April 17, 2006

The Hon. Vincent M. Ignizio
Member of Assembly
4345 Hylan Boulevard
Staten Island, NY 10312

The Hon. James S. Oddo
Minority Leader
Council of the City of New York
City Hall
New York, NY 10007

Dear Assembly Member Ignizio and Minority Leader Oddo:

The following is in response to your joint request for an analysis of the Metropolitan Transportation Authority (MTA) budget with respect to Staten Island.

As you requested, we considered local and express bus service provided by New York City Transit (NYC Transit), and rail service through the Staten Island Rapid Transit Operating Authority (SIRTOA, or the Staten Island Railway), as well as the Verrazano Narrows bridge, operated by MTA Bridges and Tunnels. We examined how much service Staten Island residents receive from the MTA, and how much they pay for this service, drawing where possible and appropriate comparisons with other MTA users.

**Staten Island in Context**

Staten Island had an estimated population of 463,314 in 2004, about 5.7 percent of the city’s total. Population density in 2000 was 7,588 persons per square mile. This density is high compared to the more intensely-developed areas adjacent to New York City. For example, Nassau County has a density of just 4,655 persons per square mile. However, the population density of Staten Island is quite low compared to the rest of New York City. (For example, in Queens, the second-least dense borough, the population density is 20,409 persons per square mile.)

Low densities are generally not propitious for transit use, because they imply a diffuse pattern of origins and destinations. Of the five boroughs, Staten Island has the lowest percentage of housing units with no access to a vehicle, and the lowest share of workers who use public transportation to get to work. On the other hand, the proximity to Manhattan increases the demand for transit on Staten Island beyond what might normally be expected given its density.
MTA Transit Service on Staten Island

**Buses.** NYC Transit operates 32 local and 24 express bus routes on Staten Island, as well as a 14-mile heavy rail system (Staten Island Rapid Transit Authority, SIRTOA) that runs through the eastern and southern parts of the borough. Three of the local bus routes cross the Verrazano Narrows bridge and connect with Bay Ridge, Brooklyn. All of the express routes provide service to and from Manhattan. The total direct cost of MTA bus operations on Staten Island, both local and express, including depot operations, was $148.0 million in 2005 (preliminary actual), and is budgeted for $154.3 million in the current year.

One measure of the amount of transit service provided is *revenue miles*, which is the total number of miles that transit vehicles travel while providing revenue service. Another measure is *revenue trips*, which indicates the frequency of service. A third measure, *revenue seat miles*, combines information on the distance that buses travel, and the capacity of the vehicles. By all these measures, bus service on Staten Island has expanded dramatically in recent years. According to MTA data, between 1996 and 2005, the total number of Staten Island revenue trips (local and express combined) increased 27 percent, while revenue seat miles increased 83 percent.

**Local Bus Service.** In 2004, Staten Island’s share of the *revenue miles* for NYCT local buses was 9 percent, considerably higher than the borough’s 5.7 percent population share. Buses in Staten Island travel longer distances because of the borough’s low density. Staten Island’s share of *revenue trips* was 6 percent, close to the population share. At first glance, this suggests that the frequency of local bus service on Staten Island is not out of line with the borough’s population. However, since the population is more spread out than in the other boroughs, the average Staten Islander probably has less local bus service available within walking distance of home than do other city residents.

Data provided by the MTA indicate that Staten Island local buses generate an average of $0.97 in fare revenue per passenger trip, identical to the citywide average. However, the routes generate considerably less fare revenue per vehicle mile than buses in the rest of the city: $3.29, compared with a $7.64 citywide average. As a result, while Staten Island local bus passengers generate an amount of fare revenue proportional to the number of passenger trips they take (4 percent of the citywide total), this revenue is less than the share of vehicle trips (6 percent) and vehicle miles (9 percent). In other words, Staten Island local buses are more heavily subsidized than local buses in the rest of the city.

**Express Bus Service.** Staten Island in 2004 had a share of MTA express bus service that was far greater than its population share. Fully 70 percent of NYC Transit’s express bus trips, and 79 percent of the revenue miles, corresponded to routes that connect Staten Island and Manhattan. Express buses have been gaining market share relative to the ferry, especially among commuters with midtown destinations. Even in areas that are close to a SIRTOA station, express buses are very competitive in terms of travel time with a combined SIRTOA/ferry/subway trip. (An additional reason for the high Staten Island share of express buses is that in 2004, almost all the express bus routes serving the
Bronx, Brooklyn, and Queens were operated by private companies. These routes are now being operated by a new MTA subsidiary called MTA Bus.

Like local bus service, Staten Island express buses are more heavily subsidized than average for the city. Staten Island express bus passengers comprise 71 percent of the total, but 78 percent of vehicle miles. In percentage as well as absolute terms, express buses are more heavily subsidized than local buses.

**Staten Island Railway.** While Staten Island has a level of bus service at least consistent with its population, rail transit service is more limited. The Staten Island Rapid Transit Operating Authority (SIRTOA), an MTA subsidiary commonly known as the Staten Island Railway, runs trains with headways of 60 minutes during late nights, approximately 10-15 minutes during weekday morning and afternoon peaks, and 30 minutes at other times. During peak hours some trains run express, and some trains do not run the entire length of the system. Total operating expenses were $27.2 million in 2005, and are budgeted at $27.8 million in the current year.

In percentage terms, the Staten Island Railway is the most heavily subsidized of all MTA subsidiaries. In 2005 the farebox operating ratio (the ratio of operating revenues to direct operating costs) for SIRTOA was 18 percent, compared with 71 percent for NYC Transit subways. SIRTOA’s operating expenses are roughly eight dollars per farepaying passenger.

The Staten Island Railway (SIRTOA) generated $3.2 million in fare revenue in 2005, from 3.4 million paying passengers. This is an average of $.94 in fare revenue per passenger trip, compared to $1.30 on NYC Transit subways. The reason why per-passenger revenue is lower on SIRTOA is that most trips involve a transfer to another MTA carrier, and the fare revenue is split between the agencies. Also, as is the case with NYC Transit buses and subways, the increased use of unlimited-ride Metrocards has pushed down the average fare paid. It is worth noting that around one-third of SIRTOA’s actual ridership pays no fare at all, and does not figure in the ridership statistics. The reason is that only riders who enter or leave the system at the St. George ferry terminal pay a fare. SIRTOA has determined that installing fare control at every station would not be cost effective. However, the Railway is planning a pilot project to implement fare collection at the Tomkinsville Station, one stop from St. George. At present, some St. George-bound passengers exit at Tomkinsville in order to avoid paying the fare, as the walk from the Tomkinsville Station to the St. George ferry terminal is under 10 minutes.

SIRTOA has a small amount of dedicated funding sources—roughly 0.31 percent of the combined total for NYCT and SIRTOA of the following funding sources:

- Section 18-b state and local operating subsidies ($318 million annually, of which SIRTOA receives $1 million).
- MRT-1 (the 0.3 percent surcharge on mortages in the MTA region): In 2005, $108.7 million was available to NYCT/SIRTOA; the latter received $337,000.
- Metropolitan Mass Transit Operating Account (MMTOA): In 2005 there was $616.9 million available to NYCT/SIRTOA, and SIRTOA received $1.93 million.

The overwhelming share of SIRTOA funding comes from a straight MTA subsidy from general MTA revenues. The necessary subsidy is determined based on what is needed to support a given spending and service level after the farebox revenues and dedicated funding sources are deducted. For 2005 the estimated operating subsidy was $17.5 million, with $18.3 million projected for this year.

_Verrazano Narrows Bridge._ In addition to bus and rail service, the MTA provides transportation services to Staten Island residents through the Verrazano Narrows Bridge, operated by its Bridges and Tunnels subsidiary. The Verrazano Bridge connects Brooklyn and Staten Island with 12 lanes of traffic. In 2004 there were 71.4 million vehicle crossings on the Verrazano, an average of almost 200,000 per day. Total toll revenues on the Verrazano were $246.3 million in 2004. MTA Bridges and Tunnels does not report operating costs on a per facility basis.

Because Staten Island is primarily residential, and all its transit routes begin and/or end in the borough, the vast majority of bus and rail passengers on Staten Island live in the borough. The share of Staten Island residents on the Verrazano Bridge is lower, because many vehicles are passing through on their way to or from New Jersey and points beyond. Roughly 36 percent of all trips on the Verrazano are made using the discount tolls available to Staten Island residents; these trips account for 21 percent of toll revenues. While some Staten Island residents may pay the undiscounted cash toll, residents who make the trip on a regular basis would be expected to use a resident EZ-Pass, token, or carpool ticket. It is thus likely that Staten Island residents account for under half of the vehicles that cross the Verrazano. Given that 21 percent of toll revenues are generated from the EZ-Pass discount available to Staten Island residents, then Staten Islanders contributed at least $50.7 million in toll revenues in 2004—not counting nondiscounted trips.

In contrast with the MTA’s transit operations, its bridges and tunnels (including the Verrazano Narrows Bridge) generate substantial operating surpluses. Revenues from the MTA’s Bridges and Tunnels Division totaled $1.272 billion in 2005, of which 95 percent—$1.207 billion—were from tolls. After subtracting for operating costs and debt service on bridge and tunnel bonds, the surplus is divided up according to formula. The first $24 million goes to NYC Transit, and the balance is distributed half to NYC Transit and half to the commuter railroads (after deductions for debt service on bonds issued by Bridges and Tunnels on behalf of the transit agencies.) The totals distributed were $457 million in 2005 and are projected to be $417 million in 2006. SIRTOA does not receive a share of the Bridges and Tunnels surplus.

The MTA’s Capital Investment in Staten Island

_Buses._ NYC Transit has a replacement cycle of 12 years for its buses. The agency tries to keep a limited number of bus models and vintages at a given depot. Sometimes NYC Transit replaces buses at a particular depot with newer models rather than brand-new
vehicles. The use of articulated buses, particularly in Manhattan, has displaced local buses to other depots.

The express buses used in Staten Island are manufactured by Motor Coach Industries, a firm with headquarters in Schaumburg, Illinois. MCI began selling buses to NYC Transit around 1997. The MTA normally assumes a useful life of 12 years for its buses. As a new vendor to the MTA, MCI was not certain how well its buses could withstand such an extended period of intense service. For this reason, MCI initially offered a seven-year warranty. In practice, the buses have held up well, and NYC Transit expects to get 12 years of service from them.

The NYC Transit 2005-2009 capital program contains funding for 238 “Hi-Cap” express buses: 56 in 2007 and 182 in 2009. The 2007 purchase is budgeted at $28.6 million ($511,000 per bus), while the 2009 purchase totals $99.1 million ($545,000 per bus). Most of these buses (over 70 percent) will be used on Staten Island express routes.

The MTA is also investing in bus depots in Staten Island. The revised 2000-2004 capital program contains full funding ($110 million) for a new depot on the South Shore. The amended 2005-2009 capital program contains $14 million for the rehabilitation of the existing Castleton depot, as well as $8 million for rehabilitation of the Yukon depot.

Staten Island Railway (SIRTOA). The MTA Preliminary Capital Program for 2005-2009 states that the Staten Island Railway (SIRTOA) is in overall good repair, except for two passenger stations, yard track, and yard switches. All of these elements are addressed in the 2005-2009 program, which allocates $86 million to SIRTOA.

SIRTOA uses the R-44 model rail car (also in use on the A subway line). These cars were purchased new for SIRTOA in the early 1970s, as part of a larger order that included cars for NYC Transit. SIRTOA’s cars were refurbished in the early 1990s. The current SIRTOA fleet numbers 64 vehicles. From a safety and operational point of view the cars are in satisfactory condition, although they are showing signs of wear.

NYC Transit has an order for 660 new R-160 cars for the “B” Division (lettered lines) under the 2000-2004 capital program to replace older R-44s. The MTA also has two options for additional R-160 purchases in the 2005-2009 capital program. While it is likely that NYC Transit’s R-44 cars will be replaced by R-160 cars within two or three years, the SIRTOA fleet of R-44 cars is not scheduled for replacement until the 2010-2014 capital program (although it should be noted that SIRTOA’s cars are less intensively used than NYC Transit’s).

Verrazano Narrows Bridge. The New York State Department of Transportation requires inspections of the MTA’s bridges every two years. In addition, underwater and substructure inspections are performed on a five-year cycle. The firm of Charles H. Sells performed the most recent inspection of the Verrazano Bridge in 2004. The ongoing rehabilitation and maintenance of the Verrazano and other MTA crossings is described in
URS Corporation, *History and projection of traffic, toll revenues and expenses, and review of physical conditions of the facilities of Triborough Bridge and Tunnel Authority.*

The MTA 2005-2009 Capital Program, as amended in January 2006, contains no specific items for the Verrazano Bridge in the categories of Structures, Utilities, Buildings and Sites, or Miscellaneous. We infer from this that the bridge is structurally sound. There are three Verrazano projects in the 2005-2009 capital program under the category Roadways and Decks: rehabilitation of approaches ($70.6 million), rehabilitation of decks on suspension spans ($66.3 million), and widening of Belt Parkway ramps ($7.4 million). One project relates to Toll Plazas and Traffic Management Systems: design of new toll plazas ($12.6 million).

I hope you will find this information to be helpful. We are happy to provide additional information on this analysis if you would like. The IBO staff contact is Alan Treffeisen, who may be reached at (212) 442-8614, or alant@ibo.nyc.ny.us.

Sincerely,

Ronnie Lowenstein
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