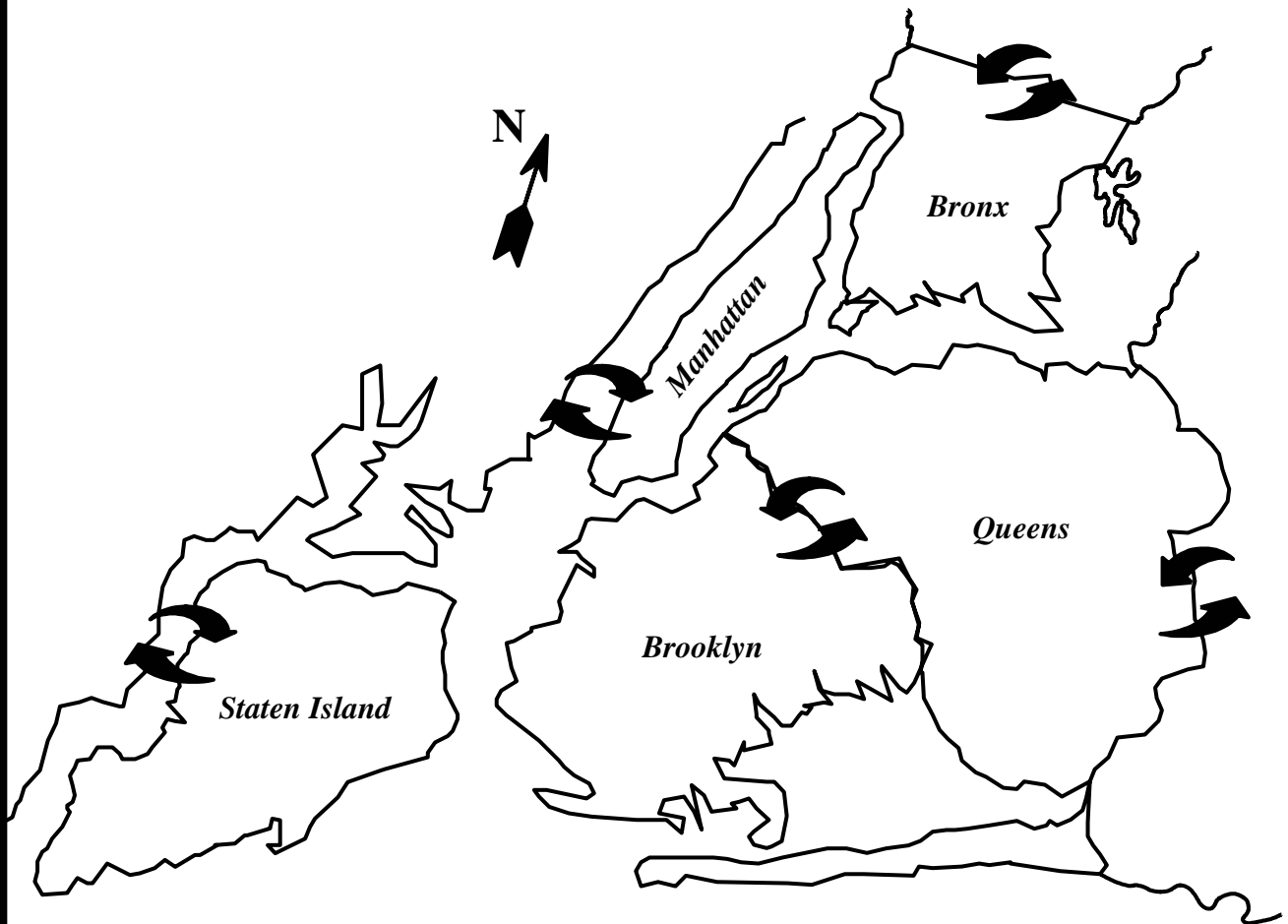


New York City Screenline Traffic Flow 2004



The City of New York
Michael R. Bloomberg, Mayor



New York City Department of Transportation
Iris Weinshall, Commissioner

A member of the New York Metropolitan Transportation Council

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New York City Screenline Traffic Flow 2004

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INTRODUCTION

The 2004 *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 Transportation Equity Act of the 21st Century (TEA-21). 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 2004 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 1993-2003. The statistical analysis presented in the report was performed by staff of NYCDOT during the 2004-2005 and 2005-2006 program years.

The 47 screenline monitoring locations in New York City are designated by a roadway functional classification. Functional classification is the method by which streets and highways are grouped into classes, or systems, according to the character of service provided by each roadway.

The five functional systems are defined as:

1. Interstate - connects population centers across state lines.
2. Principal Arterial - serves major centers of activity of an urban area and carries a high proportion of the total urban area travel on a minimum of mileage.
3. Minor Arterial - interconnects with and augments urban principal arterials; provides service for trips of moderate length at a somewhat lower level of travel mobility than principal arterials; distributes travel to geographic areas smaller than those identified with the higher system.
4. Collector Street - provides both land access service and traffic circulation within residential neighborhoods, and commercial and industrial areas. Differs from the arterial systems in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from arterials to the ultimate destination. Conversely, collector streets also collect traffic from local streets in residential neighborhoods and channel it into the arterial system.
5. Local Street - comprises all facilities not on one of the higher systems. Serves primarily to provide direct access to abutting land and access to the higher order systems. Offers the lowest level of mobility and usually contains no bus or truck route.

NEW YORK CITY SCREENLINE

SUMMARY

2004 Daily Traffic

- Nearly 2,304,000 daily motor vehicles crossed the 32 New York City border screenline monitoring locations in 2004, 0.3% fewer than the 2003 daily volume of 2,310,000.
- Since the first survey in 1963, the highest volumes have been at the Queens-Nassau border. In 2004, some 965,600 daily vehicles were counted at the fifteen Queens-Nassau monitoring locations, 41.9% of the total traffic recorded at the City boundaries. The eleven Bronx-Westchester locations yielded 27.2% of the total (627,300), the three Manhattan-New Jersey river crossings 23.3% (536,400), and the three Staten Island-New Jersey bridges 7.6% (174,300). The latter six facilities are operated by the Port Authority of New York and New Jersey (PANYNJ).
- Morning hourly inbound volume peaked between 7-8 am, when 76,500 vehicles were recorded entering the City limits. Between 6-10 am, a total of 284,400 vehicles were recorded entering the City from Nassau and Westchester Counties, and New Jersey.
- During the 5-6 pm evening peak hour, 79,000 vehicles were recorded leaving the City. Between 3-7 pm, 310,000 vehicles were recorded leaving 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 9 pm.

10-Year Trends (1994-2004)

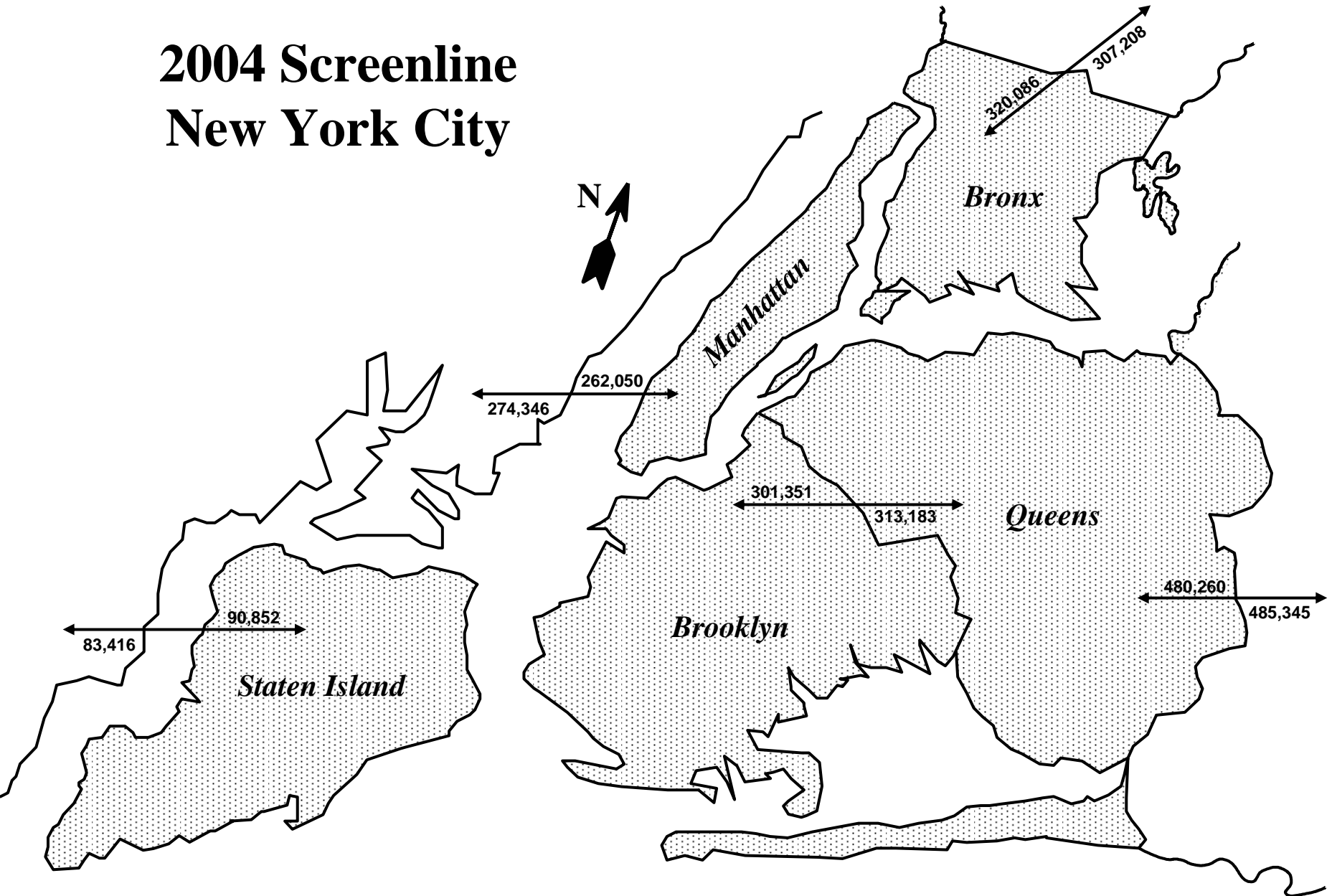
- Total monitored daily traffic volume at the City boundaries increased 13.4% during this ten-year period, to 2,303,600 in 2004 from 2,030,700 in 1994. This represents an average annual growth rate of 1.3%.
- The largest increase occurred at the eleven Bronx-Westchester border monitoring sites, where traffic volume was 21.6% higher in 2004 than in 1994: 627,300 daily vehicles vs. 515,900, an average annual growth rate of 2.0%.
- Volume at the fifteen monitored Queens-Nassau locations rose 7.6%, to 965,600 daily vehicles in 2004 from 897,200 in 1994, an average annual growth rate of 0.7%.
- On the three Hudson River crossings between Manhattan and New Jersey, daily traffic increased 13.2%, to 536,400 in 2004 from 473,800 in 1994, an average annual growth rate of 1.2%.
- On the three bridges between Staten Island and New Jersey, daily traffic increased 21.1%, to 174,300 in 2004 from 143,900 in 1994, an average annual growth rate of 1.9%.

Historical Comparisons

- 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 subsided 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 1994, monitored traffic at the New York City boundaries increased modestly, rising by just 4.1% during that eight-year period, to 2,030,700 in 1994 from 1,951,000 in 1986. The largest volume increase was at the Queens-Nassau screenline, where daily volume was up 6.4%, to 897,200 in 1994 from 843,500 in 1986 (+53,700 daily vehicles). The largest percentage increase was at the Bronx-Westchester screenline, where daily traffic increased 6.7%, to 515,900 from 483,300. Staten Island-New Jersey daily volume rose 3.9%, to 143,900 from 138,400. Traffic between Manhattan and New Jersey decreased 2.5%, to 473,800 from 485,800.
- From 1963 to 2004, daily two-way traffic at the 29 City border locations monitored throughout the period more than doubled, to 2,257,500 in 2004 from 1,109,200 in 1963.
- Staten Island-New Jersey traffic expanded by 536%, to 174,300 daily vehicles in 2004 from 27,400 in 1963, largely as a result of the opening of the Verrazano-Narrows Bridge in 1964.
- Manhattan-New Jersey volume climbed 102%, to 536,400 in 2004 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 41-year period from 1963 to 2004, continuously monitored daily traffic increased 129% between The Bronx and Westchester (to 616,500 from 269,700), and 70% between Queens and Nassau (to 930,300 from 546,600).

2004 Screenline New York City



2003 vs. 2004
Screenline Traffic Volume Trends
Both Directions

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BRONX-WESTCHESTER	Highway Functional Classification	2003	2004	Percent Change
Boston Road	Principal Arterial	27,037	24,612	- 9.0 %
Broadway	Principal Arterial	16,470	15,903	- 3.4 %
Bronx River Parkway	Principal Arterial	90,969	94,139	3.5 %
Henry Hudson Parkway	Principal Arterial	98,734	98,050	- 0.7 %
Hutchinson River Parkway	Principal Arterial	89,548	96,265	7.5 %
Major Deegan Expressway	Interstate	113,113	109,868	- 2.9 %
Major Deegan Svce Roads	Principal Arterial	10,602	12,318	16.2 %
New England Thruway	Interstate	127,557	130,037	1.9 %
Riverdale Avenue	Principal Arterial	10,954	11,359	3.7 %
Van Cortlandt Park East	Minor Arterial	10,499	10,770	2.6 %
Webster Avenue	Local	11,434	11,408	- 0.2 %
White plains Road	Principal Arterial	12,532	12,565	0.3 %
Total Bronx-Westchester Screenline		619,449	627,294	1.3 %

QUEENS-NASSAU

Beach Channel Drive	Minor Arterial	26,328	24,244	- 7.9 %
Central Avenue	Minor Arterial	14,419	14,222	- 1.4 %
Grand Central Parkway	Principal Arterial	177,744	173,869	- 2.2 %
Grand Central Parkway Svce Road	Minor Arterial	9,474	10,828	14.3 %
Hempstead Avenue	Principal Arterial	51,332	43,662	-14.9 %
Hillside Avenue	Principal Arterial	25,004	26,373	5.5 %
Jamaica Avenue	Principal Arterial	29,765	30,727	3.2 %
Laurelton Parkway	Principal Arterial	159,012	175,403	10.3 %
Linden Boulevard	Principal Arterial	29,432	28,488	- 3.2 %
Long Island Expressway	Interstate	170,119	147,648	-13.2 %
Long Island Exp Svce Roads	Principal Arterial	20,515	36,214	76.5 %
Merrick Boulevard	Minor Arterial	20,590	21,006	2.0 %
Northern Boulevard	Principal Arterial	45,665	44,802	- 1.9 %
Rockaway Boulevard	Principal Arterial	72,562	73,932	1.9 %
Seagirt Boulevard	Principal Arterial	22,897	21,044	- 8.1 %
Sunrise Highway	Principal Arterial	67,665	68,127	0.7 %
Union Turnpike	Principal Arterial	26,171	25,016	- 4.4 %
Total Queens-Nassau Screenline		968,694	965,605	- 0.3 %

2003 vs. 2004
Screenline Traffic Volume Trends
Both Directions

Page 2 of 2

NEW YORK - NEW JERSEY	<i>Highway Functional Classification</i>	2003	2004	Percent Change
George Washington Bridge	Interstate	319,029	315,066	- 1.2 %
Holland Tunnel	Interstate	101,097	96,171	- 4.9 %
Lincoln Tunnel	Principal Arterial	127,323	125,159	- 1.7 %
Bayonne Bridge	Principal Arterial	20,208	22,510	11.4 %
Goethals Bridge	Interstate	75,724	71,532	- 5.5 %
Outerbridge Crossing	Principal Arterial	78,650	80,226	2.0 %
Total New York - New Jersey Screenline		722,031	710,664	- 1.6 %

BROOKLYN - QUEENS

Grand Street Bridge	Principal Arterial	14,139	13,459	- 4.8 %
Greenpoint Avenue Bridge	Principal Arterial	28,755	28,437	- 1.1 %
Kosciuszko Bridge	Interstate	194,497	193,612	- 0.5 %
Pulaski Bridge	Principal Arterial	38,346	40,146	4.7 %
Atlantic Avenue	Principal Arterial	28,486	28,596	0.4 %
Cooper Street	Minor Arterial	9,141	9,220	0.9 %
Cornelia Street	Local	1,908	1,844	- 3.4 %
Decatur Street	Collector	2,342	2,332	- 0.4 %
DeKalb Avenue	Minor Arterial	6,110	6,304	3.2 %
Greene Avenue	Minor Arterial	2,363	2,029	-14.1 %
Jackie Robinson Parkway	Principal Arterial	73,706	74,304	0.8 %
Linden Boulevard	Principal Arterial	51,110	51,753	1.3 %
Linden Street	Collector	2,270	2,161	- 4.8 %
Shore Parkway	Principal Arterial	150,040	151,605	1.0 %
Sutter Avenue	Minor Arterial	8,794	8,732	- 0.7 %
Total Brooklyn - Queens Screenline		612,007	614,534	0.4 %

**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
Bronx-Westchester	308,307	314,460	315,038	320,086
Queens-Nassau	473,363	468,813	485,332	480,260
N.J. - Manhattan	222,389	254,895	260,117	262,050
N.J. - Staten Island	94,413	90,510	92,108	90,852
Totals	1,098,472	1,128,678	1,152,595	1,153,248

**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
Bronx-Westchester	298,359	305,478	304,411	307,208
Queens-Nassau	473,364	475,193	483,362	485,345
N.J. - Manhattan	236,555	277,944	287,332	274,346
N.J. - Staten Island	82,838	88,630	82,474	83,416
Totals	1,091,116	1,147,245	1,157,579	1,150,315

* 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
Bronx-Westchester	606,666	619,938	619,449	627,294
Queens-Nassau	946,727	944,006	968,694	965,605
N.J. - Manhattan	458,944	532,839	547,449	536,396
N.J. - Staten Island	177,251	179,140	174,582	174,268
Totals	2,189,588	2,275,923	2,310,174	2,303,563

* 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.

2004 Screenline Volumes New York City

	<i>Bronx-Westchester</i>		<i>Queens-Nassau</i>		<i>New York-New Jersey</i>				<i>NYC Totals</i>	
	<i>To Bronx</i>	<i>To W'chstr</i>	<i>To Qns.</i>	<i>To Nas.</i>	<i>Manhattan</i>	<i>Staten Island</i>		<i>To N.Y.C.</i>	<i>From N.Y.C.</i>	
					<i>To Manh.</i>	<i>To N.J.</i>	<i>To S.I.</i>	<i>To N.J.</i>		
Mid-1am	4,030	4,857	4,640	6,828	3,648	7,259	1,272	989	13,590	19,933
1-2am	2,348	3,045	2,738	3,800	2,481	4,714	891	646	8,458	12,205
2-3am	1,858	2,187	2,170	2,746	1,958	3,023	731	477	6,717	8,433
3-4am	1,908	2,027	2,660	2,388	2,111	2,827	731	518	7,410	7,760
4-5am	3,418	2,563	5,243	3,229	3,502	3,141	1,228	661	13,391	9,594
5-6am	8,107	5,238	16,707	6,919	9,880	4,909	3,157	1,712	37,851	18,778
6-7am	17,538	12,294	29,448	18,316	19,643	9,146	5,028	4,495	71,657	44,251
7-8am	22,267	18,730	30,715	29,642	18,640	12,918	4,841	6,846	76,463	68,136
8-9am	20,625	19,897	28,055	32,137	17,706	13,262	4,658	6,755	71,044	72,051
9-10am	17,116	15,029	26,782	27,568	16,798	11,373	4,527	4,685	65,223	58,655
10-11am	15,636	13,680	24,473	24,260	14,467	10,490	3,929	4,308	58,505	52,738
11-Noon	15,458	14,061	23,193	23,409	12,303	10,450	3,781	4,061	54,735	51,981
Noon-1	15,556	14,707	24,166	24,923	11,586	11,330	3,914	3,952	55,222	54,912
1-2pm	16,168	15,458	24,690	26,550	11,609	12,712	4,249	3,939	56,716	58,659
2-3pm	17,322	17,007	26,537	30,759	12,104	15,102	4,878	4,621	60,841	67,489
3-4pm	18,849	20,376	28,137	33,242	13,473	17,329	5,557	5,296	66,016	76,243
4-5pm	21,137	21,677	30,659	32,220	14,383	19,265	6,349	5,738	72,528	78,900
5-6pm	21,909	22,245	32,912	32,068	14,880	19,429	7,500	5,248	77,201	78,990
6-7pm	20,858	20,250	29,951	31,920	14,791	18,856	6,575	4,805	72,175	75,831
7-8pm	16,629	17,123	26,146	27,247	12,847	17,793	5,060	4,008	60,682	66,171
8-9pm	13,364	13,980	20,604	21,698	10,063	15,645	3,977	3,465	48,008	54,788
9-10pm	11,726	12,225	16,935	17,757	8,925	12,776	3,343	2,409	40,929	45,167
10-11pm	9,617	10,436	13,581	14,945	7,976	11,252	2,607	2,156	33,781	38,789
11-Mid	6,642	8,116	9,118	10,774	6,276	9,345	2,069	1,626	24,105	29,861
24 hr Total	320,086	307,208	480,260	485,345	262,050	274,346	90,852	83,416	1,153,248	1,150,315
6-10am	77,546	65,950	115,000	107,663	72,787	46,699	19,054	22,781	284,387	243,093
10am-1pm	46,650	42,448	71,832	72,592	38,356	32,270	11,624	12,321	168,462	159,631
1-3pm	33,490	32,465	51,227	57,309	23,713	27,814	9,127	8,560	117,557	126,148
3-7pm	82,753	84,548	121,659	129,450	57,527	74,879	25,981	21,087	287,920	309,964
6am-7pm	240,439	225,411	359,718	367,014	192,383	181,662	65,786	64,749	858,326	838,836

BRONX - WESTCHESTER SCREENLINE

SUMMARY

2004 Daily Traffic

- On a typical 2004 weekday, 627,300 vehicles crossed the eleven Bronx-Westchester screenline monitoring locations, 1.3% more than the 619,400 daily vehicles recorded in 2003.
- Some 86.2% of the recorded vehicles (540,700 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 130,000 daily vehicles, is the most-traveled Bronx-Westchester highway, carrying 20.7% of the total traffic on the monitored thoroughfares. The Major Deegan Expressway (including service roads) is second with 122,200 daily vehicles, 19.5% of the total. The Henry Hudson Parkway serves 98,100 daily vehicles (15.6%), the Hutchinson River Parkway 96,300 (15.3%), and the Bronx River Parkway 94,100 (15.0%).
- Boston Road is the busiest surface arterial monitored, averaging 24,600 vehicles per day, 3.9% of the total.
- Some 22,300 vehicles were recorded entering The Bronx from Westchester during the 7-8 am morning peak hour. The Major Deegan Expressway and its service road carried 5,100 of those peak hour southbound vehicles, with another 4,400 on the Henry Hudson Parkway.
- During the 6-10 am inbound rush period, 77,500 vehicles were recorded entering The Bronx. Some 17,100 of those vehicles were using the Major Deegan Expressway and its service road, with another 14,600 on the Henry Hudson Parkway.
- A total of 22,200 vehicles were counted crossing the screenline from The Bronx into Westchester during the 5-6 pm evening peak hour. Over 4,800 of those vehicles used the Major Deegan Expressway and its service road.
- During the 3-7 pm evening rush period, 84,500 vehicles were recorded leaving The Bronx. The Major Deegan Expressway and its service road accommodated 18,000 of those northbound vehicles.
- Reverse traffic was heavy during the 3-7 pm evening period, with an inbound volume of 82,800, compared to the outbound total of 84,500. During this period, the New England Thruway actually carried more inbound than outbound traffic (17,200 inbound vs. 13,600 outbound), consistent with recent screenline counts.
- Reverse traffic was less intense during the 6-10 am morning period: 77,500 inbound vs. 66,000 outbound. New England Thruway traffic was heavier in the reverse direction: 16,200 outbound vs. 12,800 inbound.

10-Year Trends (1994-2004)

- Bronx-Westchester screenline traffic increased 21.6% during this ten-year period, to 627,300 daily vehicles in 2004, from 515,900 in 1994. This represents an average annual growth rate of 2.0%.
- The largest increases since 1994 occurred on the Henry Hudson Parkway, the Hutchinson River Parkway, and the New England Thruway, with average annual growth rates of 3.8%, 3.2%, and 2.5%, respectively. Volume on the Henry Hudson Parkway was 45.8% higher in 2004 than in 1994 (98,100 daily vehicles vs. 67,300). Daily volume on the Hutchinson River Parkway was up 37.5%, to 96,300 in 2004 from 70,000 in 1994. Concurrently, daily volume on the New England Thruway rose 28.4% (to 130,000 from 101,300).
- The only decline occurred on Broadway, where volume was down 5.4%, to 15,900 daily vehicles in 2004 from 16,800 in 1994.

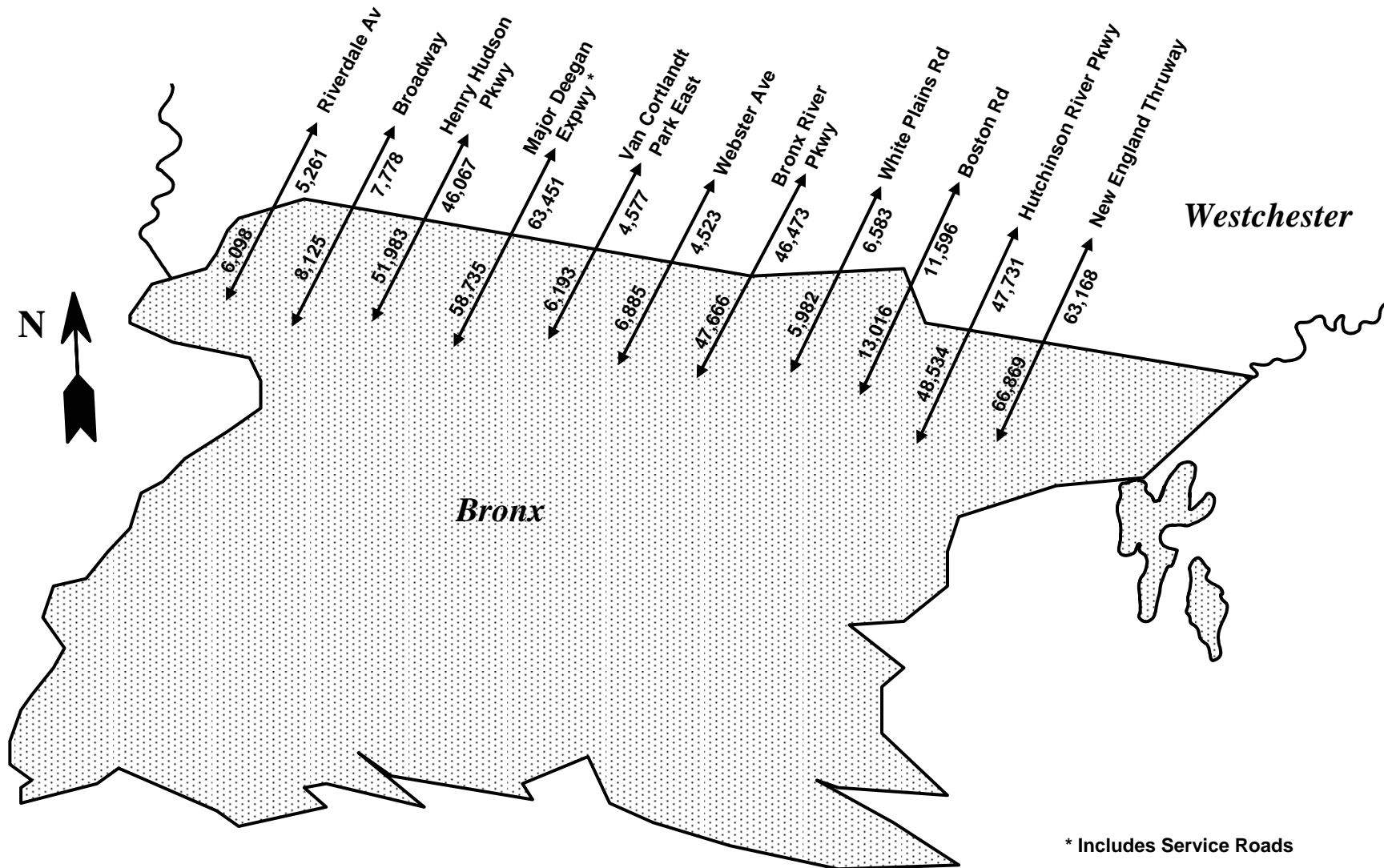
Historical Comparisons

- 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 1994, growth was moderate, as Bronx-Westchester screenline traffic volume increased 6.7% during that eight-year period, to 515,900 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 29.0%, to 70,000 daily vehicles from 54,300), and on the Henry Hudson Parkway (up 26.3%, to 67,300 from 53,300).
- During the 41 years from 1963 to 2004, total daily traffic on the ten facilities monitored throughout the period more than doubled, to 616,500 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 346,900 additional daily

vehicles on the ten continuously-monitored facilities, 327,000 (94% of the total increase) are on the limited access highways. The fastest growth occurred on the Hutchinson River Parkway, where daily volume soared 496%, to 96,300 daily vehicles from 16,200. Henry Hudson Parkway volume more than tripled, to 98,100 from 29,000. New England Thruway volume climbed 132%, to 130,000 from 56,100. Bronx River Parkway volume doubled (to 94,100 from 44,100), while volume on the Major Deegan Expressway and its service roads was up 79% (to 122,200 from 68,300).

- Boston Road exhibited the largest change of any arterial facility since 1963, with daily volume rising 124%, to 24,600 from 11,000. Volume on White Plains Road increased 36% to 12,600 daily vehicles from 9,200.

2004 Screenline Daily Volumes Bronx-Westchester



* Includes Service Roads

**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
Boston Rd	13,262	12,997	13,839	13,016
Broadway	8,143	7,989	8,117	8,125
Bronx River Pky	46,681	49,382	47,061	47,666
Henry Hudson Pky	51,091	52,378	51,151	51,983
Hutchinson River Pky	44,624	46,446	44,690	48,534
Major Deegan Exp *	54,052	56,811	59,430	58,735
New England Thruway	66,091	64,042	66,454	66,869
Riverdale Ave	5,816	5,643	5,490	6,098
Van Cortlandt Pk E	5,399	5,816	5,874	6,193
Webster Ave	6,605	6,736	6,804	6,885
White Plains Rd	6,543	6,220	6,128	5,982
Totals	308,307	314,460	315,038	320,086

* Includes 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
Boston Rd	12,825	12,296	13,198	11,596
Broadway	8,152	8,005	8,353	7,778
Bronx River Pky	42,812	45,596	43,908	46,473
Henry Hudson Pky	44,236	45,624	47,583	46,067
Hutchinson River Pky	44,027	47,490	44,858	47,731
Major Deegan Exp *	62,772	62,022	64,285	63,451
New England Thruway	61,554	62,469	61,103	63,168
Riverdale Ave	6,143	5,187	5,464	5,261
Van Cortlandt Pk E	4,961	4,801	4,625	4,577
Webster Ave	4,236	4,811	4,630	4,523
White Plains Rd	6,641	7,177	6,404	6,583
Totals	298,359	305,478	304,411	307,208

* Includes 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
Boston Rd	26,087	25,293	27,037	24,612
Broadway	16,295	15,994	16,470	15,903
Bronx River Pky	89,493	94,978	90,969	94,139
Henry Hudson Pky	95,327	98,002	98,734	98,050
Hutchinson River Pky	88,651	93,936	89,548	96,265
Major Deegan Exp *	116,824	118,833	123,715	122,186
New England Thruway	127,645	126,511	127,557	130,037
Riverdale Ave	11,959	10,830	10,954	11,359
Van Cortlandt Pk E	10,360	10,617	10,499	10,770
Webster Ave	10,841	11,547	11,434	11,408
White Plains Rd	13,184	13,397	12,532	12,565
Totals	606,666	619,938	619,449	627,294

* Includes service roads

2004 Screenline Volumes Bronx - Westchester

	Boston Rd		Broadway		Bronx River Parkway		Henry Hudson Parkway		Hutchinson River Parkway		Major Deegan Expressway		Major Deegan (Service Rd)	
	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>
Mid-1am	105	91	148	165	543	523	469	664	521	686	621	931	58	138
1-2am	64	65	73	100	245	261	206	372	234	280	371	562	34	72
2-3am	62	56	57	75	173	195	131	239	144	174	309	396	25	49
3-4am	88	69	47	58	177	187	121	139	124	125	340	375	33	29
4-5am	86	69	89	74	342	234	268	168	385	206	700	519	35	33
5-6am	211	160	159	102	1,031	627	979	351	1,074	769	2,057	1,105	130	64
6-7am	414	367	404	209	2,679	1,961	3,130	1,142	2,432	2,476	4,142	2,295	332	192
7-8am	771	628	683	364	3,274	3,008	4,393	2,163	2,790	3,303	4,637	3,123	452	294
8-9am	815	789	613	368	3,045	3,060	3,826	2,613	3,133	3,308	3,830	3,172	398	339
9-10am	667	640	440	368	2,612	2,119	3,283	1,830	2,416	2,520	2,964	2,551	321	315
10-11am	682	628	401	324	2,309	1,853	2,904	1,627	2,341	2,246	2,513	2,535	274	284
11-Noon	723	685	352	332	2,272	1,937	2,724	1,836	2,308	2,215	2,287	2,740	257	303
Noon-1	819	769	369	363	2,228	2,142	2,529	2,000	2,340	2,143	2,369	2,731	307	331
1-2pm	809	775	415	441	2,320	2,406	2,454	2,197	2,537	2,402	2,494	2,818	297	334
2-3pm	829	784	464	434	2,484	2,886	2,582	2,594	2,857	2,510	2,721	3,174	299	380
3-4pm	888	865	500	502	2,910	3,502	2,901	3,203	3,272	3,257	2,703	3,748	304	447
4-5pm	906	825	495	530	3,566	3,799	3,272	3,683	3,392	3,307	3,046	4,049	305	536
5-6pm	1,012	831	525	598	3,301	3,948	3,817	3,852	3,491	3,117	3,166	4,237	313	571
6-7pm	886	727	488	573	2,999	3,273	3,568	3,527	3,303	2,867	2,948	3,964	357	483
7-8pm	693	586	384	484	2,470	2,594	2,610	3,072	2,905	2,378	2,396	3,416	261	541
8-9pm	543	419	294	388	2,123	2,076	1,850	2,714	2,198	2,143	2,134	2,622	185	342
9-10pm	400	311	252	370	1,912	1,561	1,721	2,391	1,876	2,196	1,906	2,264	200	272
10-11pm	311	282	270	291	1,575	1,351	1,363	2,066	1,541	1,842	1,580	1,802	163	289
11-Mid	232	175	203	265	1,076	970	882	1,624	920	1,261	1,059	1,446	102	238
24 hr Total	13,016	11,596	8,125	7,778	47,666	46,473	51,983	46,067	48,534	47,731	53,293	56,575	5,442	6,876
6-10am	2,667	2,424	2,140	1,309	11,610	10,148	14,632	7,748	10,771	11,607	15,573	11,141	1,503	1,140
10am-1pm	2,224	2,082	1,122	1,019	6,809	5,932	8,157	5,463	6,989	6,604	7,169	8,006	838	918
1-3pm	1,638	1,559	879	875	4,804	5,292	5,036	4,791	5,394	4,912	5,215	5,992	596	714
3-7pm	3,692	3,248	2,008	2,203	12,776	14,522	13,558	14,265	13,458	12,548	11,863	15,998	1,279	2,037
6am-7pm	10,221	9,313	6,149	5,406	35,999	35,894	41,383	32,267	36,612	35,671	39,820	41,137	4,216	4,809

* To Bronx

2004 Screenline Volumes Bronx - Westchester (cont'd)

	New England Thruway		Riverdale Ave		Van Cortlandt Park East		Webster Ave		White Plains Rd		Totals	
	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	To Bronx	To Westchester
Mid-1am	1,234	1,329	58	75	100	52	60	56	113	147	4,030	4,857
1-2am	921	1,151	15	27	68	33	39	22	78	100	2,348	3,045
2-3am	814	853	15	23	48	24	25	20	55	83	1,858	2,187
3-4am	839	945	12	17	42	15	31	10	54	58	1,908	2,027
4-5am	1,328	1,133	33	23	37	26	41	16	74	62	3,418	2,563
5-6am	2,120	1,808	96	44	36	58	132	48	82	102	8,107	5,238
6-7am	3,114	2,973	262	151	82	137	368	146	179	245	17,538	12,294
7-8am	3,496	4,641	503	285	226	243	718	293	324	385	22,267	18,730
8-9am	3,191	4,908	530	353	371	286	535	288	338	413	20,625	19,897
9-10am	2,998	3,662	356	276	431	206	368	203	260	339	17,116	15,029
10-11am	3,039	3,185	282	245	299	225	303	196	289	332	15,636	13,680
11-Noon	3,318	2,992	332	239	287	226	303	219	295	337	15,458	14,061
Noon-1	3,307	3,106	335	303	315	237	308	228	330	354	15,556	14,707
1-2pm	3,510	2,988	325	306	337	240	370	231	300	320	16,168	15,458
2-3pm	3,566	2,964	385	330	342	301	451	281	342	369	17,322	17,007
3-4pm	3,702	3,376	452	373	384	331	447	354	386	418	18,849	20,376
4-5pm	4,338	3,384	459	372	429	370	492	388	437	434	21,137	21,677
5-6pm	4,551	3,422	413	402	437	392	452	450	431	425	21,909	22,245
6-7pm	4,647	3,372	368	369	502	345	392	335	400	415	20,858	20,250
7-8pm	3,544	2,872	278	309	416	281	312	247	360	343	16,629	17,123
8-9pm	2,989	2,366	204	257	343	217	246	172	255	264	13,364	13,980
9-10pm	2,566	2,132	167	195	291	153	190	147	245	233	11,726	12,225
10-11pm	2,056	1,940	132	159	228	96	187	98	211	220	9,617	10,436
11-Mid	1,681	1,666	86	128	142	83	115	75	144	185	6,642	8,116
24 hr Total	66,869	63,168	6,098	5,261	6,193	4,577	6,885	4,523	5,982	6,583	320,086	307,208
6-10am	12,799	16,184	1,651	1,065	1,110	872	1,989	930	1,101	1,382	77,546	65,950
10am-1pm	9,664	9,283	949	787	901	688	914	643	914	1,023	46,650	42,448
1-3pm	7,076	5,952	710	636	679	541	821	512	642	689	33,490	32,465
3-7pm	17,238	13,554	1,692	1,516	1,752	1,438	1,783	1,527	1,654	1,692	82,753	84,548
6am-7pm	46,777	44,973	5,002	4,004	4,442	3,539	5,507	3,612	4,311	4,786	240,439	225,411

* To Bronx

QUEENS - NASSAU SCREENLINE

SUMMARY

2004 Daily Traffic

- A total of 965,600 motor vehicles crossed the fifteen Queens-Nassau screenline monitoring locations on typical 2004 weekday, 0.3% fewer than the 968,700 daily vehicles recorded in 2003.
- The three limited access highways that cross the screenline accommodated more than half (56.3%) of the recorded vehicles (544,000 per day).
- The Grand Central Parkway (including service road) was the highest volume Queens-Nassau facility in 2004, with a total two-way volume of 184,700 daily vehicles, 19.1% of the total daily traffic on the monitored thoroughfares. The Long Island Expressway (including service roads) was second with 183,900 daily vehicles (19.0% of the total), followed by 175,400 on the Laurelton Parkway (18.2%).
- Rockaway Boulevard and Sunrise Highway are the busiest surface arterials, with average daily volumes of 73,900 and 68,100 vehicles, respectively.
- Other high volume principal arterials are Northern Boulevard and Hempstead Avenue, serving 44,800 and 43,600 daily vehicles, respectively.
- Nearly 31,000 vehicles were recorded entering Queens from Nassau during the 7-8 am morning peak hour. The Long Island Expressway (including service road) was the route for 6,000 of those inbound peak hour vehicles, with the Grand Central Parkway and its service road accommodating an additional 5,300, and the Laurelton Parkway serving another 5,000.
- During the 6-10 am inbound rush period, 115,000 Queens-bound vehicles were recorded. The Long Island Expressway and its service road carried 22,500 of those vehicles. Another 22,000 were on the Grand Central Parkway and its service road, and 20,900 were on the Laurelton Parkway.
- Over 33,000 vehicles were recorded departing Queens for Nassau during the 3-4 pm evening peak hour. The Long Island Expressway and its service road accommodated 6,300 of those peak hour outbound vehicles. Another 6,000 used the Grand Central Parkway and its service road, with the Laurelton Parkway serving an additional 5,500.
- During the 3-7 pm evening rush period, 129,500 vehicles were recorded leaving Queens. The Long Island Expressway (including service road) accommodated 24,000 of those vehicles. The Laurelton Parkway served 22,100. Another 21,000 used the Grand Central Parkway (and service road).
- 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.

10-Year Trends (1994-2004)

- Traffic growth between Queens and Nassau has been moderate since 1994. Monitored daily volume rose 7.6% to 965,600 in 2004 from 897,200 in 1994. This represents an average annual growth rate of 0.7%.
- The largest volume increase since 1994 occurred on the Laurelton Parkway (growth of 29,500 daily vehicles, or 1.9% annually, to 175,400 from 145,900). This was followed by the Grand Central Parkway and its service road (growth of 21,800 daily vehicles, or 1.3% annually, to 184,700 from 162,900), Rockaway Boulevard (growth of 9,400 daily vehicles, or 1.4% annually, to 73,900 from 64,500), and Sunrise Highway (growth of 8,600 daily vehicles, or 1.4% annually, to 68,100 from 59,500).
- The largest percentage increases occurred on Seagirt Boulevard (up 29.0%, or 2.6% annually, to 21,000 daily vehicles from 16,300), and Laurelton Parkway (up 20.3%, or 1.9% annually, to 175,400 from 145,900).
- The only significant decline occurred on the Long Island Expressway and its service roads, where daily traffic decreased 8.0%, or 0.8% annually, to 183,900 in 2004 from 199,800 in 1994.

Historical Comparisons

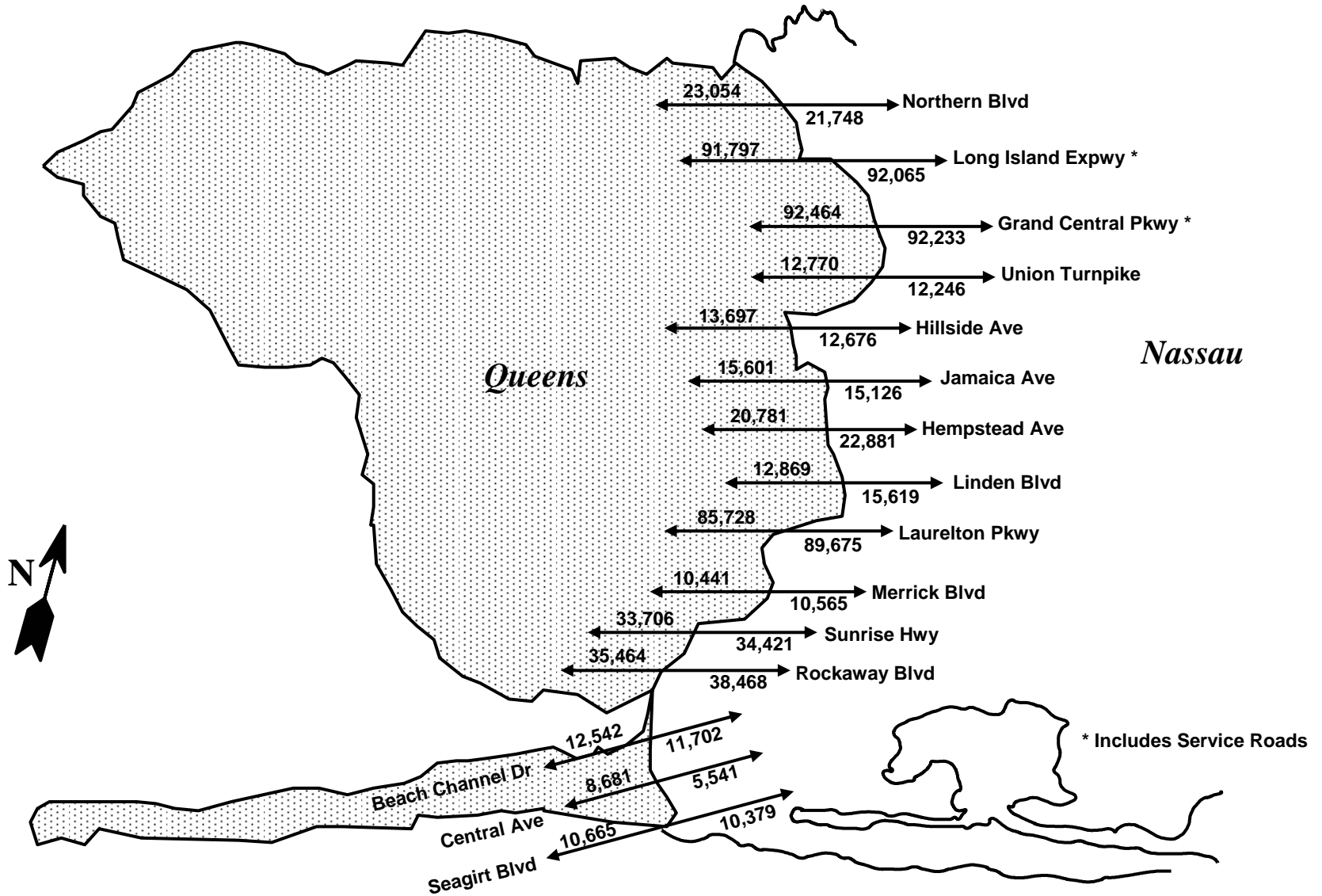
- In 1963, the first year that Queens-Nassau screenline data were analyzed, average daily two-way total volume on the thirteen roadways studied was 546,600 (volumes on Central Avenue and Seagirt Boulevard were not collected prior to 1986). The highest volume facilities were the Long Island Expressway 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 surface 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 increase occurred on Laurelton Parkway, where daily traffic rose 23.2% to 121,700 from 98,800. Traffic on Northern Boulevard 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 1994, growth was moderate, as Queens-Nassau screenline volume increased 6.4% during that eight-year period, to 897,200 daily vehicles from 843,500. The largest volume increases occurred on the Grand Central Parkway and its service road (increase of 18,900 daily vehicles, or 13.1%, to 162,900 from 144,000), and on the Long Island Expressway and its service road (increase of 10,800 daily vehicles, or

5.7%, to 199,800 from 189,000). The largest percentage increases occurred on Linden Boulevard (up 32.3%, to 30,500 daily vehicles from 23,100), and Seagirt Boulevard (up 31.6%, to 16,300 from 12,400). The biggest decline was on Beach Channel Drive (decrease of 2,900 daily vehicles, or 11.2%, to 22,800 from 25,700).

- During the 41 years from 1963 to 2004, daily traffic on the thirteen Queens-Nassau facilities monitored throughout the period increased 70.2%, to 930,300 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 383,800 additional daily vehicles on the thirteen continuously-monitored facilities, 263,100 (68.5% of the total increase) are on the three limited access routes. The Grand Central Parkway alone absorbed over one-third the total screenline traffic increase, its daily volume more than tripling, to 184,700 in 2004 from 51,700 in 1963. On the Laurelton Parkway, volume doubled (to 175,400 daily vehicles from 85,400). Daily traffic on the Long Island Expressway rose 27.9% (to 183,900 from 143,800).
- Surface arterials undergoing the most significant volume changes since 1963 are Rockaway Boulevard, where volume rose 102.8%, to 73,900 daily vehicles from 36,500, Northern Boulevard (up 53.8% to 44,800 from 29,100), Jamaica Avenue (up 100.8% to 30,700 from 15,300), and Linden Boulevard (up 98.8% to 28,500 from 14,300).

2004 Screenline Daily Volumes

Queens-Nassau



**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
Beach Channel Dr	13,128	13,403	13,844	12,542
Central Ave	8,014	9,231	9,319	8,681
Grand Central Pky *	91,225	89,054	94,792	92,464
Hempstead Ave	22,474	19,797	26,866	20,781
Hillside Ave	14,049	13,735	12,140	13,697
Jamaica Ave	14,504	15,324	15,044	15,601
Laurelton Pky	82,194	77,076	72,783	85,728
Linden Blvd	11,565	12,485	12,904	12,869
Long Island Exp *	90,205	97,818	99,694	91,797
Merrick Blvd	9,833	9,559	10,538	10,441
Northern Blvd	24,221	22,943	23,695	23,054
Rockaway Blvd	36,893	33,865	34,633	35,464
Seagirt Blvd	8,044	10,341	11,263	10,665
Sunrise Hwy	34,519	30,922	34,542	33,706
Union Tpke	12,495	13,260	13,275	12,770
Totals	473,363	468,813	485,332	480,260

* Includes 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
Beach Channel Dr	11,532	12,207	12,484	11,702
Central Ave	4,910	5,175	5,100	5,541
Grand Central Pky *	89,640	89,813	92,426	92,233
Hempstead Ave	22,176	23,621	24,466	22,881
Hillside Ave	13,526	13,593	12,864	12,676
Jamaica Ave	13,702	14,869	14,721	15,126
Laurelton Pky	89,251	85,216	86,229	89,675
Linden Blvd	15,136	15,327	16,528	15,619
Long Island Exp *	92,593	92,794	90,940	92,065
Merrick Blvd	9,568	9,920	10,052	10,565
Northern Blvd	21,584	21,243	21,970	21,748
Rockaway Blvd	35,134	36,098	37,929	38,468
Seagirt Blvd	7,895	10,051	11,634	10,379
Sunrise Hwy	34,099	31,920	33,123	34,421
Union Tpke	12,618	13,346	12,896	12,246
Totals	473,364	475,193	483,362	485,345

* Includes 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
Beach Channel Dr	24,660	25,610	26,328	24,244
Central Ave	12,924	14,406	14,419	14,222
Grand Central Pky *	180,865	178,867	187,218	184,697
Hempstead Ave	44,650	43,418	51,332	43,662
Hillside Ave	27,575	27,328	25,004	26,373
Jamaica Ave	28,206	30,193	29,765	30,727
Laurelton Pky	171,445	162,292	159,012	175,403
Linden Blvd	26,701	27,812	29,432	28,488
Long Island Exp *	182,798	190,612	190,634	183,862
Merrick Blvd	19,401	19,479	20,590	21,006
Northern Blvd	45,805	44,186	45,665	44,802
Rockaway Blvd	72,027	69,963	72,562	73,932
Seagirt Blvd	15,939	20,392	22,897	21,044
Sunrise Hwy	68,618	62,842	67,665	68,127
Union Tpke	25,113	26,606	26,171	25,016
Totals	946,727	944,006	968,694	965,605

* Includes service roads

2004 Screenline Volumes Queens - Nassau

	Beach Channel Drive		Grand Central Parkway						Hempstead Ave		Hillside Ave	
	* S/B	N/B	Central Ave		Main Rdwy		Service Rdwy		* W/B	E/B	* W/B	E/B
			* W/B	E/B	* W/B	E/B	* W/B	E/B				
Mid-1am	202	120	113	37	749	1,075	9	10	216	393	97	89
1-2am	127	66	48	26	368	531	5	3	152	200	47	46
2-3am	74	56	30	13	242	378	5	2	119	138	31	28
3-4am	48	63	28	15	371	289	3	4	117	99	34	25
4-5am	64	92	37	36	1,133	502	5	17	202	143	59	48
5-6am	158	279	96	79	4,567	1,580	15	26	513	369	230	108
6-7am	477	603	360	187	6,000	4,941	70	108	1,216	729	747	304
7-8am	767	911	554	338	5,128	6,058	137	444	1,474	1,372	1,012	715
8-9am	708	785	577	382	5,009	6,149	145	728	1,240	1,441	844	1,029
9-10am	620	641	494	331	5,378	5,628	171	436	1,027	1,071	628	677
10-11am	553	586	400	266	4,770	4,763	189	301	924	983	607	592
11-Noon	569	551	398	279	4,282	4,191	245	285	931	988	660	594
Noon-1	603	627	437	341	4,244	4,489	277	320	982	1,102	745	657
1-2pm	643	642	417	306	4,498	4,977	271	335	1,002	1,126	742	729
2-3pm	675	742	521	374	5,231	6,132	298	352	1,053	1,395	810	796
3-4pm	756	832	536	410	5,445	5,423	379	590	1,126	1,558	821	996
4-5pm	849	783	642	378	5,434	4,008	468	767	1,189	1,604	996	1,219
5-6pm	986	765	650	415	5,501	4,048	672	747	1,474	1,748	1,307	1,186
6-7pm	951	622	637	376	4,915	4,819	420	558	1,342	1,707	1,031	951
7-8pm	792	574	465	322	4,320	4,659	224	149	1,388	1,359	708	705
8-9pm	627	409	410	229	3,318	3,749	168	88	964	1,053	548	468
9-10pm	508	346	356	160	3,192	2,977	132	62	859	914	479	327
10-11pm	456	324	283	136	2,461	2,494	72	48	712	752	327	224
11-Mid	329	283	192	105	1,488	1,965	40	28	559	637	187	163
24 hr Total	12,542	11,702	8,681	5,541	88,044	85,825	4,420	6,408	20,781	22,881	13,697	12,676
6-10am	2,572	2,940	1,985	1,238	21,515	22,776	523	1,716	4,957	4,613	3,231	2,725
10am-1pm	1,725	1,764	1,235	886	13,296	13,443	711	906	2,837	3,073	2,012	1,843
1-3pm	1,318	1,384	938	680	9,729	11,109	569	687	2,055	2,521	1,552	1,525
3-7pm	3,542	3,002	2,465	1,579	21,295	18,298	1,939	2,662	5,131	6,617	4,155	4,352
6am-7pm	9,157	9,090	6,623	4,383	65,835	65,626	3,742	5,971	14,980	16,824	10,950	10,445

* To Queens

2004 Screenline Volumes Queens - Nassau (cont'd)

	Jamaica Ave		Laurelton Parkway		Linden Blvd		Long Island Expressway				Merrick Blvd	
	<i>* W/B</i>	<i>E/B</i>	<i>* W/B</i>	<i>E/B</i>	<i>* W/B</i>	<i>E/B</i>	<i>* W/B</i>	<i>E/B</i>	<i>* W/B</i>	<i>E/B</i>	<i>* W/B</i>	<i>E/B</i>
Mid-1am	124	104	1,095	2,185	198	229	10	18	695	1,125	120	154
1-2am	45	62	643	1,111	83	123	14	15	581	777	77	99
2-3am	42	41	484	742	72	74	13	22	632	696	33	51
3-4am	47	40	621	491	69	64	10	41	859	850	30	32
4-5am	88	51	1,469	614	100	90	19	55	1,184	1,011	43	33
5-6am	291	168	4,525	1,539	240	264	3,056	16	407	1,158	142	78
6-7am	957	495	6,079	3,819	586	552	5,228	2,008	982	984	411	202
7-8am	1,134	1,045	4,990	4,886	836	858	4,865	5,249	1,138	869	631	403
8-9am	952	1,257	4,842	4,746	731	964	4,613	5,361	503	1,100	642	597
9-10am	849	894	4,941	4,289	605	777	4,343	5,061	839	657	546	586
10-11am	754	824	4,352	3,907	515	656	4,912	4,614	309	302	508	558
11-Noon	784	825	3,957	3,943	561	718	4,112	4,318	328	223	547	567
Noon-1	866	883	3,888	4,170	610	786	4,325	4,300	252	250	573	613
1-2pm	863	894	3,782	4,644	649	820	4,529	4,502	176	265	608	615
2-3pm	882	1,023	4,080	5,276	712	1,002	4,777	5,210	205	421	614	655
3-4pm	933	1,177	4,451	5,484	707	1,073	4,943	5,284	418	994	647	732
4-5pm	1,121	1,203	4,723	5,489	765	1,054	5,274	4,751	1,111	1,302	687	788
5-6pm	1,337	1,075	4,894	5,468	852	1,064	4,962	4,479	1,402	1,232	772	793
6-7pm	1,062	969	4,428	5,677	868	1,031	4,804	5,234	1,482	703	665	784
7-8pm	737	716	4,352	5,237	824	934	4,560	4,773	956	192	592	662
8-9pm	627	500	3,813	4,668	705	755	2,676	3,970	1,162	121	499	564
9-10pm	517	380	3,721	4,056	641	707	60	3,598	1,568	80	481	426
10-11pm	362	286	3,256	3,912	551	602	21	2,565	1,487	167	346	340
11-Mid	227	214	2,342	3,322	389	422	17	61	978	1,081	227	233
24 hr Total	15,601	15,126	85,728	89,675	12,869	15,619	72,143	75,505	19,654	16,560	10,441	10,565
6-10am	3,892	3,691	20,852	17,740	2,758	3,151	19,049	17,679	3,462	3,610	2,230	1,788
10am-1pm	2,404	2,532	12,197	12,020	1,686	2,160	13,349	13,232	889	775	1,628	1,738
1-3pm	1,745	1,917	7,862	9,920	1,361	1,822	9,306	9,712	381	686	1,222	1,270
3-7pm	4,453	4,424	18,496	22,118	3,192	4,222	19,983	19,748	4,413	4,231	2,771	3,097
6am-7pm	12,494	12,564	59,407	61,798	8,997	11,355	61,687	60,371	9,145	9,302	7,851	7,893

* To Queens

2004 Screenline Volumes Queens - Nassau (cont'd)

	Northern Blvd		Rockaway Blvd		Seagirt Blvd		Sunrise Hwy		Union Tpke		Totals	
	<i>* W/B</i>	<i>E/B</i>	<i>* N/B</i>	<i>S/B</i>	<i>* W/B</i>	<i>E/B</i>	<i>* W/B</i>	<i>E/B</i>	<i>* W/B</i>	<i>E/B</i>	To Queens	To Nassau
Mid-1am	221	240	312	643	132	81	265	266	82	59	4,640	6,828
1-2am	110	154	199	366	71	38	132	160	36	23	2,738	3,800
2-3am	70	81	147	264	37	26	122	116	17	18	2,170	2,746
3-4am	39	47	188	175	30	35	149	102	17	16	2,660	2,388
4-5am	65	66	359	233	41	60	340	153	35	25	5,243	3,229
5-6am	238	146	1,054	407	120	188	979	385	76	129	16,707	6,919
6-7am	929	407	2,253	1,345	518	451	2,144	821	491	360	29,448	18,316
7-8am	1,485	1,289	2,429	2,149	1,137	732	2,200	1,521	798	803	30,715	29,642
8-9am	1,503	1,523	2,382	2,216	870	686	1,891	1,921	603	1,252	28,055	32,137
9-10am	1,327	1,311	2,138	1,933	605	514	1,721	1,763	550	999	26,782	27,568
10-11am	1,214	1,222	1,870	1,773	429	437	1,606	1,823	561	653	24,473	24,260
11-Noon	1,269	1,157	1,832	1,790	400	479	1,706	1,881	612	620	23,193	23,409
Noon-1	1,312	1,216	1,976	1,916	462	491	1,776	2,099	838	663	24,166	24,923
1-2pm	1,256	1,217	2,011	2,020	511	544	1,912	2,176	820	738	24,690	26,550
2-3pm	1,302	1,310	2,041	2,333	581	736	1,964	2,259	791	743	26,537	30,759
3-4pm	1,330	1,422	2,209	2,558	635	978	1,988	2,753	813	978	28,137	33,242
4-5pm	1,476	1,506	2,099	2,670	660	900	2,099	2,804	1,066	994	30,659	32,220
5-6pm	1,541	1,583	2,164	2,813	727	812	2,257	2,857	1,414	983	32,912	32,068
6-7pm	1,529	1,626	1,947	2,699	700	641	2,059	2,678	1,111	845	29,951	31,920
7-8pm	1,404	1,426	1,671	2,395	588	498	1,771	2,105	794	541	26,146	27,247
8-9pm	1,112	1,012	1,403	1,909	451	342	1,607	1,540	514	321	20,604	21,698
9-10pm	997	745	1,123	1,491	392	268	1,541	994	368	226	16,935	17,757
10-11pm	839	608	936	1,349	329	250	922	740	221	148	13,581	14,945
11-Mid	486	434	721	1,021	239	192	555	504	142	109	9,118	10,774
24 hr Total	23,054	21,748	35,464	38,468	10,665	10,379	33,706	34,421	12,770	12,246	480,260	485,345
6-10am	5,244	4,530	9,202	7,643	3,130	2,383	7,956	6,026	2,442	3,414	115,000	107,663
10am-1pm	3,795	3,595	5,678	5,479	1,291	1,407	5,088	5,803	2,011	1,936	71,832	72,592
1-3pm	2,558	2,527	4,052	4,353	1,092	1,280	3,876	4,435	1,611	1,481	51,227	57,309
3-7pm	5,876	6,137	8,419	10,740	2,722	3,331	8,403	11,092	4,404	3,800	121,659	129,450
6am-7pm	17,473	16,789	27,351	28,215	8,235	8,401	25,323	27,356	10,468	10,631	359,718	367,014

* To Queens

NEW YORK - NEW JERSEY SCREENLINE

SUMMARY

2004 Daily Traffic

- On a fall 2004 weekday, 710,700 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), 1.6% fewer than the 722,000 recorded in fall of 2003.
- Manhattan-New Jersey traffic decreased 2.0% (to 536,400 daily vehicles in 2004 from 547,400 in 2003), while daily volume between Staten Island and New Jersey decreased 0.2% (to 174,300 from 174,600).
- Three-fourths of daily New York City-New Jersey traffic (536,400 vehicles) used the three Manhattan-New Jersey crossings, with the remainder using the three Staten Island-New Jersey bridges.
- The George Washington Bridge, with a total two-way volume of 315,100 daily vehicles in 2004, continues to be the highest volume crossing by a wide margin. In fall 2004, this facility carried 44% of total New York City-New Jersey traffic, and 59% 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 125,200 daily vehicles in 2004; the Holland Tunnel, 96,200.
- The Outerbridge Crossing was the busiest Staten Island-New Jersey facility, with an average daily volume of 80,200 vehicles, up 2.0% from 78,700 in 2003. Traffic on the Goethals Bridge decreased 5.5%, to 71,500 daily vehicles in 2004 from 75,700 in 2003. The Bayonne Bridge accommodated 22,500 daily vehicles, an increase of 11.4% over the 20,200 daily vehicles recorded in 2003.
- Some 19,600 vehicles entered Manhattan from New Jersey during the 6-7 am morning peak hour. The George Washington Bridge was used by 11,200 (57%) of those Manhattan-bound peak hour vehicles.
- During the 6-10 am inbound rush period, Manhattan vehicle entries from New Jersey amounted to 72,800. The George Washington Bridge was the route for 57% of these 6-10 am entries (41,300 vehicles).
- Some 19,400 vehicles departed Manhattan for New Jersey during the 5-6 pm evening peak hour, with the George Washington Bridge accommodating 12,300 (63%) of those departing vehicles.
- During the 3-7 pm evening rush period, 74,900 vehicles crossed the Hudson River from Manhattan to New Jersey. The George Washington Bridge carried 62% of that departing traffic (46,600 vehicles).
- Total 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, as reflected at the Bayonne and Goethals Bridges. A separate pattern occurs at the

Outerbridge Crossing where the heavier volumes are Staten Island-bound in the morning, and volumes are similar in both directions in the evening.

- Between 6-10 am, 22,800 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 26,000 vehicles, while traffic bound for New Jersey totaled 21,100.

10-Year Trends (1994-2004)

- Daily traffic between Manhattan and New Jersey increased 13.2% during this ten-year period, to 536,400 in 2004 from 473,800 in 1994, an average annual growth rate of 1.2%. The fastest growth rate was at the George Washington Bridge, where daily traffic rose 21.2%, or 1.9% annually (to 315,100 in 2004 from 259,900 in 1994). Traffic using the Holland Tunnel increased 1.6%, or 0.2% annually, to 96,200 daily vehicles in 2004 from 94,600 in 1994. Daily volume through the Lincoln Tunnel rose 4.9%, or 0.5% annually (to 125,200 in 2004 from 119,300 in 1994).
- Concurrently, daily volume on the three Staten Island-New Jersey bridges rose 21.1%, to 174,300 in 2004 from 143,900 in 1994, equivalent to an average annual growth rate of 1.9%. Daily traffic on the Outerbridge Crossing increased 19.4%, or 1.8% annually (to 80,200 in 2004 from 67,200 in 1994). Traffic using the Goethals Bridge was up 14.5%, or 1.4% annually (to 71,500 in 2004 from 62,500 in 1994). Bayonne Bridge traffic was up 58.4%, or 4.7% annually (to 22,500 in 2004 from 14,200 in 1994).

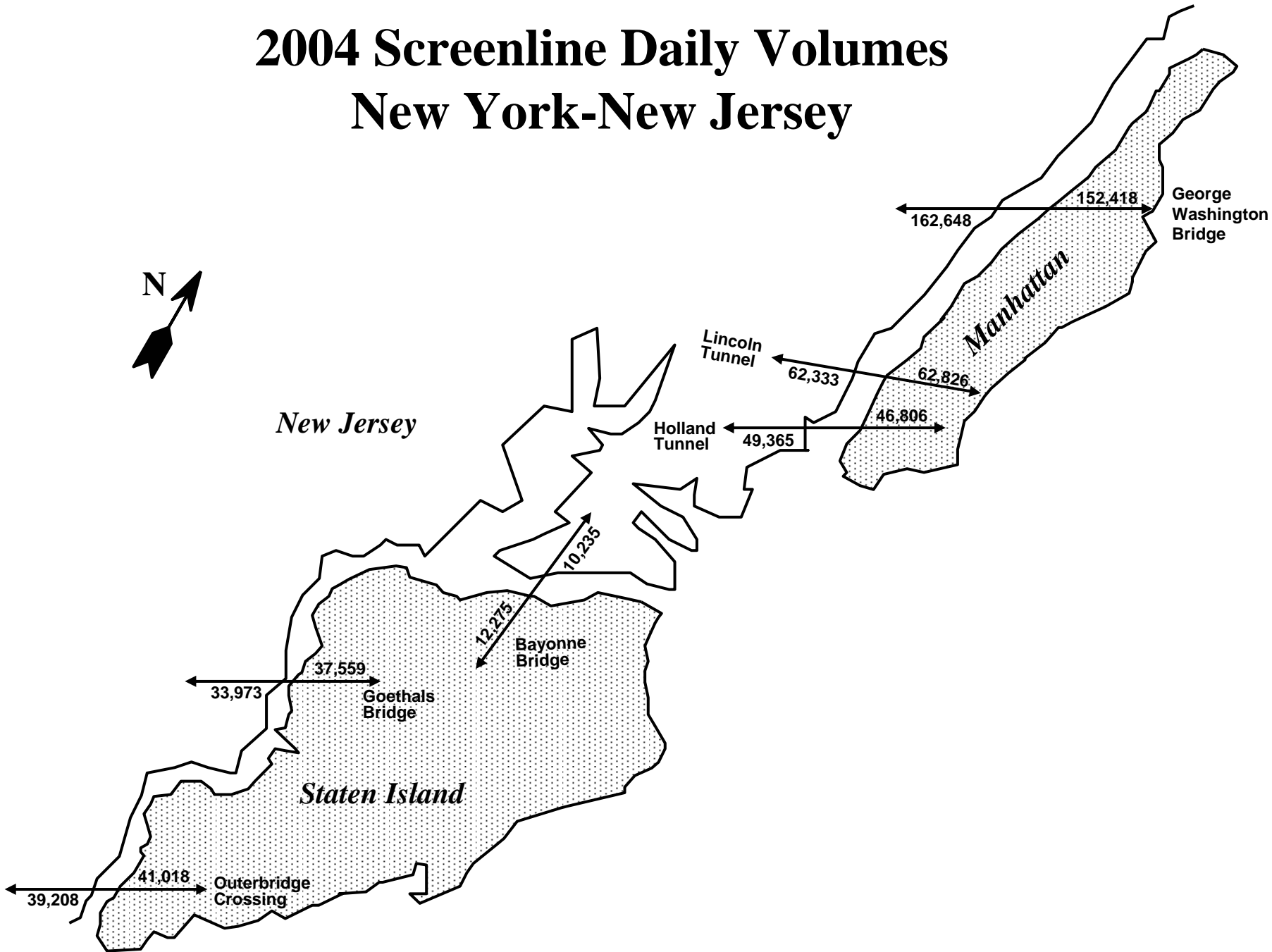
Historical Comparisons

- 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.
- During the eight years from 1986 to 1994, Manhattan-New Jersey traffic decreased 2.5%, to 473,800 daily vehicles from 485,800. Volume was down 9.3% on the George

Washington Bridge, to 259,900 daily vehicles from 286,400 (decrease of 26,500 daily vehicles), and down 2.3% at the Lincoln Tunnel (to 119,300 daily vehicles from 122,100). Those declines more than offset a 22.4% increase at the Holland Tunnel, to 94,600 daily vehicles from 77,300.

- During the 41 years from 1963 to 2004, daily traffic between Manhattan and New Jersey doubled, to 536,400 from 265,600. George Washington Bridge traffic climbed 147%, to 315,100 from 127,500. Volume increased 58% at the Lincoln Tunnel (to 125,200 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 355.6%, to 56,900 daily vehicles from 12,500 just ten years earlier. Daily volume increased 64.8% at the Outerbridge Crossing (to 11,700 from 7,100), and 59.6% 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 1994, Staten Island-New Jersey traffic increased just 3.9% over the eight-year period. A 16.1% increase on the Outerbridge Crossing (to 67,200 daily vehicles from 57,900), more than offset decreases on the Bayonne Bridge (down 10.7% to 14,200 from 15,900) and the Goethals Bridge (down 3.4% to 62,500 from 64,600).
- During the 41 years from 1963 to 2004, daily traffic between Staten Island and New Jersey soared 536%, to 174,300 from just 27,400. Outerbridge Crossing traffic skyrocketed more than tenfold, to 80,200 from 7,100. Volume on the Goethals Bridge jumped 473%, to 71,500 from 12,500. Bayonne Bridge traffic climbed 188%, to 22,500 from 7,800.

2004 Screenline Daily Volumes New York-New Jersey



**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
G Washington Bridge	155,233	150,758	150,233	152,418
Holland Tunnel	12,548	45,722	47,727	46,806
Lincoln Tunnel	54,608	58,415	62,157	62,826
Manhattan Totals	222,389	254,895	260,117	262,050
Bayonne Bridge*	14,098	11,684	11,627	12,275
Goethals Bridge*	39,315	40,419	38,828	37,559
Outerbridge Crossing*	41,000	38,407	41,653	41,018
Staten Island Totals	94,413	90,510	92,108	90,852
Grand Totals	316,802	345,405	352,225	352,902

**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
G Washington Bridge	154,077	160,013	168,796	162,648
Holland Tunnel	30,829	46,835	53,370	49,365
Lincoln Tunnel	51,649	71,096	65,166	62,333
Manhattan Totals	236,555	277,944	287,332	274,346
Bayonne Bridge*	9,533	9,643	8,581	10,235
Goethals Bridge*	38,881	40,965	36,896	33,973
Outerbridge Crossing*	34,424	38,022	36,997	39,208
Staten Island Totals	82,838	88,630	82,474	83,416
Grand Totals	319,393	366,574	369,806	357,762

* 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
G Washington Bridge	309,310	310,771	319,029	315,066
Holland Tunnel	43,377	92,557	101,097	96,171
Lincoln Tunnel	106,257	129,511	127,323	125,159
Manhattan Totals	458,944	532,839	547,449	536,396
Bayonne Bridge*	23,631	21,327	20,208	22,510
Goethals Bridge*	78,196	81,384	75,724	71,532
Outerbridge Crossing*	75,424	76,429	78,650	80,226
Staten Island Totals	177,251	179,140	174,582	174,268
Grand Totals	636,195	711,979	722,031	710,664

* 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.

2004 Screenline Volumes New York - New Jersey

	George Washington Bridge		Holland Tunnel		Lincoln Tunnel		Manhattan Totals	
	<i>* E/B</i>	<i>W/B</i>	<i>* E/B</i>	<i>W/B</i>	<i>* E/B</i>	<i>W/B</i>	To Manhattan	To N.J.
Mid-1am	1,961	4,222	736	1,135	951	1,902	3,648	7,259
1-2am	1,361	2,538	491	1,025	629	1,151	2,481	4,714
2-3am	1,117	1,697	365	661	476	665	1,958	3,023
3-4am	1,268	1,439	337	594	506	794	2,111	2,827
4-5am	2,099	1,792	529	740	874	609	3,502	3,141
5-6am	5,557	2,817	1,843	1,152	2,480	940	9,880	4,909
6-7am	11,238	5,483	3,203	2,029	5,202	1,634	19,643	9,146
7-8am	10,726	7,874	2,968	2,722	4,946	2,322	18,640	12,918
8-9am	10,068	8,058	2,973	2,797	4,665	2,407	17,706	13,262
9-10am	9,312	6,746	2,816	2,419	4,670	2,208	16,798	11,373
10-11am	8,032	6,115	2,454	2,127	3,981	2,248	14,467	10,490
11-Noon	6,803	6,033	2,084	2,091	3,416	2,326	12,303	10,450
Noon-1	6,564	6,598	1,971	2,058	3,051	2,674	11,586	11,330
1-2pm	6,740	7,302	1,977	2,401	2,892	3,009	11,609	12,712
2-3pm	7,110	9,075	2,071	2,608	2,923	3,419	12,104	15,102
3-4pm	8,049	10,805	2,335	2,833	3,089	3,691	13,473	17,329
4-5pm	9,119	12,132	2,662	2,850	2,602	4,283	14,383	19,265
5-6pm	9,940	12,272	2,847	2,764	2,093	4,393	14,880	19,429
6-7pm	9,616	11,403	2,758	2,834	2,417	4,619	14,791	18,856
7-8pm	7,667	10,734	2,508	2,769	2,672	4,290	12,847	17,793
8-9pm	5,674	9,253	2,054	2,639	2,335	3,753	10,063	15,645
9-10pm	4,943	6,928	1,908	2,519	2,074	3,329	8,925	12,776
10-11pm	4,244	6,016	1,653	2,191	2,079	3,045	7,976	11,252
11-Mid	3,210	5,316	1,263	1,407	1,803	2,622	6,276	9,345
24 hr Total	152,418	162,648	46,806	49,365	62,826	62,333	262,050	274,346
6-10am	41,344	28,161	11,960	9,967	19,483	8,571	72,787	46,699
10am-1pm	21,399	18,746	6,509	6,276	10,448	7,248	38,356	32,270
1-3pm	13,850	16,377	4,048	5,009	5,815	6,428	23,713	27,814
3-7pm	36,724	46,612	10,602	11,281	10,201	16,986	57,527	74,879
6am-7pm	113,317	109,896	33,119	32,533	45,947	39,233	192,383	181,662

* To Manhattan

2004 Screenline Volumes New York - New Jersey (cont'd)

	Bayonne Bridge		Goethals Bridge		Outerbridge Crossing		Staten Island Totals		Grand 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	179	153	581	164	512	672	1,272	989	4,920	8,248
1-2am	131	115	397	118	363	413	891	646	3,372	5,360
2-3am	98	86	318	71	315	320	731	477	2,689	3,500
3-4am	79	113	294	82	358	323	731	518	2,842	3,345
4-5am	113	161	430	114	685	386	1,228	661	4,730	3,802
5-6am	228	304	1,049	809	1,880	599	3,157	1,712	13,037	6,621
6-7am	424	842	1,826	1,917	2,778	1,736	5,028	4,495	24,671	13,641
7-8am	510	1,354	1,696	2,989	2,635	2,503	4,841	6,846	23,481	19,764
8-9am	543	1,209	1,743	3,060	2,372	2,486	4,658	6,755	22,364	20,017
9-10am	478	594	1,837	2,124	2,212	1,967	4,527	4,685	21,325	16,058
10-11am	443	465	1,657	1,908	1,829	1,935	3,929	4,308	18,396	14,798
11-Noon	465	393	1,616	1,759	1,700	1,909	3,781	4,061	16,084	14,511
Noon-1	485	370	1,700	1,650	1,729	1,932	3,914	3,952	15,500	15,282
1-2pm	557	402	1,796	1,698	1,896	1,839	4,249	3,939	15,858	16,651
2-3pm	728	447	2,010	1,864	2,140	2,310	4,878	4,621	16,982	19,723
3-4pm	927	449	2,374	2,224	2,256	2,623	5,557	5,296	19,030	22,625
4-5pm	1,074	495	2,706	2,514	2,569	2,729	6,349	5,738	20,732	25,003
5-6pm	1,423	453	3,108	2,185	2,969	2,610	7,500	5,248	22,380	24,677
6-7pm	1,195	366	2,822	1,920	2,558	2,519	6,575	4,805	21,366	23,661
7-8pm	717	324	2,268	1,578	2,075	2,106	5,060	4,008	17,907	21,801
8-9pm	486	265	1,797	1,439	1,694	1,761	3,977	3,465	14,040	19,110
9-10pm	390	296	1,490	706	1,463	1,407	3,343	2,409	12,268	15,185
10-11pm	335	336	1,114	613	1,158	1,207	2,607	2,156	10,583	13,408
11-Mid	267	243	930	467	872	916	2,069	1,626	8,345	10,971
24 hr Total	12,275	10,235	37,559	33,973	41,018	39,208	90,852	83,416	352,902	357,762
6-10am	1,955	3,999	7,102	10,090	9,997	8,692	19,054	22,781	91,841	69,480
10am-1pm	1,393	1,228	4,973	5,317	5,258	5,776	11,624	12,321	49,980	44,591
1-3pm	1,285	849	3,806	3,562	4,036	4,149	9,127	8,560	32,840	36,374
3-7pm	4,619	1,763	11,010	8,843	10,352	10,481	25,981	21,087	83,508	95,966
6am-7pm	9,252	7,839	26,891	27,812	29,643	29,098	65,786	64,749	258,169	246,411

* To Staten Island

BROOKLYN - QUEENS SCREENLINE

SUMMARY

2004 Daily Traffic

- On a typical 2004 weekday, 614,500 vehicles crossed the fifteen monitored Brooklyn-Queens screenline locations, 0.4% more than the 2003 count of 612,000. 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 (68.3%) of the vehicles (419,500 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 Parkway. Some 44.9% (275,700 per day) were crossing Newtown Creek via the Grand Street, Greenpoint Avenue, 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 193,600 vehicles, 31.5% of all traffic on the monitored thoroughfares and 70.2% of Newtown Creek crossings. Shore Parkway was second with 151,600 vehicles per day, 24.7% of the total recorded screenline traffic.
- Shore Parkway, Jackie Robinson Parkway, Linden Boulevard, Pulaski Bridge, Atlantic Avenue, and Greenpoint Avenue Bridge were the busiest of the principal arterials surveyed, with average daily volumes of 151,600, 74,300, 51,800, 40,100, 28,600, and 28,400 vehicles, respectively.
- A total of 19,600 vehicles were recorded entering Brooklyn from Queens during the 7-8 am morning peak hour. The Kosciuszko Bridge and Shore Parkway accommodated 5,200 and 4,400 of those vehicles, respectively.
- Morning traffic to Queens peaked between 8-9 am, at 17,800 vehicles, including 5,400 on the Kosciuszko Bridge and 4,300 on Shore Parkway.
- During the 6-10 am rush period, 72,000 vehicles were recorded entering Brooklyn, with the Kosciuszko Bridge and Shore Parkway carrying 20,300 and 17,100, respectively. Simultaneously, 65,200 vehicles entered Queens, including 20,400 on the Kosciuszko Bridge and 15,700 on Shore Parkway.
- Evening traffic entering Queens from Brooklyn peaked between 4-5 pm, when 20,400 vehicles were recorded. The Kosciuszko Bridge was the route of 5,600 of those vehicles, while another 4,500 used Shore Parkway.
- Evening traffic entering Brooklyn from Queens peaked between 5-6 pm, at 18,500 vehicles. The Kosciuszko Bridge was used by 4,900 of those vehicles, while another 4,400 were on Shore Parkway.
- During the 3-7 pm evening rush period, 79,100 vehicles were recorded entering Queens, while 71,000 were counted in the opposite direction. The Kosciuszko Bridge carried

21,600 to Queens and 18,900 to Brooklyn, while Shore Parkway carried 18,300 to Queens and 17,700 to Brooklyn.

10 Year Trends (1994-2004)

- Traffic between Brooklyn and Queens grew 14.5% during this ten-year period, to 614,500 daily vehicles in 2004 from 536,600 in 1994. This represents an average annual growth rate of 1.4%.
- The largest volume increase since 1994 occurred on the Kosciuszko Bridge over Newtown Creek (growth of 27,200 daily vehicles, or 1.5% annually, to 193,600 from 166,400). This was followed by the Jackie Robinson Parkway (growth of 15,700 daily vehicles, or 2.4% annually, to 74,300 from 58,600), the Pulaski Bridge over Newtown Creek (growth of 14,300 daily vehicles, or 4.5% annually, to 40,100 from 25,800), and Shore Parkway (growth of 10,800 daily vehicles, or 0.7% annually, to 151,600 from 140,800).
- The largest percentage increases occurred on the Pulaski Bridge over Newtown Creek (up 55.6%, or 4.5% annually, to 40,100 from 25,800), Cornelia Street (up 29.4%, or 2.6% annually, to 1,800 from 1,400), the Jackie Robinson Parkway (up 26.8%, or 2.4% annually, to 74,300 from 58,600), and Sutter Avenue (up 25.2%, or 2.3% annually, to 8,700 from 7,000).
- The only decreases occurred on Cooper Street (down 11.7%, or 1.2% annually, to 9,200 from 10,400), and Linden Street (down 6.7%, or 0.7% annually, to 2,200 from 2,300).

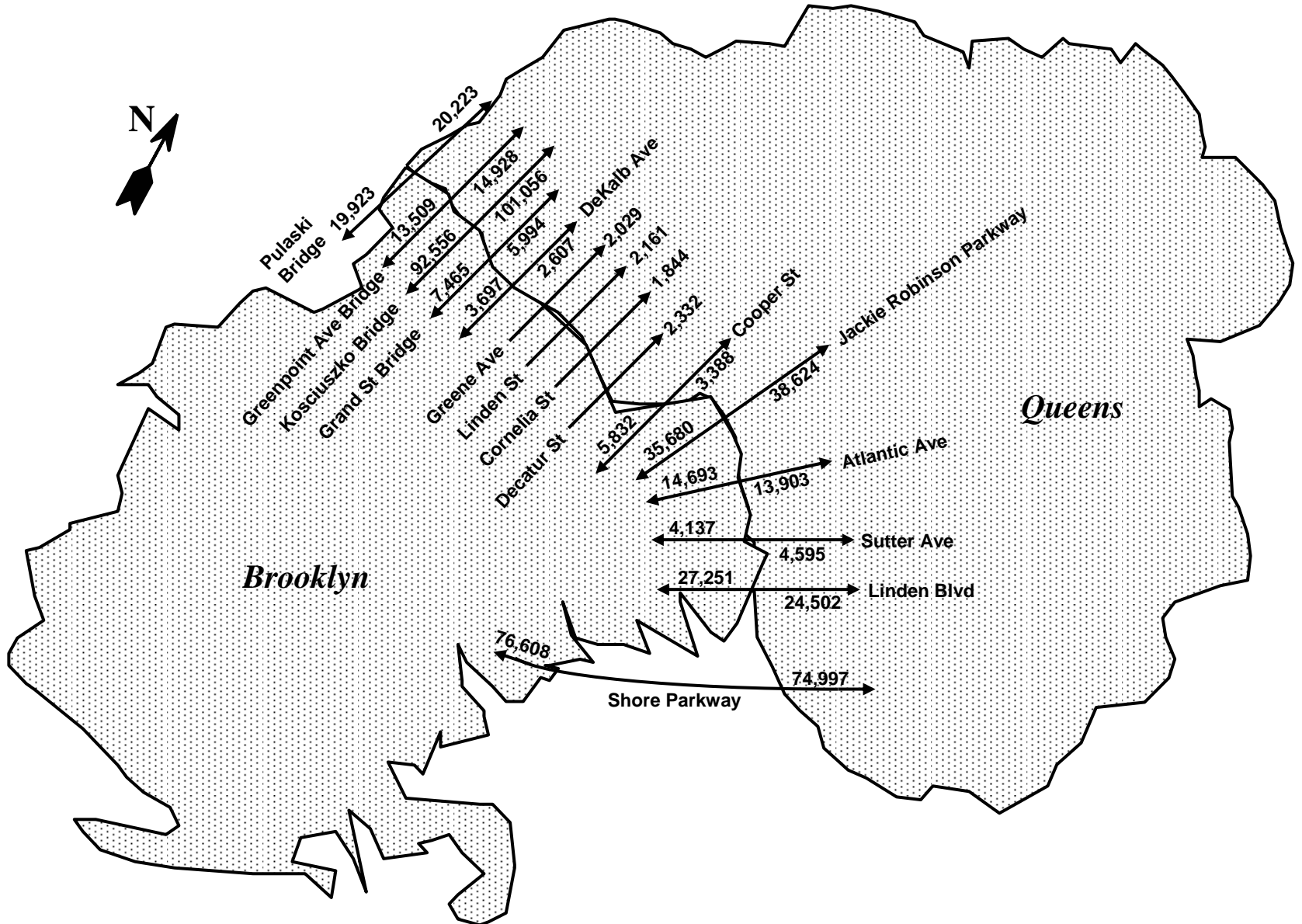
Historical Comparisons

- In 1963, average daily 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 1994, daily volume crossing Newtown Creek increased just 3.0% during the eight-year period, to 231,700 in 1994 from 224,800 in 1986. The growth was concentrated at the Greenpoint Avenue Bridge, where daily volume increased 83.6%, to 26,300 in 1994 from 14,300 in 1986. On the Grand Street Bridge, daily volume increased 15.4%, to 13,200 from 11,400. Daily traffic on the Kosciuszko Bridge decreased by 2,000 vehicles, to 166,300 in 1994 from 168,300 in 1986, a decrease of 1.2%. Volume on the Pulaski Bridge decreased 16.1%, to 25,800 daily vehicles in 1994 from 30,800 in 1986.
- During the 41 years from 1963 to 2004, daily traffic crossing Newtown Creek increased 71.9%, to 275,700 from 160,400. Volumes increased on all four facilities: Kosciuszko Bridge up 89.5% to 193,600 from 102,200; Greenpoint Avenue Bridge up 61.3% to 28,400 from 17,600; Pulaski Bridge up 40.6% to 40,100 from 28,600; Grand Street Bridge up 12.0% to 13,500 from 12,000.

2004 Screenline Daily Volumes

Brooklyn-Queens



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	<i>One-Way to Queens</i>							
Decatur St	N/A	N/A	N/A	N/A	<i>One-Way to Queens</i>							
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	<i>One-Way to Queens</i>							
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	<i>One-Way to Queens</i>							
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
Grand Street Bridge	7,729	7,447	8,356	7,465
Greenpoint Ave Bridge	12,993	12,375	14,445	13,509
Kosciuszko Bridge	97,242	90,607	96,153	92,556
Pulaski Bridge	19,292	18,667	19,465	19,923
Newtown Creek Totals	137,256	129,096	138,419	133,453
Atlantic Ave	14,182	14,687	14,150	14,693
Cooper St	5,756	5,741	6,001	5,832
Cornelia St	<i>One-Way to Queens</i>			
Decatur St	<i>One-Way to Queens</i>			
DeKalb Ave	2,563	3,428	3,566	3,697
Greene Ave	<i>One-Way to Queens</i>			
Jackie Robinson Pky	35,760	37,175	36,445	35,680
Linden Blvd	27,130	27,698	25,717	27,251
Linden St	<i>One-Way to Queens</i>			
Shore Pky	75,478	69,587	75,682	76,608
Sutter Ave	3,821	3,851	4,090	4,137
Other Totals	164,690	162,167	165,651	167,898
Grand Totals	301,946	291,263	304,070	301,351

**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
Grand Street Bridge	6,166	5,641	5,783	5,994
Greenpoint Ave Bridge	13,773	13,931	14,310	14,928
Kosciuszko Bridge	99,323	93,772	98,344	101,056
Pulaski Bridge	19,770	19,681	18,881	20,223
Newtown Creek Totals	139,032	133,025	137,318	142,201
Atlantic Ave	13,713	14,249	14,336	13,903
Cooper St	3,761	3,533	3,140	3,388
Cornelia St	1,936	2,032	1,908	1,844
Decatur St	2,082	2,237	2,342	2,332
DeKalb Ave	2,347	2,464	2,544	2,607
Greene Ave	1,962	2,078	2,363	2,029
Jackie Robinson Pky	36,920	37,545	37,261	38,624
Linden Blvd	25,160	25,439	25,393	24,502
Linden St	2,544	2,609	2,270	2,161
Shore Pky	76,440	70,576	74,358	74,997
Sutter Ave	4,291	4,498	4,704	4,595
Other Totals	171,156	167,260	170,619	170,982
Grand Totals	310,188	300,285	307,937	313,183

**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
Grand Street Bridge	13,895	13,088	14,139	13,459
Greenpoint Ave Bridge	26,766	26,306	28,755	28,437
Kosciuszko Bridge	196,565	184,379	194,497	193,612
Pulaski Bridge	39,062	38,348	38,346	40,146
Newtown Creek Totals	276,288	262,121	275,737	275,654
Atlantic Ave	27,895	28,936	28,486	28,596
Cooper St	9,517	9,274	9,141	9,220
Cornelia St	1,936	2,032	1,908	1,844
Decatur St	2,082	2,237	2,342	2,332
DeKalb Ave	4,910	5,892	6,110	6,304
Greene Ave	1,962	2,078	2,363	2,029
Jackie Robinson Pky	72,680	74,720	73,706	74,304
Linden Blvd	52,290	53,137	51,110	51,753
Linden St	2,544	2,609	2,270	2,161
Shore Pky	151,918	140,163	150,040	151,605
Sutter Ave	8,112	8,349	8,794	8,732
Other Totals	335,846	329,427	336,270	338,880
Grand Totals	612,134	591,548	612,007	614,534

2004 Screenline Volumes Brooklyn - Queens

	Grand Street Bridge		Greenpoint Ave Bridge		Kosciuszko Bridge		Pulaski Bridge		Newtown Creek Totals	
	<i>W/B*</i>	<i>E/B</i>	<i>W/B*</i>	<i>E/B</i>	<i>W/B*</i>	<i>E/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>To Brooklyn</i>	<i>To Queens</i>
Mid-1am	81	57	95	149	1,971	2,656	388	201	2,535	3,063
1-2am	66	54	72	114	1,252	1,866	254	135	1,644	2,169
2-3am	61	66	64	96	1,053	1,400	164	118	1,342	1,680
3-4am	51	52	79	92	1,097	1,295	183	143	1,410	1,582
4-5am	107	75	126	170	1,799	1,805	198	236	2,230	2,286
5-6am	204	163	407	363	3,721	3,149	406	571	4,738	4,246
6-7am	474	321	1,019	834	5,365	5,032	758	1,341	7,616	7,528
7-8am	705	284	1,044	898	5,240	5,158	1,028	1,779	8,017	8,119
8-9am	625	265	991	875	4,720	5,406	1,272	1,651	7,608	8,197
9-10am	425	234	844	721	4,998	4,844	960	1,154	7,227	6,953
10-11am	432	263	724	653	4,592	4,199	921	1,045	6,669	6,160
11-Noon	412	309	621	713	4,523	4,236	938	1,026	6,494	6,284
Noon-1	449	321	679	737	4,637	5,341	994	1,073	6,759	7,472
1-2pm	402	311	665	779	4,669	4,909	1,024	1,109	6,760	7,108
2-3pm	418	374	734	921	4,923	5,461	1,220	1,169	7,295	7,925
3-4pm	498	485	888	1,210	4,847	5,514	1,571	1,298	7,804	8,507
4-5pm	553	574	1,070	1,202	4,608	5,585	1,828	1,329	8,059	8,690
5-6pm	509	660	1,085	1,261	4,873	5,433	1,702	1,340	8,169	8,694
6-7pm	321	549	763	978	4,600	5,030	1,172	967	6,856	7,524
7-8pm	200	233	464	716	4,365	5,333	795	757	5,824	7,039
8-9pm	127	96	379	458	3,922	5,119	660	543	5,088	6,216
9-10pm	126	86	327	409	3,862	4,602	562	450	4,877	5,547
10-11pm	112	84	228	322	3,851	4,073	461	419	4,652	4,898
11-Mid	107	78	141	257	3,068	3,610	464	369	3,780	4,314
24 hr Total	7,465	5,994	13,509	14,928	92,556	101,056	19,923	20,223	133,453	142,201
6-10am	2,229	1,104	3,898	3,328	20,323	20,440	4,018	5,925	30,468	30,797
10am-1pm	1,293	893	2,024	2,103	13,752	13,776	2,853	3,144	19,922	19,916
1-3pm	820	685	1,399	1,700	9,592	10,370	2,244	2,278	14,055	15,033
3-7pm	1,881	2,268	3,806	4,651	18,928	21,562	6,273	4,934	30,888	33,415
6am-7pm	6,223	4,950	11,127	11,782	62,595	66,148	15,388	16,281	95,333	99,161

* To Brooklyn

2004 Screenline Volumes Brooklyn - Queens (cont'd)

	Atlantic Ave		Cooper St		Cornelia St	Decatur St	DeKalb Ave		Greene Ave	Jackie Robinson Parkway	
	<i>W/B*</i>	<i>E/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>N/B</i>	<i>N/B</i>	<i>S/B*</i>	<i>N/B</i>	<i>N/B</i>	<i>W/B*</i>	<i>E/B</i>
Mid-1am	166	187	70	44	26	52	39	49	25	745	753
1-2am	103	122	30	24	21	39	26	36	18	374	386
2-3am	83	97	30	25	7	26	21	25	8	226	290
3-4am	73	81	14	16	17	15	23	25	11	169	224
4-5am	112	94	27	25	9	16	39	23	12	245	323
5-6am	257	225	65	45	14	26	81	64	24	632	808
6-7am	707	431	276	129	42	56	187	123	56	1,944	2,045
7-8am	1,112	591	557	165	83	89	365	161	93	2,576	2,322
8-9am	1,120	748	624	185	119	117	314	171	123	2,540	2,095
9-10am	890	599	315	147	85	109	208	133	91	2,153	1,699
10-11am	720	611	282	122	69	101	142	101	70	1,630	1,442
11-Noon	738	670	250	156	111	92	163	111	124	1,504	1,461
Noon-1	807	717	257	154	92	126	180	123	121	1,507	1,660
1-2pm	820	738	249	187	96	116	170	120	104	1,548	1,848
2-3pm	844	803	322	217	153	140	208	124	103	1,780	2,229
3-4pm	862	1,042	341	284	131	148	215	151	126	2,115	2,481
4-5pm	904	1,197	406	304	140	170	230	162	109	2,425	2,821
5-6pm	949	1,309	400	230	140	170	261	201	191	2,424	2,773
6-7pm	797	1,120	303	280	116	158	209	164	176	2,167	2,636
7-8pm	734	764	292	181	102	155	185	129	141	1,873	2,250
8-9pm	656	613	240	167	95	130	148	127	135	1,510	1,852
9-10pm	561	444	188	122	79	111	124	113	73	1,272	1,563
10-11pm	411	406	175	107	58	95	97	95	51	1,226	1,506
11-Mid	267	294	119	72	39	75	62	76	44	1,095	1,157
24 hr Total	14,693	13,903	5,832	3,388	1,844	2,332	3,697	2,607	2,029	35,680	38,624
6-10am	3,829	2,369	1,772	626	329	371	1,074	588	363	9,213	8,161
10am-1pm	2,265	1,998	789	432	272	319	485	335	315	4,641	4,563
1-3pm	1,664	1,541	571	404	249	256	378	244	207	3,328	4,077
3-7pm	3,512	4,668	1,450	1,098	527	646	915	678	602	9,131	10,711
6am-7pm	11,270	10,576	4,582	2,560	1,377	1,592	2,852	1,845	1,487	26,313	27,512

* To Brooklyn

2004 Screenline Volumes Brooklyn - Queens (cont'd)

	<i>Linden Blvd</i>		<i>Linden St</i>	<i>Shore Parkway</i>		<i>Sutter Ave</i>		<i>Other Totals</i>		<i>Grand Totals</i>	
	<i>W/B*</i>	<i>E/B</i>	<i>N/B</i>	<i>W/B*</i>	<i>E/B</i>	<i>W/B*</i>	<i>E/B</i>	<i>To Brooklyn</i>	<i>To Queens</i>	<i>To Brooklyn</i>	<i>To Queens</i>
Mid-1am	422	602	25	1,588	1,449	41	67	3,071	3,279	5,606	6,342
1-2am	277	341	20	879	1,117	33	31	1,722	2,155	3,366	4,324
2-3am	220	202	8	540	609	25	23	1,145	1,320	2,487	3,000
3-4am	207	205	12	420	510	18	27	924	1,143	2,334	2,725
4-5am	319	306	12	599	694	28	35	1,369	1,549	3,599	3,835
5-6am	662	486	29	1,829	1,633	84	69	3,610	3,423	8,348	7,669
6-7am	1,400	971	63	3,879	3,386	238	202	8,631	7,504	16,247	15,032
7-8am	2,194	1,127	101	4,433	4,251	330	280	11,567	9,263	19,584	17,382
8-9am	2,163	1,206	134	4,442	4,336	331	321	11,534	9,555	19,142	17,752
9-10am	1,732	1,192	120	4,305	3,739	199	178	9,802	8,092	17,029	15,045
10-11am	1,424	1,156	139	4,151	3,288	177	186	8,526	7,285	15,195	13,445
11-Noon	1,301	1,165	122	3,608	3,268	174	184	7,738	7,464	14,232	13,748
Noon-1	1,358	1,559	124	3,414	3,286	164	253	7,687	8,215	14,446	15,687
1-2pm	1,350	1,435	115	3,642	3,851	186	270	7,965	8,880	14,725	15,988
2-3pm	1,388	1,421	107	3,877	3,949	252	313	8,671	9,559	15,966	17,484
3-4pm	1,607	1,658	158	4,269	4,591	276	336	9,685	11,106	17,489	19,613
4-5pm	1,652	1,768	153	4,449	4,538	268	361	10,334	11,723	18,393	20,413
5-6pm	1,544	1,673	170	4,446	4,475	303	386	10,327	11,718	18,496	20,412
6-7pm	1,472	1,357	146	4,563	4,679	233	302	9,744	11,134	16,600	18,658
7-8pm	1,163	1,131	116	4,382	4,265	241	236	8,870	9,470	14,694	16,509
8-9pm	1,002	1,048	96	3,870	3,916	184	194	7,610	8,373	12,698	14,589
9-10pm	837	986	82	3,422	3,515	135	149	6,539	7,237	11,416	12,784
10-11pm	878	835	68	3,181	3,150	124	110	6,092	6,481	10,744	11,379
11-Mid	679	672	41	2,420	2,502	93	82	4,735	5,054	8,515	9,368
24 hr Total	27,251	24,502	2,161	76,608	74,997	4,137	4,595	167,898	170,982	301,351	313,183
6-10am	7,489	4,496	418	17,059	15,712	1,098	981	41,534	34,414	72,002	65,211
10am-1pm	4,083	3,880	385	11,173	9,842	515	623	23,951	22,964	43,873	42,880
1-3pm	2,738	2,856	222	7,519	7,800	438	583	16,636	18,439	30,691	33,472
3-7pm	6,275	6,456	627	17,727	18,283	1,080	1,385	40,090	45,681	70,978	79,096
6am-7pm	20,585	17,688	1,652	53,478	51,637	3,131	3,572	122,211	121,498	217,544	220,659

* To Brooklyn