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An Assessment of Staten Island Ferry Service and Recommendations for Improvement



THE COUNCIL OF
THE CITY OF NEW YORK
Hon. Gifford Miller
Speaker



THE COMMITTEE ON OVERSIGHT
AND INVESTIGATIONS
Hon. Eric Gioia • Chair

THE COMMITTEE ON TRANSPORTATION
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EXECUTIVE SUMMARY

 Staten Island (Richmond County) was New York City's fastest growing borough and New York State's fastest growing county between 1990 and 2000.ⁱ Indeed, Staten Island's population has grown over 30 percent in the past 24 years—yet ferry service has remained essentially stagnant.ⁱⁱ

- While Staten Island's economy grew—with the number of jobs increasing 110 percent between 1978 and 2001—Staten Island ferry service remained essentially unchanged.ⁱⁱⁱ
- Staten Islanders have far fewer public transit options than residents of any other borough, especially during overnight hours. For example, more than 700 buses and trains connect Brooklyn and Manhattan on weekends between midnight and 6 a.m., while only 33 buses and ferries link Staten Island and Manhattan in that time.
- The New York City Department of Transportation (DOT) does not have accurate mechanisms to count ferry ridership, contributing to schedules unresponsive to passenger demand and purchases of vessels too large for actual ridership levels.
- For example, the Staten Island Ferry's morning peak hour schedule does not reflect actual passenger demand. A New York City Council investigation finds an average of 1,478 more Manhattan-bound passengers between 7:01 and 8 a.m. than between 8:01 and 9 a.m., even though there are fewer scheduled ferries in that earlier hour.

A New York City Council investigation finds that Staten Island residents face gaping inequalities in public transportation connections to Manhattan. The DOT-operated Staten Island Ferry service provides a lifeline for many Staten Islanders to the rest of New York City. The ferry fleet carries more than 65,000 passengers per day and makes over

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¹ U.S. Bureau of the Census. *Highest Ranking County in U.S. and each State based on Population: Percent Change*, 1990-2000, http://www.census.gov/statab/ccdb/tst01100.txt [accessed Nov. 15, 2004].

ⁱⁱ U.S. Bureau of the Census. *Population Estimates*, *1980-2003*. The population of Staten Island (Richmond County) grew from 352,029 in 1980 to 459,737 in 2003, an increase of 30.6%.

iii U.S. Bureau of the Census. *County Business Patterns*, 1980-2001. The number of jobs in Staten Island increased from 40,891 in 1978 to 85,897 in 2001, or 110.1%.

33,000 trips annually. Nevertheless, ferry service has not kept pace with the borough's growing economy and population over the past several decades. The graph below compares the growth in population to changes in ferry service.

35 30 25 20 15 Percent 10 5 0 -5 -10 -15 -20 S.I. Population Growth Change in Ferry Service

S.I. Population Change vs. Ferry Service Change, 1980-2003

Figure I. Sources: U.S. Census and Mayor's Management Reports, 1980-2003

The level of service is particularly low during overnight hours, when the ferries make only one round trip per hour between Manhattan and Staten Island. Making matters worse, bus service is also sparse during these times. The graph on the next page shows the combined number of public transit connections—subway trains, buses and, in the case of Staten Island, ferries—between each borough and Manhattan during weekend overnight hours.

^{iv} New York City Department of Transportation (hereinafter DOT), "Facts about the Ferry," http://www.nyc.gov/html/dot/html/masstran/ferries/statfery.html#facts [accessed Sept. 28, 2004].

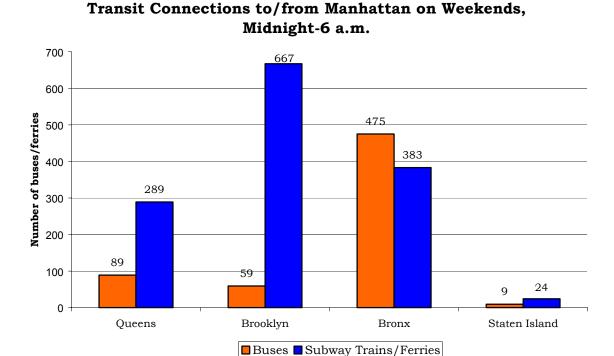


Figure II. Sources: Metropolitan Transportation Authority and NYC DOT

Investigators from the New York City Council sought to assess how closely the current Staten Island Ferry schedule reflects passenger demand, specifically during the morning rush-hour period. Adapting DOT's own counting methodology, teams of investigators counted Manhattan-bound passengers as they crossed the turnstiles at Staten Island's St. George Terminal for every ferry departing between 7:01 and 9 a.m. on nine weekday mornings in September 2004. The graph on the next page shows the mean and median ridership for each ferry departure counted. Vi

^v For a description of DOT's counting methods, see Letter from Andra Horsch, Director, Intergovernmental Affairs, DOT, to Mitchell Schwartz, Counsel, Committee on Transportation, New York City Council, Mar. 4, 2003 (See Appendix C). Individuals recognized as security, DOT, and maintenance personnel were excluded from the counts.

vi The mean is the average of a set of numbers. The median is the middle number in a set of numbers, *i.e.*, half of the numbers in the set are values greater than the median and half are less than it.

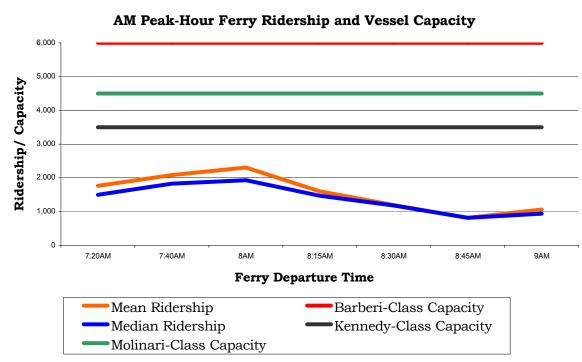


Figure III.

The graph above also compares ridership to the capacity of the two classes of vessels used in the morning hours, the Kennedy-class and the Barberi-class, as well as that of the Molinari-class vessels, which will replace the Kennedy-class ferries in coming years. As the graph shows, in September 2004, ferry ridership remained well below capacity, even at the peak 8 a.m. departure.^{vii}

Based on the findings of this investigation, the Council recommends:

- Pass Int. 94A-2004 to provide more frequent ferry service. viii
- Purchase smaller, faster ferries to make more frequent trips using fewer resources.
- Pass legislation requiring DOT to report on ferry ridership.

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 $^{^{\}mathrm{vii}}$ Some outlying values in investigators' passenger counts tend to skew the average towards higher values. Therefore, both measures of central tendency, mean and median ridership, are presented in the graph above. See Appendix D for detailed findings. $^{\mathrm{viii}}$ See Appendix B.

BACKGROUND

For New York City's more than 450,000 Staten Islanders,¹ the Staten Island Ferry is a vital service linking the City's fastest-growing borough to the rest of the City. Every day, more than 65,000 passengers ride the fleet of seven vessels that travel between Whitehall Terminal in Manhattan and St. George Terminal in Staten Island.² Nevertheless, ferry service has failed to keep pace with the borough's growth. Indeed, the level of Staten Island Ferry service has remained essentially stagnant since 1980, even though Staten Island has experienced over 30 percent population growth and a doubling of the number of jobs since then.³

Operated and maintained by the New York City Department of Transportation (DOT), the Staten Island Ferry service is a unique undertaking. While ferry services in other states and localities may serve more passengers—Washington State's ferry service, for example, serves 26 million people a year on ten different ferry routes between Washington and Canada⁴—the Staten Island Ferry is an anomaly in that it is municipally run, subsidized by the City, and operates 24 hours per day. The Staten Island Ferry is also the only mass transportation service connecting the island directly to Manhattan.⁵

¹ U.S. Bureau of the Census (hereinafter U.S. Census), *New York Quick Facts: Richmond County.* http://quickfacts.census.gov/qfd/states/36/36085.html [accessed Oct. 8, 2004].

² Tara Bahrampour, "A Romantic Symbol of the City Gets a Fresh Look," Neighborhood Report: New York Up Close, *The New York Times*, sec. 14, August 5, 2001.

³ The level of ferry service is measured by the number of completed roundtrips made by the Staten Island Ferry as reported in the yearly Mayor's Management Report (MMR). The first year for which this information is available in the MMR is 1978. The U.S. Census measures the number of jobs in its County Business Patterns.

⁴ Washington State Ferries, "History." http://www.wsdot.wa.gov/ferries/your_wsf/index.cfm?fuseaction=our_history [accessed Sept. 27, 2004].

⁵ Bus lines transport Staten Islanders to and from Manhattan via Brooklyn.

Of the current fleet of seven vessels, five boats make 104 trips on a typical weekday schedule.⁶ On weekends, three boats make 64 trips each day.⁷ Collectively, the ferries make over 33,000 trips annually.⁸

History

Ferries have been making the 5.2-mile trip from Lower Manhattan to Staten Island's north shore for almost 400 years.⁹ Early accounts reveal ferry service dating as far back as 1650, with biweekly service beginning in 1745.¹⁰ The City of New York took over the operation in 1905.¹¹

The popularity of transport ferries in the New York area peaked during the first decade of the 1900s, when as many as 11 companies operated about 125 ferries on 45 routes. While some of these ferry services continued until the 1950s and 1960s, the increasing popularity of automobiles eventually brought about their extinction. The opening of both the Brooklyn Battery Tunnel in 1950 and the Verrazano Narrows Bridge in 1964 ended two popular ferry routes—Manhattan to Brooklyn and Brooklyn to Staten Island. The Staten Island Ferry is the only ferry service to have survived this proliferation of bridges and tunnels since the turn of the century.

⁶ New York City Department of Transportation (hereinafter DOT), "Facts about the Ferry," http://www.nyc.gov/html/dot/html/masstran/ferries/statfery.html#facts [accessed Sept. 28, 2004].

⁷ Ibid.

⁸ Ibid.

⁹ Bahrampour. See n.2.

¹⁰ Ibid.

¹¹ *Ibid*.

¹² Barbara A. Koeth, "The Waterfront," Take Out, *Crain's New York Business*, April 27, 1987.

¹³ *Ibid*.

¹⁴ Ibid.

¹⁵ Mary B. W. Tabor, "The Newest Fashion in Urban Transportation," *The New York Times*, sec. B, October 22, 1991.

Increasingly sophisticated ferry technology and demand for an alternative to roadway gridlock helped make ferry service as public transportation popular again in the late 1980s and early 1990s. Of the 13 New York City ferry routes that began in 1990, however, at least four closed down within a year, with some of the companies going out of business.¹⁶

The Staten Island Ferry has been free for riders since 1997, when the City Council passed and Mayor Giuliani signed a law eliminating the 50-cent fare.¹⁷ At the time, revenue from the fares constituted \$6 million of the \$25 million in operating costs.¹⁸

The Staten Island Ferry Today

The current fleet of ferries consists of seven vessels, which are distinguished into three classes.¹⁹ The three Kennedy-class ferries (the American Legion, the Herbert H. Lehman, and the John F. Kennedy) are 297 feet long and hold 3,500 passengers and 40 automobiles.²⁰ They require a crew of 13 (plus one female attendant).²¹ The larger Barberi-class ferries—the Samuel I. Newhouse and the Andrew J. Barberi—are 300 feet long, can accommodate 6,000 passengers and require a crew of 15 (plus one female attendant).²² The two Austen-class boats—the Alice Austen and the John Noble—began service in 1986, carry 1,280 passengers and maintain a crew of nine (plus one female attendant).²³

 17 Local Law 46 of 1997 amended section 19-304 of the Administrative Code of the City of New York to make the Staten Island Ferry free.

¹⁶ *Ibid.*

¹⁸ Bob Liff, "Unfare? Ferry Ride to be Free," Daily News, April 28, 1997

 $^{^{19}}$ The Guy V. Molinari, a new ferry vessel, is not yet in service, and it is not counted as part of the current fleet of ferries.

²⁰DOT, "Facts about the Ferry," http://www.nyc.gov/html/dot/ html/masstran/ferries/statfery.html#facts. [accessed on 28 Sep 04]. Since September 11, 2001 the S.I. Ferry has stopped transporting automobiles.

²¹ *Ibid*.

²² *Ibid*.

²³ *Ibid*.

Three new ferries have begun replacing the older Kennedy-class ferries, which are being phased out. The Guy V. Molinari, the first of this new crop, will be put into service in the next few years.²⁴ The Molinari cost \$40 million and can carry up to 4,500 passengers.²⁵ Two other new vessels, the John J. Marchi and the Spirit of America, will join the fleet in the coming years.²⁶

The current Manhattan-bound weekday schedule is:27

Manhattan-bound ferries	Number of Ferries	Frequency
6:01 a.m. – 8:00 a.m.	6	Every 20 minutes
8:01 a.m. – 9:00 a.m.	4	Every 15 minutes
9:01 a.m. – 3:30 p.m.	13	Every 30 minutes
3:31 p.m. – 5:30 p.m.	6	Every 20 minutes
5:31 p.m. – 7:00 p.m.	6	Every 15 minutes
7:01 p.m. – 12:00 a.m.	10	Every 30 minutes
12:01 a.m 6:00 a.m.	6	Every 60 minutes

In the opposite direction, the Staten Island-bound weekday schedule is:28

Staten Island-bound ferries	Number of Ferries	Frequency
6:31 a.m. – 8:30 a.m.	6	Every 20 minutes
8:31 a.m. – 9:30 a.m.	4	Every 15 minutes
9:31 a.m. – 4:00 p.m.	13	Every 30 minutes

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²⁵ "Mayor Michael R. Bloomberg welcomes the Guy V. Molinari to Staten Island Ferry fleet" (press release). NYC. 27 Sep 04. http://www.nyc.gov/html/om/html/2004b/pr252-04.html [accessed 28 Sep 04].

 ^{26 &}quot;Mayor Michael R. Bloomberg and Transportation Commissioner Iris Weinshall Announce Name of New Staten Island Ferry" (press release). NYC. 24 Oct 04. http://www.nyc.gov/html/om/html/2004b/pr283-04.html [accessed 4 Nov 04].
 27 DOT, Staten Island Ferry Schedule, Effective Date: July 1, 2003. See Appendix A.
 28 Ibid.

4:01 p.m. – 5:00 p.m.	3	Every 20 minutes
5:01 p.m. – 7:00 p.m.	8	Every 15 minutes
7:01 p.m. – 8:00 p.m.	3	Every 20 minutes
8:01 p.m. – 12:30 a.m.	9	Every 30 minutes
12:31 a.m. – 6:30 a.m.	6	Every 60 minutes

On weekends, Manhattan-bound ferries operate hourly from 12:01 to 11 a.m., every half-hour from 11:01 a.m. to 7 p.m. and hourly between 7:01 p.m. and midnight.²⁹ Staten Island-bound ferries depart every hour from 12:31 to 11:30 a.m., hourly from noon to 7:30 p.m. and hourly from 7:31 p.m. to 12:31 a.m.³⁰

The Staten Island Ferry cost \$44.5 million to operate during Fiscal Year (FY) 2004, and has been appropriated \$46.5 million for the following current fiscal year; \$2.2 million is spent on fuel each year.³¹

Adequacy of Ferry Service

Staten Island (Richmond County) experienced the highest rate of population growth between 1990 and 2000 in all of New York State.³² Staten Island is also the fastest growing borough in the City of New York, with an increase in population of 17 percent from 1990 to 2000 and almost 100 percent since 1960.³³ By contrast, three of the four other

³⁰ *Ibid*.

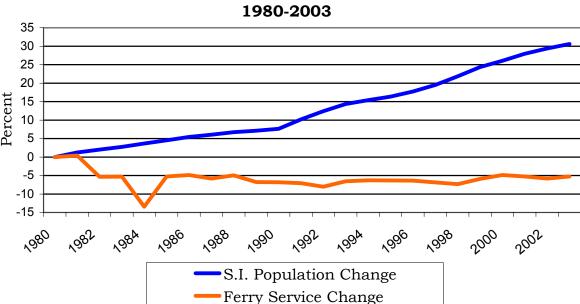
²⁹ *Ibid*.

³¹ City of New York. *Adopted Budget- Fiscal Year 2005* http://www.ci.nyc.ny.us/html/omb/pdf/erc7_04.pdf [accessed Nov. 3, 2004]

³² U.S. Bureau of the Census. *Highest Ranking County in U.S. and each State based on Population: Percent Change*, 1990-2000. http://www.census.gov/statab/ccdb/tst01100.txt [accessed on Nov. 15, 2004].

³³ U.S. Bureau of the Census. *Population of Counties by Decennial Census*, 1900-1990. http://www.census.gov/population/cencounts/ny190090.txt [accessed Oct. 8, 2004]; also, U.S. Bureau of the Census. *New York Quick Facts: Richmond County.*. http://quickfacts.census.gov/qfd/states/36/36085.html [accessed Oct. 8, 2004].

boroughs have experienced a net population decrease since the 1960 The graph below shows the growth of Staten Island's population since 1980 and the changes to the level of ferry service provided in that time.³⁵



S.I. Population Change vs. Ferry Service Change,

Figure 1. Sources: U.S. Census and Mayor's Management Reports, 1980-2003

As the graph above shows, ferry service has remained essentially stagnant even as Staten Island's population has steadily increased.

The number of public transportation connections, as well as the frequency of existing connections, has not followed the pace of growth in Between 1978 and 2001, Staten Island's job market the borough.

³⁴ According to the U.S. Bureau of the Census, between 1960 and 2000, the population of Kings County changed -6.2%; the population of Bronx County changed -6.5%; the population of New York County changed -9.5%; and the population of Queens grew 23.2%.

³⁵ The level of ferry service is measured by the number of completed roundtrips made by the Staten Island Ferry as reported in the yearly Mayor's Management Report (MMR). The first year this information is available in the MMR is 1978.

-Change in Ferry Service

boomed, with the number of jobs more than doubling.³⁶ The graph below shows rising job growth—measured by the percentage change of the number of jobs—compared to changes in the level of ferry service provided.

120 100 80 40 20 0 -20

S.I. Employment Growth vs. Ferry Service Change, 1978- 2001

Figure 2. Sources: U.S. Census and Mayor's Management Reports, 1978-2001

S.I. Employment Growth

As the graph shows, while the local job market boomed, ferry service did not. 37

The level of service is especially low during overnight hours (midnight-6 a.m.) when the ferries make only one round trip per hour between Manhattan and Staten Island. Bus service is also sparse, making matters worse for those who rely on public transportation. On any night of the week, a Staten Island resident returning home from Manhattan could be forced to wait an hour for the ferry, and even longer waits are possible if a ferry is delayed or cancelled.

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³⁶ U.S. Bureau of the Census. *County Business Patterns*, 1978-2001. http://quickfacts.census.gov/qfd/states/36/36085lk.html [accessed Oct. 4, 2004]. ³⁷ As of the publication date of this report, economic data is not available for 2002 and 2003.

The following graph shows the combined number of public transportation connections subway trains, buses and, in the case of Staten Island, ferries—between each borough and Manhattan during weekday overnight hours.

Weekday Public Transit Connections to/from Manhattan, Midnight-6 a.m.

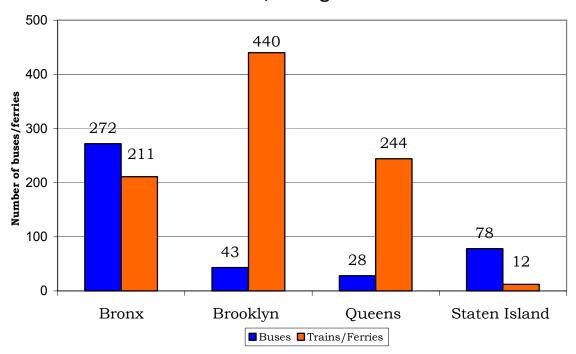


Figure 3. Source: Metropolitan Transportation Authority

The inequity in public transit connections is even greater on weekends. The graph on the next page compares the number of buses, ferries and subway trains available on weekends from midnight to 6 a.m. between Manhattan and each borough.

Weekend Public Transit Connections to/from Manhattan, Midnight-6 a.m.

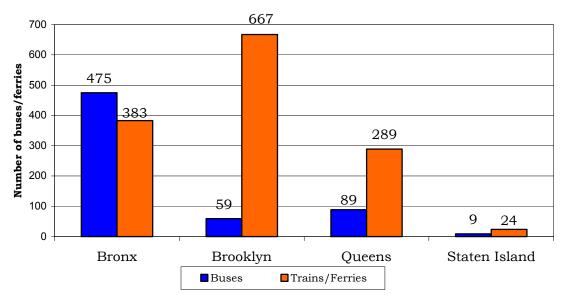


Figure 4. Source: Metropolitan Transportation Authority

The infrequent night and weekend service has long been a concern for Staten Islanders. For more than a decade, local legislators have proposed measures to increase the low frequency of service.³⁸ In 1995, a group of concerned citizens organized themselves as the Ferry Riders Committee and issued a report detailing the results of a poll about ferry conditions. Over 67% of the 320 Staten Islanders polled requested additional service during nights and weekends, and 81.3% asserted that they had changed their plans based on the infrequent ferry service.³⁹

The Metropolitan Transportation Authority (MTA) also assessed the transit needs of Staten Island, and reported that "the combination of unattractive terminals at both ends of the trip, multiple fares and

³⁸ For example, Introduction No. 174, introduced in 1991 by New York City Council Member Alfred C. Cerullo III, sought minimum levels of service for the Staten Island Ferry. Intros. No. 60 (1992), No. 23 (1994), No. 56 (2002) also attempted to set minimum levels of service.

³⁹ St. George Civic Association. *Report of the Ferry Riders Committee.* 1995.

intermittent service depletes this service's competitive advantage against services like the express buses."⁴⁰ The report further characterized the ferries as "old, large, slow vessels" with service "quite infrequent in the off peak hours."⁴¹ To ameliorate these problems, the report proposed "a new 17-20 minute ferry service on 300-350 passenger vessels between St. George and Downtown Brooklyn," and "a 12-15 minute ferry service" as "an additional alternative between St. George and Whitehall Terminal."⁴²

A bill currently being considered by the New York City Council would establish more frequent ferry service. The bill, Introduction 94A, would provide an extra Manhattan-bound ferry during the 7-8 a.m. morning rush hour and provide half-hourly service overnight and all weekend in both directions.⁴³ The bill also mandates that the DOT provide the City with a written report detailing any disruption of service within 48 hours.⁴⁴

In April 2004, during a hearing of the City Council's Committee on Transportation, the DOT Commissioner spoke in opposition to this bill. Her opposition was based on three points: ridership has failed to meet the ferries' capacity, indicating demand is too low to justify additional runs; the proposed increases in service would be too costly; and the City Council was "attempting to micromanage the DOT" by legislating a specific schedule.⁴⁵

⁴⁰ Metropolitan Transportation Authority, New York City Transit, *Transit needs assessment study for Staten Island*, n.d., ca. 1995.

⁴¹ *Ibid*.

⁴² *Ibid*.

⁴³ *Ibid*.

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⁴⁵ Statement of Iris Weinshall, Commissioner, DOT. Apr. 22, 2004. Hearing of the New York City Council Committee on Transportation.

This investigation seeks to assess how closely the current Staten Island Ferry schedule reflects passenger demand, specifically during the morning rush-hour period.

METHODOLOGY

For nine weekday mornings in September 2004, three investigators counted Manhattan-bound ferry passengers as they crossed the turnstiles into the boarding area at the St. George ferry terminal in Staten Island. Using handheld tally counters, investigators counted passengers for every Manhattan-bound ferry from 7:01 to 9 a.m.⁴⁶ When the slip door closed, signaling the ferry's departure, investigators reported their tallies, reset their counters and began counting passengers for the next departing ferry.

This methodology was adapted from DOT's own counting method, as described in a 2003 letter to the City Council.⁴⁷ DOT does not record "specific ridership data by trip" although it collects total "peak-hour ridership data at St. George's Terminal" where it records "between 16,000 and 20,000 passengers" entering Lower Manhattan between 6 and 10 a.m. each weekday morning.⁴⁸ The Staten Island Ferry is an open system where there are no tickets or control areas to distinguish passengers from non-passengers. Just as ridership on a particular New York City subway cannot be counted, there is no way to count the number of people riding a specific ferry because people who cross the turnstiles into the boarding area may not necessarily board ferries.⁴⁹

Council investigators did not have access to the turnstile counters at the St. George terminal. While introducing an element of human error, their

 $^{^{46}}$ Individuals recognized as security, DOT and/or maintenance personnel were excluded from the counts.

⁴⁷ Letter from Andra Horsch, Director, Intergovernmental Affairs, DOT to Mitchell Schwartz, Counsel, Committee on Transportation, New York City Council. Mar. 4, 2003. See Appendix C.

⁴⁸ *Ibid*.

⁴⁹ *Ibid*.

manual counts nevertheless provide a good measure of ridership. In fact, at Whitehall Terminal, where no counting mechanisms exist, DOT itself conducts manual passenger counts to determine ferry ridership on off-peak ferries.⁵⁰

To mitigate the effects of human error, investigators sought to obtain a reasonable sample of weekday non-holiday ridership, and reported mean and median figures rather than ridership on a single day or only on a few mornings.⁵¹ Investigators counted passengers on three Tuesdays, three Wednesdays, and three Thursdays. The dates were chosen to avoid any holidays that might affect ridership.⁵² Passenger counts were taken on the following dates:

Tuesday	September 14 th	September 21st	September 28 th
Wednesday	September 15 th	September 22 nd	September 29 th
Thursday	September 9 th	September 23 rd	September 30 th

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⁵⁰ Ibid

⁵¹ The mean is the average of a set of numbers. The median is the middle number in a set of numbers, *i.e.*, half of the numbers in the set are values greater than the median and half are less than it.

⁵² For example, Labor Day and Rosh Hashanah were not counted.

FINDINGS

Ferry ridership levels were higher in the hour between 7:01 and 8 a.m. than in the following hour, both per boat and in the aggregate. The total mean ridership for the three ferries departing during the first hour was greater by 1,478 than that of the four ferries departing the second hour. Likewise, the sum of the median ridership was 949 greater for the first hour than for the second hour. The table below shows the hourly breakdown in the mean and median ridership.

	Total	Total
	mean	median
	ridership	ridership
Total weekday ridership, 7:01-9 a.m.	10,814	9,529
Total weekday ridership, 7:01-8 a.m.	6,146	5,239
Total weekday ridership, 8:01-9 a.m.	4,668	4,290

The graph below illustrates the difference in median ridership between 7:01 to 8 a.m. and 8:01 to 9 a.m.

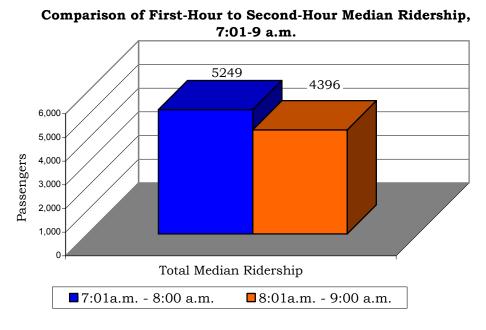


Figure 5.

Ridership climbed between 7:01 and 8 a.m., peaked at 8 a.m. and fell sharply thereafter, with a small increase for the 9 a.m. ferry. The graph below shows both the mean and median ridership for each Manhattan-bound ferry during the two hours investigators counted. ⁵³

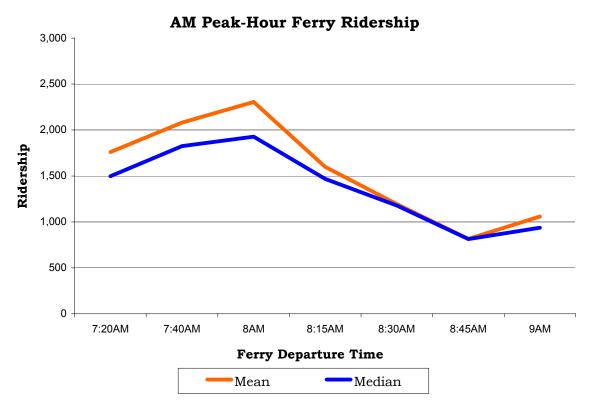


Figure 6.

⁵³ Some outlying values in investigators' passenger counts tend to skew the average towards higher values. Therefore, both measures of central tendency, mean and median ridership, are presented here. See Appendix D for detailed findings.

CONCLUSION

Connecting geographically isolated Staten Island to Manhattan is not an easy task. While DOT has made some improvement in infrastructure, there are still changes that should occur to better serve residents.

As the findings show, adding one Manhattan-bound ferry during the morning rush hour will give commuters an easier and less hectic journey into downtown Manhattan. Since DOT has found it appropriate to schedule four Manhattan-bound ferries between 8:01 and 9 a.m., there should be at least four ferries between 7:01 and 8 a.m., when there are more riders.

DOT claims that its schedule is set to meet passenger demand, but with no way to measure the number of passengers on each ferry, it is unclear how it can accurately gauge when service does or does not meet demand.

DOT has made much of the fact that ridership does not approach ferry capacity during this peak morning rush hour. Yet ridership does not fill the ferries at peak times; it is unclear when, if ever, it would. The Barberi-class ferries, for example, have a capacity of 6,000 passengers, yet the highest average morning ridership, according to investigators' counts, was only 2,305. The following graph compares ridership to the capacity of the two classes of vessels used in the morning hours, the Kennedy-class and the Barberi-class, as well as that of the upcoming Molinari-class vessels. As the graph on the following page shows, in September 2004, ferry ridership remained well below capacity, even at the peak 8 a.m. departure.

AM Peak-Hour Ferry Ridership 6,000 5,000 Ridership/ Capacity 4,000 3,000 2,000 1,000 0 7:20AM 7:40AM MA8 8:15AM 8:30AM 8:45AM 9AM Ferry Departure Time Mean Ridership Barberi-Class Capacity Kennedy-Class Capacity Median Ridership Molinari-Class Capacity

Figure 7.

It is also unclear why new vessels are being purchased that have capacities far greater than passenger demand. DOT has failed to invest in smaller, more fuel efficient, faster ferries that could run more frequently and with smaller crews, thereby saving tax dollars.

The lack of transportation connections to Manhattan is both unfair and detrimental to the lives of Staten Islanders. While half-hourly service would still not bring parity to the situation, it would do much to close the service gap that currently exists. Cab fares from Whitehall to St. George Terminal can cost a minimum of \$34, which does not include any costs for idle time or any points further than the two terminals.⁵⁴ With high cab fares, possible fare hikes for express buses, and substantial new

⁵⁴ This is calculated using the Taxi and Limousine Commission's website (http://www.nyc.gov/html/tlc) and accounts for the thirteen miles of roadway between

development, it seems very likely that more people will begin to take advantage of the Staten Island Ferry service. It is imperative therefore that DOT begin measuring ridership and applying this data to its scheduling and procurement decisions.

the two destinations (\$26), taxi cab entry fare (\$2.50), late night surcharge (\$.50) and the toll of the Verrazano Narrows bridge (\$8).

RECOMMENDATIONS

• Pass Int. 94A-2004.

The passage of this legislation would:

- Provide a needed extra Manhattan-bound ferry for the weekday mornings.
- o Maintain half-hourly service on weekends and overnight.
- o Alert the Council when ferry service disruptions occur.

• Purchase smaller, faster ferries for non-peak hours.

While running large ferries at times of low ridership is certainly not cost-effective, DOT does not currently own any vessels smaller than its Austen class, which has a capacity of 1,280. With operational costs an obvious consideration, the purchase of smaller ferries will better serve off-peak demand, allowing for more frequent trips using fewer resources like personnel and fuel.

• Pass legislation instituting reporting requirements to the City Council on Staten Island Ferry ridership.

The DOT currently does not regularly release specific numbers on ferry ridership. Reporting those numbers to the City Council would help justify its scheduling decisions.

APPENDIX A:

Staten Island Ferry Schedule

STATEN ISLAND FERRY SCHEDULE

Because of traffic disruptions in lower Manhattan, there are no vehicles allowed on the ferry until further notice.

H Denotes additional holiday Ferries

Holidays: New Years Day, Martin Luther King Jr. Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

Staten Island, NY - Lower Manhattan (Weekdays)

Manhattan Bound				Staten Island Bound				
Depart St. George	Arrive Whitehall	Depart St. George	Arrive Whitehall		Depart Whitehall	Arrive St. George	Depart Whitehall	Arrive St. George
АМ	AM	PM	PM		AM	AM	PM	PM
6:00	6:25	4:10	4:35		6:30	6:55	4:40	5:05
6:20	6:45	4:30	4:55		6:50	7:15	5:00	5:25
6:40	7:05	4:50	5:15		7:10	7:35	5:15	5:40
7:00	7:25	-	-		7:30	7:55	5:30	5:55
7:20	7:45	5:10	5:35		7:50	8:25	5:45	6:10
7:40	8:05	5:30	5:55		8:10	8:35	6:00	6:25
8:00	8:25	5:45	6:10		8:30	8:55	6:15	6:40
8:15	8:40	6:00	6:25		8:45	9:10	6:30	6:55
8:30	8:55	6:15	6:40		9:00	9:25	6:45	7:05
8:45	9:10	6:30	6:55		9:15	9:40	7:00	7:25
9:00	9:25	6:45	7:10		9:30	9:55	7:20	7:45
9:30	9:55	7:00	7:25	******	10:00	10:25	7:40	8:05
10:00	10:25	7:30	7:55		10:30	10:55	8:00	8:25
10:30	10:55	8:00	8:25		11:00	11:25	8:30	8:55
11:00	11:25	8:30	8:55	***	11:30	11:55	9:00	9:25
11:30	11:55	9:00	9:25		12:00	12:25	9:30	9:55
РМ	PM	9:30	9:55		PM	PM	10:00	10:25
12:00	12:25	10:00	10:25		12:30	12:55	10:30	10:55

12:30	12:55	10:30	10:55	1:00	1:25	11:00	11:25
1:00	1:25	11:00	11:25	1:30	1:55	11:30	11:55
-	-	11:30	-	-	-	12:00	-
		AM	AM			AM	AM
1:30	1:55	12:00	12:25	2:00	2:25	12:30	12:55
2:00	2:25	1:00	1:25	2:30	2:55	1:30	1:55
2:30	2:55	2:00	2:25	3:00	3:25	2:30	2:55
3:00	3:25	3:00	3:25	3:30	3:55	3:30	3:55
3:30	3:55	4:00	4:25	4:00	4:25	4:30	4:55
3:50	4:15	5:00	5:25	4:20	4:45	5:30	5:55

Because of traffic disruptions in lower Manhattan, there are no vehicles allowed on the ferry until further notice.

Staten Island, NY - Lower Manhattan (Weekends and Holidays)

Manhatta	Manhattan Bound		Staten Isla	and Bound
Depart St. George	Arrive Whitehall		Depart Whitehall	Arrive St. George
AM	AM		АМ	AM
12:00	12:25		12:30	12:55
1:00	1:25		1:30	1:55
2:00	2:25		2:30	2:55
3:00	3:25		3:30	3:55
4:00	4:25		4:30	4:55
5:00	5:25		5:30	5:55
6:00	6:25		6:30	6:55
7:00	7:25		7:30	7:55
H 7:30	7:55		H 8:00	8:25
8:00	8:25		8:30	8:55
H 8:30	8:55		H 9:00	9:25
9:00	9:25		9:30	9:55
H 9:30	9:55		H 10:00	10:25
10:00	10:25		10:30	10:55

H 10:30	10:55	H 11:00	11:25
11:00	11:25	11:30	11:55
11:30	11:55	PM	PM
PM	РМ	12:00	12:25
12:00	12:25	12:30	12:55
12:30	12:55	1:00	1:25
1:00	1:25	1:30	1:55
1:30	1:55	2:00	2:25
2:00	2:25	2:30	2:55
2:30	2:55	3:00	3:25
3:00	3:25	3:30	3:55
3:30	3:55	4:00	4:25
4:00	4:25	4:30	4:55
4:30	4:55	5:00	5:25
5:00	5:25	5:30	5:55
5:30	5:55	6:00	6:25
6:00	6:25	6:30	6:55
6:30	6:55	7:00	7:25
7:00	7:25	7:30	7:55
H 7:30	7:55	H 8:00	8:25
8:00	8:25	8:30	8:55
H 8:30	8:55	H 9:00	9:25
9:00	9:25	9:30	9:55
10:00	10:25	10:30	10:55
11:00	11:25	11:30	11:55

Because of traffic disruptions in lower Manhattan, there are no vehicles allowed on the ferry until further notice.

H Denotes additional holiday Ferries

Holidays: New Years Day, Martin Luther King Jr. Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

APPENDIX B:

Intro No. 94A (2004)

Proposed Int. No. 94-A

By Council Members McMahon, Oddo, Lanza, Avella, Baez, Barron, Comrie, DeBlasio, Fidler, Gennaro, Gioia, Jackson, Jennings Katz, Moskowitz, Nelson, Perkins, Provenzano, Quinn, Recchia Jr., Reed, Reyna, Rivera, Sanders Jr., Seabrook, Sears, Serrano, Stewart, Vann, Weprin, Yassky, Liu, Gallagher, Addabbo Jr., Clarke, Brewer and Gentile

A Local Law

To amend the administrative code of the city of New York, in relation to Staten Island ferry service.

Be it enacted by the Council as follows:

Section one. Chapter 3 of title 19 of the administrative code of the city of New York is amended by adding a new section 19-305 to read as follows:

19-305. Ferry service. a. Any city owned and operated ferry operating between the Whitehall terminal in the borough of Manhattan and the St. George terminal in the borough of Staten Island shall operate, at a minimum, according to the following schedule: (i) On monday through friday, except on legal holidays, a ferry shall depart from the Whitehall terminal in the borough of Manhattan every twenty minutes between 6:30 a.m. and 8:30 a.m.; every fifteen minutes between 8:30 a.m. and 9:30 a.m.; every thirty minutes between 9:30 a.m. and 4:00 p.m.; every twenty minutes between 4:00 p.m. and 5:00 p.m.; every fifteen minutes between 7:00 p.m. and 8:00 p.m.; and every thirty minutes between 8:00 p.m. and 6:30 a.m.

(ii) On monday through friday, except on legal holidays, a ferry shall depart from the St. George terminal in the borough of Staten Island every twenty minutes between 6:00 a.m. and 7:00 a.m.; every fifteen minutes between 7:00 a.m. and 9:00 a.m.; every thirty minutes between 9:00 a.m. and 3:30 p.m.; every twenty minutes between 3:30 p.m. and 5:30 p.m.; every fifteen minutes between 5:30 p.m. and 7:00 p.m.; and every thirty minutes between 7:00 p.m. and 6:00 a.m.

(iii) On saturdays, sundays and legal holidays service both to and from Manhattan's Whitehall terminal and Staten Island's St. George terminal shall be every thirty minutes beginning at midnight on each such day.

b. The schedule of service set forth in subdivision a of this section shall not apply in the event of the mechanical malfunction of a ferry being used to provide such service, when the commissioner or a designee determines that weather conditions make it unsafe to operate in accordance with such schedule or when the commissioner determines that an emergency exists preventing compliance with such schedule. In the event of any such disruption in the schedule of service set forth in subdivision a of this section, the commissioner or a designee shall, within forty-eight hours of the service disruption, submit a written report to the speaker of the council which shall include the specific reasons for the disruption and the time at which service was restored. If service has not been restored by the time the report must be submitted, the report shall also include the estimated duration of the disruption in service and what, if any, attempts are being made to mitigate the loss of scheduled service. Any disruption in service in accordance with this subdivision which has a duration in excess of thirty days shall require the approval of the council by local law.

- c. Any proposed diminution in the schedule of service set forth in subdivision a of this section, other than in accordance with subdivision b of this section, shall require the approval of the council by local law.
 - §2. This local law shall take effect one hundred and twenty days after it is enacted into law.

APPENDIX C:

Letter from DOT to the New York City Council Regarding Staten Island Ferry Schedule

40 Worth Street New York, New York 10013

Tel: 212/676-0868 Fax: 212/442-7007

Iris Weinshall, Commissioner

March 4, 2003

Mr. Mitchell B. Schwartz Counsel, Committee on Transportation The Council of the City of New York City Hall New York, NY 10007

Dear Mr. Schwartz:

The New York City Department of Transportation's (NYCDOT) testimony presented on October 16, 2002 at the City Council's Transportation Committee hearing on Staten Island Ferry service and in particular, Intro No. 56, generated a number of follow-up questions from the Council on ridership, costs and revenue and the issue of privatization. As we stated in our testimony, NYCDOT strongly believes that the current schedule of 648 weekly trips between the Whitehall and St. George Terminals is responsive to passenger demand. Our spot counts have found that fewer than 1,800 passengers take advantage of the Ferry's overnight service on a daily basis, which equates to only 2.7% of the daily average. Moreover, expanded service would require additional budgetary resources that are not available during this time of fiscal constraint.

Unlike any other mass-transit system in the City, the Staten Island Ferry is an open system meaning that no tickets are required and no "control" areas exist in the terminals separating passengers from non-passengers. Within MTA/NYCT's subway system for example, you need to swipe a MetroCard or use a token to enter the control area. In our terminals, we only have public waiting areas that lead directly to the boarding slips. Similar to NYCT, we do not have any mechanisms in place to determine exactly how many passengers we carry on a given trip. While NYCT knows how many people enter a subway station's control area during a certain time frame, it does not know how many people are on any given train other than by estimating the passenger density. NYCDOT uses a similar method, approved by the United States Coast Guard, to estimate the number of passengers on each of our trips to ensure that a boat's certified capacity is not exceeded.

Although NYCDOT does not have specific ridership data by trip, since September 11th we continue to collect peak-hour ridership data at St. George Terminal in order to monitor the number of passengers entering lower Manhattan. These turnstile counts are recorded daily between the hours of 6 AM and 10 AM and have fluctuated between 16,000 and 20,000 passengers. No such counting devices exist at the Whitehall Terminal.



To determine the overnight passenger count information summarized in our testimony, NYCDOT conducted quarterly, one-week passenger counts of each departure between the hours of 12.00 AM and 5.30 AM. Three such counts were conducted in 2002: February 25 – March 3; June 1 – 7; and October 9 – 15. Each night over the 7-day periods, three staff members manually counted the passengers as they boarded the boats. Once the boat was underway, the three counts were combined to establish the total ridership of a given trip. When the boat arrived, the staff members repositioned themselves for the next departure. The raw data for each of the 12 overnight departures was then broken down into weekday, weekend, and overall weekly totals and averages (see attached ridership data).

As you will note, our findings show that the average number of passengers on each overnight boat is 146, which translates into a load factor of only 11%. To further make the point, while the average daily ridership on the Staten Island Ferry between Whitehall and St. George is 65,000 passengers, overnight ridership averages just 1,760 passengers, or only 2.7 % of the daily average. The current demand for overnight ridership does not justify increasing its frequency beyond the present service.

In 2002, it cost the City of New York \$54 million to provide the more than 34,000 annual Staten Island Ferry trips between St. George and Whitehall. Labor accounts for nearly 81% of these costs, with fuel, parts, supplies, etc., making up the remainder. A minimal offset to the \$54 million in expenses is revenue of approximately \$1.3 million (down from \$2.4 million in 2001), including about \$400,000 in concession revenue from the sale of food and beverages on the boats. Advertising and two months of vehicle fares make up the rest. As you know, since September 11th, however, no vehicles have been allowed on the Staten Island Ferry. In addition to the City's \$37 million in expense and capital funding needed to keep the operation going in 2002, the State of New York through its State Transit Operating Assistance (STOA) program provided \$16 million. The City receives no other operational-related governmental subsidies for the Staten Island Ferry.

It costs the City approximately \$2.2 million annually, with a corresponding cost per passenger of \$3.40 per trip, for overnight Staten Island Ferry service, from 12:00 am to 5:30 am, consisting of six trips in each direction using one Austen-class vessel. The implementation of additional half hourly service, as dictated by Intro. 56, would increase the cost of overnight service by an additional \$3 million annually to \$5.2 million and would inflate the cost per passenger to over \$8.00 per trip. This calculation includes the cost of an additional 540,000 gallons of fuel per year and the extra 30 crewmembers and support staff that DOT would be required to hire in order to comply with U.S. Coast Guard regulations.

It should also be noted that the \$3 million additional cost does not include other related costs that would also escalate. As stated in our testimony, the added service would require the agency to accelerate the replacement of Austen-class boats by approximately 5 years to 2011, at a cost of approximately \$25 million per boat, due to increased the wear and tear on the boats. It would also require the doubling of NYPD coverage on our boats, and due to the age of the existing Staten Island Ferry fleet and our mandated U.S. Coast Guard maintenance schedules, doubling our overnight schedule would force us to use our largest boats – the 6,000 passenger Barberi-class – during a four month period each year.

1. ..

In an attempt to reduce operating costs and establish a better match between passenger demand and boat capacity, NYCDOT is exploring the concept of privatizing the overnight service between the hours of 12 Midnight and 5.30 AM. However, it must be noted that privatizing the overnight service is still under review and the City has had no discussions on this matter with any potential vendors.

I hope that this additional information on the Staten Island Ferry's operation, addresses your questions, and provides further clarification to the City Council on why the New York City Department of Transportation cannot support Intro. No. 56. Should you have any further questions, please contact me at (212) 442-7095.

Sincerely,

Andra Horsch Director of

Intergovernmental Affairs

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APPENDIX D:

Selected Data Tables

AM Peak-Hour Ferry Ridership, 7:01 - 9 a.m.

TIME	Mean Ridership	Median Ridership	Kennedy- Class Capacity	Class	Class
7:01-8 a.m.					
7:20AM	1,761	1,497	3,500	4,500	6,000
7:40AM	2,080	1,825	3,500	4,500	6,000
8AM	2,305	1,927	3,500	4,500	6,000
Total	6,146	5,239	3,500	4,500	6,000
Mean per boat	2,049				0
8:01-9 a.m.					
8:15AM	1,599	1,467	3,500	4,500	6,000
8:30AM	1,194	1,179	3,500	4,500	6,000
8:45AM	816	813	3,500	4,500	6,000
9AM	1,059	937	3,500	4,500	6,000
Total	4,668	4,290	3,500	4,500	6,000
Mean per boat	1,167				
Morning Totals	10,813	9,529			
Mean per boat	1,545				

S.I. Population Change vs. Ferry Service Change, 1980-2003

Year	Population Estimate	Cumulative Population Change (Percent)	Number of Ferry Roundtrips	Cumulative Ferry Service Change (Percent)
1980	352,029	0	17,638	0
1981	356,317	1.22	17,713	0.43
1982	359,062	2.00	16,695	-5.35
1983	361,728	2.76	16,706	-5.28
1984	364,847	3.64	15,268	-13.44
1985	367,927	4.52	16,714	-5.24
1986	371,084	5.41	16,781	-4.86
1987	373,232	6.02	16,614	-5.81
1988	375,706	6.73	16,765	-4.95
1989	377,063	7.11	16,445	-6.76
1990	378,977	7.66	16,439	-6.80
1991	387,948	10.20	16,393	-7.06
1992	395,643	12.39	16,222	-8.03
1993	402,590	14.36	16,480	-6.57
1994	406,208	15.39	16,527	-6.30
1995	409,600	16.35	16,522	-6.33
1996	414,481	17.74	16,515	-6.37
1997	420,725	19.51	16,427	-6.87
1998	428,952	21.85	16,342	-7.35
1999	437,814	24.37	16,599	-5.89
2000	443,728	26.05	16,782	-4.85
2001	450,454	27.96	16,711	-5.26
2002	455,385	29.36	16,614	-5.81
2003	459,737	30.60	16,709	-5.27

S.I Employment Growth vs. Ferry Service Growth, 1980-2001

Year		Cumulative S.I. Employment Growth (Percent)	Number of Ferry Roundtrips	Cumulative Ferry Service Change (Percent)
1977	38588			
1978	40,891	0.00	19,284	0.00
1979	43,278	5.84	17,492	-9.29
1980	44,921	9.86	17,638	0.83
1981	45,831	12.08	17,713	0.43
1982	53,189	30.08	16,695	-5.75
1983	53,885	31.78	16,706	0.07
1984	55,787	36.43	15,268	-8.61
1985	59,183	44.73	16,714	9.47
1986	62,761	53.48	16,781	0.40
1987	67,746	65.67	16,614	-1.00
1988	68,377	67.22	16,765	0.91
1989	71,026	73.70	16,445	-1.91
1990	71,525	74.92	16,439	-0.04
1991	71,157	74.02	16,393	-0.28
1992	68,234	66.87	16,222	-1.04
1993	69,214	69.26	16,480	1.59
1994	73,696	80.23	16,527	0.29
1995	77,792	90.24	16,522	-0.03
1996	75,796	85.36	16,515	-0.04
1997	77,357	89.18	16,427	-0.53
1998	79,611	94.69	16,342	-0.52
1999	82,844	102.60	16,599	1.57
2000	84,673	107.07	16,782	1.10
2001	85,897	110.06	16,711	-0.42