# Status Report on the Bus Systems in the National Capital Region










**Report of the TPB Regional Bus Subcommittee**
**Fall, 2007**

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## Executive Summary

## Introduction and Background

The Regional Bus Subcommittee of the TPB Technical Committee was established in January 2007. Since then, the subcommittee has met monthly to provide a forum for regional bus planning and coordination. This report provides an overview of the subcommittee's work to date, and highlights current operational issues and long-range planning needs which have been identified. After review and discussion by the subcommittee, it is recommended that these issues should be brought to the attention of the TPB Technical Committee and then to the Transportation Planning Board.

### *The Regional Bus Subcommittee*

The Regional Bus Subcommittee (RBS) of the TPB Technical Committee was established by TPB resolution R13-2007 on January 17, 2007. Its mission is to "provide a permanent process for the coordination of bus planning throughout the Washington region, and for incorporating regional bus plans into the Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP)." The subcommittee coordinates with and engages staff from the following transit services:

- Metrobus
- Montgomery County Ride On
- Prince George's County TheBus
- DC Circulator
- Alexandria Dash
- Arlington Transit (ART)
- Falls Church George
- City of Fairfax CUE
- Frederick County TransIT
- Fairfax Connector
- Loudoun Commuter Transit
- PRTC Omni Ride
- MTA Commuter Bus
- Metrorail
- Virginia Railway Express
- Maryland Commuter Rail
- DC Streetcar
- Laurel Connect-a-Ride

The subcommittee also includes agencies that coordinate, plan and fund transit services, including the following:

- District of Columbia DOT
- District of Columbia Mass Transit Administration
- Maryland DOT
- Maryland Transit Administration
- Virginia DOT
- Virginia Department of Rail and Public Transportation
- Potomac and Rappahannock Transportation Commission (PRTC)
- Northern Virginia Transportation Commission

Since its first meeting, the subcommittee has covered the following topic areas:

- Review of an agreement between the TPB, the state departments of transportation and public transportation operators on the roles and responsibilities for metropolitan transportation planning in the region, as required by SAFETEA-LU.

- Incorporation of bus transit networks into the regional travel demand model and long-range planning work.
- Review of a methodology developed by TPB staff to map bus transit "availability" for use as a tool for long-range bus transit planning.
- The need for more daytime commuter bus vehicle parking in the regional core.
- The possibility of conducting a regional "Costs of Congestion" analysis which would quantify the costs incurred by bus transit operators due to increasing traffic congestion.
- Bus transit related activities of other subcommittees and the TPB task forces.

During a review of long-range planning topics, members of the subcommittee raised several operational concerns which, unless addressed, would limit the ability of the region's transit operators to focus on long-range planning. The subcommittee members agreed that these shorter term planning and operational issues should be brought to the attention of the TPB Technical Committee and the TPB, in order to raise the profile of the regional bus transit systems and communicate their importance and pressing needs to regional decision makers. This report is the TPB Regional Bus Subcommittee's first effort towards that goal.

## *The Bus Systems of the National Capital Region*

### *Different Bus Systems for Different Needs*

The functions served by bus transit in the region have changed over the past 30 years. First, private operators provided local bus service to and around the regional core. Those services were then folded into Metrobus, which provided distributor services within the District and ran radial routes into the core from the suburban jurisdictions. The opening and gradual expansion of the Metrorail system between 1976 and 2001 allowed many bus routes to be replaced by rail routes. This resulted in the restructuring of many Metrobus lines to feed into the rail system. Over the past 20 years, local jurisdictions established their own transit agencies, providing local/circulator service to suburban downtowns as well as feeder service to Metrorail stations. Some jurisdictions in the region operate commuter/express bus services, which provide direct access between park-and-ride lots and the regional core or Metrorail stations.

### *Many Bus Transit Agencies*

The Washington Metropolitan Region is served by Metrobus and 13 local bus systems. These operators are listed in Table 1.

**Table 1: Bus Transit Operators in the TBP Planning Area**

| Jurisdiction | Transit Service | Type of Service |
|---|---|---|
| WMATA Compact Area | Metrobus | express, local/feeder |
| District of Columbia | DC Circulator | circulator |
| State of Maryland | MTA | express |
| Montgomery County | Ride-On | express, local/feeder |
| Prince George's County | TheBus | express, local/feeder |

| | | |
|---|---|---|
| Frederick County | TransIT | local/feeder |
| Laurel/Columbia MD | Connect-a-Ride[1] | local/feeder |
| Arlington County | ART | local/feeder |
| Fairfax County | Connector | local/feeder |
| Loudoun County | LC Transit | express, local/feeder |
| Prince William | PRTC (OmniRide, OmniLink) | express, local/feeder |
| The City of Alexandria | Dash | local/feeder |
| The City of Fairfax | Cue | local/feeder |
| The City of Falls Church | George | local/feeder |

In addition to fixed route transit, the Washington Metropolitan Region has many paratransit operators. Paratransit services in the region are overseen by the TPB's Human Services Task Force and the TPB's Access For All advisory committee.

*Bus Services are Important to the Regional Transportation System*

The regional bus systems are a large component of the region's transit system. According to the Year 2000 Regional Bus Survey[2], buses provided 45% of the annual transit trips in the region. Of that total, 32% of the trips were provided by Metrobus, 12% by other local transit agencies, and 1% by commuter buses.

Buses also account for 45% of the operating expenses in the region. Metrobus expenses account for 31% of the region's annual bus operating expenses, with local bus accounting for 13% and express bus systems accounting for 3%.

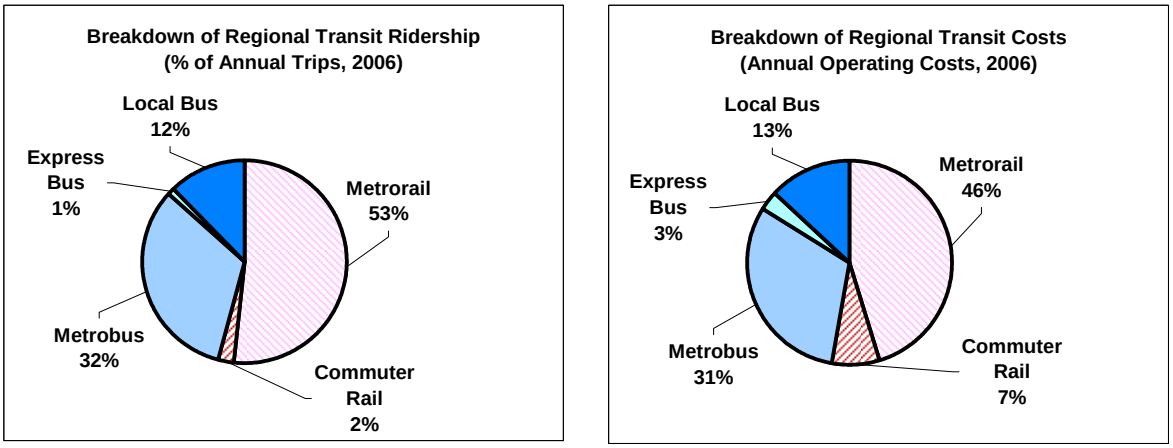


**Figure 1: Breakdown of annual transit ridership and annual transit operating costs.**

In addition to having a large share of the region's transit market, bus systems in the Washington region have a much greater reach than the Metrorail system. The maps in Figure 2 illustrate the collective service area of the local and express bus services compared to Metrorail. The first map shows the reach of the local bus systems, as determined by drawing a half-mile radius around local bus stops. The second map shows

[1] Connect-a-ride ridership data was not available at the time of this writing.
[2] Regional Bus Conference White Paper, November, 2006

the reach of the express bus systems, as determined by drawing a one-mile radius around express bus stops (generally park-and-ride lots or transit stations). The bus stop data points were taken from bus transit inputs to the TPB regional travel demand model.

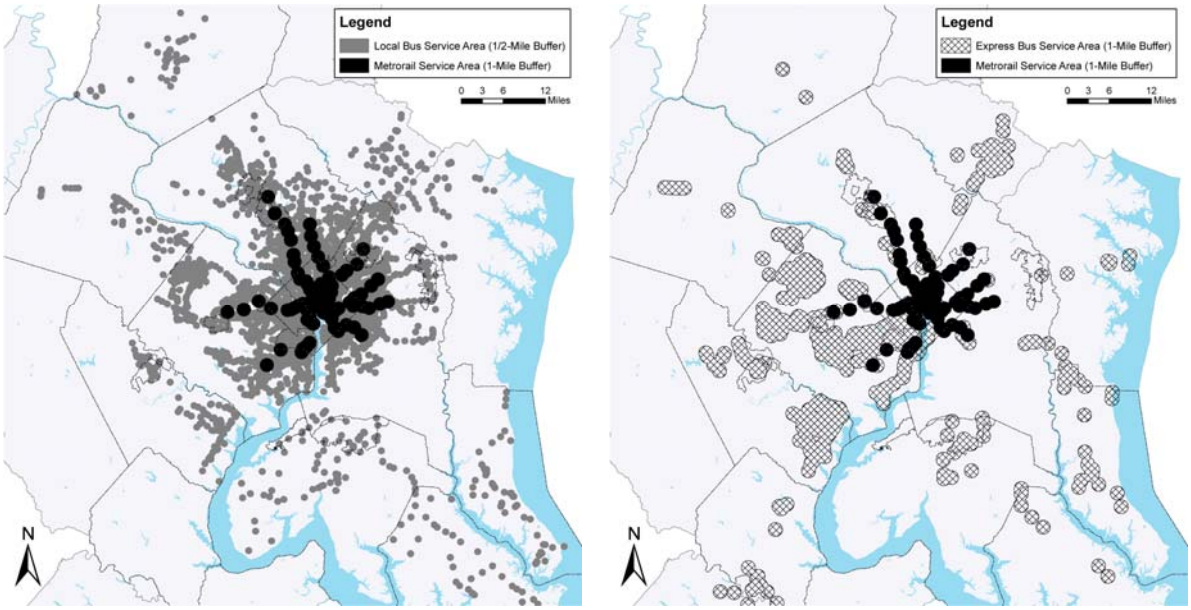


**Figure 2: Comparison of the service area of regional bus service versus Metrorail.**

Bus transit is the most flexible of the region's transit services. Bus services can be easily tailored to individual markets. Buses can function both as complements and substitutes to rail service.

The continued increasing use of Metrorail has been well publicized. According to the National Transit Database, Metrorail ridership has increased by 39% between 1997 and 2006, or about 4% per year. WMATA announced on August 6, 2007, that Metrorail broke its all-time ridership record in July, carrying 19.2 million people during that month. As of July 19, 2007, five of Metrorail's Top 10 ridership days were in the year 2007. Metrorail's annual unlinked trips[3] from 1996 to 2006 are displayed in Figure 3.

This record-breaking usage is not without its drawbacks. Metrorail is swiftly reaching capacity along many of its lines. The cost of accommodating future Metrorail ridership is projected to exceed available identified funding after 2010. As a result, the TPB travel demand model caps rail capacity at 2010 levels in the future, as no funding has been identified to increase capacity beyond that date.

What is less well known is that the region's bus systems are also swiftly reaching capacity due to rapid ridership growth. (The growth in bus ridership over the past ten years is discussed in detail below.) Many transit operators report problems with

[3] Transit ridership in this document is expressed as unlinked trips. An unlinked trip is a segment of a transit trip, including one boarding and one alighting. Many transit trips include more or one segment, where a rider will transfer to another bus or to rail. Such a multi-segment trip (or linked trip) is considered multiple unlinked trips.

maintaining headways on current lines, let alone expanding service. These problems are resulting from limited resources for acquiring new buses and limited bus storage and maintenance space. These issues are discussed in more detail in the next section of this report.

### *Trends in Regional Bus Ridership*

Ridership on the regional bus systems has been growing steadily over the past 10 years. However, most of the growth has experienced by the local transit providers.

Metrobus

Metrobus ridership between 1996 and 2006 has grown 8%, an average of about 1% annual growth. However, according to the data provided the number of annual unlinked trips between 2005 and 2006 dropped by over 20-million. (See Figure 3.) This drop does not seem to be reflective of the growth trend experienced by Metrobus over the preceding years. WMATA reports that this outlier is the result of a change in bus rider reporting methodology. If this outlier is ignored, Metrobus has experienced a growth of about 3-million trips per year, which is about 24% growth over 9 years or about 2% annually between 1996 and 2005. The Metrobus annual unlinked trips statistics from the National Transit Database are displayed in Figure 3. The Metrobus ridership data is compared against the ridership data from the non-WMATA local and commuter bus systems in Figure 4.

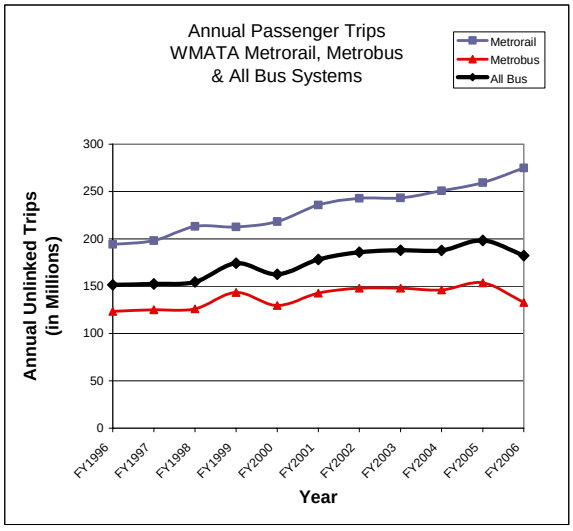


Figure 3: WMATA Metrorail and Metrobus annual unlinked trips, 1996 - 2006. *Source, National Transit Database.*

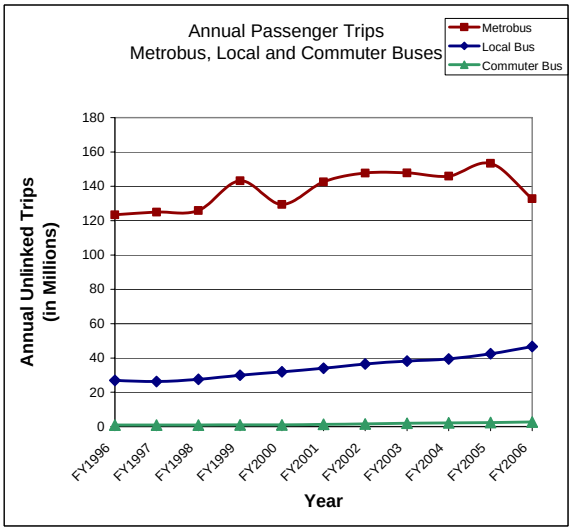


Figure 4: Comparison of ridership on Metrorail, local bus and commuter bus services. *Source, National Transit Database.*

Local Feeder and Circulators Services

As mentioned above, the local bus transit systems have been receiving the bulk of the growth in regional bus transit use. The local circulator and feeder systems in the region have experienced a steady growth rate of about 7% per year since 1996. Between 1996 and 2006, ridership on the local circulators/feeders has grown 74%. The collective annual ridership data grouped by Metrobus, circulator/feeder systems and commuter bus systems is graphed in Figure 4.

Of the local systems, some showed moderate growth while others' ridership skyrocketed. For example, ridership on the City of Fairfax Cue system grew by 27% between 1996 and 2006. By contract, ridership on PRTC's OmniLink and Arlington County's ART grew by 440% and 790% respectively over the same period. Growth in annual unlinked trips since 1996 for the individual locally operated bus systems is displayed in Figure 5 and Figure 6.

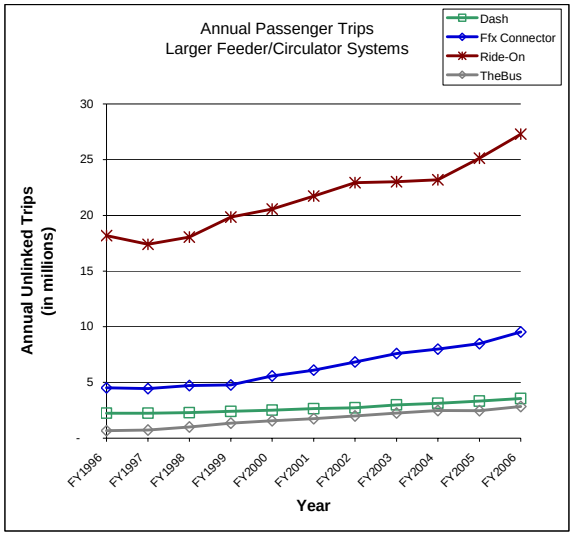


Figure 5: Annual unlinked trips, larger local feeder and circulator systems. *Source, National Transit Database*

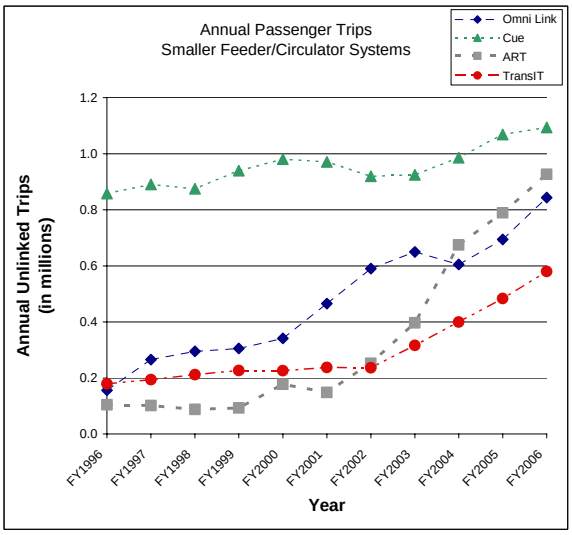


Figure 6: Annual unlinked trips, smaller local feeder and circulator systems. *Source, National Transit Database*

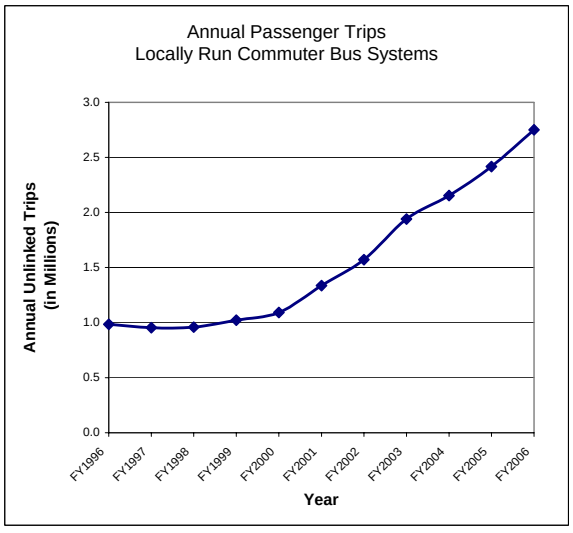


Figure 7: Locally Run Commuter Bus annual unlinked trips, 1996 - 2006. *Source, National Transit Database.*

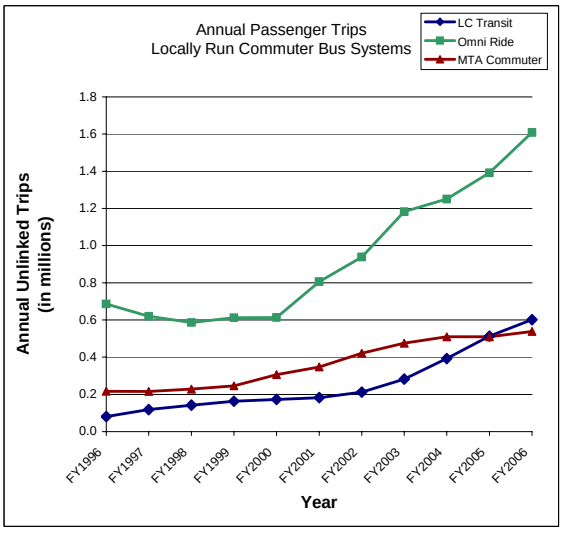


Figure 8: Annual unlinked trips by individual locally operated commuter/express bus systems. *Source, National Transit Database.*

## Commuter/Express Systems

Locally operated commuter bus services have seen the greatest growth in percentage terms in the past 10 years. MTA's commuter service, LC Transit[4] and OmniRide collectively have experienced 180% growth in that time period. However, as visible from the graph in Figure 7, the real growth in these long-distance express carriers began in the year 2000. Between 2000 and 2006, the locally run commuter bus systems experienced an average annual growth rate of 17%, resulting in 150% growth over 6 years. The growth in ridership of the individual locally operated commuter/express bus systems between 1996 and 2006 is presented in Figure 8.

## *Trends in Regional Bus Costs*

With increasing ridership comes increasing costs. The operating costs in both current and constant (2006) dollars of all the region's transit operators have increased. The annual operating cost of Metrobus, in constant (2006) dollars, has increased 31% between 1996 and 2006. Metrorail's operating costs in constant (2006) dollars over the same time period have increased 51%.

### Metrobus

In real dollars, the annual operating costs of Metrobus have increased by 68% between 1996 and 2006. As mentioned above, this amounted to a 31% increase in constant (2006) dollars. This increase mirrors the percent increase in annual Metrobus ridership of 24% described in the previous section. A chart illustrating the growth in operating costs of Metrobus is presented in Figure 9.

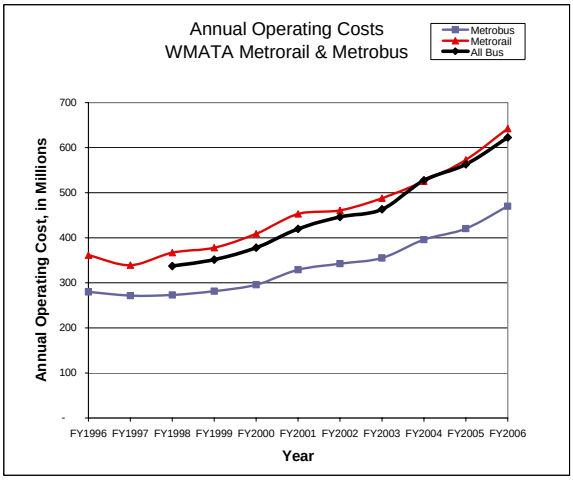


Figure 9: Operating costs of Metrobus and Metrorail, 1996 to 2006 in current dollars. Source, National Transit Database.

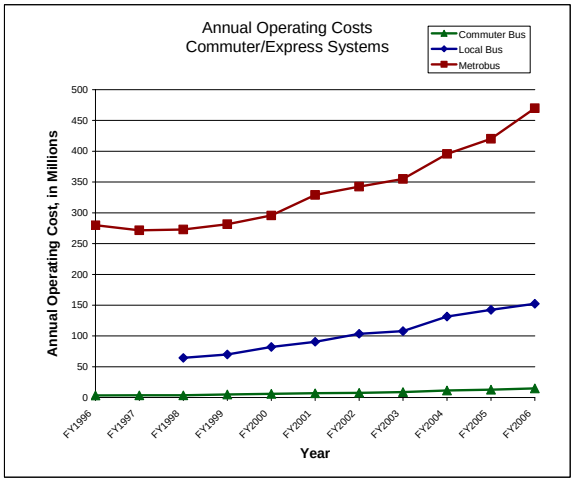


Figure 10: Operating costs of Metrobus versus Local (feeder and circulator) and Commuter bus systems. Source, National Transit Database.

### Local Feeder and Circulators Services

The data currently available provides a complete picture of locally operated bus systems for 1998 through 2006.[5] Taken together, annual operating costs of these bus services in

[4] LC Transit does operate local bus routes, but is primarily an express/commuter bus operator.

[5] Data has not been supplied for DASH and Cue systems for 1996 or 1997, and Fairfax Connector data is missing for 1997. Arlington's ART system began service in 2002, and replaced a trolley system, which did not independently track its operating expenses until 1998.

current dollars increased by 137% over time period for which data was made available. Adjusting for inflation results in a 91% increase in annual operating costs. This figure is relatively on par with the 74% increase in ridership over the same period.

While all operators experienced increases in operating costs, not all experienced the same amount of increase over the period described above. For example, the Fairfax City CUE system experienced a 57% increase in annual operating costs while Prince George's County's TheBus experienced an 800% increase in operating expenses, both in current dollars. However, the increases in operating costs reflect similar increases in levels of service, which resulted in the increased annual ridership described in the previous section.

Chart illustrating the change in annual operating expenses of the local feeder and circulator services is displayed in Figure 11 and Figure 12.

The above data reflects major investments made in bus transit by the local jurisdictions and transit operators. Many jurisdictions have established new transit services, and others have greatly expanded their coverage and levels of service. Additionally, many transit agencies, such as ART and the Fairfax Connector to name a few, have been taking over Metrobus routes, expanding locally offered services while allowing Metrobus to focus on other routes.

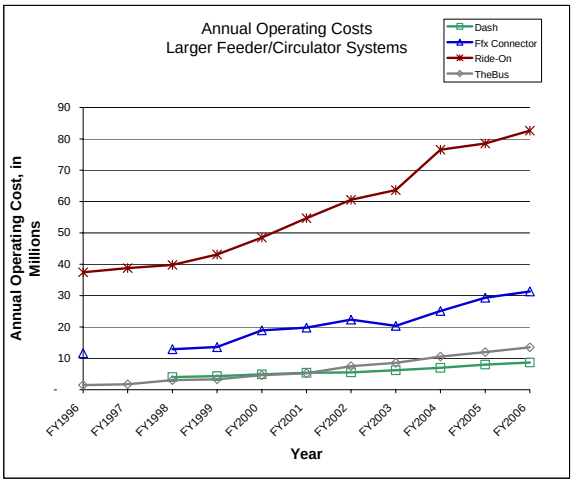


Figure 11: Operating costs of the larger local feeder/circulator systems, 1996 to 2006 in current dollars. Source: National Transit Database.

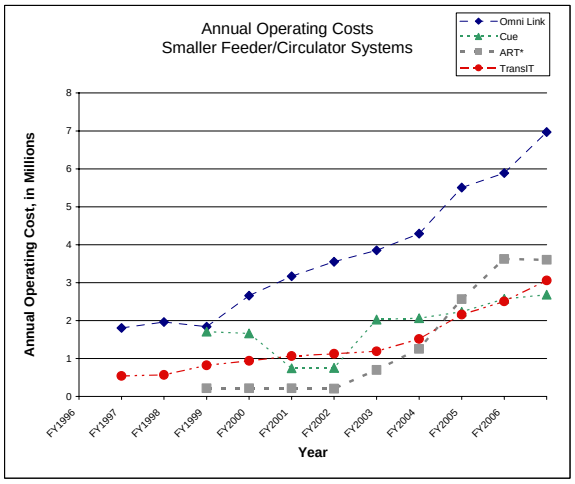


Figure 12: Operating costs of the smaller local feeder/circulator systems, 1996 to 2006 in current dollars. Source: National Transit Database.

## Commuter/Express Systems

The region's commuter bus systems also saw increases in annual operating costs. And as with the local bus systems described above, both systems (OmniRide and LC Transit[6]) experienced increases that mirrored increases in ridership. OmniRide experienced nearly 300% growth in operating expenses between 1996 and 2006, and LC Transit saw a 780%

[6] MTA commuter bus operating costs broken out for the Washington Region were not available as of the writing of this report.

increase over the same period, both figures in current dollars. In constant (2006) dollars, the operators experienced 210% and 590% growth in operating expenses, respectively.

A chart illustrating the growth in operating expenses of the commuter/express systems is presented in Figure 13.

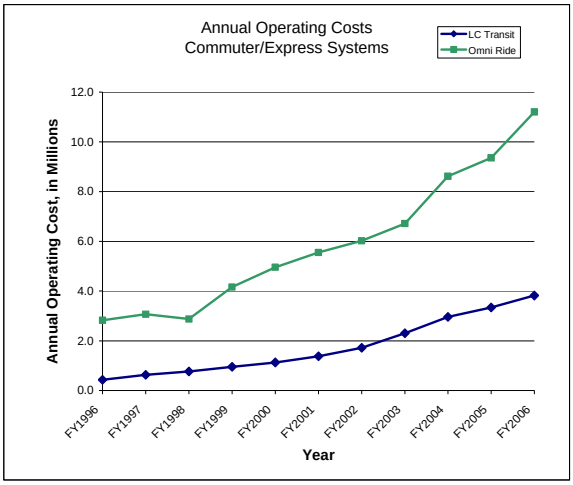


Figure 13: Operating costs of commuter/express systems, 1996 to 2006 in current dollars. Source: National Transit Database.

### *Recent Bus Planning Efforts*

In 2003, WMATA and its consultant team released the final report of their Regional Bus Study. The Regional Bus Study was "initiated and conducted by WMATA in cooperation with the jurisdictions in its service area." The study's final report "presents a plan to address the short and long term requirements for both regional and non-regional bus services in the District of Columbia, Montgomery County and Prince George's County in Maryland, Arlington, Fairfax and Loudoun Counties and the Cities of Alexandria, Fairfax and Falls Church in Virginia."[7]

The plan's recommended improvements are organized into service improvements and capital improvements. Service improvements include strategies for providing new or improved services throughout the region. Capital improvements include upgrades to the region's bus fleets and facilities and Intelligent Transportation Systems (ITS) implementations that are required to facilitate the service improvements. The service and capital improvements described in the plan are outlined in Figure 14.

The final section of the Regional Bus Study report reconfirms that the study's recommendations are not financially constrained. While the study's recommendations plot a clear course for enhancing the region's bus transit system, the funding sources needed to move the plan forward are not identified.

[7] WMATA Regional Bus Study, Final Report, September 2003

In November of 2006, WMATA hosted a regional bus summit which was attended by representatives of the bus community from around the region, with nearly 230 registered attendees. The conference was designed to seek broad local and state government support for increasing the quality of the bus services in the region:

- Improve traffic operations in congested bus corridors
- Enhance the design and accessibility of bus stops
- Coordinate the implementation of operating and capital projects to support a full range of bus services
- Build on the success of fare simplification to make payment more convenient for customers and to reduce the impact and cost of revenue collection on service operations.

At the conference, WMATA and other attendees identified the following strategies for moving forward:

- Empanel a regional transit service planning group.
- Complete multi-year planning documents to guide implementation and ensure coordination between projects at WMATA and local providers.
- Establish funding need: this includes summarizing project budgets and available grant funding for operating and capital projects.
- Determine fleet size and design requirements.
- Prepare and maintain a prioritized five-year schedule of Metrobus services for review, development and deployment based on findings of the Regional Bus Study and Metrobus Network Evaluation.
- Recommend Premium Bus service corridors for development and deployment, and provide a tentative schedule for action.
- Document the critical garage needs to support these operating plans, including siting, design, acquisition of property, and initiation of construction.
- Recommend strategies to plan, fund and implement operating and capital projects.

The establishment of the Regional Bus Subcommittee was the most immediate outcome of the conference, and has opened the door to making progress on the remaining strategies listed above.

**Recommendations from the WMATA Regional Bus Study**

- Service Improvements
  - Improvements to the Existing Routes
    - Increased Frequency
    - Increased Time-Span
    - Restructuring of Routes
  - New Routes
    - New Fixed Route Services
    - New/Improved Feeder Services
    - New Circulator Routes and Demand Responsive Services
    - New Cross-Regional Services (Radial and Reverse Commute)
  - High Performance Services
    - Rapid Bus: using Bus Rapid Transit (BRT) technologies and features to increase the level of service of long-haul bus lines.
    - Express Bus Services: premium commuter bus routes in corridors not served by Metrorail.
    - Rail Relief Services: express bus services intended to relieve crowded Metrorail corridors and provide downtown circulator services.
- Capital Improvements
  - Fleet
    - Provide new vehicles needed to implement the plan
  - Passenger Facility Amenities
    - Provide passengers with a seamless transit system; increased mobility; improved access and circulation; and reliable service and good information.
  - Running Way Treatments
    - Improve the level of bus service by: removing on-street parking during peak service hours; providing signal priority to transit vehicles; providing left-hand turn lanes; and providing bus-only lanes or queue jumpers
  - ITS Technology
    - Use technology to improve bus services through: enhanced communications; better scheduling, real-time traveler information (pre-trip, wayside and in-vehicle); transit signal priority;
  - Bus Maintenance and Storage Garages
    - Facilities to house and maintain the increased fleet of buses.

**Figure 14: Summary of recommendations from the 2003 Regional Bus Study**

## Current Issues in Regional Bus Operations

The Regional Bus Study described above highlights mid- and long-range bus transit recommendations for the Washington region. However, there are current concerns: the existing systems must be maintained, and there are pressing demands for new services that must be addressed before focusing on long-range bus transit planning. These current needs and their causes are discussed in the following sections.

### *Real Monetary and Infrastructure Needs*

The regional bus systems have pressing monetary and infrastructure needs. The existing bus fleet is aging. Some of the older vehicles are not heavy-duty transit vehicles and also do not have sufficient seating capacity to meet demand. Funding is required to replace these older buses and enable their retirement from the fleet. The issue of bus replacement is compounded as local governments struggle with local air pollution concerns and rising fuel costs, resulting in added pressure to replace an aging fleet of diesel-fuel buses with more fuel-efficient, low-emissions, and alternative-fuel vehicles.

**Real Monetary Needs**

How much do transit vehicles cost?[8]

| | |
|---|---|
| $490,000 | Small Hybrid Bus |
| $390,000 | Standard CNG Bus |
| $540,000 | Standard Hybrid Bus |
| $460,000 | Commuter Bus |
| $600,000 | Articulated Diesel Bus |
| $800,000 | Articulated Hybrid Bus |

Local transit agencies are also working to increase their bus fleet size. Transit agencies are purchasing buses to serve new bus lines and to reduce congestion or maintain headways on established lines.

Transit agencies are in need of new bus maintenance and storage garages. These locally undesirable facilities are hard to locate in our heavily developed urbanized area. An insufficient amount of land is zoned for compatible industrial-type uses. As a result, competition with other industries for sites that could be leased for bus garage use is heavy. Rental costs as well as land values for such sites continue to increase as demand far exceeds supply.

Finally, transit agencies are experiencing operational cost pressures. The January 2005 Report of the Metro Funding Panel discusses how "the level and ability of passenger fares to cover operating costs is dictated by two competing policy decisions: the desire to provide comprehensive service and the desire to limit fare increases so as to make that service affordable."[9] As described above, regional bus operators have been providing greater levels of service and have been experiencing rising operating costs. However, operating costs are rising faster than ridership, and additional funding is required to cover the costs of this expanding service. HR 3496, introduced by Rep. Tom Davis and other

[8] Sources: WMATA, LC Transit

[9] Report of the Metro Funding "Blue Ribbon" Panel, January 2005

local representatives in Congress, proposes establishing a dedicated funding stream for WMATA, but this proposed funding stream only covers capital costs. The Davis Bill, as it is commonly known, could help alleviate operating cost pressures by allowing transit operators to reprogram planned capital funding into operating expenses. However, bus operators are considering seeking additional increased operating funding through fare increases or greater local government subsidies.

The needs described above are in addition to other operating concerns that are already getting attention at local and regional levels. These concerns include:

- providing quality bus stops and transit transfer centers;
- implementation of BRT technologies such as signal priority and real-time bus information systems;
- compliance with the Americans with Disabilities Act;
- planning for the conversion of HOV lanes to HOT-lane facilities.

Regional committees such as the TPB Access For All Advisory Committee, the TPB MOITS (Management, Operations and Intelligent Transportation Systems) Task Force, VDRPT's Transit Advisory Committee and WMATA's Bus Stop Task Force are working to address these issues.

### *Factors Creating Current Situation*

Many factors interact to create the current situation, including regional growth, changing development patterns, congestion and the growing ridership on the Metrorail system.

Increased demand for public transportation stems from the region's healthy growth rate. Regional employment and housing demand grow at a faster rate than the region's highway system, which result in greater demand for transit services. Additionally, growth patterns are shifting toward transit oriented developments in or around regional activity centers. Many of these activity centers are not served by the Metrorail system and rely on bus transit to provide transportation alternatives.

Traffic congestion also increases the need for more buses. Travelers and commuters wishing to avoid sitting in traffic and driving in stop-and-go conditions may switch to transit. Additionally, buses are slowed by traffic congestion, and transit agencies must add additional buses to traffic-congested routes in order to maintain schedules and meet level of service goals.

Finally, the growing ridership on the Metrorail system has increased the need for expanded bus services in two ways. First, buses assist the rail system by providing feeder service to the rail lines: increases in rail ridership are accompanied by corresponding increases the feeder bus ridership. This relationship is further compounded by limited parking facilities at select Metrorail stations. Secondly, growing rail ridership has brought the Metrorail system close to capacity along several corridors. WMATA is currently planning "rail relief" bus routes which aim to take pressure off of the congested rail system. This puts even greater strain on the regional bus systems, requiring even more new buses and new routes.

All of the factors described above work to greatly increase the fleet sizes of the region's bus operators that are required to satisfy the growing demand for bus transit service. And as bus operators' fleets grow, so does the need for additional bus maintenance and storage facilities.

### *Examples of Current Bus Systems' Needs*

Examples from local transit agencies illustrate the above factors resulting in increased needs for funding of bus transit systems.

*Needs for Maintenance of Current System:*

- ART is seeking funding for its new six year plan which will replace and upgrade much of its fleet to heavy duty vehicles to improve the dependability of current service and relieve crush load and reduce the proportion of spare vehicles needed.
- The City of Fairfax has identified the need for 6 new buses to replace vehicles in its existing fleet.
- Prince George's County has identified the need to replace 25 buses in the next year.
- Alexandria Transit (DASH) presently replaces approximately 5 buses per year.
- The Potomac and Rappahannock Transit Commission (PRTC), which operates the OmniRide commuter bus service, has identified the need for daytime parking facilities for commuter buses in the regional core to support ridership growth. PRTC reported its 6$^{th}$ straight year of double-digit ridership increases, and has recently surpassed 10,000 passengers per day.
- As the regions bus systems mature, many career employees are nearing retirement. Many transit agencies have expressed an increase in the need to hire skilled bus maintenance personnel and operators.

*Needs to Support Short-Term Expansion:*

- Arlington Transit (ART) is unable to add new bus routes until a larger percentage of its fleet is replaced. Its new six year plan, currently seeking funding, will expand the size of its fleet.
- WMATA has identified the need to exapnd bus service along selected corridors, implementing new Rapid bus routes which employ skip-stop operations and special vehicle branding. This expansion will require additional operating and capitol funding.
- The District of Columbia Mass Transit Administration is responding to high demand for its circulator service, and is seeking funding to add two new routes in the near future.
- Loudoun County's LC Transit commuter buses are currently operating at crush loads. The county needs to increase its fleet size to accommodate the growing demand caused by increased development and congestion in Northern Virginia.

- Prince George's County has identified great need county-wide for evening and weekend services. This expansion will require additional capital and operating funding. The county has also identified the need for high levels of transit service to the new National Harbor area.
- Alexandria Transit (DASH) has identified the need for an expansion of 70 buses by the year 2014 which will allow for additional frequency on existing routes as well as new routes throughout the City.
- Frederick County has identified the need to double its bus fleet and cut headways in half and seeks to secure funding to implement this fleet growth, as well as other aspects of its recently approved new transportation development plan.
- Montgomery County's RideOn has identified the need for new buses and routes to accommodate rapid ridership growth. The county has had monthly ridership increases for nearly three straight years, resulting in an estimated 28.3 million trips in FY 2007.
- The Regional Bus Study identified the need for seven new bus garages throughout the region between 2002 and 2012, which would result in additional capacity for 900 buses.

## Long-Range Planning Activities

### *Activities of the Regional Bus Subcommittee*

The Regional Bus Subcommittee is currently engaged in long-range planning activities as well as addressing the current operational challenges. TPB staff is working with the subcommittee to develop mapping tools which portray current and future bus transit service from a regional perspective. Maps of future bus service are overlaid with land-use changes and regional activity clusters, identifying for long range bus planning efforts where new routes and services may be needed.

The subcommittee also has expressed interest in gathering a set of regional bus transit level-of-service standards. These standards, based on land use patterns, can then be compared against planned bus transit levels of service to spotlight areas in need of enhanced transit.

In the following year, the regional bus subcommittee will work on these and other issues pertaining to short- and long-term regional bus planning.

### *Other TPB Planning Activities Involving Bus Transit*

Additionally, the TPB's Regional Mobility and Accessibility Study (RMAS) incorporates transit enhancements (including Bus Rapid Transit) into packaged scenarios of transportation and land-use changes. These scenarios are then analyzed in an effort to answer the question, "What if the Washington Region grew differently?" These scenarios are intended to inform future land-use and transportation decisions throughout the region.

One of the RMAS scenarios is a network of Variably Priced Lanes (VPLs). VPLs are defined as tolled traffic lanes where the toll varies dynamically to ensure congestion-free

travel for those willing to pay the toll. The Virginia implementation of VPLs will be HOT Lanes, or High-Occupancy/Toll Lanes, which allow vehicles with three or more occupants (HOV-3) to travel toll-free in the VPLs. Maryland and the District plan to implement Express Toll Lanes (ETLs), which do not allow HOVs toll-free access. As part of the study of a Regional Network of Variably Priced Lanes, enhanced bus transit is added to the new lanes. In this scenario, buses use the congestion-free toll lanes and provide a higher level of service than currently possible, at costs less than new rail or BRT lines.

Since 9/11, as the region has conducted emergency preparedness planning, the transit operators have participated in the process and identified ways to use buses during regional emergencies plans. This is a natural extension of the role buses play in supporting the Metrorail system when stations are closed due to scheduled maintenance and emergency situations.

## Summary

Bus services and rail services have equal importance to our region. The region's bus systems provide nearly as many trips annually as the Metrorail system. Approximately 20% of Metrorail riders reach Metrorail by bus. Just as with Metrorail, ridership on Metrobus and the 13 locally operated bus systems is rapidly increasing. Regional bus operators are challenged to serve this increasing demand, and are experiencing other challenges including increased congestion on the region's roadways, degrading round-trip route travel times, and real monetary and infrastructure needed to maintain current levels of service and support short-term expansion..

The challenges facing the Metrorail system have been widely publicized and discussed among our region's decision makers. However, the challenges facing the region's bus systems go relatively unrecognized. The Regional Bus Subcommittee of the National Capital Region Transportation Planning Board wishes to raise the profile of the region's bus systems in the hope that these issues can be explored, discussed, and addressed. These real monetary and infrastructure needs include:

- Replacing aging buses to increase capacity, reliability and fuel efficiency, and to improve local air quality
- Increasing fleet sizes to expand or maintain service levels
- Citing and constructing new bus garages and maintenance facilities
- Locating daytime parking facilities for commuter buses

Recommendations from the subcommittee on how to raise the profile of the region's bus systems are listed below.

The Regional Bus Subcommittee is also pursuing long-range planning for the region's bus systems. However, long-range planning cannot be accomplished in earnest until the current operational challenges of the region's bus systems have been met.

**Recommendations from the Regional Bus Subcommittee to Raise the Profile of Bus Transit:**

- The TPB would be presented this report at its January 16 meeting, and be asked to review and accept it.
- The subcommittee would recommend the TPB produce a user-friendly brochure to raise the profile of the bus systems in the region, summarizing the major points of this report. The TPB could distribute this brochure to all regional decision makers who may have a role in operating, planning or funding public transportation.
- As the report shows, the region's bus systems are an important part of the regional transportation system. The TPB should to ensure that bus transit facilities, services and projects are included in the annual transportation planning process.