Maryland Department of Transportation
The Secretary's Office

Robert L. Ehrlich, Jr.
Governor
Michael S. Steele
Lt. Governor
Robert L. Flanagan
Secretary
James F. Ports, Jr.
Deputy Secretary

November 14, 2006

The Honorable Ulysses Currie
Chairman, Senate Budget & Taxation Committee
3W Miller Senate Building
Annapolis, Maryland 21401-1991

Pursuant to 2006 JCR Page 72
SB 110/Ch. 216, 2006

The Honorable Norman Conway
Chairman, House Appropriations Committee
131 Lowe House Office Building
Annapolis, Maryland 21401-1991

Dear Chairmen:

Attached is a report concerning the *Greater Baltimore Bus Initiative: Impact & Achieved Efficiencies—Phase I* as required in the 2006 Joint Chairmen's Report (JCR), page 72. The release of restricted funds is being requested with the submission of this report, subject to the 45-day review and comment requirement, as noted below. The funds being requested are the appropriation of $2,991,000 in Maryland Transit Administration, J00H01.05 (Facilities and Capital Equipment), Special Funds. The language states:

> *"...provided that no funds may be expended for Phase II of the Greater Baltimore Bus Initiative until:*
>
> *(1) October 1, 2006;*
>
> *(2) the Maryland Transit Administration (MTA) submits a report to the budget committees by October 1, 2006 that outlines the impact and achieved efficiencies from the bus reorganization associated with Phase I of the Greater Baltimore Bus Initiative;*
>
> *(3) the MTA holds two public hearings on the proposed changes entailed in Phase II of the Greater Baltimore Bus Initiative prior to their implementation before September 30, 2006; and*
>
> *(4) the budget committees have 45 days to review and comment from the date of receipt of the report.*
>
> *Further provided that the MTA may submit a budget amendment for the costs associated with the restoration of any bus route implemented during Phase I of the Greater Baltimore Bus Initiative."*

My telephone number is 410-865-1000
Toll Free Number 1-888-713-1414 TTY User Call Via MD Relay
7201 Corporate Center Drive, Hanover, Maryland 21076

I am pleased to report that MTA conducted public hearings on the next round of service enhancements proposed for the Greater Baltimore Bus Initiative (GBBI) on June 29 and June 30, 2006, in Baltimore. As you will see from the enclosed report, each hearing provided four hours' time for testimony; a total of 31 persons testified at the hearings. In addition, MTA received 34 written comments in the two-month public comment period that concluded on July 31, 2006. These numbers stand in stark contrast to the thousands of comments MTA received during the comment period for the first phase of GBBI in the summer of 2005.

The successes achieved in connection with the Greater Baltimore Bus Initiative (GBBI) have to be evaluated in the broader context of the Ehrlich Administration's efforts to improve public transit in the Baltimore metropolitan area that began in the earliest days of his first term. In the year preceding his coming into office, the Maryland Transit Administration (MTA) was plagued with 29 bus wheel incidents, and in 18 of those, wheels actually fell off the buses. Furthermore, in the years preceding his administration, there had been two light rail crashes at Baltimore/Washington Thurgood Marshall International Airport.

The paratransit system was dysfunctional, under federal investigation, with a pathetic 76 percent on-time performance. The paratransit system was leaving persons with disabilities stranded and in danger on a regular basis. Safety and reliability quickly became the first priority. To reform this system, the Ehrlich Administration implemented a new model that utilizes competitive contracting. The State purchased 187 new vehicles, redesigned the tracking system for vehicles, and added 21 new positions at the paratransit control center.

In addition to ensuring that the wheels no longer fell off the buses and the light rail stopped crashing into the airport terminal, the Ehrlich Administration initiated a comprehensive focus on upgrading maintenance. The MAXIMO system was implemented. A maintenance tracking system, MAXIMO helps identify trends and problem areas. It also alerts maintenance personnel when corrective steps need to be taken. This and other maintenance improvements dramatically increased the reliability of on-the-road buses. In 2003, buses broke down in service every 976 miles. By 2005, this number had risen to 5,503, and in 2006, the number of miles had climbed to 7,962 miles. This represents an over 800 percent improvement in the reliability of the bus fleet.

As these accomplishments were well underway, MTA turned its attention to antiquated bus routes that had failed to respond to the changing travel patterns and needs of the modern-day Baltimore metropolitan area. Veterans at the MTA whose time and service reaches back over 35 years reported that there had never been a comprehensive review and adjustment of the MTA's bus routes. This effort was undertaken with the understanding that change can be difficult and often appear threatening. It is often much easier for the public to focus on what has been compared with what will be put in its place.

The MTA conducted thorough and complete ride-checks, counting passengers on every single check on every route; received over 10,000 customer surveys; and conducted seven open houses before proposing changes. The next phase of due diligence involved public hearings and follow-up with individual communities, senior centers and other interested parties concerning comments and criticism received at those hearings. By the time the public hearings were held by the MTA in June 2006, the City Council had conducted their own hearings in February 2006 in which no complaints were registered to the City Council. As a result of the extensive outreach the number of comments at the June 2006 hearings was small compared to the breadth and scope of improvements as outlined below. The principal issue in contention, the M6 line, has been resolved by changes implemented in February 2006, and additional service supplied in October 2006.

Some of the principal accomplishments of GBBI are the reallocation of resources to provide an increased midday and weekend service. In modern-day Baltimore, more transit riders are working on shifts, not the typical nine-to-five pattern, and making cross-town trips to important destinations such as Johns Hopkins Bayview Center, Franklin Square Hospital, St. Agnes Hospital, and East Point Mall. Considering the GBBI changes along with additional service improvements in October which were not GBBI, these destinations are far better served today than prior to this reform effort. Transit-dependent customers have better connections to work, medical appointments, recreation, houses of worship, and shopping. The routes have been simplified and are easier to understand. There are improved connections to the light rail and subway systems. This is being accomplished with a new system that is more efficient, i.e., more miles are being covered with fewer hours of operation. In 2005, MTA served 65,591 weekday service miles, in 5,493 hours. In 2006, MTA served 67,193 weekday service miles, in 5,474 hours. The farebox recovery has improved on important, restructured lines.

Another important accomplishment is the Quick Bus service. The 40 Line Quick Bus service, providing stops at the most popular locations east and west, has averaged 6,959 weekday boardings. On-the-street interviews that the Secretary of Transportation has had with numerous riders indicate great customer satisfaction with this service. It has achieved a 55.4 percent farebox recovery. Substantially more improvement to this service is possible as soon as more progress can be achieved in giving these buses a preference at critical city traffic lights. Unfortunately, this effort, as well as efforts at improving the travel times at the light rail system on Howard Street, have been plagued by delays on the part of Baltimore City's administration. An additional enhancement of providing customers on Quick Bus routes with real-time information on when their next bus will arrive was delayed over a year by the General Assembly, which adopted budget language in the FY 2005 budget prohibiting the new technology.

The Ehrlich administration envisions a Baltimore metropolitan-wide system of Quick Buses like the 40 route, with preferential traffic lights and the Next Vehicle Arrival System. The adoption of route reform as exemplified by GBBI was the necessary predicate to these future accomplishments. (The previous administration attempted in 1999 to implement Trapeze, the scheduling software now being used so successfully in paratransit, but the implementation failed in large part because of the needless complexity of the old bus routes.)

A critical element to improving bus service is increasing on-time performance. The Citizens Planning and Housing Association (CPHA) report noting poor on-time performance was skewed in that it focused on downtown trips during morning and evening rush hours. Service at other times is better. Feeder buses to rail and cross-town lines also experience higher on-time service. It should be noted that road construction, such as the agonizing reconstruction of Russell Street and the ongoing closure of Baltimore Street, are examples of city-initiated delays in bus service. Nevertheless, the Ehrlich Administration has, from its earliest days, launched a concerted effort at improving on-time bus service. The most important gains in improving that on-time service will come from the implementation and supervisory follow-up made possible by the NEXT Vehicle Arrival System. Unfortunately, following a Baltimore Sun editorial that dismissed the importance of on-time bus performance, the General Assembly prohibited MTA for over a year from spending money to implement the system. The NEXT Vehicle Arrival System, which is now slated to go into effect later this year, will use the same technology that allowed the MTA to increase paratransit on-time service from 76 percent to 90 percent. The NEXT System will overcome the historic shortage of bus supervisors who cannot practically manage 500 buses, 50 routes and some 8,500 bus stops, without the aid of modern technology. Following the implementation of the NEXT System, there will be a period of time during which MTA personnel learn to use this dynamic tool, working together with operators and managers to improve on-time bus performance.

This Administration also looks forward to working with Baltimore City on important city actions that affect on-time performance. As previously noted, there is an ongoing effort (although somewhat delayed) to give transit vehicles preferential treatment at traffic signals. Also, there is a request that city decisions, such as blocking streets on which uses for downtown development and the conducting of events such as the Baltimore Marathon, be made with the earliest possible consultation with those who are responsible for operating our transit system.

In conclusion, this Administration stands ready to work cooperatively with the Baltimore City Government and the General Assembly to continue addressing the chronic and longstanding problems at the MTA and provide residents of metropolitan Baltimore with a public transit system need and deserve.

If you have additional questions or concerns, please do not hesitate to contact Ms. Lisa L. Dickerson, Administrator and CEO, Maryland Transit Administration at (410) 767-3945. Of course, you should always feel free to contact me directly.

Sincerely,

Robert L. Flanagan
Secretary

cc: Ms. Lisa L. Dickerson, Administrator and CEO, Maryland Transit Administration
Mr. James F. Ports, Jr., Deputy Secretary, Maryland Department of Transportation

bcc: Mr. Jack Cahalan, Director, Office of Public Affairs, Maryland Department of Transportation
Mr. Ned Cheston, Committee Staff, Senate Budget and Taxation Committee
Mr. Michael Deets, Maryland Transit Administration
Ms. Elizabeth delCastillo, Budget Analyst, Department of Budget and Management
Mr. Joseph Getty, Director, Governor's Policy & Legislative Office
Mr. Don Hogan, Deputy Legislative Officer, Governor's Legislative Office
Mr. Jim Knighton, Director, Office of External Affairs, Maryland Transit Administration
Ms. Beth B. Kreider, Deputy Administrator for Planning and Policy, Maryland Transit Administration
Mr. John Martin, Department of Legislative Services
Mr. Ed Miller, Deputy Chief of Staff, Governor's Office
Ms. Elizabeth Moss, Staff to House Appropriations Committee
Ms. Nanette M. Schieke, State Legislative Officer, Maryland Department of Transportation
Mr. Jeff Tosi, Legislative Analyst, Maryland Department of Transportation

A Report to the Maryland General Assembly

Senate Budget & Taxation Committee

and

House Appropriations Committee

regarding

The Greater Baltimore Bus Initiative: Impact & Achieved Efficiencies - Phase I

(Joint Chairmen's Report, p. 72)

Pursuant to 2006 JCR Page 72
SB 110/Ch. 216, 2006

The Maryland Department of Transportation,
Maryland Transit Administration

November 2006

The Greater Baltimore Bus Initiative: Impact & Achieved Efficiencies – Phase I (Joint Chairmen's Report, p. 72)

This report is pursuant to language contained in the Joint Chairmen's Report-Operating Budget, April 2006. Specifically, the Committee Narrative directs that

> "*, provided that no funds may be expended for Phase II of the Greater Baltimore Bus Initiative until:*
>
> *(1) October 1, 2006;*
> *(2) the Maryland Transit Administration (MTA) submits a report to the budget committees by October 1, 2006 that outlines the impact and achieved efficiencies from the bus reorganization associated with Phase I of the Greater Baltimore Bus Initiative;*
> *(3) the MTA holds two public hearings on the proposed changes entailed in Phase II of the Greater Baltimore Bus Initiative prior to their implementation before September 30, 2006; and*
> *(4) the budget committees have 45 days to review and comment from the date of receipt of this report.*"

Introduction

In May 2005, as a part of Governor Ehrlich's vision to improve public transit as soon as possible, the Maryland Transit Administration (MTA) introduced a proposal to improve local bus service by restructuring bus routes to meet the needs of our customers. This effort was long past due, as no comprehensive restructuring of Baltimore-area bus routes had been attempted in more than 30 years. The proposal was based on a study conducted to determine where MTA's customers need and want to travel for work, health care, recreation, shopping and worship. MTA conducted a comprehensive ridecheck over nine months in 2004, counting all the passengers getting on or off at every stop on every trip in the system, gathering data on the running vehicle load and the running time between each timepoint. MTA conducted an origin-destination survey, asking our passengers on a 50% sample of all service on the street between 3am and 2pm where they were trying to go to from where, and asking them their priorities for service improvements. MTA found huge disparities between the service being provided and needs of its customers, and moved resolutely in constant dialogue with the community to change the service so it better meets the needs of the riders.

Route Simplification

One of the main stated goals of the Greater Baltimore Bus Initiative (GBBI) was route simplification. Route simplification has numerous benefits for MTA's customers. With fewer branches and deviations, routes are easier to learn, and the more casual user is able to attempt a bus ride with more confidence and understanding of where the bus is going and how it is getting there. Less branching means that service can be redeployed to serve the most popular destinations more often, and transfers can consistently take place in the same location.

The Greater Baltimore Bus Initiative: Impact & Achieved Efficiencies – Phase I (Joint Chairmen's Report, p. 72)

Route simplification has also allowed MTA to access an effective scheduling software used by other transit systems across the county. Trapeze is being used successfully for MTA's paratransit services, and the simplification of MTA's fixed routes is allowing the current implementation effort for MTA fixed-route services to proceed successfully at the end of calendar 2006.

Following is a summary of the route simplifications achieved to date; "destinations" refers to the different destination signs that might be displayed associated with a bus number and traveling in a certain direction, usually either the terminus of a branch, or a short-turn—a destination along the route short of the furthest terminus; "deviations" refers to additional information that might appear on the destination sign, i.e. the bus will be traveling via a less common route; the various possible combinations of starting points, deviations and termini create "patterns":

- Route 2—Two of four westbound destinations retained.
- Route 4—Bus now runs both north and south through one set of communities; previously bus ran northbound through one set of communities, southbound through another.
- Route 8—One of five northbound destinations retained; two separate lines (9 and 12) created to handle two of the branches, both feeding into Light Rail. Two separate routes through Towson reduced to one, and express service now has all the same stops downtown as local service. Limited stop service eliminated.
- Route 10—One of three southbound destinations retained, with one short-turn reintroduced. All three route deviations between downtown and Dundalk eliminated. Express service eliminated.
- Route 13—Initially two of four eastbound destinations retained with the two branches partially consolidated, two of three westbound. Following community meetings, the location of the consolidated branches was relocated and a short-turn reintroduced.
- Route 20—Two of three westbound destinations retained, one subsequently added. Two of five eastbound destinations retained; one short-turn reintroduced. The one route deviation and express service eliminated.
- Route 23—Two of eight eastbound destinations retained, two of five westbound. The one route deviation eliminated.
- Route 24—One deviation added.
- Route 31—Two of five westbound destinations retained, the one deviation, express service and limited stop service eliminated.
- Route 33—Route extended, old terminus retained as a short-turn.
- Route 35—One of five eastbound destinations retained, the two deviations eliminated.
- Route 44—One of four westbound destinations retained, one added, and another destination and one deviation subsequently added; one of two eastbound destinations retained.
- Route 77—One of two northbound destinations retained.
- Route M1—Two of four northbound destinations retained.

- Route M6—Subsequently reintroduced with two of four destinations retained and the three deviations eliminated.
- Route M10—Both destinations retained, but with one instead of two routes. One destination added.
- Route M17—One destination added.

Routes introduced: 9, 12, 40. Routes merged, absorbed or discontinued: 2, 31, 65, 86, 102, 103, 105, M-12.

Frequency and Connectivity Improvements

As part of Governor Ehrlich's vision for a more mobile Maryland, MTA set as another major goal of the Greater Baltimore Bus Initiative to look for opportunities to increase service frequency and to provide improved connections to other bus lines and to rail services. MTA conducted an origin-destination survey in early December 2004, covering 50% of all service on the street between 3am and 2pm, resulting in 11,000 valid survey responses. The results showed a high level of trips requiring a transfer—52%. Of all trips, 44% involved one transfer and 8% involved two transfers. Of the transfers, 66.3% were from one bus line to another, 24.8% were from bus to Metro, and 8.9% were bus to Light Rail.

As a part of the survey, customers were given a series of possible bus service improvements (Question 12). Riders were asked to select the 3 most important improvements. Below is a list of the three highest-ranked improvements in order of their importance:

1) More Frequent Weekday Service- 4,756 responses
2) Less Crowding on the Bus- 4,714 responses
3) More Frequent Sunday Service- 4,054 responses

It is worth noting that option 2) is also an frequency issue, as it relates directly to offering enough service at the times of day customers are traveling and in the direction they are traveling. In the comprehensive ridecheck project conducted from January to September 2004, during which all the customers boarding or alighting from each stop and vehicle loads were tracked for most every trip in the system, higher midday ridership was found relative to the service offered by MTA. Total average daily weekday AM Ridership (6AM to 9AM) was found to be 51,097, PM Ridership (3PM to 6PM) 56,804, and Midday Ridership (9AM to 3PM) 76,882. Ratio of Peak Ridership to Midday: 1.4:1, but the level of service offered during the peak periods was twice as great as that offered during the midday.

The Greater Baltimore Bus Initiative: Impact & Achieved Efficiencies – Phase I (Joint Chairmen's Report, p. 72)

	Average Peak Frequencies (minutes)	**Average Midday Frequencies (minutes)**
Crosstown	22	41
Circulator	26	26
Rail Feeder	21	38
Radial	12	23
Radial-Through	12	23

Following are improvements MTA made to frequency, particularly the underserved midday time period and weekends, and enhancements to connectivity, which improves mobility by allowing direct access to other transit services:

- Route 2—Peak frequency increased from 12 to 10 minutes, midday from 20 to 15, Saturday from 26 to 15, and Sunday from 35 to 30. Through combination with the 10 Line, new connections provided to the 4, 13, 21 and 22 Lines.
- Route 4—New connection provided to the 33 Line.
- Route 8—Sunday frequency increased from 26 to 20 minutes.
- Route 10—Peak frequency increased from 13 to 10 minutes, midday from 20 to 15, Saturday from 20 to 15. Through combination with the 2 Line, new connections provided to the 16, 51 and 77 Lines.
- Route 12—New bus line to Stella Maris provides connection to Light Rail as well as the 8 Line. Prior arrangement did not give Light Rail option.
- Route 13—Midday and Saturday frequency increased from 15 minutes to 10 minutes, Sunday frequency increased from 20 minutes to 15 minutes. Connections from the 5, 15 and 35 lines also improved through the partial consolidation of the 13 line branches; previously, connections took place every roughly 30 minutes in two separate locations; now they take place in one location roughly every 15 minutes.
- Route 20—Midday frequency improved from 18 to 15 minutes, and all trips continue to the Woodawn area, instead of stopping short at Edmondson Village. Under the old schedule, only 51 daily trips continued to the western terminus at Security Square Mall. Now, 68 trips make it to the Security Square Mall terminus (now CMS before 7am). This improves connections with the 44 and 77 Lines. Service from downtown to Edmondson Village and Security Square Mall is further augmented by the introduction of the new limited-stop 40 Line, which runs every 12 minutes during the peak and every 15 during the midday and weekends. From downtown east, the 20 Line now runs on Baltimore/Fayette Street along with the 23 Line between Charles Street and Ponca Street. The combined frequency of the two services is 7.5 minutes weekdays, 15 minutes Saturdays, 30 minutes Sundays. A similar combined frequency achieved by two lines using the same stops in effect between the 10 Line and the 20 Line on Dundalk Avenue between Center Place and Boston Street.

- Route 23—This route has been enhanced by the addition of the new limited-stop service on the 40 Line and coordination with the 20 Line, as discussed above. Further improved on the east side by service every trip to Bayview Medical Center and Fox Ridge. Previously, on 41 weekday trips made it out to the eastern terminus at Fox Ridge; other trips went to various other destinations in the service area of the 24 Line. Under the present schedule, 71 weekday trips serve Fox Ridge. Similarly, only 35 Saturday trips served Fox Ridge, now 41 do.
- Route 24—Weekday frequency improved from 75 minutes midday to 60 minutes, weekend service from 80 minutes to 60 minutes.
- Route 31—Saturday service frequency improved from 45 minutes to 30 minutes, and Sunday frequency improved from 35 minutes to 30 minutes. Through combination with 35 Line, new connections provided to the 4, 22, 24, 33, 44, and 55 Lines.
- Route 33—Route extended through Armistead Gardens to Eastpoint Mall and Essex Park and Ride, creating new connections to the 4, 23, 40 and 35 Lines. Weekday trips through Armistead Gardens increased from 39 before to 73 now, Saturday trips 32 before and 41 now, Sundays 21 before, 24 now.
- Route 35—Sunday frequency improved from 80 minutes to 30 minutes, and all trips continue to eastern terminus at White Marsh Mall. Previously only 27 weekday trips on this line served Franklin Square Hospital and White Marsh Mall. Currently, 57 weekday trips do. Similarly, only 17 Saturday trips served the hospital and mall, now 41 trips do. On Sunday, only 15 trips served the hospital and mall, today 38 do. This extension of service to Franklin Square and White Marsh also improves connections to the 4, 24 and 55 Lines. Through combination with the 31 Line, new connections are created to the 16, 51 and 77 Lines.
- Route 40—New limited-stop 40 Line introduced, which runs every 12 minutes during the peak and every 15 minutes during the midday and weekends. Connections provided to Metro and Light Rail downtown, MARC in West Baltimore, and to every crosstown service in the system—44, 77, 16, 51, 21, 13, 22, 33, 4, 24 and 55 Lines.
- Route 44—Midday frequency increased from 40 minutes to 30 minutes, Saturday frequency from 35 minutes to 30 minutes. Previously, connections to Metro, the M3 and the M2 Lines took place in different locations roughly every 40 minutes, connections to the 33, 51, M1 and M6 Lines took place roughly every 1 hour and 20 minutes, and connections to the 77 Line only took place during selected peak trips. Now connections to the 44 Line are available from all of these services in consistent locations every 30 minutes during the midday and Saturday, and every 15 minutes during peak periods.
- Route 77—Frequency increased from 45 minutes middays and Saturdays to 30 minutes. Service extended from UMBC to Patapsco 33 trips instead of 8, improving connections between this line and Light Rail, the MARC station at Halethorpe, and the 11, 16, 51, and 14 Lines.
- M-10—Frequency increase from 45 minutes middays to 30 minutes and from 70 minutes weekends to 60 minutes. Number of weekday trips serving Greenspring Station increased from 12 to 24, and those serving Villa Julie College increased from 6 to 14.

Needs Assessment and Efficiency

Another major goal of bus route restructuring is to determine where today's bus riders need to go and how to get them there efficiently. The Baltimore region has changed dramatically over the last 30-plus years, but the bus system has only changed incrementally at best. The region's office jobs are no longer concentrated on Redwood Street, the region's retail is no longer concentrated on Howard Street, the region's medical practices are no longer concentrated in Mount Vernon, and the region's transit riders are no longer concentrated within the pre-1888 boundaries of the City.

Prior to the Greater Baltimore Bus Initiative, the bus system provided twice as much service on lines going downtown as those going crosstown, and twice as much service on lines during the peak periods as during the midday period (100% more service to accommodate 40% more demand; see chart and data on page 4). Despite the orientation of the bus system to downtown (71% of 53 routes), the origin destination survey conducted by MTA found that only 22% of customers were trying to get downtown as their final destination:

Origin/Destination Survey December 2004				
	AM Origin	**AM Destination**	**Destination if Origin W. Baltimore (17.3%)**	**Destination if Origin E. Baltimore (15.9%)**
Downtown	7.2%	22.3%	21.4%	22.6%
Other Parts of Baltimore City	63.2%	48.6%	54.0% (19.6% W.)	55.7% (26.3% E.)
Baltimore County	22.3%	22.8%	19.0%	17.6%
Anne Arundel	6.7%	5.6%	5.0%	3.7%
Howard	0.5%	0.6%	0.6%	0.4%

The survey found that the travel patterns of those living in the two largest zones of origin, West Baltimore (17.3%) and East Baltimore (15.9%) were very similar to the overall pattern. Of those with trips originating from West Baltimore, 21.4% were trying to get downtown, 19.6% were traveling locally within West Baltimore, 19% were going somewhere in Baltimore County, 34.4% were trying to get to another Baltimore City destination not downtown and not within West Baltimore.

The comprehensive ridecheck data also revealed the changes in how MTA's customers use the bus system. As indicated in the chart below, for example, three bus lines designed to take patrons downtown showed twice as many all-day boardings along the corridor between North Avenue and Northern Parkway as between North Avenue and downtown. In other words, nearly half the patrons did not travel downtown at all, even to transfer to rail or other radial bus routes:

#15 Bus	Between Preston & Gay and Overlea/Gardenville	3,914
	Between Preston & Gay and Saratoga & Charles	2,126
#19 Bus	Between North Avenue and Northern Parkway	5,108
	Between North Avenue and State Center	2,913
#36 Bus	Between North Avenue and Northern Parkway	2,998
	Between North Avenue and Univ. of Md Transit Ctr	1,621

Shifting resources away from downtown and morning, and afternoon rush to middays and weekends, and away from radial routes to crosstown routes to meet the stated and demonstrated needs of MTA's customers also allows MTA to provide service in a more efficient and cost-effective manner. Radial routes require more buses and more operators to serve downtown than other parts of the region because travel times are slower through downtown, particularly during rush hour, when travel times are slower still. Eliminating the overlap between radial lines in the downtown area and reestablishing radial-through routes enhances connectivity and improves efficiency that can be redeployed where most needed.

Here is a summary of the efficiencies achieved to date:

- Weekday Hours June 2005: 5,493
- Weekday Hours June 2006: 5,474
- Weekday Miles June 2005: 65,591
- Weekday Miles June 2006: 67,193

As can be seen, more weekday service miles are covered in fewer hours under the new service structure.

The impact on ridership is inconclusive at this point, as MTA transitions to new fareboxes. For the six-month period from January to June 2006, following the GBBI changes, MTA counted 30,569,331 local bus boardings. Prior to the GBBI changes, MTA counted 27,752,285 local bus boardings for the same period in 2005. So ridership appears to be up over the previous year.

MTA has been able to complete comprehensive ridechecks on some of our lines:

Route 4 (line shortened, routing improved, branches of competing lines removed)
2006 Average Daily Boardings: 1,453 Farebox Recovery: 56.9%
2004 Average Daily Boardings: 1,474 Farebox Recovery: 19.2%
2002 Average Daily Boardings: 1,169 Farebox Recovery: 23.9%

Route 24 (branches of competing lines removed)
2006 Average Daily Boardings: 576 Farebox Recovery: 32.7%
2004 Average Daily Boardings: 425 Farebox Recovery: 17.8%
2002 Average Daily Boardings: 351 Farebox Recovery: 20.7%

Route 40 (new service)
2006 Average Daily Boardings: 6,959 Farebox Recovery: 55.4%

Route 104 (no change)
2006 Average Daily Boardings: 54 Farebox Recovery: 37.8%
2004 Average Daily Boardings: 44 Farebox Recovery: 28.8%
2002 Average Daily Boardings: 28 Farebox Recovery: 20.1%

Improved Schedules

The last stated goal of the Greater Baltimore Bus Initiative was to improve schedule development with ample travel and recovery time so that the schedules the operators work within will better allow for unforeseen circumstances.

Schedules are only one factor in on-time performance. The others are operating environment (mixed traffic conditions), load distribution (how many or few passengers are boarding and alighting along a route), equipment performance (the reliability of the bus), and supervision, or the guidance provided to the operator about what is happening up and down the line and how to adjust the schedule based on those conditions.

In his FY2005 Budget, Governor Ehrlich funded a comprehensive set of technology improvements for the MTA that were designed to improve MTA's ability to manage all of the various factors that affect on-time performance. As described in the Analysis of the FY 2005 Maryland Executive Budget, 2004 on page 705-6:

The NEXT system is an integrated network that uses global positioning satellite systems and wireless technology to monitor and display information on an entire transit system. Among the components, when fully completed, MTA's NEXT System is projected to include the following:

- Electronic message signs providing real-time schedule information at light rail and MARC stations and at 200 high usage bus stations, and a public announcement system at light rail, MARC, and Metro stations;
- Scheduling software systems that provide real-time trip planning information at kiosks throughout the rail system;

- Closed circuit surveillance systems at light rail, Metro, and MARC stations; and
- Computer-aided dispatch/automatic vehicle location system housed in MTA's Communications Control System that will enable bus supervisors to monitor the location of every bus in the fleet and to conduct diagnostic assessments of each bus (regarding such issues as engine temperature, oil pressure, and transmission fluid levels, etc.).

The Department of Legislative Services questioned whether providing customers with information about the arrival time of their transit service and providing MTA with the tools necessary to monitor on-time performance, vehicle loads and the condition of the equipment would attract those who do not currently use transit (i.e., those who drive cars or use other means of getting around). The analysis concluded, "DLS therefore recommends that the General Assembly add language withholding $24.2 million from MTA's capital program until MTA has submitted a report explaining the NEXT System in more detail (ibid., p. 707)."

Unfortunately, the MTA was not given the opportunity to submit a report explaining the NEXT System in more detail. In its February 13, 2004 editorial "Buck Rogers Buses," the Baltimore Sun denounced Governor Ehrlich's initiative to equip MTA with the technology tools necessary to monitor transit performance and communicate with riders. "Some people own a Pinto and foolishly aspire to a Bentley," wrote the Sun. "The proposal features global positioning satellites that would track the bus fleet. People waiting at stops could be informed (thanks to electronic signs) how long they'd have to wait for the next bus." The editorial went on to note, "The chief benefit of all this technology? Monitoring drivers to see if they are on schedule… That's nice, but is it crucial?"

Improbable as it seems that those who have the option of driving a car would fail to be more attracted to a transit system that runs on-time, communicates with customers in real time when there are delays, avoids overcrowded conditions by providing the appropriate level of service, provides warning that maintenance is required before service is disrupted and that these benefits might therefore accrue only to the transit dependent who have no option but use the service, the Maryland General Assembly disregarded the recommendation of the Department of Legislative Services. Instead, the following language was included in the budget bill, "Provided that no funding in this budget may be expended to develop, construct, or equip any portion of the Maryland Transit Administration's (MTA) facilities with any components of the NEXT System or to issue a Request for Proposal (RFP) for any initiatives or projects related to the NEXT system… Further provided that no funds may be transferred to the MTA's budget by budget amendment or otherwise for any project related to the NEXT initiative. Further provided that funds programmed in the 2004 CTP may not be reprogrammed from the projects for which they were programmed in the CTP to any new or existing projects that are associated with the NEXT initiative." (Joint Chairman's Report – Operating Budget, April 2004, p. 70-1). This delay, unfortunately, denied MTA the opportunity to start acquiring the technology and to begin putting the systems in place to monitor bus performance in the most efficient manner for another 15 months.

The Greater Baltimore Bus Initiative: Impact & Achieved Efficiencies – Phase I (Joint Chairmen's Report, p. 72)

Despite the prohibition by the General Assembly on NEXT System-like improvements on MTA's fixed route services through the end of FY2005, MTA has made considerable progress improving its management of the various factors that govern service reliability and on-time performance. In April 2005, MTA was able to announce that a substantial overhaul of bus maintenance and management procedures was producing tangible results making bus service more efficient and providing passengers with a more dependable ride. Two years prior, the average MTA bus broke down in the middle of a run once every 976 miles. In March 2005, a similar failure occurred only once every 5,305 miles. That number reflected a 543 percent improvement in performance. In February this year, MTA announced that further improvements to the tracking of bus maintenance had led to the average MTA bus requiring emergency only once every 7,962 miles. This represents very significant improvement in an agency that only a few years ago under a previous administration had numerous high-profile incidents of wheels falling off buses.

As part of the comprehensive bus study in 2004, MTA gathered on-time performance data on all of its bus lines at all hours of the day and on weekends. Rail-feeders and crosstown routes—lines that do not serve downtown directly—had significantly higher on-time performance than lines that traveled through downtown. There was no difference in on-time performance between radial-through routes (lines that serve both sides of downtown) and radial routes (lines that terminate at the far-side of downtown). The shifting of resources out of downtown and into the other parts of the City and County on crosstown services and at the ends of the line where shopping, employment, healthcare and housing are abundantly available, as discussed above in the sections on "Frequency and Connectivity Improvements" and "Needs Assessment and Efficiency," also allows a larger portion of MTA's bus service to operate in the very same environments where on-time performance is better.

Since implementing the new schedules, MTA's Operations Planning and Scheduling staff has worked closely with Bus Supervision to identify issues with on-time performance that can be improved by adjustments to running time and recovery time. By and large, these issues have been found to be most prevalent on lines that travel through downtown Baltimore, and during the weekday peak periods. As a result, adjustments were made to three lines during the winter schedule change, and to three more lines during the summer schedule change.

Contrary to the contention of the Baltimore Sun that improved on-time performance is nice, but not crucial, the Citizens Planning and Housing Alliance (CPHA) in June 2006 published a study entitled, "It's About Time: A Survey of MTA Bus On-Time Performance," suggesting that on-time performance is very important to MTA customers. Although the CPHA only looked at bus lines that serve downtown, and used very different methods of compiling data—MTA's comprehensive bus study covered every trip from one end of the line to the other, CPHA's study covered only portions of lines, only some trips, gathered data on some trips multiple times, etc.—it is clear that there is more that can be done to provide MTA with real-time information on the on-time performance on its buses and use that real-time information to adjust service and to provide guidance to bus operators.

The Greater Baltimore Bus Initiative: Impact & Achieved Efficiencies – Phase I (Joint Chairmen's Report, p. 72)

As discussed earlier, the simplification of the bus system is not only providing direct benefits to MTA customers, but also facilitating a successful implementation of new scheduling software. In FY2006 Governor Ehrlich also funded a Computer Aided Dispatch/Automatic Vehicle Locator system. These two technologies have been successfully employed by MTA's paratransit services and have improved on-time performance for paratransit customers from 77% to 90%. Both are on-schedule to be completed in the Fall of 2006.

Conclusion

The impact of the first phase of improvements embodied by the Greater Baltimore Bus Initiative has been a positive initial effort to fulfill Governor Ehrlich's vision for a more mobile Maryland. The 101,860 daily customers of the 29 first-round transit lines have adapted quickly to the new services. The Baltimore City Council held a hearing at the Waxter Senior Center in February, 2006 to find out if any of the City's senior citizens had been negatively impacted by the changes to the bus system. At this meeting, no testimony was provided indicating that negative impacts had been experienced. MTA has remained open to continuing dialog and customer input, and has followed up with six minor service adjustments. The simplification of the bus system is permitting the successful implementation of the same scheduling software that has allowed MTA's paratransit services to improve to 90% on-time. A bus system that used to work primarily for those who commuted downtown in the morning and home in the evening is now more effectively serving those who need a full-time transit system that serves their needs for access to employment, healthcare, recreation, housing and worship through frequency improvements during off-peak and weekends, on crosstown services, and through connectivity improvements. MTA is providing its services more efficiently, covering more service miles each day in fewer hours, with steady, possibly increasing ridership.

Some of the most popular changes already made have been:

- the introduction of the new 40 line limited-stop service to Security Square Mall, Edmondson Village, University of Maryland Medical Center, Charles Center, Johns Hopkins Medical Center, Johns Hopkins Bayview, and Eastpoint Mall;
- the larger, articulated buses that are finally providing enough service capacity on the Greenmount Avenue/York Road corridor on the 8 Line;
- the connection of the Cold Spring/Morgan State corridor with Eastpoint Mall on the 33 Line;
- the much more frequent service on the 35 Line out Pulaski Highway to Franklin Square Hospital and White Marsh Mall;
- and the more frequent service on the 77 Line from Old Court Metro Station to Northwest Hospital Center, Security Square Mall, Social Security Administration, Westview Mall, CCBC Catonsville, UMBC, Riverview and Patapsco Light Rail Station.

The Greater Baltimore Bus Initiative: Impact & Achieved Efficiencies – Phase I (Joint Chairmen's Report, p. 72)

Through the six public hearings held in June 2005, the input of MTA bus operators, and the scores of community outreach meetings conducted by the MTA, the changes in the second phase of Greater Baltimore Bus Initiative, involving 23 transit lines and 104,786 additional daily customers, were already thoroughly tested with the community and customers by March 2006, and MTA was ready for implementation of these improvements on June 11, 2006. As a result, during the two additional public hearings mandated by the Maryland General Assembly, only 31 individuals testified on these changes during 8 hours of public hearing time (average of 4 instances of 3-minute public testimony per hour), and only 34 provided wrote to the MTA during the two months the public hearing record remained open (average of one letter every other day).

MTA continues to remain ready to improve service to our customers.