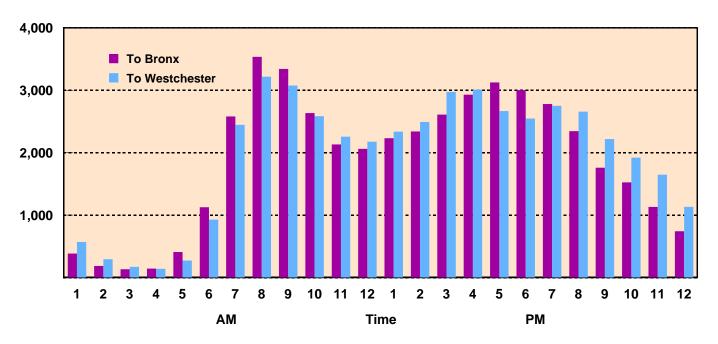
#### Henry Hudson Parkway - 2009 Hourly Vehicular Volumes



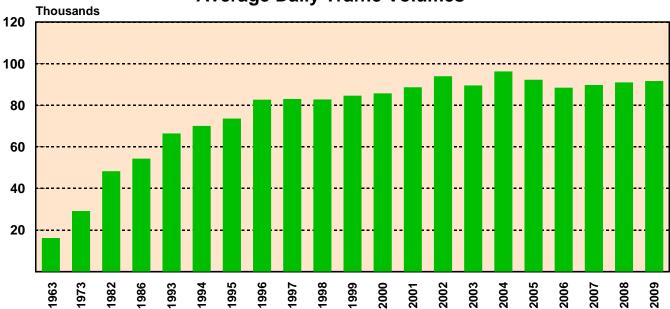
#### Henry Hudson Parkway Average Daily Traffic Volumes



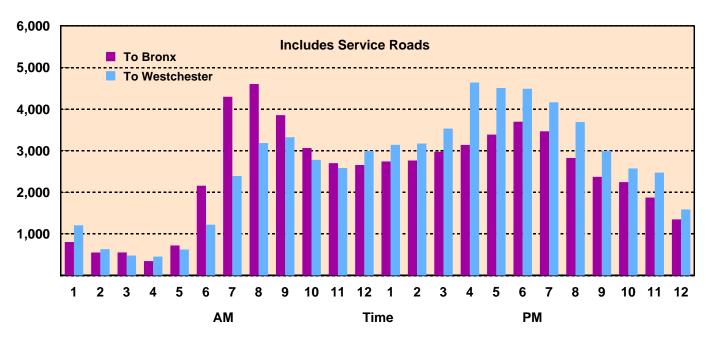
#### Hutchinson River Parkway - 2009 Hourly Vehicular Volumes



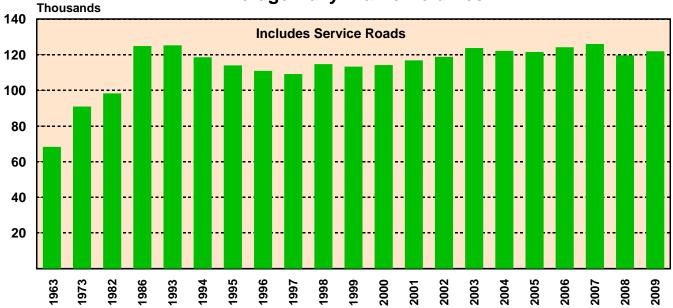
#### **Hutchinson River Parkway Average Daily Traffic Volumes**



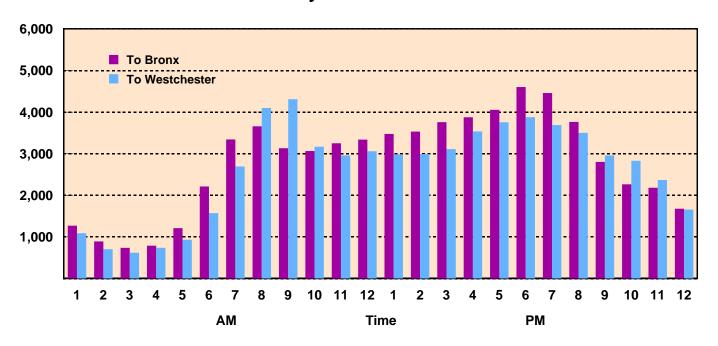
#### Major Deegan Expressway - 2009 Hourly Vehicular Volumes



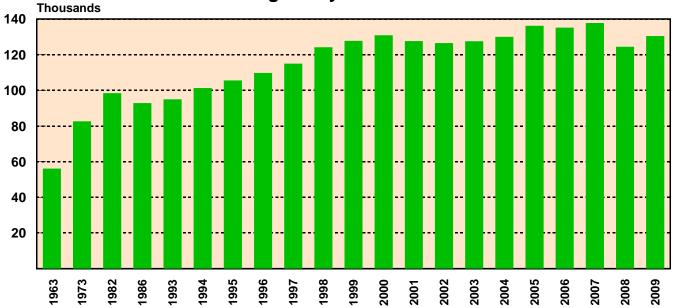
#### Major Deegan Expressway Average Daily Traffic Volumes



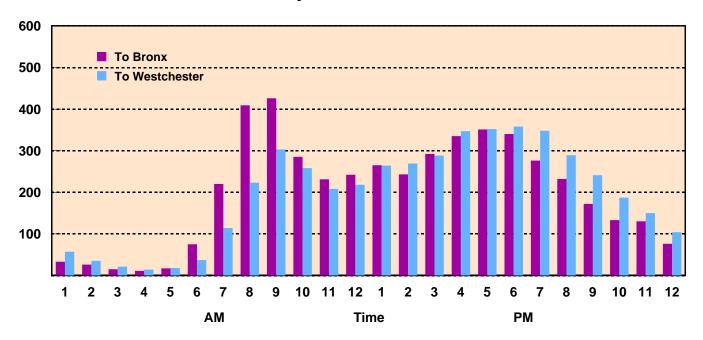
#### New England Thruway - 2009 Hourly Vehicular Volumes



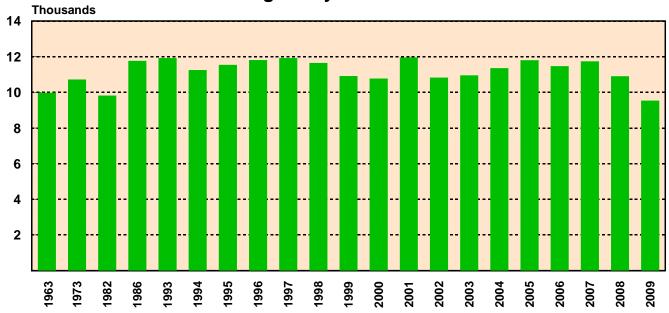
#### New England Thruway Average Daily Traffic Volumes



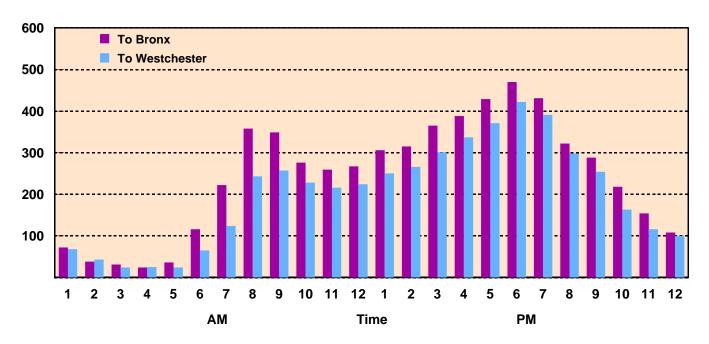
#### Riverdale Avenue - 2009 Hourly Vehicular Volumes



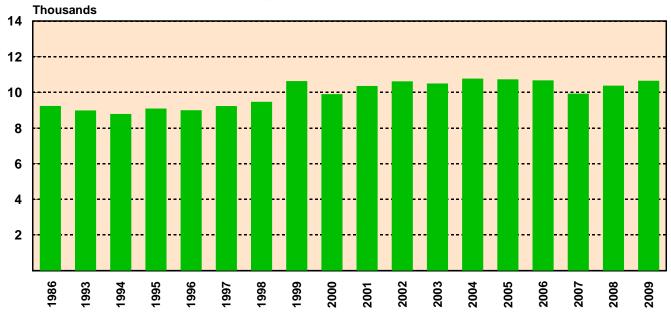
#### Riverdale Avenue Average Daily Traffic Volumes



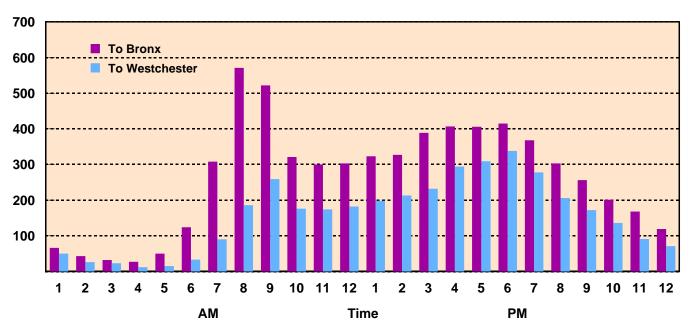
#### Van Cortlandt Park East - 2009 Hourly Vehicular Volumes



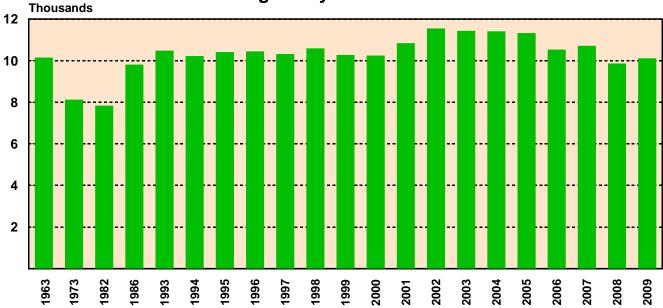
#### Van Cortlandt Park East Average Daily Traffic Volumes



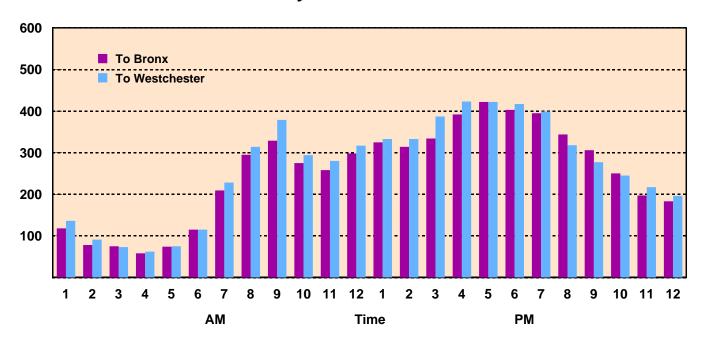
Webster Avenue - 2009 Hourly Vehicular Volumes



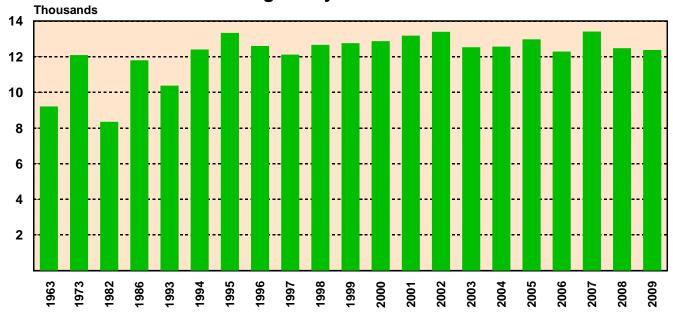
#### Webster Avenue Average Daily Traffic Volumes

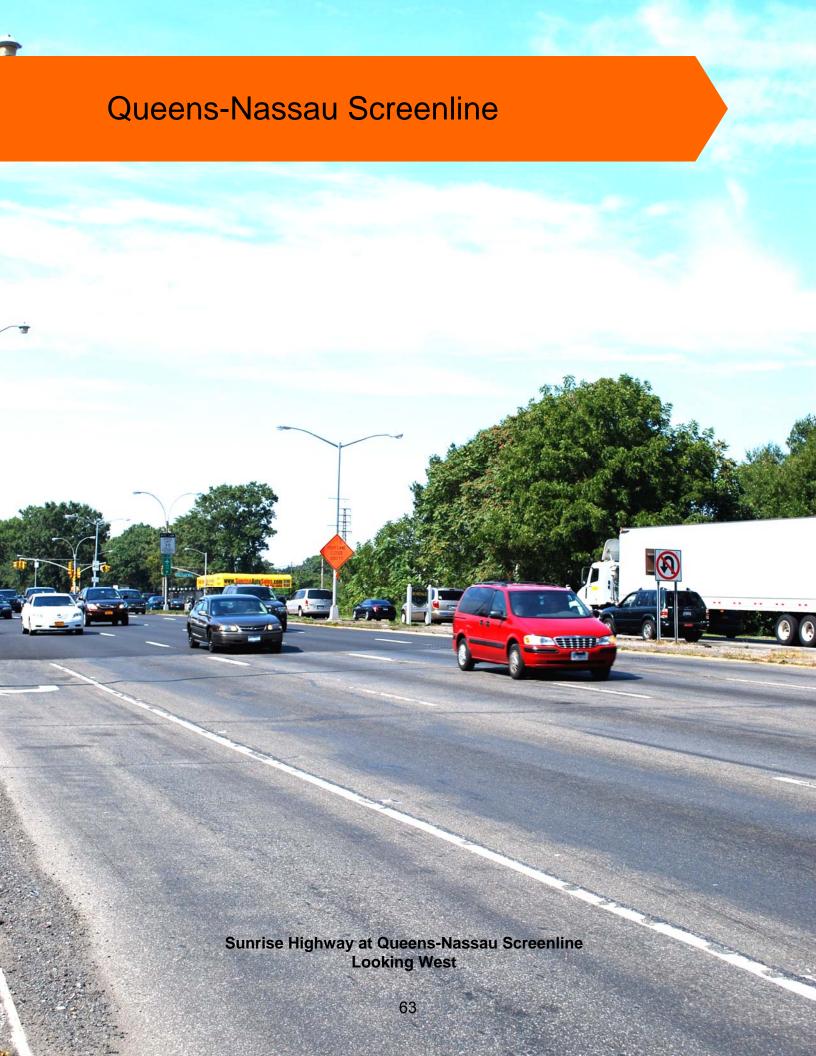


# White Plains Road - 2009 Hourly Vehicular Volumes



# White Plains Road Average Daily Traffic Volumes





#### **QUEENS - NASSAU SCREENLINE**

In 1963, the first year that Queens-Nassau screenline data were analyzed, average daily two-way total volume on the thirteen roadways studied was 546,600 (volumes on Central Avenue and Seagirt Boulevard were not collected prior to 1986). The highest volume facilities were the Long Island Expressway and its service roads (143,800 daily vehicles), Laurelton Parkway (85,400), Sunrise Highway (59,500), and the Grand Central Parkway and its service road (51,700).

By 1973, daily volume had increased 22.7% to 670,700, approximately 124,100 more than in 1963. The Long Island Expressway remained the highest volume facility, carrying 172,200 daily vehicles, 19.8% more than in 1963. Daily volume on the Grand Central Parkway facility doubled, to 104,800 from 51,700, making it the second busiest. Laurelton Parkway volume rose 15.6% to 98,800. Sunrise Highway remained the busiest principle arterial, carrying 62,700 daily vehicles, 5.4% more than in 1963.

Between 1973 and 1982, growth slowed, as volume increased just 6.3% to 713,100 daily vehicles. The largest numerical increase occurred on Laurelton Parkway, where daily traffic rose 23.2%, to 121,700 from 98,800. The largest percentage increase occurred on Northern Boulevard where daily traffic increased 26.4%, to 42,000 daily vehicles from 33,200.

Growth intensified between 1982 and 1986, raising daily volume to 816,600, an increase of 14.5% over the four-year period (excluding 14,500 on Central Avenue and 12,400 on Seagirt Boulevard where volumes were not counted in 1982). Large increases in daily volume were recorded on the Grand Central Parkway (up 30.8% to 144,000 from 110,000), Laurelton Parkway (up 22.0% to 148,400 from 121,700), the Long Island Expressway (up 12.8% to 189,000 from 167,600), and Rockaway Boulevard (up 22.0% to 56,700 from 46,500).

From 1986 to 1999, growth was moderate, as Queens-Nassau screenline volume increased 12.3% during that thirteen-year period, to 947,000 daily vehicles from 843,500. The largest volume increase occurred on the Grand Central Parkway and its service road (increase of 24,900 daily vehicles, or 17.3%, to 168,900 from 144,000). Daily volume on Rockaway Boulevard increased by 13,800 daily vehicles (+24.4%). The largest percentage increases occurred on Hillside Avenue (up 41.1%, to 32,300 daily vehicles from 22,900), and Hempstead Avenue (up 32.3%, to 49,900 from 37,700). The biggest decline in daily volume was on Central Avenue (decrease of 1,700 daily vehicles, or 11.8%, to 12,800 from 14,500).

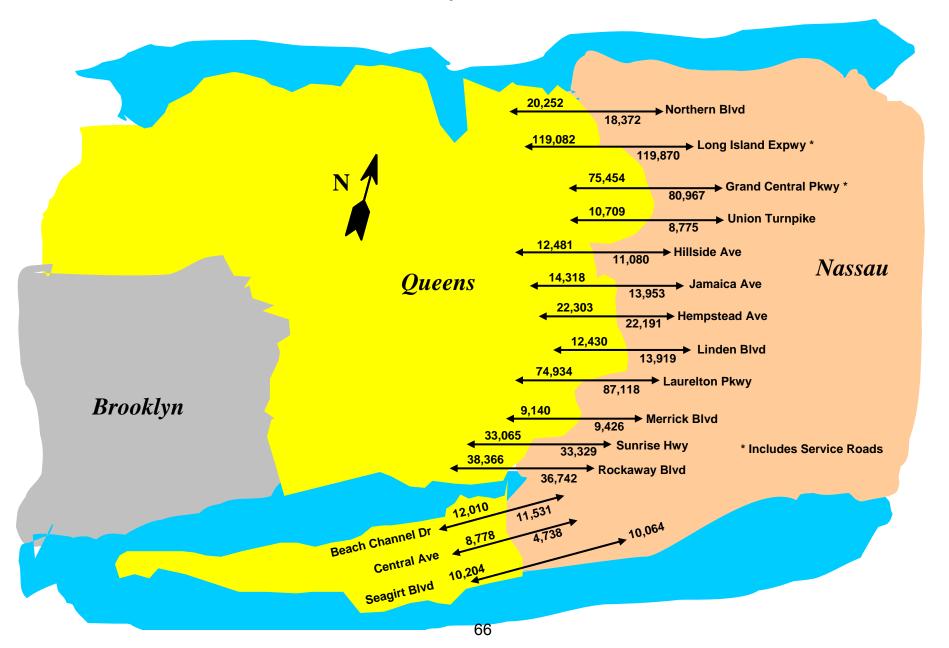
During the 46 years from 1963 to 2009, daily traffic on the thirteen Queens-Nassau facilities monitored throughout the period increased 68.7%, to 921,800 from 546,600.

The bulk of growth in Queens-Nassau traffic since 1963 has occurred on the three limited access facilities crossing the screenline. Of the 375,300 additional daily vehicles on the thirteen continuously-monitored facilities, 276,500 (73.7% of the total increase) are on the three limited access routes. The Grand Central Parkway alone absorbed over one-fourth the total screenline traffic increase, its daily volume more than tripling, to 156,400 in 2009 from 51,700 in 1963. On the Laurelton Parkway, volume nearly doubled (to 162,100 daily vehicles from 85,400). Daily traffic on the Long Island Expressway rose 66.2% (to 239,000 from 143,800).

Principle arterials undergoing the most significant volume changes since 1963 are Rockaway Boulevard, where volume more than doubled, to 75,100 daily vehicles from 36,500, Jamaica Avenue (up 84.8% to 28,300 from 15,300), Linden Boulevard (up 83.9% to 26,300 from 14,300), and Northern Boulevard (up 32.6%, to 38,600 from 29,100).

# Queens – Nassau Screenline

### 2009 Daily Volumes Shown



#### Queens-Nassau Screenline Historical Comparisons Average Daily Traffic Volumes

#### To Queens

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Beach Channel Dr	10,610	11,954	12,411	12,510	11,817	11,609	11,980	11,830	12,317	12,220	12,794	13,845
Central Ave	N/A	N/A	N/A	7,396	8,367	7,848	8,189	8,421	8,181	8,780	8,095	8,647
Grand Central Pky *	25,280	47,495	61,614	71,775	85,261	82,431	79,189	76,571	77,853	78,916	82,978	87,617
Hempstead Ave	18,720	19,167	22,230	19,671	21,008	21,512	21,103	21,294	21,568	21,561	27,530	24,487
Hillside Ave	12,230	11,728	9,799	11,485	12,333	13,149	12,635	12,967	13,087	13,836	16,828	14,070
Jamaica Ave	7,370	11,473	13,984	14,081	14,090	13,775	13,339	13,950	13,149	13,822	14,769	14,921
Laurelton Pky	42,980	48,873	67,940	72,147	64,216	69,082	68,967	68,838	75,601	77,315	76,246	76,654
Linden Blvd	6,840	10,470	11,863	12,767	18,190	19,846	19,517	12,870	12,431	12,961	13,717	12,782
Long Island Exp *	70,340	85,294	83,656	90,553	101,193	101,972	100,335	101,602	100,402	100,310	96,711	97,412
Merrick Blvd	7,880	8,140	10,631	9,708	8,803	9,633	9,694	9,478	9,255	9,517	9,563	9,434
Northern Blvd	14,450	17,659	20,288	20,232	21,275	21,375	21,011	22,350	21,962	21,149	22,897	22,912
Rockaway Blvd	18,470	22,448	21,300	26,676	28,200	30,587	31,508	31,914	31,392	33,930	35,957	36,447
Seagirt Blvd	N/A	N/A	N/A	6,161	8,025	8,412	8,687	8,426	8,767	8,410	7,656	8,765
Sunrise Hwy	28,730	31,403	28,592	30,256	32,839	26,643	30,314	32,806	33,980	32,638	35,872	36,606
Union Tpke	8,460	8,836	9,171	11,587	12,429	12,458	12,274	12,598	12,222	12,007	12,245	8,262
Totals	272,360	334,940	373,479	417,005	448,046	450,332	448,742	445,915	452,167	457,372	473,858	472,861

#### **To Queens**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Beach Channel Dr	13,128	13,403	13,844	12,542	11,997	12,347	15,377	12,685	12,010
Central Ave	8,014	9,231	9,319	8,681	8,909	9,308	8,321	9,051	8,778
Grand Central Pky *	91,225	89,054	94,792	92,464	92,993	80,941	77,918	78,423	75,454
Hempstead Ave	22,474	19,797	26,866	20,781	19,270	18,731	22,786	24,705	22,303
Hillside Ave	14,049	13,735	12,140	13,697	13,472	12,558	12,170	12,489	12,481
Jamaica Ave	14,504	15,324	15,044	15,601	15,903	14,954	14,524	14,433	14,318
Laurelton Pky	82,194	77,076	72,783	85,728	80,245	80,157	79,954	75,794	74,934
Linden Blvd	11,565	12,485	12,904	12,869	13,521	13,099	11,976	12,855	12,430
Long Island Exp *	90,205	97,818	99,694	91,797	92,491	97,600	101,793	115,433	119,082
Merrick Blvd	9,833	9,559	10,538	10,441	9,841	9,466	9,238	9,041	9,140
Northern Blvd	24,221	22,943	23,695	23,054	20,807	21,523	20,953	20,765	20,252
Rockaway Blvd	36,893	33,865	34,633	35,464	36,156	36,371	39,466	38,167	38,366
Seagirt Blvd	8,044	10,341	11,263	10,665	10,046	11,236	10,659	10,099	10,204
Sunrise Hwy	34,519	30,922	34,542	33,706	35,166	32,833	33,626	32,159	33,065
Union Tpke	12,495	13,260	13,275	12,770	12,532	11,792	10,826	11,338	10,709
Totals	473,363	468,813	485,332	480,260	473,349	462,916	469,587	477,437	473,526

<sup>\*</sup> Incudes service roads

#### Queens-Nassau Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### To Nassau

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Beach Channel Dr	9,050	11,472	14,759	13,165	11,107	11,198	11,923	12,037	12,642	12,022	11,929	11,740
Central Ave	N/A	N/A	N/A	7,124	5,424	4,959	5,022	5,452	4,905	5,215	4,711	5,119
Grand Central Pky *	26,440	57,341	48,424	72,191	89,073	80,438	79,481	82,086	79,934	84,576	85,888	85,579
Hempstead Ave	16,680	16,293	13,555	18,035	19,155	21,008	20,722	19,453	20,328	20,815	22,359	22,400
Hillside Ave	11,270	10,297	10,625	11,419	13,089	14,398	13,247	12,860	13,324	13,077	15,482	13,901
Jamaica Ave	7,930	11,326	13,345	13,377	13,293	12,744	12,971	13,170	13,229	13,391	13,495	13,821
Laurelton Pky	42,460	49,924	53,734	76,261	73,044	76,773	75,841	74,897	79,808	82,005	84,544	82,489
Linden Blvd	7,490	8,260	7,697	10,283	10,718	10,660	11,626	15,038	15,443	15,660	15,797	15,679
Long Island Exp *	73,410	86,858	83,902	98,443	96,937	97,860	98,271	99,342	101,200	100,938	99,919	93,967
Merrick Blvd	7,760	8,080	7,296	9,206	9,339	9,866	10,205	9,871	9,933	9,852	9,595	9,482
Northern Blvd	14,680	15,585	21,745	20,741	20,477	21,524	20,619	19,876	19,987	19,854	20,747	22,049
Rockaway Blvd	17,990	21,473	25,214	30,059	32,317	33,958	35,009	34,237	32,226	32,193	34,598	37,683
Seagirt Blvd	N/A	N/A	N/A	6,230	8,124	7,899	8,093	8,261	7,727	8,112	8,452	8,806
Sunrise Hwy	30,740	31,301	28,805	29,145	32,406	32,821	30,458	33,147	34,178	34,158	34,796	34,389
Union Tpke	8,290	7,552	10,566	10,854	9,769	10,737	10,513	10,502	10,100	10,163	10,873	10,182
Totals	274,190	335,762	339,667	426,533	444,272	446,843	444,001	450,229	454,964	462,031	473,185	467,286

#### To Nassau

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Beach Channel Dr	11,532	12,207	12,484	11,702	11,652	13,454	13,615	11,667	11,531
Central Ave	4,910	5,175	5,100	5,541	5,762	6,262	5,334	4,803	4,738
Grand Central Pky *	89,640	89,813	92,426	92,233	93,399	84,853	84,831	80,185	80,967
Hempstead Ave	22,176	23,621	24,466	22,881	24,757	22,234	23,292	21,910	22,191
Hillside Ave	13,526	13,593	12,864	12,676	13,055	10,565	12,158	12,411	11,080
Jamaica Ave	13,702	14,869	14,721	15,126	15,717	14,660	14,479	14,641	13,953
Laurelton Pky	89,251	85,216	86,229	89,675	88,909	88,702	93,700	83,373	87,118
Linden Blvd	15,136	15,327	16,528	15,619	16,123	15,199	13,996	11,912	13,919
Long Island Exp *	92,593	92,794	90,940	92,065	92,333	94,300	99,602	114,971	119,870
Merrick Blvd	9,568	9,920	10,052	10,565	9,694	9,567	9,421	10,467	9,426
Northern Blvd	21,584	21,243	21,970	21,748	21,067	19,837	18,072	18,718	18,372
Rockaway Blvd	35,134	36,098	37,929	38,468	37,188	37,396	38,293	37,293	36,742
Seagirt Blvd	7,895	10,051	11,634	10,379	9,805	11,321	11,783	9,808	10,064
Sunrise Hwy	34,099	31,920	33,123	34,421	35,842	33,986	35,272	32,835	33,329
Union Tpke	12,618	13,346	12,896	12,246	10,437	9,297	8,774	9,074	8,775
Totals	473,364	475,193	483,362	485,345	485,740	471,633	482,622	474,068	482,075

<sup>\*</sup> Incudes service roads

#### Queens-Nassau Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### **Both Directions**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Beach Channel Dr	19,660	23,426	27,170	25,675	22,924	22,807	23,903	23,867	24,959	24,242	24,723	25,585
Central Ave	N/A	N/A	N/A	14,520	13,791	12,807	13,211	13,873	13,086	13,995	12,806	13,766
Grand Central Pky *	51,720	104,836	110,038	143,966	174,334	162,869	158,670	158,657	157,787	163,492	168,866	173,196
Hempstead Ave	35,400	35,460	35,785	37,706	40,163	42,520	41,825	40,747	41,896	42,376	49,889	46,887
Hillside Ave	23,500	22,025	20,424	22,904	25,422	27,547	25,882	25,827	26,411	26,913	32,310	27,971
Jamaica Ave	15,300	22,799	27,329	27,458	27,383	26,519	26,310	27,120	26,378	27,213	28,264	28,742
Laurelton Pky	85,440	98,797	121,674	148,408	137,260	145,855	144,808	143,735	155,409	159,320	160,790	159,143
Linden Blvd	14,330	18,730	19,560	23,050	28,908	30,506	31,143	27,908	27,874	28,621	29,514	28,461
Long Island Exp *	143,750	172,152	167,558	188,996	198,130	199,832	198,606	200,944	201,602	201,248	196,630	191,379
Merrick Blvd	15,640	16,220	17,927	18,914	18,142	19,499	19,899	19,349	19,188	19,369	19,158	18,916
Northern Blvd	29,130	33,244	42,033	40,973	41,752	42,899	41,630	42,226	41,949	41,003	43,644	44,961
Rockaway Blvd	36,460	43,921	46,514	56,735	60,517	64,545	66,517	66,151	63,618	66,123	70,555	74,130
Seagirt Blvd	N/A	N/A	N/A	12,391	16,149	16,311	16,780	16,687	16,494	16,522	16,108	17,571
Sunrise Hwy	59,470	62,704	57,397	59,401	65,245	59,464	60,772	65,953	68,158	66,796	70,668	70,995
Union Tpke	16,750	16,388	19,737	22,441	22,198	23,195	22,787	23,100	22,322	22,170	23,118	18,444
Totals	546,550	670,702	713,146	843,538	892,318	897,175	892,743	896,144	907,131	919,403	947,043	940,147

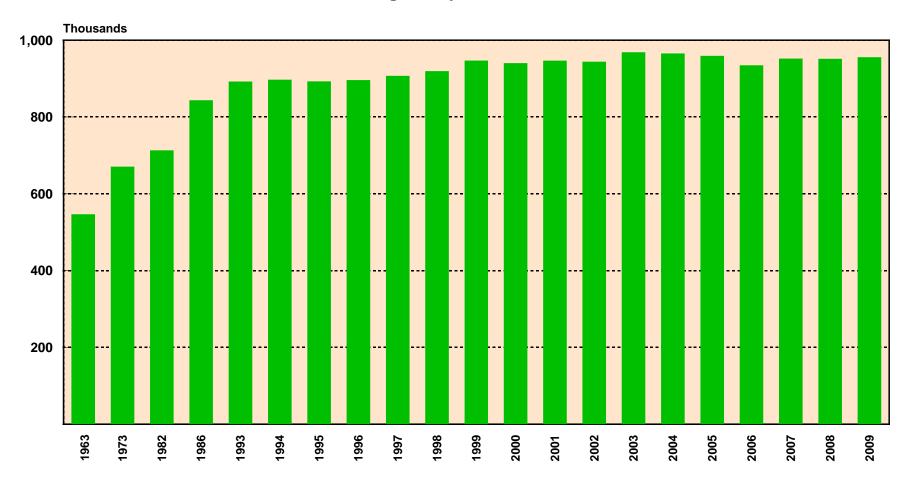
#### **Both Directions**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Beach Channel Dr	24,660	25,610	26,328	24,244	23,649	25,801	28,992	24,352	23,541
Central Ave	12,924	14,406	14,419	14,222	14,671	15,570	13,655	13,854	13,516
Grand Central Pky *	180,865	178,867	187,218	184,697	186,392	165,794	162,749	158,608	156,421
Hempstead Ave	44,650	43,418	51,332	43,662	44,027	40,965	46,078	46,615	44,494
Hillside Ave	27,575	27,328	25,004	26,373	26,527	23,123	24,328	24,900	23,561
Jamaica Ave	28,206	30,193	29,765	30,727	31,620	29,614	29,003	29,074	28,271
Laurelton Pky	171,445	162,292	159,012	175,403	169,154	168,859	173,654	159,167	162,052
Linden Blvd	26,701	27,812	29,432	28,488	29,644	28,298	25,972	24,767	26,349
Long Island Exp *	182,798	190,612	190,634	183,862	184,824	191,900	201,395	230,404	238,952
Merrick Blvd	19,401	19,479	20,590	21,006	19,535	19,033	18,659	19,508	18,566
Northern Blvd	45,805	44,186	45,665	44,802	41,874	41,360	39,025	39,483	38,624
Rockaway Blvd	72,027	69,963	72,562	73,932	73,344	73,767	77,759	75,460	75,108
Seagirt Blvd	15,939	20,392	22,897	21,044	19,851	22,557	22,442	19,907	20,268
Sunrise Hwy	68,618	62,842	67,665	68,127	71,008	66,819	68,898	64,994	66,394
Union Tpke	25,113	26,606	26,171	25,016	22,969	21,089	19,600	20,412	19,484
Totals	946,727	944,006	968,694	965,605	959,089	934,549	952,209	951,505	955,601

<sup>\*</sup> Incudes service roads

## **Queens-Nassau Screenline**

# **Historical Comparisons Average Daily Traffic Volumes**



### 2009 Screenline Volumes Queens - Nassau

	Beach	Channel			G	rand Cent	ral Parkv	way				
	D	rive	Centi	ral Ave	Maiı	n Rdwy	Servic	e Rdwy	Hemps	tead Ave	Hillsid	le Ave
	* S/B	N/B	* W/B	E/B	* W/B	E/B	* W/B	E/B	* W/B	E/B	* W/B	E/B
Mid-1am	252	124	112	46	464	909	20	17	387	374	97	103
1-2am	144	79	70	22	229	433	10	7	234	201	39	54
2-3am	99	67	42	14	181	291	5	7	144	138	27	37
3-4am	66	66	26	10	212	231	6	6	122	105	30	26
4-5am	75	115	44	26	559	355	6	10	130	157	57	41
5-6am	162	268	90	73	2,789	1,008	20	38	272	337	178	103
6-7am	365	552	250	148	5,393	3,230	43	116	763	632	566	266
7-8am	436	779	516	257	4,911	5,379	141	353	1,622	1,144	910	586
8-9am	515	719	566	282	4,170	5,797	171	647	1,865	1,381	729	765
9-10am	484	613	410	287	4,382	4,803	200	453	1,595	1,027	597	553
10-11am	509	570	440	272	3,761	3,593	223	330	1,229	977	553	534
11-Noon	536	629	408	280	3,298	3,604	282	338	1,103	1,006	629	555
Noon-1	584	647	488	286	3,308	3,762	314	349	1,106	1,100	666	609
1-2pm	612	632	501	283	3,287	4,174	303	370	1,123	1,151	713	629
2-3pm	661	686	561	302	3,722	5,171	350	335	1,164	1,361	735	699
3-4pm	715	794	535	361	4,406	5,327	403	384	1,204	1,529	778	853
4-5pm	856	739	611	342	4,984	4,613	524	537	1,220	1,505	900	961
5-6pm	923	721	608	345	4,998	4,356	593	512	1,223	1,548	1,087	996
6-7pm	897	662	646	274	4,579	4,625	388	309	1,328	1,604	918	824
7-8pm	811	581	535	255	3,380	4,332	261	177	1,189	1,381	732	693
8-9pm	718	474	444	200	2,622	3,212	202	113	1,017	1,129	577	479
9-10pm	613	392	317	145	2,409	2,337	151	72	852	964	454	335
10-11pm	562	343	330	127	1,650	2,235	84	48	756	827	325	243
11-Mid	415	279	228	101	1,014	1,632	46	30	655	613	184	136
24 hr Total	12,010	11,531	8,778	4,738	70,708	75,409	4,746	5,558	22,303	22,191	12,481	11,080
6-10am	1,800	2,663	1,742	974	18,856	19,209	555	1,569	5,845	4,184	2,802	2,170
10am-1pm	1,629	1,846	1,336	838	10,367	10,959	819	1,017	3,438	3,083	1,848	1,698
1-3pm	1,273	1,318	1,062	585	7,009	9,345	653	705	2,287	2,512	1,448	1,328
3-7pm	3,391	2,916	2,400	1,322	18,967	18,921	1,908	1,742	4,975	6,186	3,683	3,634
6am-7pm	8,093	8,743	6,540	3,719	55,199	58,434	3,935	5,033	16,545	15,965	9,781	8,830

<sup>\*</sup> To Queens

## 2009 Screenline Volumes Queens - Nassau (cont'd)

			Lau	ırelton	Long Island Expressway									
	Jama	aica Ave	Pai	kway	Lind	en Blvd	Mail	n Rdwy	Servi	ce Rdwy	Merric	k Blvd		
	* W/B	E/B	* W/B	E/B	* W/B	E/B	* W/B	E/B	* W/B	E/B	* W/B	E/B		
Mid-1am	131	128	714	1,550	196	352	1,454	2,070	9	15	77	165		
1-2am	59	73	428	856	113	229	845	1,304	4	6	50	118		
2-3am	47	57	329	565	75	116	741	1,047	3	4	28	68		
3-4am	70	55	481	424	59	70	963	1,062	3	6	25	41		
4-5am	95	84	1,274	556	89	57	2,012	1,488	3	5	50	29		
5-6am	291	165	4,107	1,364	251	96	6,022	2,862	18	23	139	33		
6-7am	636	415	6,111	3,567	520	246	7,132	5,413	337	96	412	84		
7-8am	960	779	5,169	4,759	779	481	6,218	6,963	652	211	609	188		
8-9am	852	1,081	4,207	4,815	762	779	5,586	7,150	282	411	560	348		
9-10am	729	855	4,256	3,992	591	844	6,093	6,614	237	337	466	557		
10-11am	689	703	3,677	3,407	533	677	6,010	5,807	247	190	433	471		
11-Noon	712	762	3,467	3,483	573	657	5,777	5,325	256	183	491	456		
Noon-1	785	822	3,446	3,761	619	683	5,622	5,577	169	195	531	485		
1-2pm	797	827	3,502	4,470	610	713	5,574	5,950	149	228	523	544		
2-3pm	822	913	3,836	5,528	672	759	6,022	6,751	155	238	554	569		
3-4pm	947	1,026	4,056	6,008	700	898	6,408	7,002	200	336	610	615		
4-5pm	1,046	1,047	4,292	6,187	736	944	6,887	6,762	326	663	622	707		
5-6pm	1,185	1,004	4,404	5,959	828	944	6,806	6,463	831	807	724	753		
6-7pm	996	959	4,162	6,144	818	967	6,360	6,442	865	425	598	782		
7-8pm	746	766	3,516	5,422	784	931	5,691	6,115	284	157	518	761		
8-9pm	608	537	2,943	4,459	666	799	4,728	5,183	94	103	407	608		
9-10pm	507	402	2,773	3,843	597	635	4,384	4,336	62	73	334	443		
10-11pm	371	304	2,296	3,431	495	536	3,961	4,142	39	54	230	342		
11-Mid	237	189	1,488	2,568	364	506	2,535	3,249	26	27	149	259		
24 hr Total	14,318	13,953	74,934	87,118	12,430	13,919	113,831	115,077	5,251	4,793	9,140	9,426		
6-10am	3,177	3,130	19,743	17,133	2,652	2,350	25,029	26,140	1,508	1,055	2,047	1,177		
10am-1pm	2,186	2,287	10,590	10,651	1,725	2,017	17,409	16,709	672	568	1,455	1,412		
1-3pm	1,619	1,740	7,338	9,998	1,282	1,472	11,596	12,701	304	466	1,077	1,113		
3-7pm	4,174	4,036	16,914	24,298	3,082	3,753	26,461	26,669	2,222	2,231	2,554	2,857		
6am-7pm	11,156	11,193	54,585	62,080	8,741	9,592	80,495	82,219	4,706	4,320	7,133	6,559		

<sup>\*</sup> To Queens

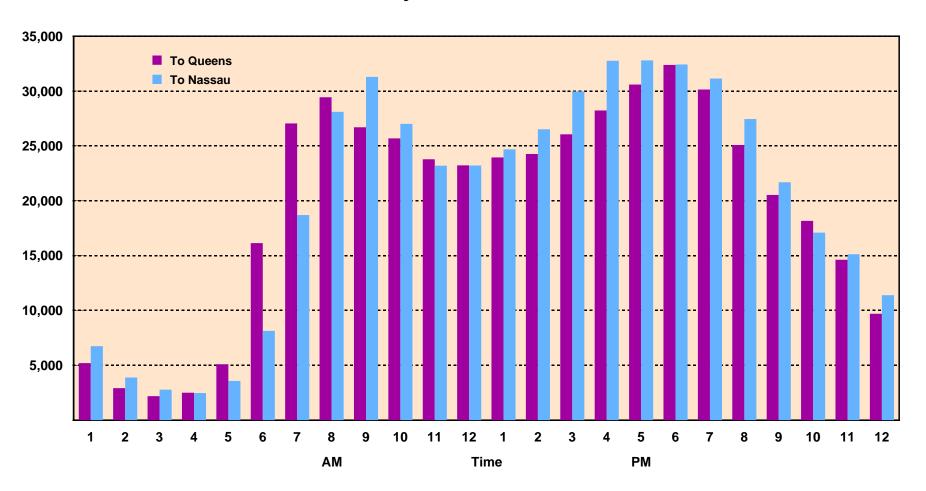
### 2009 Screenline Volumes Queens - Nassau (cont'd)

	North	ern Blvd	Rocka	way Blvd	Seag	irt Blvd	Sunr	ise Hwy	Unio	n Tpke	To	tals
	* W/B	E/B	* N/B	S/B	* W/B	E/B	* W/B	E/B	* W/B	E/B	To Queens	To Nassau
Mid-1am	134	129	673	349	130	77	275	303	69	32	5,194	6,743
1-2am	60	61	372	213	67	35	143	172	44	19	2,911	3,882
2-3am	34	38	248	169	42	31	116	115	23	11	2,184	2,775
3-4am	36	27	203	201	25	37	149	91	21	12	2,497	2,470
4-5am	60	38	255	375	45	72	305	138	30	22	5,089	3,568
5-6am	250	120	501	1,056	113	187	853	329	71	70	16,127	8,132
6-7am	857	376	1,216	2,183	444	440	1,701	734	302	197	27,048	18,695
7-8am	1,259	1,054	1,940	2,722	955	671	1,851	1,284	501	495	29,429	28,105
8-9am	1,258	1,428	2,129	2,570	837	704	1,728	1,712	478	700	26,695	31,289
9-10am	1,206	1,229	1,873	2,157	557	506	1,567	1,683	438	500	25,681	27,010
10-11am	1,114	1,048	1,789	1,938	409	427	1,651	1,770	511	480	23,778	23,194
11-Noon	1,156	1,026	1,809	1,939	406	435	1,737	2,026	590	505	23,230	23,209
Noon-1	1,274	1,116	1,925	2,018	464	498	1,900	2,198	744	579	23,945	24,685
1-2pm	1,260	1,109	2,048	2,089	497	530	2,014	2,206	749	611	24,262	26,516
2-3pm	1,258	1,102	2,258	2,045	540	645	2,020	2,284	725	579	26,055	29,967
3-4pm	1,334	1,303	2,575	2,203	621	968	1,991	2,406	747	744	28,230	32,757
4-5pm	1,401	1,367	2,610	2,164	677	877	2,006	2,600	892	774	30,590	32,789
5-6pm	1,454	1,424	2,715	2,244	722	788	2,131	2,794	1,144	763	32,376	32,421
6-7pm	1,347	1,400	2,760	1,982	671	644	1,961	2,511	840	587	30,134	31,141
7-8pm	1,067	1,048	2,500	1,756	570	476	1,879	2,158	609	442	25,072	27,451
8-9pm	860	735	1,948	1,468	462	374	1,747	1,552	484	260	20,527	21,685
9-10pm	728	519	1,601	1,158	399	245	1,661	1,001	323	185	18,165	17,085
10-11pm	542	420	1,376	971	326	225	1,047	753	224	122	14,614	15,123
11-Mid	303	255	1,042	772	225	172	632	509	150	86	9,693	11,383
			.,				002		.00		3,000	, 0 0 0
24 hr Total	20,252	18,372	38,366	36,742	10,204	10,064	33,065	33,329	10,709	8,775	473,526	482,075
6-10am	4,580	4,087	7,158	9,632	2,793	2,321	6,847	5,413	1,719	1,892	108,853	105,099
10am-1pm	3,544	3,190	5,523	5,895	1,279	1,360	5,288	5,994	1,845	1,564	70,953	71,088
1-3pm	2,518	2,211	4,306	4,134	1,037	1,175	4,034	4,490	1,474	1,190	50,317	56,483
3-7pm	5,536	5,494	10,660	8,593	2,691	3,277	8,089	10,311	3,623	2,868	121,330	129,108
6am-7pm	16,178	14,982	27,647	28,254	7,800	8,133	24,258	26,208	8,661	7,514	351,453	361,778
odin / pin	10,170	17,002	21,071	20,207	7,000	0,100	27,200	20,200	0,001	7,017	001, <del>1</del> 00	501,770

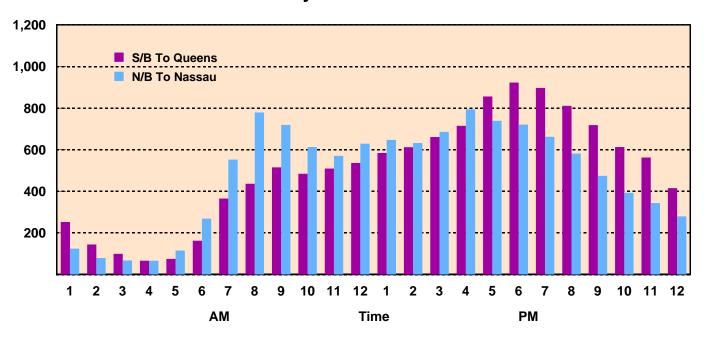
<sup>\*</sup> To Queens

## **Queens-Nassau Screenline**

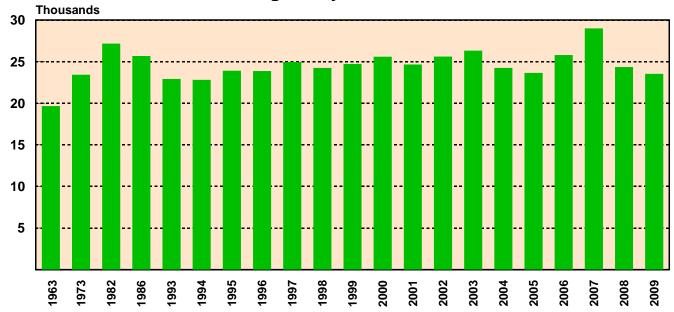
### **Total Hourly Vehicle Volumes - 2009**



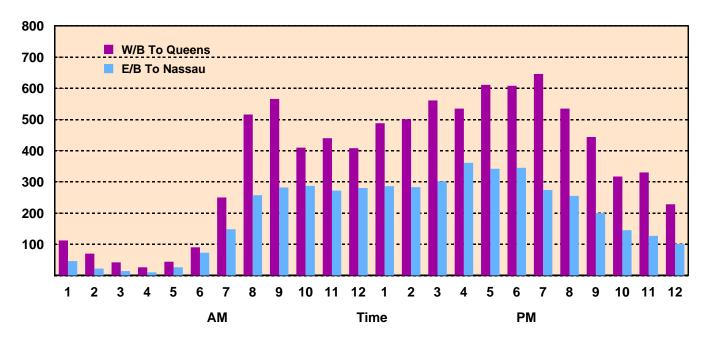
# **Beach Channel Drive - 2009 Hourly Vehicular Volumes**



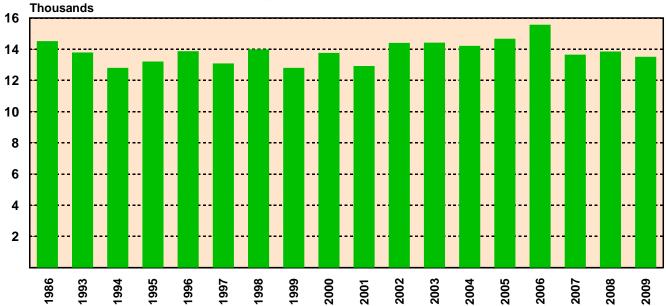
# **Beach Channel Drive Average Daily Traffic Volumes**



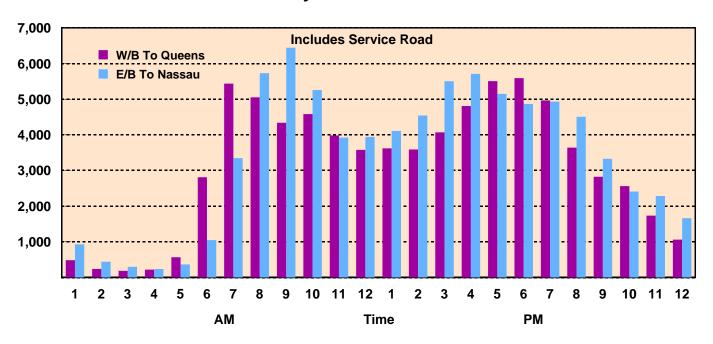
**Central Avenue - 2009 Hourly Vehicular Volumes** 



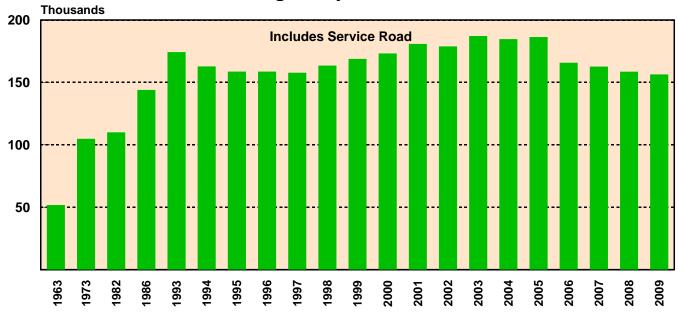
Central Avenue
Average Daily Traffic Volumes



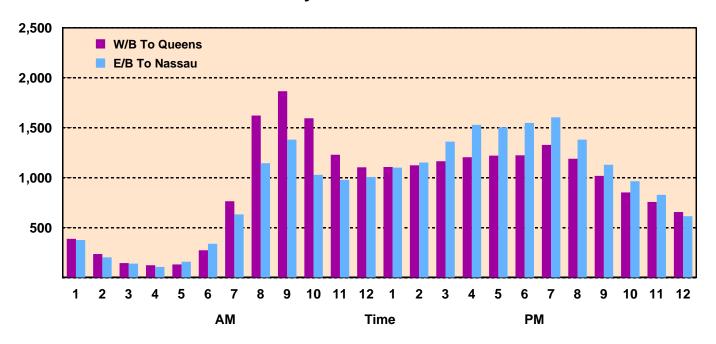
# **Grand Central Parkway - 2009 Hourly Vehicular Volumes**



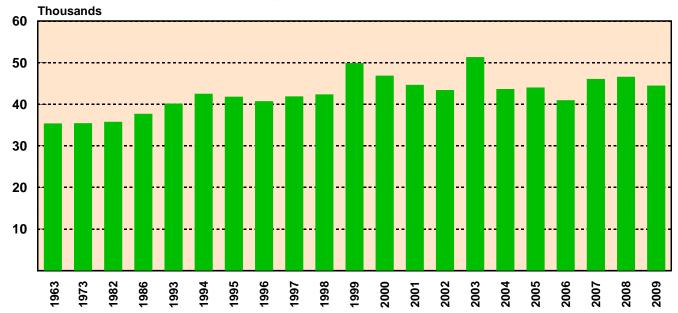
# **Grand Central Parkway Average Daily Traffic Volumes**



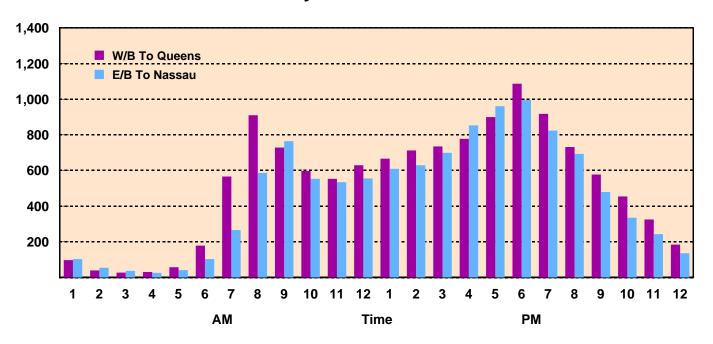
#### Hempstead Avenue - 2009 Hourly Vehicular Volumes



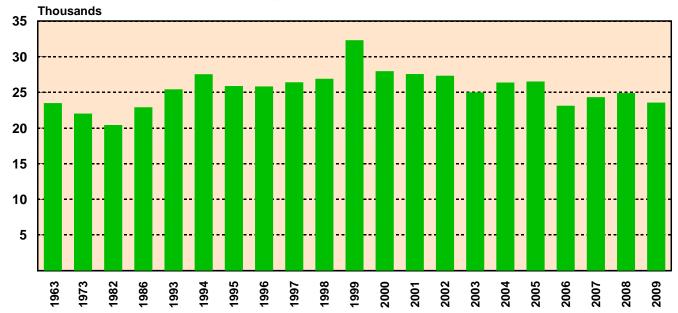
### Hempstead Avenue Average Daily Traffic Volumes



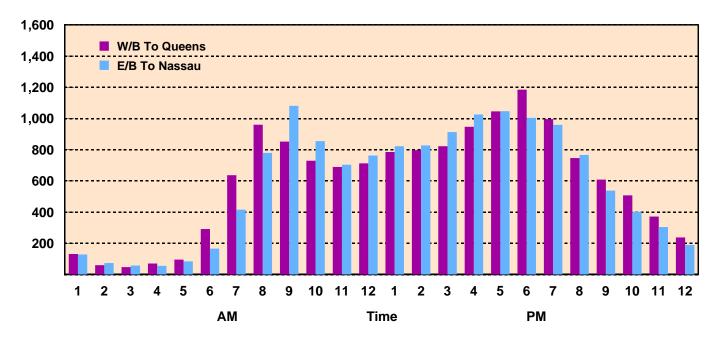
Hillside Avenue - 2009 Hourly Vehicular Volumes



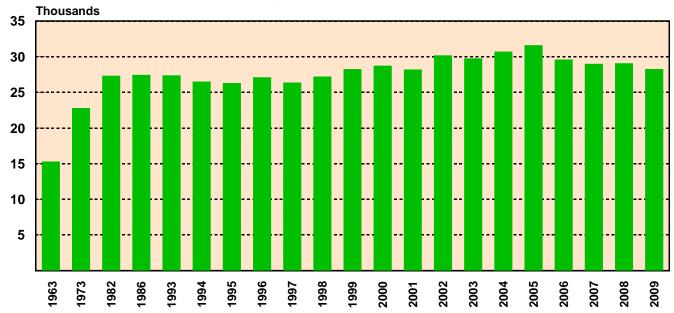
### Hillside Avenue Average Daily Traffic Volumes



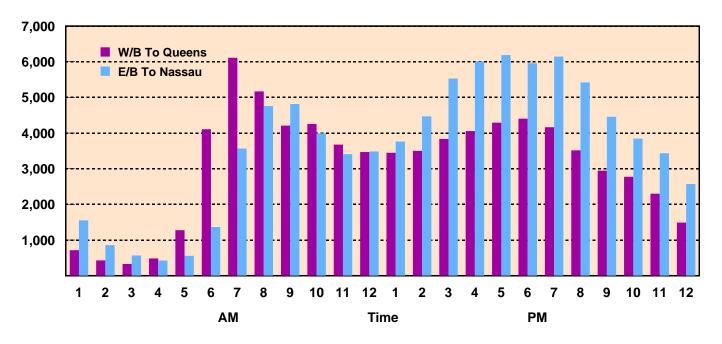
#### Jamaica Avenue - 2009 Hourly Vehicular Volumes



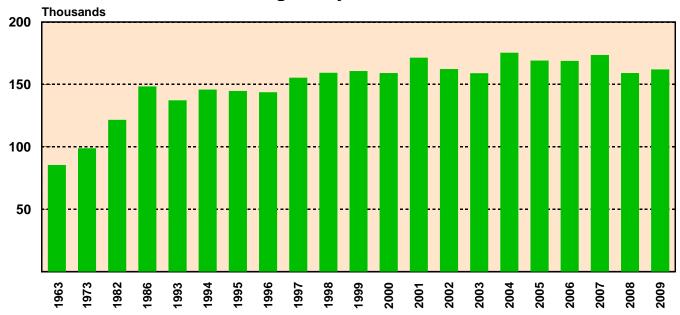
# Jamaica Avenue Average Daily Traffic Volumes



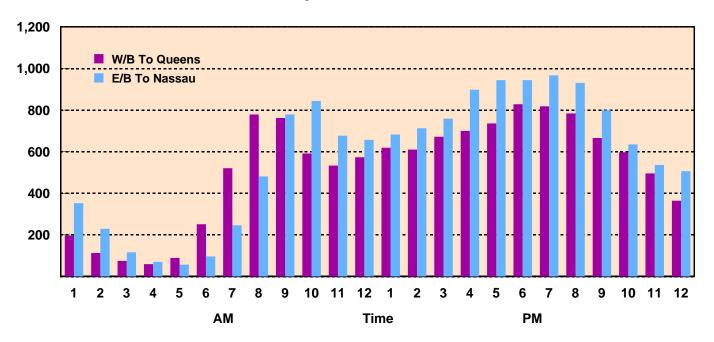
#### Laurelton Parkway - 2009 Hourly Vehicular Volumes



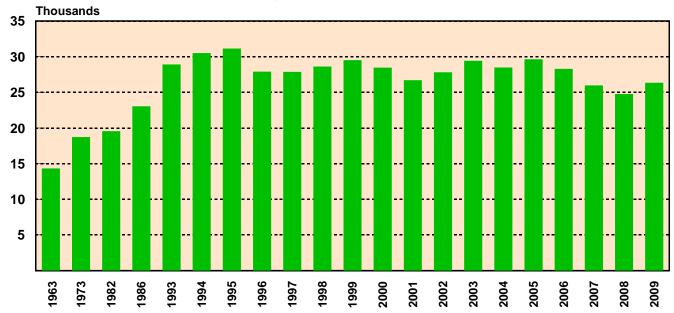
# Laurelton Parkway Average Daily Traffic Volumes



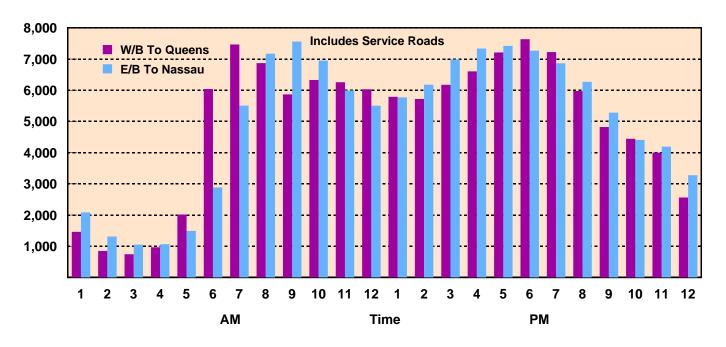
# **Linden Boulevard - 2009 Hourly Vehicular Volumes**



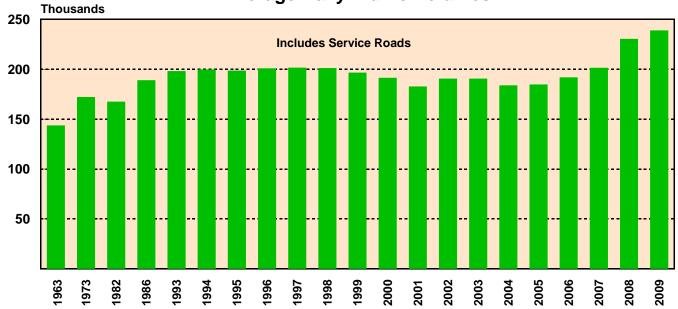
# **Linden Boulevard Average Daily Traffic Volumes**



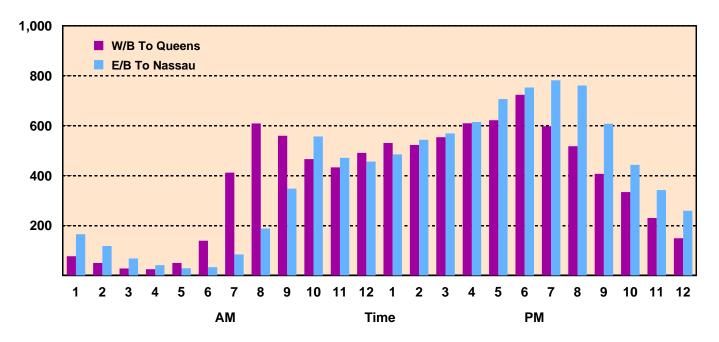
# **Long Island Expressway - 2009 Hourly Vehicular Volumes**



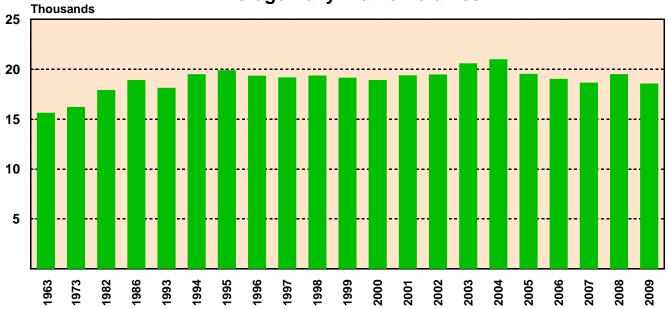
# **Long Island Expressway Average Daily Traffic Volumes**



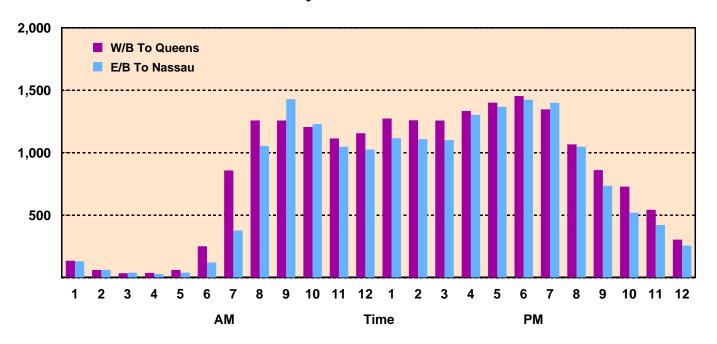
#### Merrick Boulevard - 2009 Hourly Vehicular Volumes



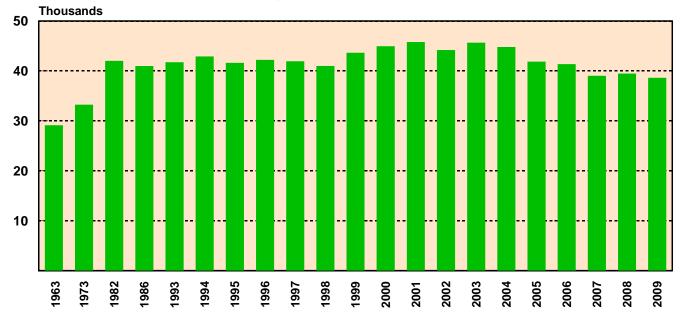
### Merrick Boulevard Average Daily Traffic Volumes



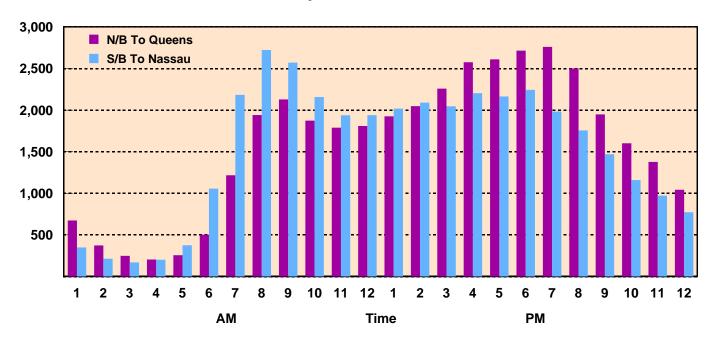
#### Northern Boulevard - 2009 Hourly Vehicular Volumes



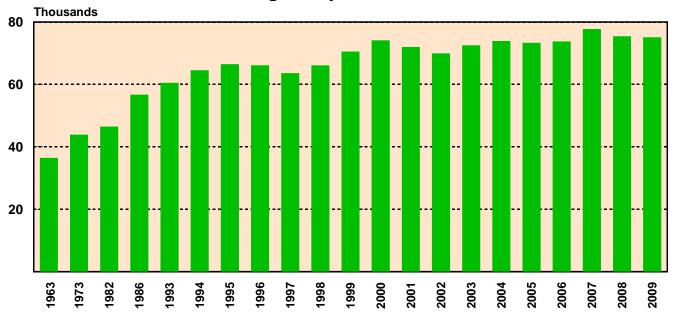
# Northern Boulevard Average Daily Traffic Volumes



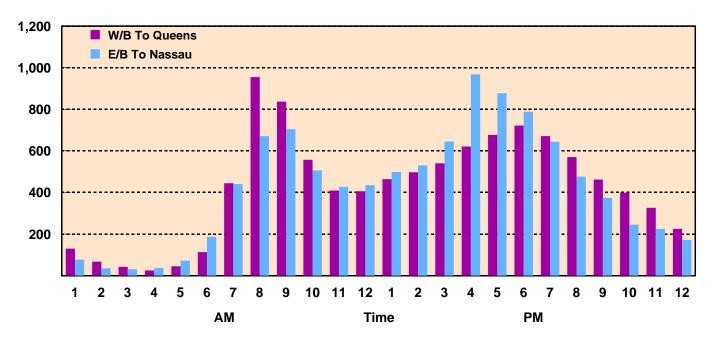
#### Rockaway Boulevard - 2009 Hourly Vehicular Volumes



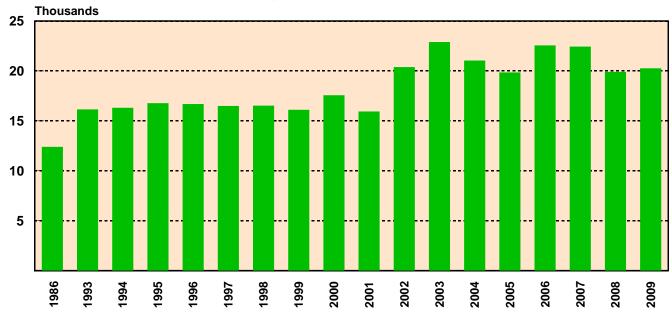
### Rockaway Boulevard Average Daily Traffic Volumes



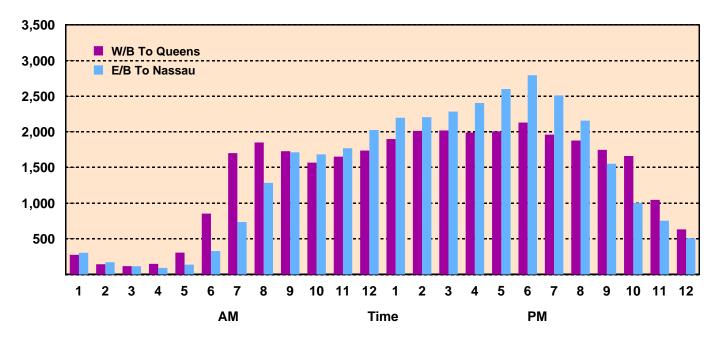
# **Seagirt Boulevard - 2009 Hourly Vehicular Volumes**



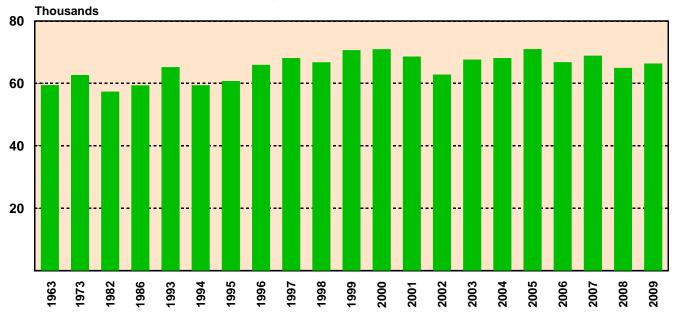
# Seagirt Boulevard Average Daily Traffic Volumes



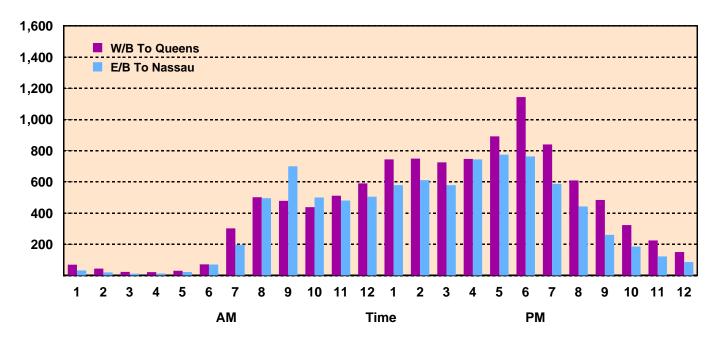
**Sunrise Highway - 2009** Hourly Vehicular Volumes



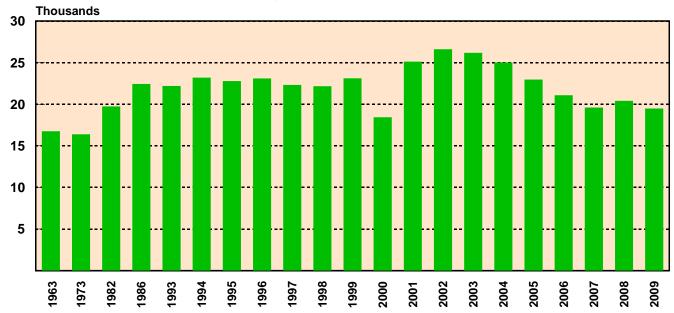
Sunrise Highway Average Daily Traffic Volumes



# **Union Turnpike - 2009 Hourly Vehicular Volumes**



### Union Turnpike Average Daily Traffic Volumes



# New York – New Jersey Screenline



#### **NEW YORK - NEW JERSEY SCREENLINE**

- In 1963, daily traffic between Manhattan and New Jersey averaged 265,600 vehicles. The George Washington Bridge was the most heavily-traveled crossing, serving 127,500 vehicles per day (48.0% of the total).
- Between 1963 and 1973, Manhattan-New Jersey volume grew to 397,200 vehicles per day, an increase of 49.5% (131,600 additional daily vehicles). George Washington Bridge volume increased 82.6% (to 232,700 from 127,500), partly as a result of the opening of the lower level in 1962 and the Alexander Hamilton Bridge/Trans-Manhattan Expressway route in 1963 which facilitated travel between Bronx/Queens/Long Island/New England and New Jersey via upper Manhattan. That increase of 105,200 daily vehicles using the George Washington Bridge accounted for 80.0% of the total 1963-1973 growth in Manhattan-New Jersey screenline traffic. Lincoln Tunnel traffic increased 25.8% to 99,800 daily vehicles from 79,300 and Holland Tunnel traffic was up 10.1% to 64,700 from 58,800.
- Growth slowed considerably between 1973 and 1982, with daily Manhattan-New Jersey volume increasing by just 36,500 vehicles (+9.2%) to 433,700. Daily traffic was up 14.3% to 74,000 through the Holland Tunnel, up 10.7% to 110,500 through the Lincoln Tunnel, and up 7.1% to 249,300 via the George Washington Bridge.
- Faster growth resumed between 1982 and 1986, as daily Manhattan-New Jersey traffic reached 485,800, up 12.0% over the four-year period. Daily volume was up 14.9% to 286,400 via the George Washington Bridge, up 10.5% to 122,100 through the Lincoln Tunnel, and up 4.5% to 77,300 through the Holland Tunnel.
- From 1986 to 1999, Manhattan-New Jersey traffic increased 13.1%, to 549,400 daily vehicles from 485,800. Volume was up 33.3% through the Holland Tunnel, to 103,000 daily vehicles from 77,300 (increase of 25,700 daily vehicles), up 10.9% at the George Washington Bridge (to 317,600 daily vehicles from 286,400), and up 5.4% through the Lincoln Tunnel (to 128,700 daily vehicles from 122,100).
- During the 46 years from 1963 to 2009, daily traffic between Manhattan and New Jersey nearly doubled, to 504,900 from 265,600. George Washington Bridge traffic climbed 127%, to 289,700 from 127,500. Volume increased 50% at the Lincoln Tunnel (to 119,200 from 79,300), and 64% at the Holland Tunnel (to 96,200 from 58,800).
- In 1963, Staten Island-New Jersey screenline traffic was only 27,400 vehicles per day. The highest volume was on the Goethals Bridge, 12,500 vehicles per day.
- By 1973, motor travel between Staten Island and New Jersey had nearly tripled, to 81,000 daily vehicles, amplified by the opening of the Verrazano-Narrows Bridge between Brooklyn and Staten Island in 1964. Much of the new traffic was simply passing through Staten Island. Goethals Bridge traffic jumped 356%, to 56,900 daily vehicles from 12,500 just ten years earlier. Daily volume increased 65% at the Outerbridge Crossing (to 11,700 from 7,100), and 60% at the Bayonne Bridge (to 12,500 from 7,800).
- Growth slowed between 1973 and 1982; nevertheless, Staten Island-New Jersey traffic volume rose to 106,700 daily vehicles, an increase of 31.6% during the nine-year period, the highest rate of any City border screenline. Virtually all growth was concentrated at the Outerbridge Crossing, where volume nearly quadrupled, to 44,700 daily vehicles. Completion of the West Shore Expressway in the late 1970s provided a continuous limited access route between the Outerbridge Crossing and the Verrazano-

Narrows Bridge. Bayonne Bridge traffic increased 9.3%, to 13,600. On the other hand, daily volume on the Goethals Bridge decreased 15.0%, to 48,300.

- Renewed growth between 1982 and 1986 boosted daily Staten Island-New Jersey traffic volume to 138,400, a gain of 29.8% in just four years. Growth was fairly evenly distributed among the three facilities: Goethals Bridge up 33.8% to 64,600, Outerbridge Crossing up 29.4% to 57,900, Bayonne Bridge up 16.8% to 15,900.
- From 1986 to 1999, Staten Island–New Jersey traffic increased 20.6%. Virtually all of this increase occurred at the Outerbridge Crossing, where daily traffic increased 35.5%, to 78,400 from 57,900. Daily traffic using the Goethals Bridge increased 9.6%, to 70,900 from 64,600. Bayonne Bridge traffic volume was up 10.7%, to 17,600 daily vehicles from 15,900.
- During the 46 years from 1963 to 2009, daily traffic between Staten Island and New Jersey soared 504%, to 165,500 from just 27,400. Outerbridge Crossing traffic skyrocketed more than nine fold, to 74,900 from 7,100. Volume on the Goethals Bridge jumped 471%, to 71,200 from 12,500. Bayonne Bridge traffic increased 149%, to 19,400 from 7,800.



### New York - New Jersey Screenline Historical Comparisons Average Daily Traffic Volumes

#### **To New York**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
G Washington Bridge	N/A	114,286	122,932	143,199	132,527	132,086	135,219	140,018	143,487	149,093	151,685	153,461
Holland Tunnel	N/A	32,521	37,009	35,513	44,461	45,482	45,484	46,688	47,692	47,985	49,658	49,486
Lincoln Tunnel	N/A	49,725	56,038	62,209	57,491	58,272	58,826	59,401	59,685	60,647	62,159	62,516
Manhattan Totals	N/A	196,532	215,979	240,921	234,479	235,840	239,529	246,107	250,864	257,725	263,502	265,463
Bayonne Bridge	N/A	6,229	6,811	7,953	8,147	8,283	8,472	8,384	9,268	9,628	9,709	10,309
Goethals Bridge	N/A	28,425	24,155	32,317	32,325	33,416	33,726	34,024	34,884	35,547	35,900	37,919
Outerbridge Crossing	N/A	5,863	22,370	28,948	35,129	35,567	34,975	36,295	37,297	38,034	40,944	39,477
Staten Island Totals	N/A	40,517	53,336	69,218	75,601	77,266	77,173	78,703	81,449	83,209	86,553	87,705
Grand Totals	N/A	237,049	269,315	310,139	310,080	313,106	316,702	324,810	332,313	340,934	350,055	353,168

#### **To New York**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
G Washington Bridge	155,233	150,758	150,233	152,418	147,861	151,639	148,567	145,102	145,105
Holland Tunnel	12,548	45,722	47,727	46,806	46,968	48,161	48,226	46,061	46,696
Lincoln Tunnel	54,608	58,415	62,157	62,826	61,460	61,812	61,619	56,812	57,507
Manhattan Totals	222,389	254,895	260,117	262,050	256,289	261,612	258,412	247,975	249,308
Bayonne Bridge*	14,098	11,684	11,627	12,275	11,933	13,290	12,469	11,094	10,985
Goethals Bridge*	39,315	40,419	38,828	37,559	36,905	34,327	38,687	37,979	38,397
Outerbridge Crossing*	41,000	38,407	41,653	41,018	41,090	43,723	41,282	39,319	40,079
Staten Island Totals	94,413	90,510	92,108	90,852	89,928	91,340	92,438	88,392	89,461
Grand Totals	316,802	345,405	352,225	352,902	346,217	352,952	350,850	336,367	338,769

### New York - New Jersey Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### **To New Jersey**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
G Washington Bridge	N/A	118,400	126,362	143,199	128,205	127,777	130,810	135,451	138,806	148,095	165,955	164,157
Holland Tunnel	N/A	32,210	36,988	41,787	48,224	49,155	50,826	50,110	53,294	52,887	53,362	51,651
Lincoln Tunnel	N/A	50,061	54,415	59,844	62,161	61,027	60,933	61,526	61,824	63,805	66,533	67,194
Manhattan Totals	N/A	200,671	217,765	244,830	238,590	237,959	242,569	247,087	253,924	264,787	285,850	283,002
Bayonne Bridge*	N/A	6,229	6,811	7,953	5,832	5,929	6,064	6,005	6,635	7,218	7,894	8,184
Goethals Bridge*	N/A	28,425	24,155	32,317	28,099	29,048	29,314	29,577	30,323	31,529	34,963	34,872
Outerbridge Crossing*	N/A	5,863	22,370	28,948	31,243	31,632	31,106	32,280	33,171	34,830	37,480	33,907
Staten Island Totals	N/A	40,517	53,336	69,218	65,174	66,609	66,484	67,862	70,129	73,577	80,337	76,963
Grand Totals	N/A	241,188	271,101	314,048	303,764	304,568	309,053	314,949	324,053	338,364	366,187	359,965

#### **To New Jersey**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
G Washington Bridge	154,077	160,013	168,796	162,648	156,441	160,439	142,824	147,957	144,589
Holland Tunnel	30,829	46,835	53,370	49,365	49,992	50,264	52,265	50,996	49,488
Lincoln Tunnel	51,649	71,096	65,166	62,333	64,995	65,433	60,473	61,341	61,475
Manhattan Totals	236,555	277,944	287,332	274,346	271,428	276,136	255,562	260,294	255,552
Bayonne Bridge*	9,533	9,643	8,581	10,235	9,822	10,940	8,982	8,964	8,437
Goethals Bridge*	38,881	40,965	36,896	33,973	31,885	31,051	34,312	34,855	32,833
Outerbridge Crossing*	34,424	38,022	36,997	39,208	40,018	42,583	34,496	33,565	34,773
Staten Island Totals	82,838	88,630	82,474	83,416	81,725	84,574	77,790	77,384	76,043
Grand Totals	319,393	366,574	369,806	357,762	353,153	360,710	333,352	337,678	331,595

<sup>\*</sup> Actual 24 hour westbound volumes from Staten Island to New Jersey not available for 1973, 1982, and 1986; estimated to be the same as eastbound volumes to Staten Island obtained from toll records.

### New York - New Jersey Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### **Both Directions**

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
G Washington Bridge	127,452	232,686	249,294	286,398	260,732	259,863	266,029	275,469	282,293	297,188	317,640	317,618
Holland Tunnel	58,814	64,731	73,997	77,300	92,685	94,637	96,310	96,798	100,986	100,872	103,020	101,137
Lincoln Tunnel	79,337	99,786	110,453	122,053	119,652	119,299	119,759	120,927	121,509	124,452	128,692	129,710
Manhattan Totals	265,603	397,203	433,744	485,751	473,069	473,799	482,098	493,194	504,788	522,512	549,352	548,465
Bayonne Bridge*	7,806	12,458	13,622	15,906	13,979	14,212	14,536	14,389	15,903	16,846	17,603	18,493
Goethals Bridge*	12,478	56,850	48,310	64,634	60,424	62,464	63,040	63,601	65,207	67,076	70,863	72,791
Outerbridge Crossing*	7,114	11,726	44,740	57,896	66,372	67,199	66,081	68,575	70,468	72,864	78,424	73,384
Staten Island Totals	27,398	81,034	106,672	138,436	140,775	143,875	143,657	146,565	151,578	156,786	166,890	164,668
Grand Totals	293,001	478,237	540,416	624,187	613,844	617,674	625,755	639,759	656,366	679,298	716,242	713,133

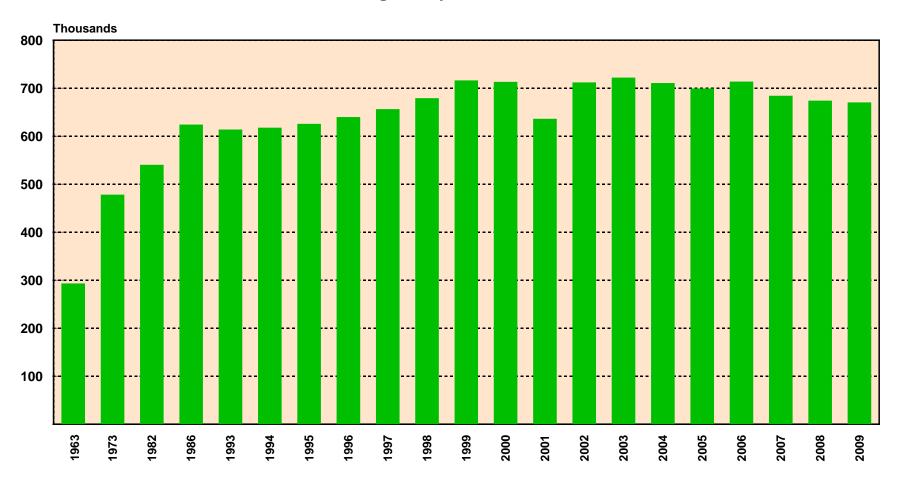
#### **Both Directions**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
G Washington Bridge	309,310	310,771	319,029	315,066	304,302	312,078	291,391	293,059	289,694
Holland Tunnel	43,377	92,557	101,097	96,171	96,960	98,425	100,491	97,057	96,184
Lincoln Tunnel	106,257	129,511	127,323	125,159	126,455	127,245	122,092	118,153	118,982
Manhattan Totals	458,944	532,839	547,449	536,396	527,717	537,748	513,974	508,269	504,860
Bayonne Bridge*	23,631	21,327	20,208	22,510	21,755	24,230	21,451	20,058	19,422
Goethals Bridge*	78,196	81,384	75,724	71,532	68,790	65,378	72,999	72,834	71,230
Outerbridge Crossing*	75,424	76,429	78,650	80,226	81,108	86,306	75,778	72,884	74,852
Staten Island Totals	177,251	179,140	174,582	174,268	171,653	175,914	170,228	165,776	165,504
Grand Totals	636,195	711,979	722,031	710,664	699,370	713,662	684,202	674,045	670,364

<sup>\*</sup> Actual 24 hour westbound volumes from Staten Island to New Jersey not available for 1973, 1982, and 1986; estimated to be the same as eastbound volumes to Staten Island obtained from toll records.

## **New York - New Jersey Screenline**

# **Historical Comparisons Average Daily Traffic Volumes**



### 2009 Screenline Volumes New York - New Jersey

	_	rasimigton								
	Bridge		Holland	Holland Tunnel		Tunnel	Manhatta	Manhattan Totals		
	* E/B	W/B	* E/B	W/B	* E/B	W/B	To Manhattan	To N.J.		
Mid-1am	1,984	2,050	717	1,106	947	1,679	3,648	4,835		
1-2am	1,267	1,851	455	778	540	912	2,262	3,541		
2-3am	1,085	1,184	302	676	427	574	1,814	2,434		
3-4am	1,255	981	335	789	478	492	2,068	2,262		
4-5am	2,164	1,319	529	1,112	871	558	3,564	2,989		
5-6am	6,043	2,319	1,873	1,393	2,691	841	10,607	4,553		
6-7am	10,759	4,501	3,167	2,189	4,932	1,449	18,858	8,139		
7-8am	9,855	6,806	2,986	2,808	4,621	2,108	17,462	11,722		
8-9am	8,937	7,679	2,849	2,620	4,331	2,266	16,117	12,565		
9-10am	8,863	6,736	2,860	2,225	4,007	1,991	15,730	10,952		
10-11am	7,781	6,029	2,494	2,073	3,488	2,007	13,763	10,109		
11-Noon	7,056	6,359	2,112	1,997	3,031	2,277	12,199	10,633		
Noon-1	6,673	6,399	1,989	2,115	2,690	2,495	11,352	11,009		
1-2pm	6,722	6,692	1,987	2,496	2,675	2,818	11,384	12,006		
2-3pm	7,157	7,806	2,098	2,835	2,720	3,386	11,975	14,027		
3-4pm	7,869	9,665	2,456	2,968	2,810	3,816	13,135	16,449		
4-5pm	8,403	10,207	2,740	2,356	2,360	4,699	13,503	17,262		
5-6pm	8,683	9,865	2,886	1,986	1,904	4,781	13,473	16,632		
6-7pm	8,388	10,249	2,878	2,137	2,268	4,968	13,534	17,354		
7-8pm	7,032	9,824	2,565	2,517	2,426	3,052	12,023	15,393		
8-9pm	5,480	8,397	1,923	2,877	2,043	3,175	9,446	14,449		
9-10pm	4,672	6,630	1,639	2,651	1,945	4,690	8,256	13,971		
10-11pm	3,995	5,975	1,638	2,525	1,802	3,948	7,435	12,448		
11-Mid	2,982	5,066	1,218	2,259	1,500	2,493	5,700	9,818		
	,	.,	,	,	,	,	,	-,-		
24 hr Total	145,105	144,589	46,696	49,488	57,507	61,475	249,308	255,552		
6-10am	38,414	25,722	11,862	9,842	17,891	7,814	68,167	43,378		
10am-1pm	21,510	18,787	6,595	6,185	9,209	6,779	37,314	31,751		
1-3pm	13,879	14,498	4,085	5,331	5,395	6,204	23,359	26,033		
3-7pm	33,343	39,986	10,960	9,447	9,342	18,264	53,645	67,697		
6am-7pm	107,146	98,993	33,502	30,805	41,837	39,061	182,485	168,859		

<sup>\*</sup> To Manhattan

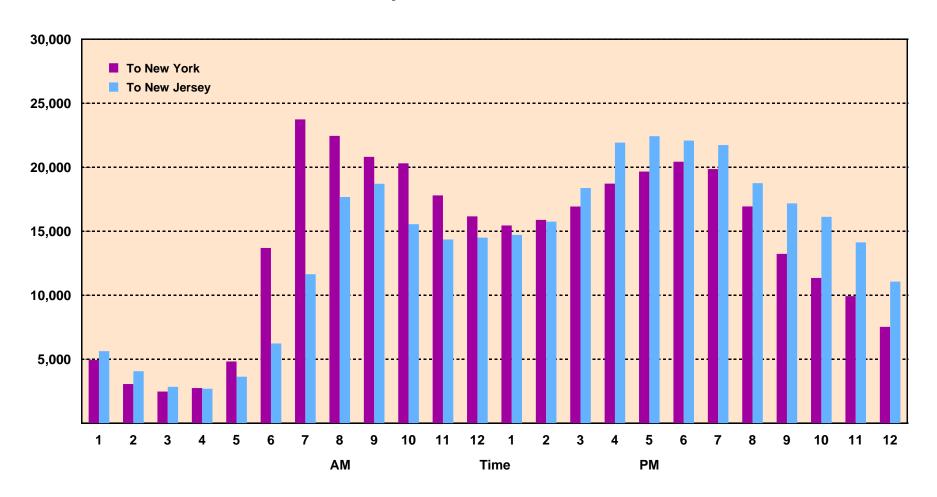
### 2009 Screenline Volumes New York - New Jersey (cont'd)

Outerbridge												
	Bayonn	e Bridge	Goetha	ls Bridge	Cro	ssing	Staten Islar	nd Totals		Grand	l Totals	
	* S/B	N/B	* E/B	W/B	* E/B	W/B	To Staten Is.	To N.J.		To N.Y.	To N.J.	
Mid-1am	158	70	630	299	487	416	1,275	785		4,923	5,620	
1-2am	95	48	391	206	304	255	790	509		3,052	4,050	
2-3am	80	38	301	191	273	175	654	404		2,468	2,838	
3-4am	77	40	297	202	302	182	676	424		2,744	2,686	
4-5am	119	59	473	329	659	252	1,251	640		4,815	3,629	
5-6am	221	247	1,127	894	1,729	528	3,077	1,669		13,684	6,222	
6-7am	397	652	1,802	1,669	2,675	1,171	4,874	3,492		23,732	11,631	
7-8am	509	1,163	1,847	2,450	2,629	2,334	4,985	5,947		22,447	17,669	
8-9am	523	1,048	1,875	2,647	2,297	2,443	4,695	6,138		20,812	18,703	
9-10am	456	510	1,895	2,117	2,219	1,964	4,570	4,591		20,300	15,543	
10-11am	418	429	1,779	1,992	1,834	1,816	4,031	4,237		17,794	14,346	
11-Noon	417	401	1,778	1,759	1,767	1,698	3,962	3,858		16,161	14,491	
Noon-1	436	324	1,834	1,734	1,825	1,633	4,095	3,691		15,447	14,700	
1-2pm	498	350	2,053	1,749	1,950	1,643	4,501	3,742		15,885	15,748	
2-3pm	617	398	2,219	1,885	2,115	2,056	4,951	4,339		16,926	18,366	
3-4pm	779	446	2,486	2,251	2,313	2,774	5,578	5,471		18,713	21,920	
4-5pm	936	442	2,654	2,255	2,567	2,460	6,157	5,157		19,660	22,419	
5-6pm	1,203	423	2,877	2,485	2,870	2,536	6,950	5,444		20,423	22,076	
6-7pm	1,100	357	2,714	1,736	2,505	2,281	6,319	4,374		19,853	21,728	
7-8pm	671	294	2,244	1,083	1,999	1,984	4,914	3,361		16,937	18,754	
8-9pm	418	226	1,757	1,033	1,599	1,459	3,774	2,718		13,220	17,167	
9-10pm	324	227	1,425	755	1,335	1,165	3,084	2,147		11,340	16,118	
10-11pm	302	164	1,114	613	1,066	897	2,482	1,674		9,917	14,122	
11-Mid	231	81	825	499	760	651	1,816	1,231		7,516	11,049	
							·				·	
24 hr Total	10,985	8,437	38,397	32,833	40,079	34,773	89,461	76,043		338,769	331,595	
6-10am	1,885	3,373	7,419	8,883	9,820	7,912	19,124	20,168		87,291	63,546	
10am-1pm	1,271	1,154	5,391	5,485	5,426	5,147	12,088	11,786		49,402	43,537	
1-3pm	1,115	748	4,272	3,634	4,065	3,699	9,452	8,081		32,811	34,114	
3-7pm	4,018	1,668	10,731	8,727	10,255	10,051	25,004	20,446		78,649	88,143	
6am-7pm	8,289	6,943	27,813	26,729	29,566	26,809	65,668	60,481		248,153	229,340	

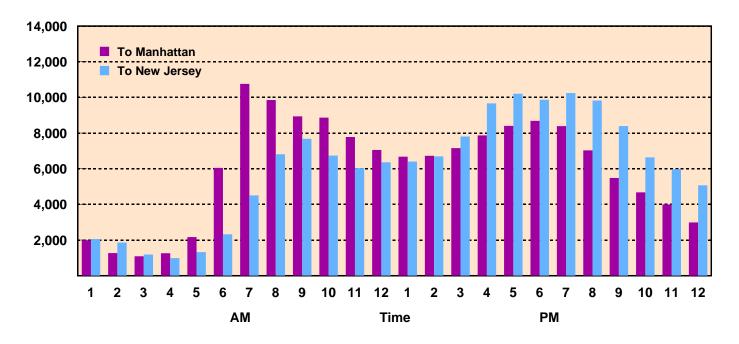
<sup>\*</sup> To Staten Island

# **New York - New Jersey Screenline**

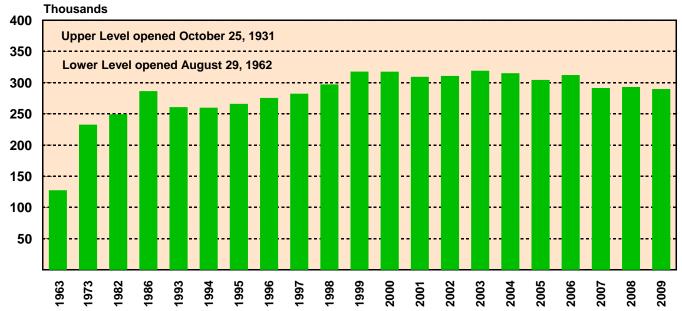
### **Total Hourly Vehicle Volumes - 2009**



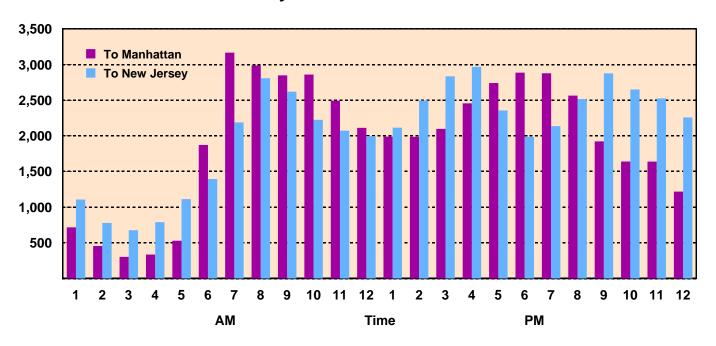
# **George Washington Bridge - 2009 Hourly Vehicular Volumes**



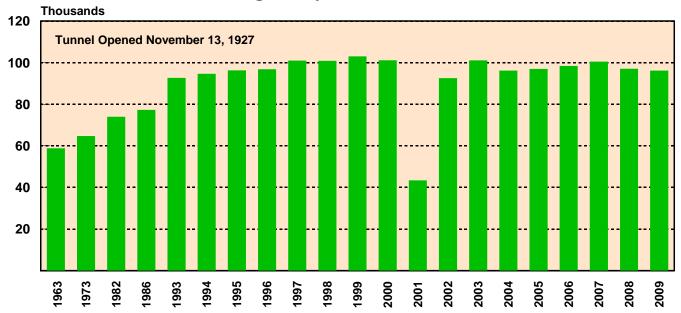
### **George Washington Bridge Average Daily Traffic Volumes**



# **Holland Tunnel - 2009 Hourly Vehicular Volumes**

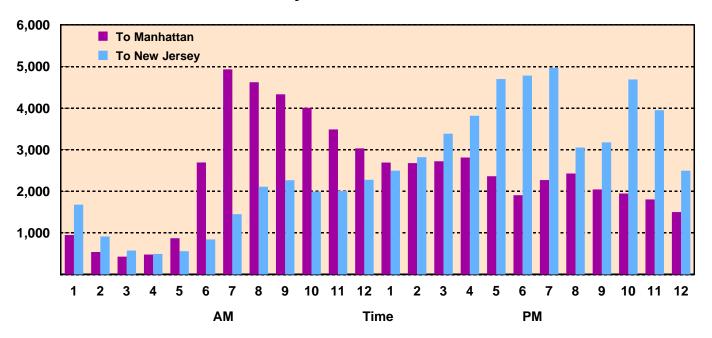


# Holland Tunnel Average Daily Traffic Volumes

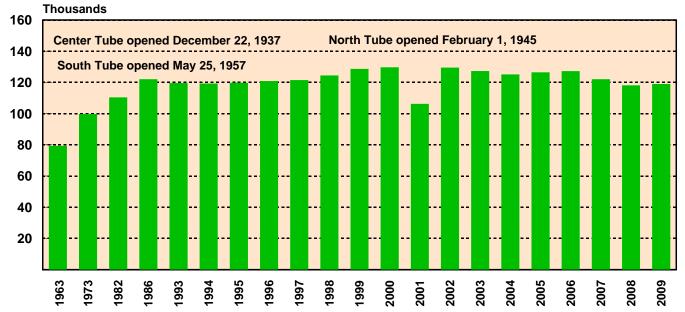


Following 9/11/2001, Holland Tunnel 2-way volume fell 57% compared to fall 2000. Inbound volume was down 75%, outbound down 40%.

# **Lincoln Tunnel - 2009 Hourly Vehicular Volumes**

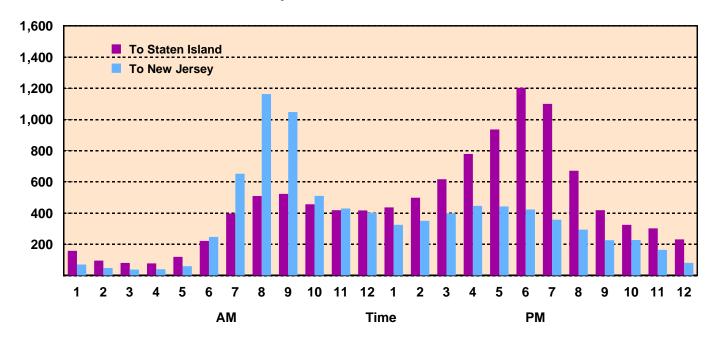


# Lincoln Tunnel Average Daily Traffic Volumes

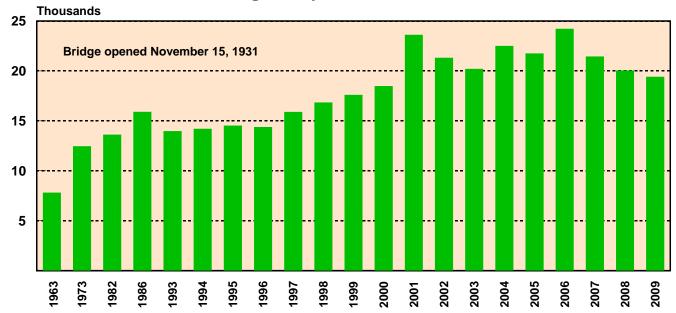


Following 9/11/2001, Lincoln Tunnel 2-way volume fell 18% compared to fall 2000. Inbound volume was down 13%, outbound down 23%.

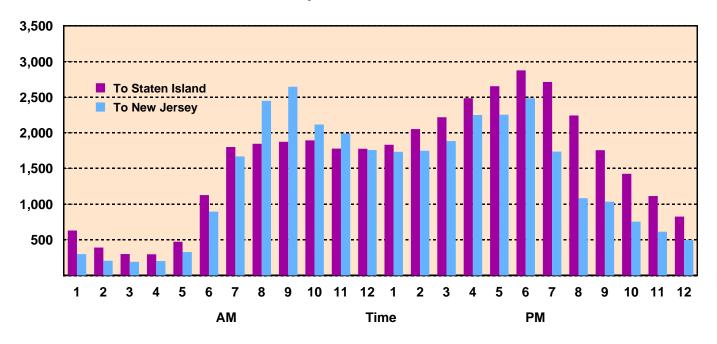
# **Bayonne Bridge - 2009 Hourly Vehicular Volumes**



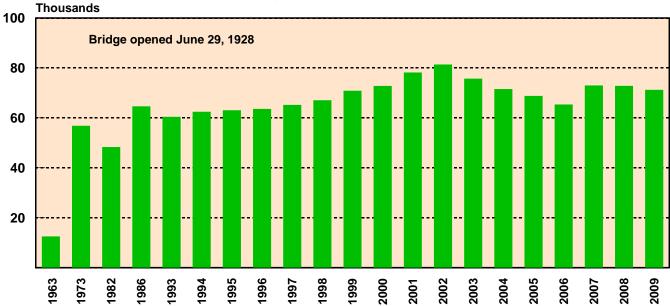
# **Bayonne Bridge Average Daily Traffic Volumes**



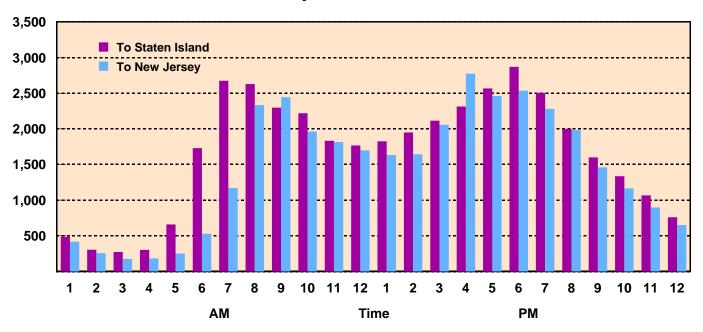
# **Goethals Bridge - 2009 Hourly Vehicular Volumes**



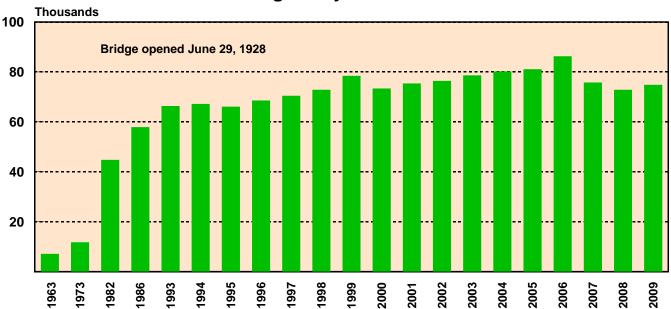
### Goethals Bridge Average Daily Traffic Volumes

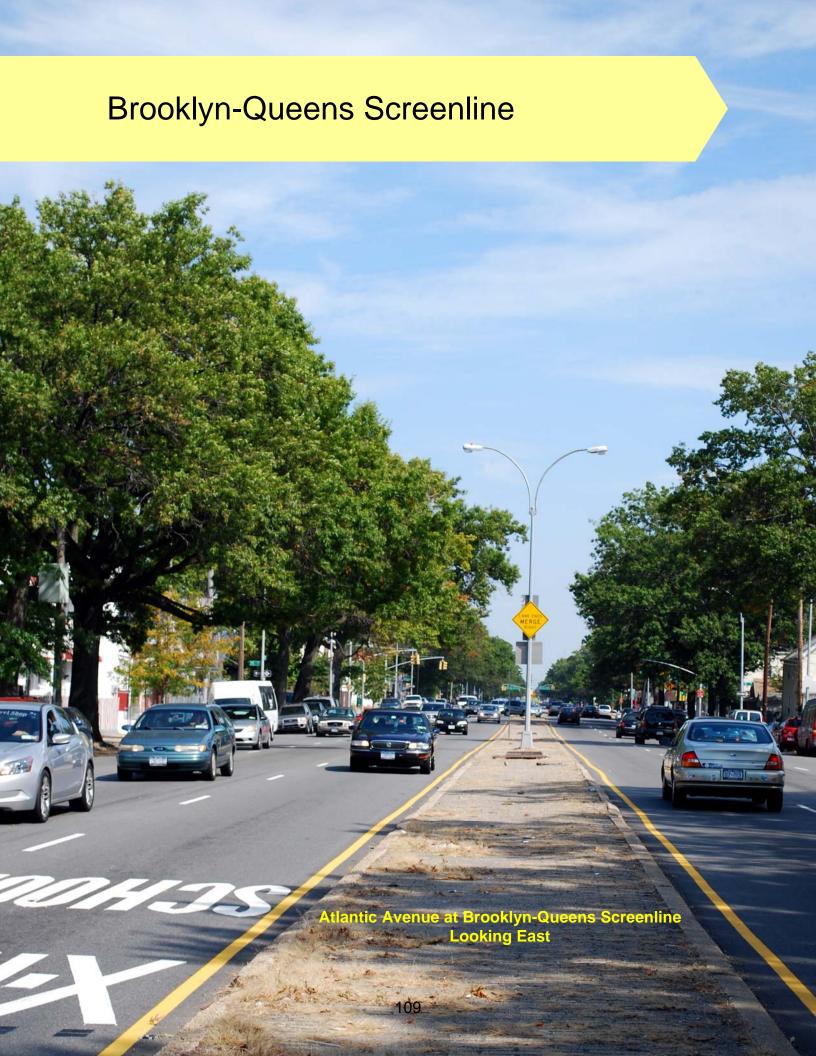


# Outerbridge Crossing - 2009 Hourly Vehicular Volumes



# Outerbridge Crossing Average Daily Traffic Volumes





#### **BROOKLYN - QUEENS SCREENLINE**

#### **Newtown Creek Bridges**

- In 1963, average two-way total daily volume on the four Newtown Creek bridges was 160,400. The Kosciuszko Bridge carried the bulk of that traffic, 102,200 daily vehicles (63.7% of the total). The Grand Street Bridge served 12,000 daily vehicles (7.5%), the Greenpoint Avenue Bridge 17,600 (11.0%), and the Pulaski Bridge 28,600 (17.8%).
- By 1973, Newtown Creek crossings had increased 4.8% to 168,000 vehicles per day, just 7,600 more than ten years earlier. The Kosciuszko Bridge remained the most-traveled facility, although its volume slipped to 99,000 daily vehicles, 3.1% fewer than in 1963. The Grand Street Bridge was accommodating 11,700 daily vehicles (down 2.5%), the Greenpoint Avenue Bridge 26,800 (up 52.0%), and the Pulaski Bridge 30,500 (up 6.7%).
- Between 1973 and 1982, daily volume crossing Newtown Creek rose 7.0%, to 179,800 vehicles. Growth was concentrated solely on the Kosciuszko Bridge, where daily volume rose 30.8% to 129,600. Daily volumes fell on the other three bridges: Grand Street Bridge down 21.5% to 9,200, Greenpoint Avenue Bridge down 33.2% to 17,900, and Pulaski Bridge down 24.1% to 23,100.
- From 1982 to 1986, traffic over Newtown Creek increased rapidly, by 25.0% to 224,800 daily vehicles, with increases occurring on three of the four bridges. By 1986, the Kosciuszko Bridge was carrying 168,300 daily vehicles (up 29.9% from 1982), the Grand Street Bridge 11,400 (up 24.0%), the Pulaski Bridge 30,800 (up 32.9%). The only decline was on the Greenpoint Avenue Bridge, where daily traffic was 19.9% less in 1986 than in 1982 (14,300 vs. 17,900).
- Between 1986 and 1993, daily volume crossing Newtown Creek increased just 2.3% during the seven—year period, to 230,000 in 1993 from 224,800 in 1986. Growth was concentrated at the Greenpoint Avenue Bridge, where daily volume increased by 11,400 vehicles, to 25,700 in 1993 from 14,300 in 1986, a gain of 79.3%. Daily traffic on the Grand Street Bridge increased by 1,000 vehicles, to 12,400 in 1993 from 11,400 in 1986, a gain of 9.1%. On the Kosciuszko Bridge, daily volume decreased 1.0%, to 166,600 in 1993 from 168,300 in 1986. Volume on the Pulaski Bridge decreased 17.8%, to 25,300 daily vehicles in 1993 from 30,800 in 1986.
- Newtown Creek crossings increased 16.0% from 1993 to 1999, with increases recorded on all four bridges. The largest numerical increase occurred on the Kosciuszko Bridge, where daily volume increased to 194,800 in 1999 from 166,600 in 1993 (+16.9%). The largest percentage increase occurred on the Pulaski Bridge, where daily volume increased 22.5%, to 31,000 from 25,300.
- During the 46 years from 1963 to 2009, daily traffic crossing Newtown Creek increased 64.4%, to 263,600 from 160,400. Volumes increased on all four facilities: Kosciuszko Bridge up 84.3% to 188,300 from 102,200; Greenpoint Avenue Bridge up 51.1% to 26,600 from 17,600; Pulaski Bridge up 26.4% to 36,100 from 28,600; Grand Street Bridge up 4.6% to 12,600 from 12,000.

#### **Other Facilities**

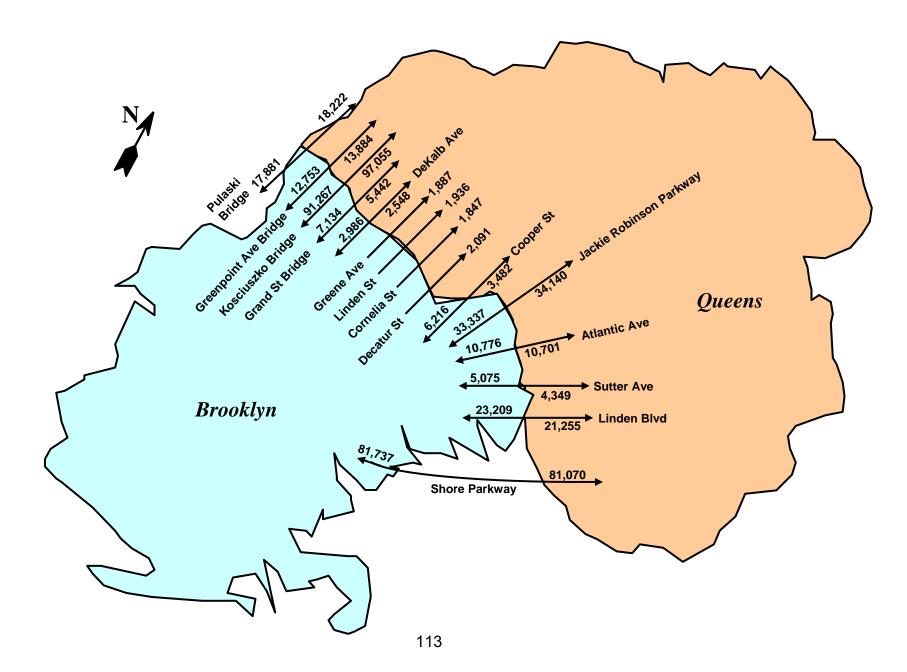
- Volumes on facilities other than the Newtown Creek Bridges were collected at the Brooklyn-Queens screenline for the first time in 1993. The highest of these recorded

volumes were on the limited access Shore Parkway (135,700 daily vehicles) and Jackie Robinson Parkway (52,300 daily vehicles). The highest principal arterial volumes were on Linden Boulevard (44,400 daily vehicles), and on Atlantic Avenue (27,500 daily vehicles).

- Daily volumes on these eleven facilities increased 13.6% from 1993 to 1999, to 328,000 total daily vehicles from 288,800. The largest increase was on the Jackie Robinson Parkway, where daily volume rose 27.3%, to 66,600 in 1999 from 52,300 in 1993.
- During the sixteen years from 1993 to 2009, total daily volumes on these eleven facilities increased 13.8%, to 328,600 from 288,800. The largest increases were on Shore Parkway (up 20.0%, to 162,800 daily vehicles from 135,700, an increase of 27,100 daily vehicles), and on Jackie Robinson Parkway (up 28.9% to 67,500 daily vehicles from 52,300, an increase of 15,200 daily vehicles). On Atlantic Avenue, daily volume decreased 21.9%, to 21,500 from 27,500, a decrease of 6,000 daily vehicles.

# **Brooklyn - Queens Screenline**

2009 Daily Volumes



### Brooklyn-Queens Screenline Historical Comparisons Average Daily Traffic Volumes

#### To Brooklyn

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Grand Street Bridge	N/A	N/A	5,216	6,414	7,018	7,212	7,600	6,916	7,078	7,831	7,862	7,747
Greenpoint Ave Bridge	N/A	11,336	8,048	7,276	13,304	13,526	13,737	13,368	12,660	12,863	12,351	12,741
Kosciuszko Bridge	N/A	43,118	63,426	81,363	78,371	81,000	81,356	79,729	89,222	92,765	97,690	101,852
Pulaski Bridge	N/A	13,617	9,906	15,447	13,003	13,182	14,436	14,926	15,737	16,076	15,724	17,993
Newtown Creek Totals	N/A	N/A	86,596	110,500	111,696	114,920	117,129	114,939	124,697	129,535	133,627	140,333
Atlantic Ave	N/A	N/A	N/A	N/A	13,940	13,394	14,016	12,767	13,951	14,231	15,071	14,850
Cooper St	N/A	N/A	N/A	N/A	4,558	5,010	4,929	4,841	5,220	5,460	5,611	5,942
Cornelia St	N/A	N/A	N/A	N/A	One-Way to Queens							
Decatur St	N/A	N/A	N/A	N/A			One-Way to	Queens				
DeKalb Ave	N/A	N/A	N/A	N/A	3,163	3,010	3,166	2,879	3,234	2,283	2,515	2,746
Greene Ave	N/A	N/A	N/A	N/A			One-Way to	Queens				
Jackie Robinson Pky	N/A	N/A	N/A	N/A	24,460	27,163	27,323	29,318	30,169	31,808	33,198	34,441
Linden Blvd	N/A	N/A	N/A	N/A	22,724	23,305	23,248	24,324	26,472	24,758	27,165	26,299
Linden St	N/A	N/A	N/A	N/A			One-Way to	Queens				
Shore Pky	N/A	N/A	N/A	N/A	65,341	71,124	71,538	72,633	73,618	74,085	73,484	76,366
Sutter Ave	N/A	N/A	N/A	N/A	3,178	3,130	3,158	3,010	3,695	3,638	3,670	3,776
Other Totals	N/A	N/A	N/A	N/A	137,364	146,136	147,378	149,772	156,359	156,263	160,714	164,420
Grand Totals	N/A	N/A	N/A	N/A	249,060	261,056	264,507	264,711	281,056	285,798	294,341	304,753

#### To Brooklyn

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Grand Street Bridge	7,729	7,447	8,356	7,465	6,455	6,920	6,858	7,378	7,134
Greenpoint Ave Bridge	12,993	12,375	14,445	13,509	13,951	14,318	13,453	12,756	12,753
Kosciuszko Bridge	97,242	90,607	96,153	92,556	94,830	86,969	91,026	87,257	91,267
Pulaski Bridge	19,292	18,667	19,465	19,923	19,431	18,500	18,417	18,295	17,881
Newtown Creek Totals	137,256	129,096	138,419	133,453	134,667	126,707	129,754	125,686	129,035
Atlantic Ave	14,182	14,687	14,150	14,693	12,611	12,095	11,180	10,947	10,776
Cooper St	5,756	5,741	6,001	5,832	6,160	5,921	5,565	6,025	6,216
Cornelia St	One-	One-Way to Queens							
Decatur St	One-	Way to Que	ens						
DeKalb Ave	2,563	3,428	3,566	3,697	3,583	3,109	3,016	3,061	2,986
Greene Ave	One-	Way to Que	ens						
Jackie Robinson Pky	35,760	37,175	36,445	35,680	36,037	34,799	34,804	33,302	33,337
Linden Blvd	27,130	27,698	25,717	27,251	28,195	27,119	25,993	23,784	23,209
Linden St	One-	Way to Que	ens						
Shore Pky	75,478	69,587	75,682	76,608	76,393	79,763	81,339	79,589	81,737
Sutter Ave	3,821	3,851	4,090	4,137	4,810	4,218	4,685	4,896	5,075
Other Totals	164,690	162,167	165,651	167,898	167,789	167,024	166,582	161,604	163,336
Grand Totals	301,946	291,263	304,070	301,351	302,456	293,731	296,336	287,290	292,371

### Brooklyn-Queens Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### To Queens

	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Grand Street Bridge	N/A	N/A	3,987	4,999	5,430	5,963	5,650	5,466	5,797	7,497	6,528	7,761
Greenpoint Ave Bridge	N/A	15,462	9,850	7,062	12,397	12,803	13,199	13,160	12,277	12,741	14,262	13,402
Kosciuszko Bridge	N/A	55,926	66,127	86,951	88,221	85,354	87,283	90,775	99,988	102,427	97,094	99,020
Pulaski Bridge	N/A	16,855	13,228	15,304	12,276	12,617	14,044	15,412	15,826	16,124	15,251	19,428
Newtown Creek Totals	N/A	N/A	93,192	114,316	118,324	116,737	120,176	124,813	133,888	138,789	133,135	139,611
Atlantic Ave	N/A	N/A	N/A	N/A	13,545	15,026	15,005	14,166	14,425	14,315	14,728	14,264
Cooper St	N/A	N/A	N/A	N/A	5,199	5,431	5,649	6,132	3,886	3,598	3,702	3,663
Cornelia St	N/A	N/A	N/A	N/A	1,552	1,425	1,529	1,443	1,522	1,454	1,787	1,905
Decatur St	N/A	N/A	N/A	N/A	1,921	2,163	2,112	2,306	2,220	2,242	2,099	2,113
DeKalb Ave	N/A	N/A	N/A	N/A	2,117	2,381	2,297	2,311	2,481	2,316	2,588	2,372
Greene Ave	N/A	N/A	N/A	N/A	1,762	1,711	1,810	1,787	1,872	2,223	1,922	1,947
Jackie Robinson Pky	N/A	N/A	N/A	N/A	27,872	31,458	33,751	31,483	31,615	32,020	33,420	36,932
Linden Blvd	N/A	N/A	N/A	N/A	21,717	23,408	25,704	26,562	27,160	23,924	26,630	25,901
Linden St	N/A	N/A	N/A	N/A	1,063	2,315	2,360	2,552	2,400	2,420	2,439	2,477
Shore Pky	N/A	N/A	N/A	N/A	70,365	69,679	68,627	72,369	73,776	73,754	73,969	73,588
Sutter Ave	N/A	N/A	N/A	N/A	4,297	3,846	3,827	3,729	3,750	3,871	4,022	4,096
Other Totals	N/A	N/A	N/A	N/A	151,410	158,843	162,671	164,840	165,107	162,137	167,306	169,258
Grand Totals	N/A	N/A	N/A	N/A	269,734	275,580	282,847	289,653	298,995	300,926	300,441	308,869

#### To Queens

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Grand Street Bridge	6,166	5,641	5,783	5,994	6,561	5,973	5,727	5,653	5,442
Greenpoint Ave Bridge	13,773	13,931	14,310	14,928	15,498	15,522	13,574	14,170	13,884
Kosciuszko Bridge	99,323	93,772	98,344	101,056	103,983	97,372	95,467	94,526	97,055
Pulaski Bridge	19,770	19,681	18,881	20,223	19,480	19,724	18,804	18,724	18,222
Newtown Creek Totals	139,032	133,025	137,318	142,201	145,522	138,591	133,572	133,073	134,603
Atlantic Ave	13,713	14,249	14,336	13,903	13,349	11,961	11,066	10,613	10,701
Cooper St	3,761	3,533	3,140	3,388	3,622	3,372	3,378	3,477	3,482
Cornelia St	1,936	2,032	1,908	1,844	1,787	1,660	1,727	1,753	1,847
Decatur St	2,082	2,237	2,342	2,332	2,003	2,247	2,059	2,203	2,091
DeKalb Ave	2,347	2,464	2,544	2,607	2,626	2,197	2,258	2,341	2,548
Greene Ave	1,962	2,078	2,363	2,029	1,551	1,854	1,733	1,883	1,887
Jackie Robinson Pky	36,920	37,545	37,261	38,624	37,490	36,034	35,893	34,433	34,140
Linden Blvd	25,160	25,439	25,393	24,502	21,692	24,950	23,429	22,937	21,255
Linden St	2,544	2,609	2,270	2,161	2,123	2,192	2,012	1,992	1,936
Shore Pky	76,440	70,576	74,358	74,997	75,733	78,046	83,142	83,850	81,070
Sutter Ave	4,291	4,498	4,704	4,595	4,938	4,401	4,411	4,286	4,349
Other Totals	171,156	167,260	170,619	170,982	166,914	168,914	171,108	169,768	165,306
<b>Grand Totals</b>	310,188	300,285	307,937	313,183	312,436	307,505	304,680	302,841	299,909

### Brooklyn-Queens Screenline Historical Comparisons Average Daily Traffic Volumes (continued)

#### **Both Directions**

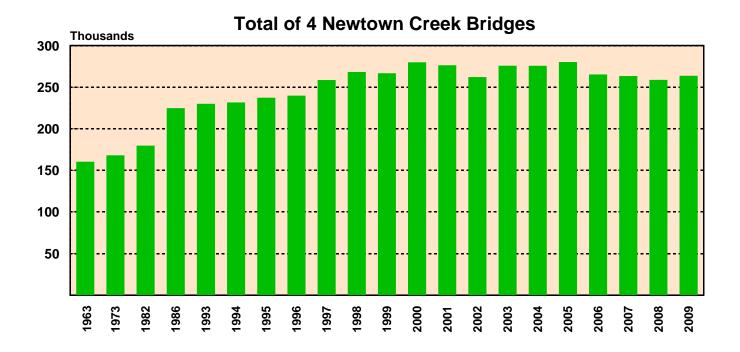
	1963	1973	1982	1986	1993	1994	1995	1996	1997	1998	1999	2000
Grand Street Bridge	12,020	11,723	9,203	11,413	12,448	13,175	13,250	12,382	12,875	15,328	14,390	15,508
Greenpoint Ave Bridge	17,630	26,798	17,898	14,338	25,701	26,329	26,936	26,528	24,937	25,604	26,613	26,143
Kosciuszko Bridge	102,190	99,044	129,553	168,314	166,592	166,354	168,639	170,504	189,210	195,192	194,784	200,872
Pulaski Bridge	28,560	30,472	23,134	30,751	25,279	25,799	28,480	30,338	31,563	32,200	30,975	37,421
Newtown Creek Totals	160,400	168,037	179,788	224,816	230,020	231,657	237,305	239,752	258,585	268,324	266,762	279,944
Atlantic Ave	N/A	N/A	N/A	N/A	27,485	28,420	29,021	26,933	28,376	28,546	29,799	29,114
Cooper St	N/A	N/A	N/A	N/A	9,757	10,441	10,578	10,973	9,106	9,058	9,313	9,605
Cornelia St	N/A	N/A	N/A	N/A	1,552	1,425	1,529	1,443	1,522	1,454	1,787	1,905
Decatur St	N/A	N/A	N/A	N/A	1,921	2,163	2,112	2,306	2,220	2,242	2,099	2,113
DeKalb Ave	N/A	N/A	N/A	N/A	5,280	5,391	5,463	5,190	5,715	4,599	5,103	5,118
Greene Ave	N/A	N/A	N/A	N/A	1,762	1,711	1,810	1,787	1,872	2,223	1,922	1,947
Jackie Robinson Pky	N/A	N/A	N/A	N/A	52,332	58,621	61,074	60,801	61,784	63,828	66,618	71,373
Linden Blvd	N/A	N/A	N/A	N/A	44,441	46,713	48,952	50,886	53,632	48,682	53,795	52,200
Linden St	N/A	N/A	N/A	N/A	1,063	2,315	2,360	2,552	2,400	2,420	2,439	2,477
Shore Pky	N/A	N/A	N/A	N/A	135,706	140,803	140,165	145,002	147,394	147,839	147,453	149,954
Sutter Ave	N/A	N/A	N/A	N/A	7,475	6,976	6,985	6,739	7,445	7,509	7,692	7,872
Other Totals	N/A	N/A	N/A	N/A	288,774	304,979	310,049	314,612	321,466	318,400	328,020	333,678
Grand Totals	N/A	N/A	N/A	N/A	518,794	536,636	547,354	554,364	580,051	586,724	594,782	613,622

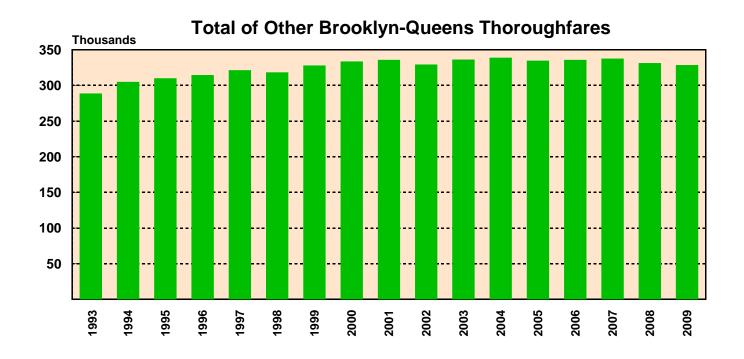
#### **Both Directions**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Grand Street Bridge	13,895	13,088	14,139	13,459	13,016	12,893	12,585	13,031	12,576
Greenpoint Ave Bridge	26,766	26,306	28,755	28,437	29,449	29,840	27,027	26,926	26,637
Kosciuszko Bridge	196,565	184,379	194,497	193,612	198,813	184,341	186,493	181,783	188,322
Pulaski Bridge	39,062	38,348	38,346	40,146	38,911	38,224	37,221	37,019	36,103
Newtown Creek Totals	276,288	262,121	275,737	275,654	280,189	265,298	263,326	258,759	263,638
Atlantic Ave	27,895	28,936	28,486	28,596	25,960	24,056	22,246	21,560	21,477
Cooper St	9,517	9,274	9,141	9,220	9,782	9,293	8,943	9,502	9,698
Cornelia St	1,936	2,032	1,908	1,844	1,787	1,660	1,727	1,753	1,847
Decatur St	2,082	2,237	2,342	2,332	2,003	2,247	2,059	2,203	2,091
DeKalb Ave	4,910	5,892	6,110	6,304	6,209	5,306	5,274	5,402	5,534
Greene Ave	1,962	2,078	2,363	2,029	1,551	1,854	1,733	1,883	1,887
Jackie Robinson Pky	72,680	74,720	73,706	74,304	73,527	70,833	70,697	67,735	67,477
Linden Blvd	52,290	53,137	51,110	51,753	49,887	52,069	49,422	46,721	44,464
Linden St	2,544	2,609	2,270	2,161	2,123	2,192	2,012	1,992	1,936
Shore Pky	151,918	140,163	150,040	151,605	152,126	157,809	164,481	163,439	162,807
Sutter Ave	8,112	8,349	8,794	8,732	9,748	8,619	9,096	9,182	9,424
Other Totals	335,846	329,427	336,270	338,880	334,703	335,938	337,690	331,372	328,642
Grand Totals	612,134	591,548	612,007	614,534	614,892	601,236	601,016	590,131	592,280

## **Brooklyn-Queens Screenline**

# Historical Comparisons Average Daily Traffic Volumes





### 2009 Screenline Volumes Brooklyn - Queens

		l Street idge	•	oint Ave ridge		iuszko idge		ılaski ridge	Newtow To	n Creek tals
	W/B*	E/B	W/B*	E/B	W/B*	E/B	S/B*	N/B	To Brooklyn	
Mid-1am	93	68	148	156	1,561	2,767	378	245	2,180	3,236
1-2am	57	55	76	118	1,183	1,775	217	188	1,533	2,136
2-3am	56	49	74	103	992	1,280	180	151	1,302	1,583
3-4am	66	49	65	90	1,124	1,213	174	150	1,429	1,502
4-5am	110	76	145	160	1,957	1,812	197	259	2,409	2,307
5-6am	272	176	544	397	4,342	2,966	348	627	5,506	4,166
6-7am	440	231	916	623	5,312	4,819	668	1,201	7,336	6,874
7-8am	588	245	996	773	5,246	5,254	941	1,445	7,771	7,717
8-9am	594	241	924	810	4,370	5,261	1,060	1,305	6,948	7,617
9-10am	539	258	836	718	4,374	4,786	874	1,030	6,623	6,792
10-11am	465	265	685	658	4,786	4,223	845	908	6,781	6,054
11-Noon	400	304	667	711	4,645	4,534	848	947	6,560	6,496
Noon-1	390	342	669	710	4,785	4,765	881	967	6,725	6,784
1-2pm	408	335	668	743	4,727	4,894	961	983	6,764	6,955
2-3pm	422	355	708	976	4,946	4,897	1,097	1,053	7,173	7,281
3-4pm	457	444	824	1,149	4,508	4,513	1,410	1,138	7,199	7,244
4-5pm	487	486	897	1,124	4,786	4,866	1,513	1,180	7,683	7,656
5-6pm	408	490	908	1,119	4,757	5,138	1,372	1,093	7,445	7,840
6-7pm	257	363	621	844	4,775	5,234	1,064	900	6,717	7,341
7-8pm	164	208	395	616	4,395	5,225	751	715	5,705	6,764
8-9pm	143	125	334	446	3,926	4,978	641	536	5,044	6,085
9-10pm	110	110	281	352	3,853	4,394	537	457	4,781	5,313
10-11pm	113	84	205	284	3,370	4,010	465	417	4,153	4,795
11-Mid	95	83	167	204	3,570 2,547	3,451	459	327	· ·	•
i i-iviid	95	03	107	204	2,347	3,431	459	321	3,268	4,065
24 hr Total	7,134	5,442	12,753	13,884	91,267	97,055	17,881	18,222	129,035	134,603
6-10am	2,161	975	3,672	2,924	19,302	20,120	3,543	4,981	28,678	29,000
10am-1pm	1,255	911	2,021	2,079	14,216	13,522	2,574	2,822	20,066	19,334
1-3pm	830	690	1,376	1,719	9,673	9,791	2,058	2,036	13,937	14,236
3-7pm	1,609	1,783	3,250	4,236	18,826	19,751	5,359	4,311	29,044	30,081
•									· ·	
6am-7pm	5,855	4,359	10,319	10,958	62,017	63,184	13,534	14,150	91,725	92,651

<sup>\*</sup> To Brooklyn

### 2009 Screenline Volumes Brooklyn - Queens (cont'd)

										Jackie	Robinson
	Atlar	ntic Ave	Coo	per St	Cornelia St	Decatur St	DeKa	alb Ave	Greene Ave	Pa	rkway
	W/B*	E/B	S/B*	N/B	N/B	N/B	S/B*	N/B	N/B	W/B*	E/B
Mid-1am	136	154	80	37	27	27	26	25	29	488	551
1-2am	96	102	46	25	<sub>თ</sub> 15	თ 17	20	16	<sub>თ</sub> 21	241	316
2-3am	65	67	32	22	<b>6</b> 9	ត្ត 11	14	14	다. 12	160	236
3-4am	70	66	29	19	One Way to Queens 101 18 29 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	11 12 13 33 64 122 106	14	12	One Way to Queens 12 23 28 130 102	160	239
4-5am	95	81	51	29	Ø 13	Ø 13	21	16	Ø 15	316	400
5-6am	234	135	118	71	9 18 >	2 33	59	44	23	912	867
6-7am	539	272	324	125	ණි 53	ණි 64	152	106	g 78 N	2,299	1,805
7-8am	759	442	547	183	≥ 101	> 122 Φ	290	160	> 130 Φ	2,653	1,913
8-9am	714	450	482	193	Š 91	Š 106	260	156	Š 102	2,385	1,759
9-10am	575	448	343	163	81	95	163	120	102	1,959	1,462
10-11am	520	491	270	150	90	84	128	124	81	1,515	1,323
11-Noon	521	525	272	181	80	115	142	138	86	1,332	1,383
Noon-1	547	572	284	167	91	99	145	143	71	1,399	1,559
1-2pm	586	615	300	188	108	104	153	144	99	1,494	1,727
2-3pm	588	670	351	212	116	128	168	161	115	1,743	2,081
3-4pm	660	799	363	274	129	172	188	181	114	2,144	2,319
4-5pm	722	903	392	267	130	158	191	208	124	2,311	2,410
5-6pm	730	958	404	271	155	165	198	187	132	2,163	2,503
6-7pm	675	830	375	209	138	138	181	162	135	1,883	2,284
7-8pm	551	649	317	203	111	125	157	129	127	1,543	1,929
8-9pm	464	493	271	176	89	109	111	99	87	1,263	1,572
9-10pm	384	405	222	134	84	76	85	84	85	1,130	1,348
10-11pm	317	329	195	105	64	70	67	71	60	984	1,228
11-Mid	228	245	148	78	45	48	53	48	48	860	926
24 hr Total	10,776	10,701	6,216	3,482	1,847	2,091	2,986	2,548	1,887	33,337	34,140
6-10am	2,587	1,612	1,696	664	326	387	865	542	412	9,296	6,939
10am-1pm	1,588	1,588	826	498	261	298	415	405	238	4,246	4,265
1-3pm	1,174	1,385	651	400	224	232	321	305	214	3,237	3,808
3-7pm	2,787	3,490	1,534	1,021	552	633	758	738	505	3,23 <i>1</i> 8,501	9,516
•											
6am-7pm	8,136	7,975	4,707	2,583	1,363	1,550	2,359	1,990	1,369	25,280	24,528

<sup>\*</sup> To Brooklyn

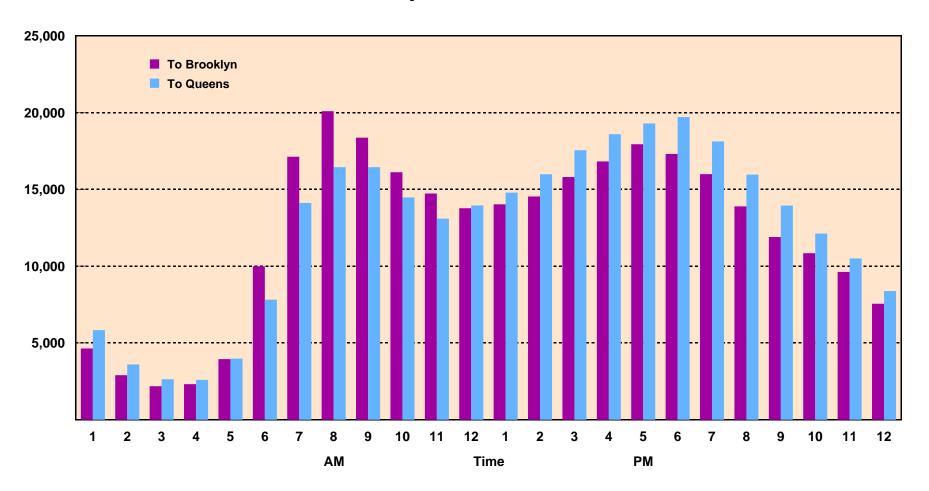
### 2009 Screenline Volumes Brooklyn - Queens (cont'd)

	Lind	en Blvd	Lin	iden St	Shore	Parkway	Sutte	er Ave	Other	Totals	Grand	l Totals
	W/B*	E/B		N/B	W/B*	E/B	W/B*	E/B	To Brooklyn	To Queens	To Brooklyr	To Queens
Mid-1am	331	380		29	1,332	1,278	66	57	2,459	2,594	4,639	5,830
1-2am	212	228	w	21	706	660	43	38	1,364	1,459	2,897	3,595
2-3am	159	188	Queens	16	428	451	22	25	880	1,051	2,182	2,634
3-4am	177	202	ne	15	407	481	29	26	886	1,092	2,315	2,594
4-5am	266	278	Ø	17	742	770	43	34	1,534	1,666	3,943	3,973
5-6am	642	444	, t	33	2,404	1,906	111	75	4,480	3,649	9,986	7,815
6-7am	1,459	783	/a	56	4,771	3,671	245	229	9,789	7,242	17,125	14,116
7-8am	2,153	894	<b>S</b>	101	5,545	4,424	372	256	12,319	8,726	20,090	16,443
8-9am	1,986	998	One Way to	103	5,225	4,621	364	249	11,416	8,828	18,364	16,445
9-10am	1,460	959	0	88	4,736	3,975	257	194	9,493	7,687	16,116	14,479
10-11am	1,188	933		83	4,095	3,495	233	187	7,949	7,041	14,730	13,095
11-Noon	1,050	1,049		96	3,685	3,617	206	190	7,208	7,460	13,768	13,956
Noon-1	1,140	1,111		110	3,555	3,867	232	216	7,302	8,006	14,027	14,790
1-2pm	1,147	1,204		96	3,854	4,490	239	253	7,773	9,028	14,537	15,983
2-3pm	1,164	1,300		116	4,324	5,096	291	269	8,629	10,264	15,802	17,545
3-4pm	1,244	1,614		119	4,694	5,323	329	309	9,622	11,353	16,821	18,597
4-5pm	1,279	1,570		123	5,011	5,430	346	317	10,252	11,640	17,935	19,296
5-6pm	1,222	1,570		157	4,790	5,457	355	318	9,862	11,873	17,307	19,713
6-7pm	1,108	1,293		143	4,715	5,162	336	286	9,273	10,780	15,990	18,121
7-8pm	1,020	1,046		125	4,324	4,530	275	224	8,187	9,198	13,892	15,962
8-9pm	816	1,023		101	3,711	3,912	213	196	6,849	7,857	11,893	13,942
9-10pm	748	842		80	3,303	3,501	189	164	6,061	6,803	10,842	12,116
10-11pm	697	747		65	3,041	2,829	168	132	5,469	5,700	9,622	10,495
11-Mid	541	599		43	2,339	2,029	111	105	4,280	4,309	7,548	8,374
i i-iviid	341	599		43	2,339	2,124	111	105	4,200	4,309	7,546	0,374
24 hr Total	23,209	21,255		1,936	81,737	81,070	5,075	4,349	163,336	165,306	292,371	299,909
6-10am	7,058	3,634		348	20,277	16,691	1,238	928	43,017	32,483	71,695	61,483
10am-1pm	3,378	3,093		289	11,335	10,979	671	593	22,459	22,507	42,525	41,841
1-3pm	2,311	2,504		212	8,178	9,586	530	522	16,402	19,292	30,339	33,528
3-7pm	4,853	6,047		542	19,210	21,372	1,366	1,230	39,009	45,646	68,053	75,727
•									•			·
6am-7pm	17,600	15,278		1,391	59,000	58,628	3,805	3,273	120,887	119,928	212,612	212,579

<sup>\*</sup> To Brooklyn

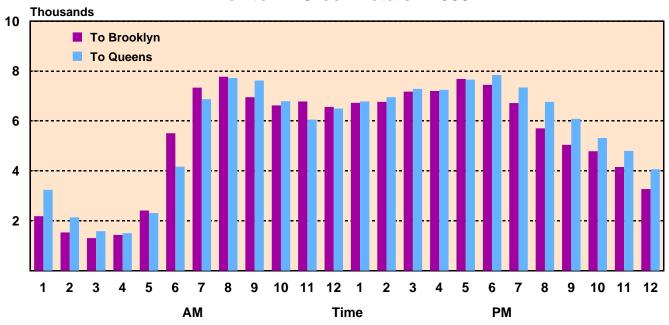
# **Brooklyn-Queens Screenline**

### **Total Hourly Vehicle Volumes - 2009**

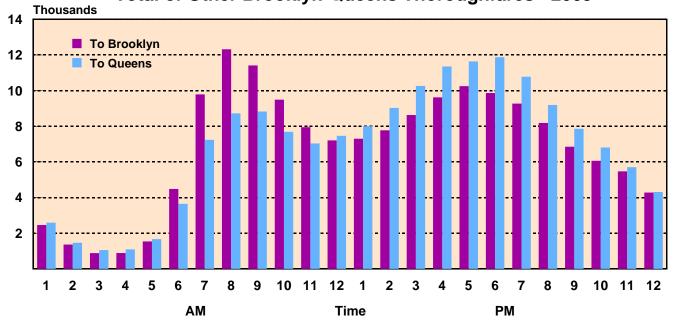


## Brooklyn-Queens Screenline Hourly Vehicle Volumes

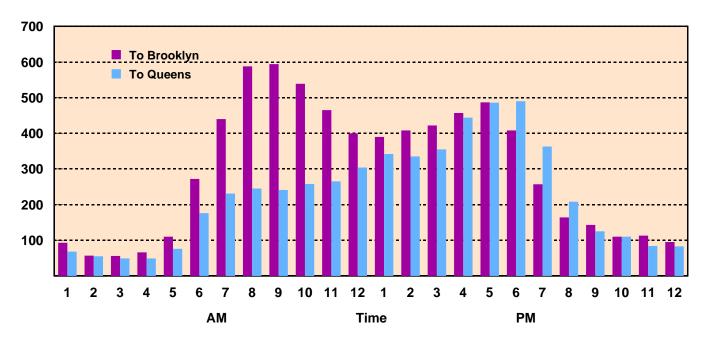
#### **Newtown Creek Totals - 2009**



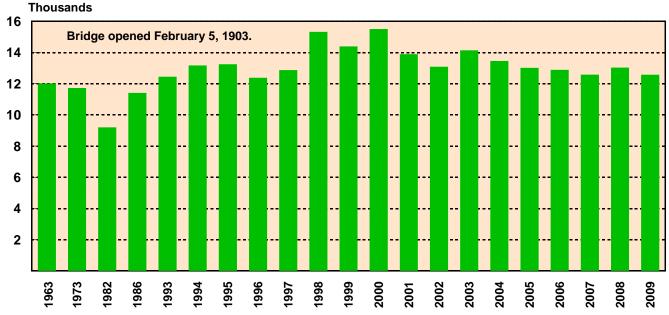
### Total of Other Brooklyn-Queens Thoroughfares - 2009



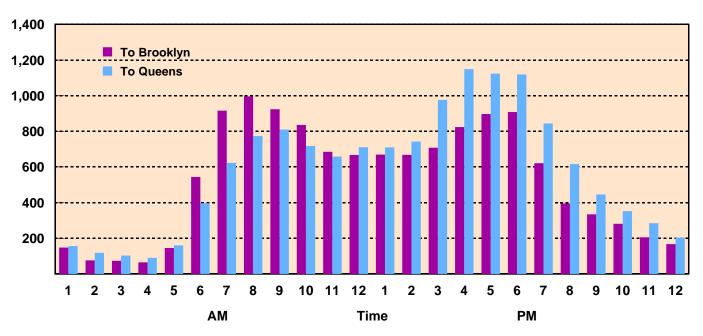
# **Grand Street Bridge - 2009 Hourly Vehicular Volumes**



# **Grand Street Bridge Average Daily Traffic Volumes**

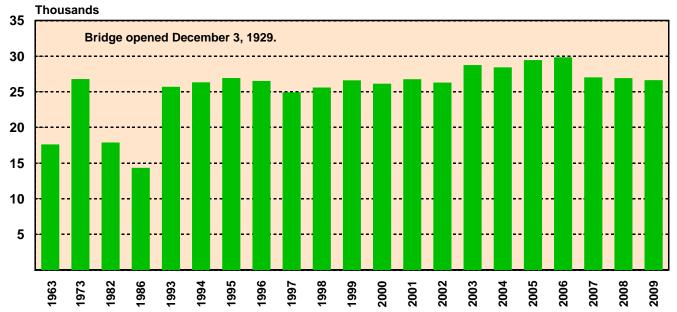


**Greenpoint Avenue Bridge - 2009 Hourly Vehicular Volumes** 

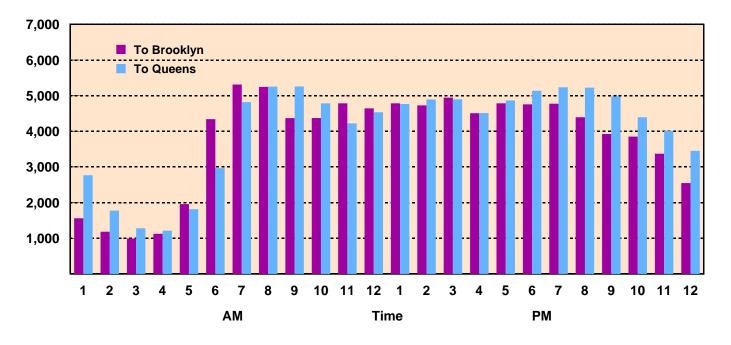


Note: Greenpoint Avenue Bridge also known as J.J. Byrne Memorial Bridge.

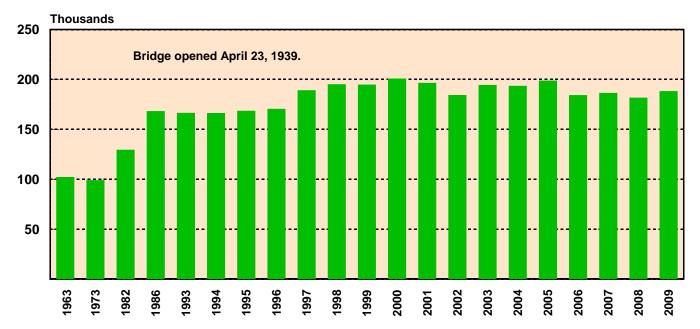
# **Greenpoint Avenue Bridge Average Daily Traffic Volumes**



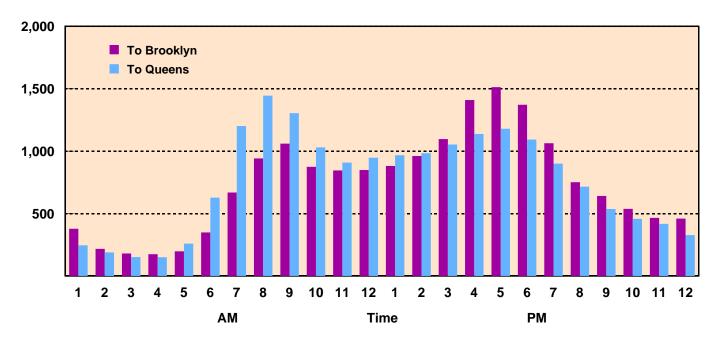
# **Kosciuszko Bridge - 2009 Hourly Vehicular Volumes**



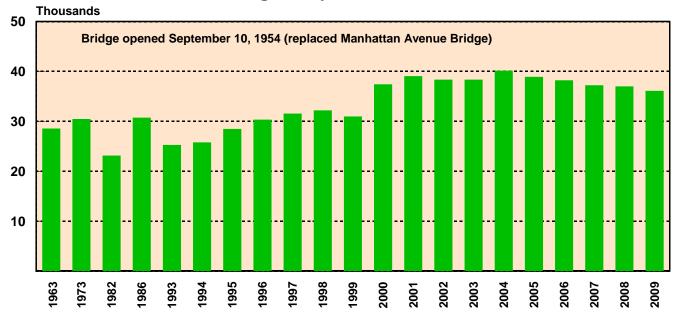
### Kosciuszko Bridge Average Daily Traffic Volumes



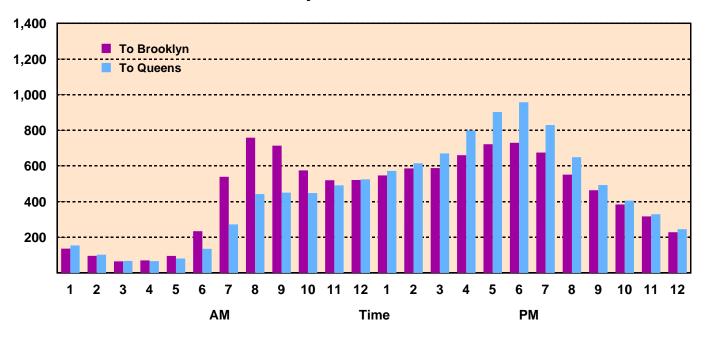
Pulaski Bridge - 2009 Hourly Vehicular Volumes



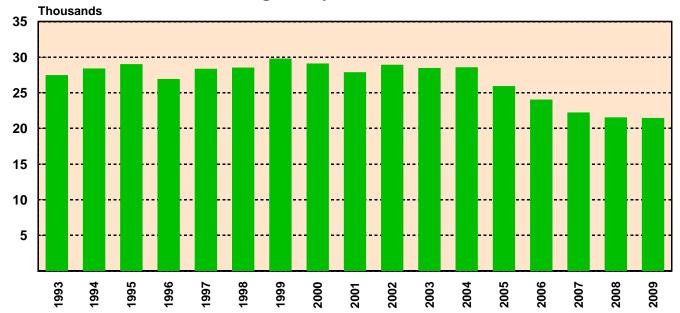
### Pulaski Bridge Average Daily Traffic Volumes



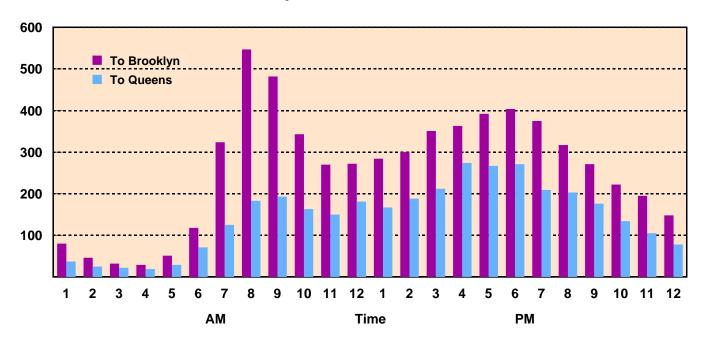
**Atlantic Avenue - 2009 Hourly Vehicular Volumes** 



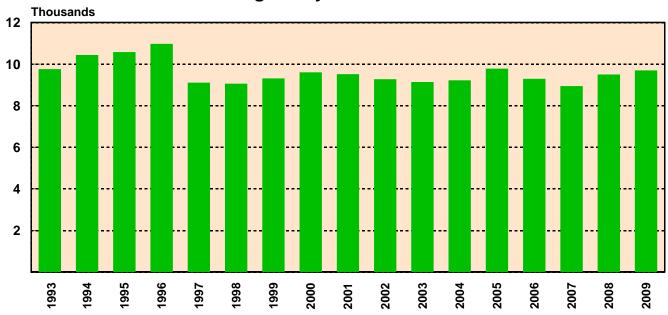
Atlantic Avenue
Average Daily Traffic Volumes



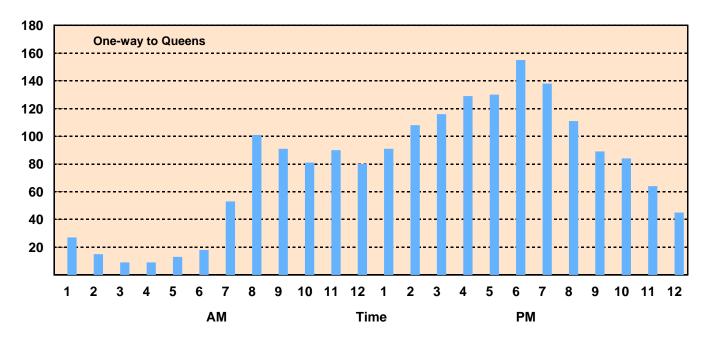
**Cooper Street - 2009 Hourly Vehicular Volumes** 



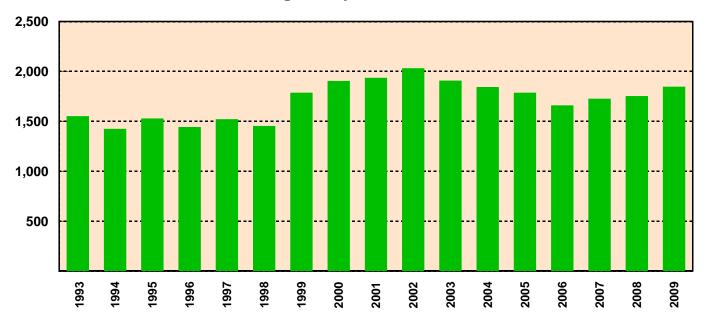
**Cooper Street Average Daily Traffic Volumes** 



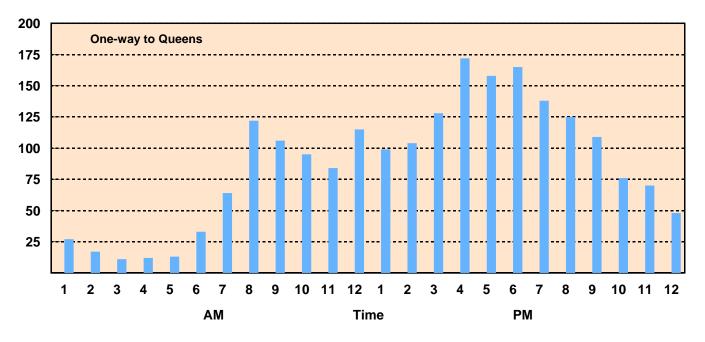
Cornelia Street - 2009 Hourly Vehicular Volumes



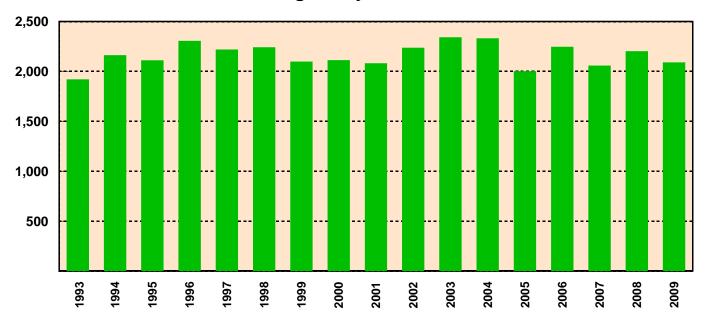
Cornelia Street
Average Daily Traffic Volumes



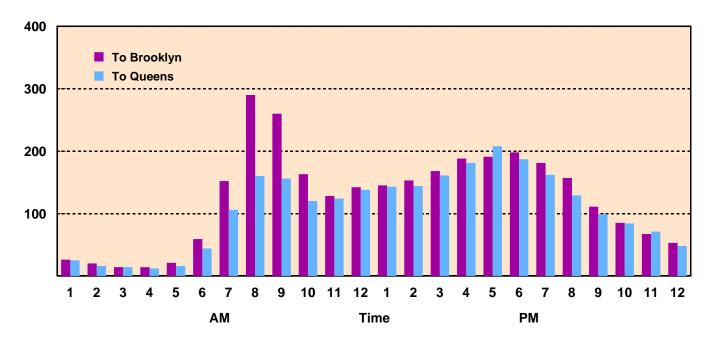
**Decatur Street - 2009 Hourly Vehicular Volumes** 



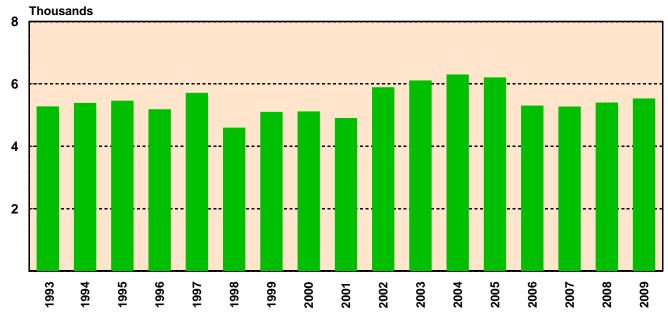
Decatur Street
Average Daily Traffic Volumes



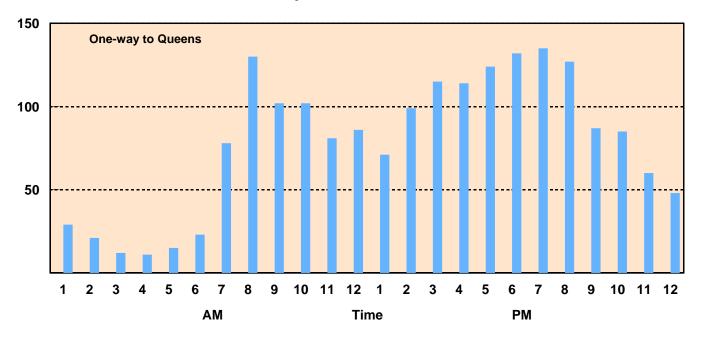
**DeKalb Avenue - 2009** Hourly Vehicular Volumes



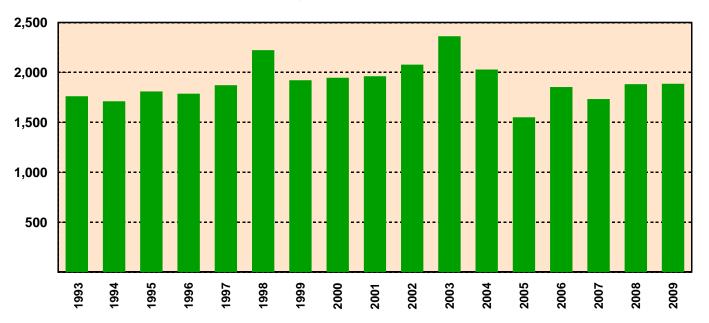
DeKalb Avenue Average Daily Traffic Volumes



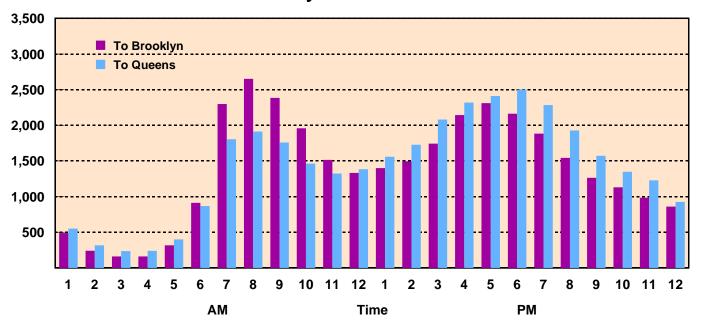
**Greene Avenue - 2009 Hourly Vehicular Volumes** 



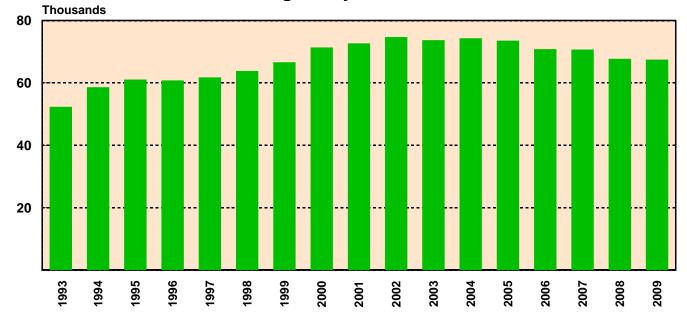
**Greene Avenue Average Daily Traffic Volumes** 



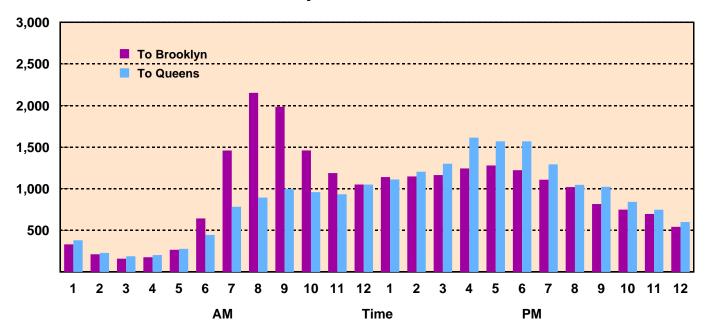
### Jackie Robinson Parkway - 2009 Hourly Vehicular Volumes



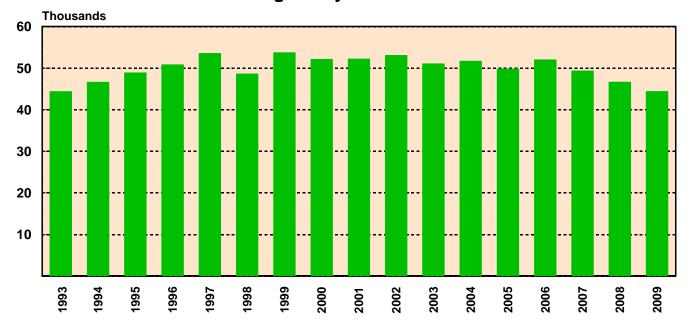
### Jackie Robinson Parkway Average Daily Traffic Volumes



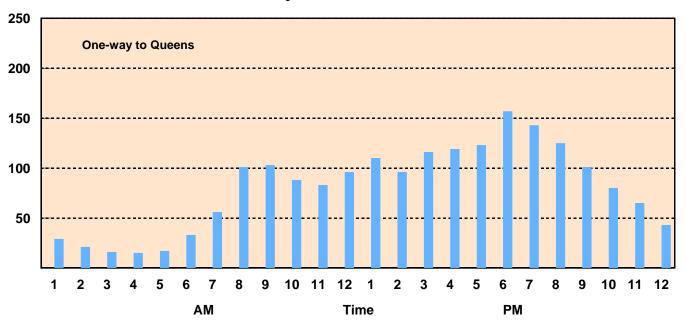
# **Linden Boulevard - 2009 Hourly Vehicular Volumes**



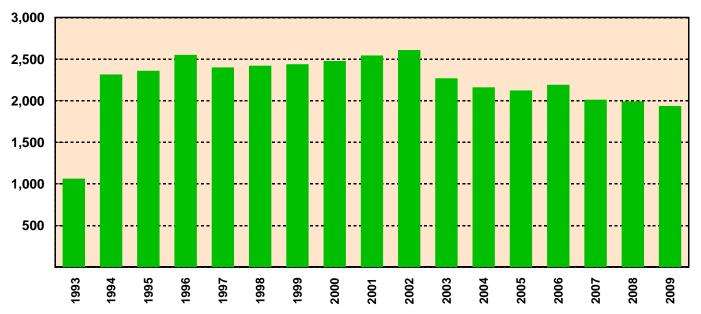
# Linden Boulevard Average Daily Traffic Volumes



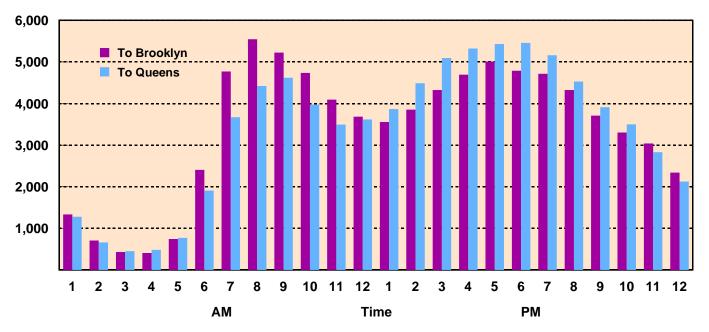
**Linden Street - 2009 Hourly Vehicular Volumes** 



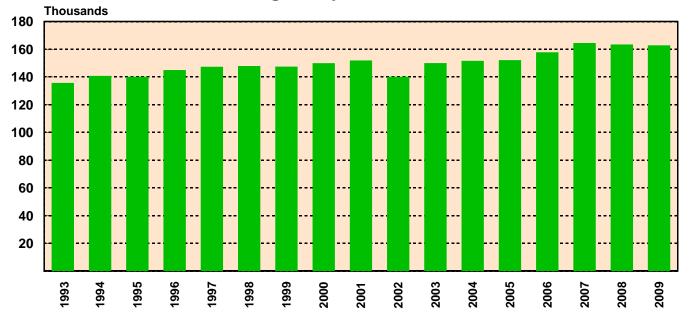
**Linden Street Average Daily Traffic Volumes** 



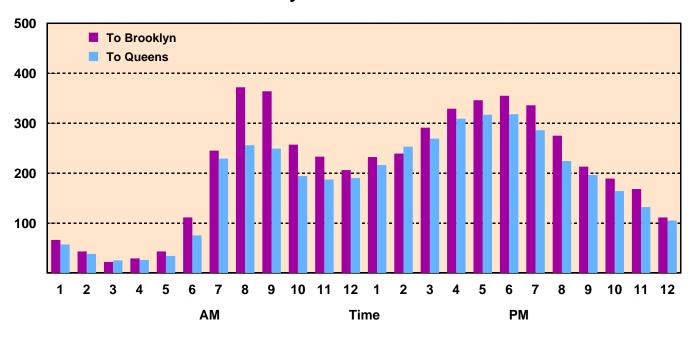
**Shore Parkway - 2009** Hourly Vehicular Volumes



Shore Parkway
Average Daily Traffic Volumes



**Sutter Avenue - 2009 Hourly Vehicular Volumes** 



Sutter Avenue Average Daily Traffic Volumes

