



**COORDINATION OF LOCAL TRANSIT SYSTEMS IN
NORTHERN VIRGINIA'S PUBLIC TRANSIT NETWORK**

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As shown in Figure 1, Northern Virginia is served by several local bus systems in addition to the regional Virginia Railway Express commuter rail system and the Washington Metropolitan Area Transit Authority's Metrorail and Metrobus, together providing over 428,000 passenger trips on an average weekday in FY 2004.

Ridership on all of these transit systems is strong, with Metrorail and Metrobus growing by over a third in the last decade and, as shown in Figure 2, more than doubling on the other systems combined. As an example, the Fairfax Connector began exactly 20 years ago with 10 routes and 33 buses. Today it has 57 routes, 170 buses and 8.5 million annual passenger trips.

In Figure 3, the relative size of these systems is shown, varying in FY 2004 from Metro's large regional system of hundreds of buses and railcars (one of the largest in the U.S.), through Fairfax County's Connector (170 buses--one of the largest in Virginia) to Arlington's ART (27 buses powered by compressed natural gas) and the CUE system in the city of Fairfax (12 buses serving the GMU campus as well as connecting to city businesses and the nearby Metrorail station). Currently, GEORGE is the newest system; it operates with four clean diesel buses in the city of Falls Church with almost all riders connecting to Metrorail and Metrobus.

Figure 4 shows the various methods of owning and operating the transit systems operating in Northern Virginia. While WMATA uses its own employees--which is efficient given its size--most other systems contract competitively with private management firms in order to control costs.

Figure 3 also illustrates that the annual budgets of these systems vary considerably. However, in each case, Northern Virginia's local governments are ultimately responsible for paying whatever operating and capital costs remain after deducting fares and other sources of revenue. Local general funds and gas taxes cover on average about 26% of these transit budgets.

These systems were formed at various times for many different reasons. For example:

- WMATA initially took over operation of financially ailing private bus companies as the regional rail system was being planned and built.
- VRE was the culmination of several decades of complex negotiations to gain access to privately owned freight railroad rights-of-way to serve long-distance, peak direction commuters.
- CUE helped to boost access for a major university (students rode free) and provided connections to Metrorail.

- ART has reduced costs on some heavily used as well as some lower density routes within Arlington previously operated by WMATA.
- The Fairfax Connector has grown into a major transit system serving the large territory within Fairfax County with separate divisions and garages (sometimes operated by separate private management firms). Services vary from Bus Rapid Transit in the Dulles Corridor to internal circulation (Reston's RIBS) to market-driven and separately branded services in dense corridors (REX in the Route 1 Corridor).
- Alexandria's DASH originated to save money for the city on low-density routes previously operated by WMATA and on connections to the Pentagon. DASH has added special services to link off-peak customers to Old Town businesses (using separately branded and "wrapped" DASH About buses) and to provide lunch-time connections for employees of the massive Patent and Trademark Office (Lunch Loop).
- Loudoun County and PRTC have responded to needs of their residents to reach jobs in the core with long distance commuter buses using at one time volunteer "bus meisters" to collect fares and even volunteer drivers (now replaced by professional drivers and soon SmarTrip-equipped fare boxes). Some PRTC jurisdictions even joined WMATA's transit zone so that WMATA could operate Omni Ride bus service under contract, although a new contractor has now been chosen. PRTC has added demand responsive local service with route-deviation features, known as Omni Link. Loudoun County Transit also connects to Metrorail at West Falls Church and offers connections to employment sites in Loudoun County with its Reverse Commute service.
- In general, riders seem to prefer using systems with a strong local identity and the growth of local transit systems is a response to that customer preference. Prior to important revisions in WMATA's cost allocation formulas in the mid-1990's, localities discontinuing Metrobus routes were rewarded with disproportionately large cost savings, creating an artificial incentive to reduce Metrobus service. This contributed in the past to the start of some local systems.

With this great diversity of transit systems, how is coordination ensured? Among the methods are:

- Since the local governments ultimately are financially responsible, they have a strong incentive not only to avoid wasteful duplication but also to respond to the needs of citizens for good connections.
- NVTC hosts regular staff meetings at which routes and fares are discussed and coordinated. NVTC has conducted regional bus studies to

identify gaps, overlaps and conflicts in service and fares. Each local system also carefully plans in order to identify potential problem areas as well as opportunities for smoother connections. WMATA's planners also carefully consider impacts of its service and fare changes on connections with the local systems and communicate effectively with planners from these systems. Currently, WMATA's "Regional Mobility Initiative" is focusing on coordination. Public hearings precede each fare change and most route changes to allow riders to flag any problems.

- Regional fare integration has resulted in cross-honoring transfers, tokens and other fare media. All bus systems will soon use SmarTrip-equipped fare boxes (Metrobus already has them). The SmarTrip card to be accepted on all systems here (and in Baltimore) will be a major customer convenience.
- Each transit system web site includes information about connecting transit services from other providers. WMATA's heavily used Ride Guide as well as its route maps include connections with all other transit systems.
- Regionwide transit marketing efforts are the norm. For example, NVTC has led the effort to include all systems in providing electronic access to schedules via personal digital assistants and hand-held computers.
- Technologies are often shared. WMATA's Clever Devices stop enunciators, passenger counters and automated maintenance systems were deployed on GEORGE buses. Also, NVTC is developing Automated Vehicle Locators using GPS-enabled telephones to allow smaller transit systems to employ this management and customer-service innovation.
- NVTC is assisting all of the transit systems operating in Northern Virginia to develop specific emergency response plans. Having identified key Metrorail stations, first responders and transit officials have devised communication protocols and alternative routings, buttressed with GIS maps and manuals. These materials supplement the Regional Incident Communication and Coordination System (RICCS) operating through the Metropolitan Washington Council of Governments (MWCOCG).
- Small systems are able to purchase fuel collectively via a regionwide contract negotiated by MWCOCG to realize economies of scale. Because most systems are part of local government, they can rely on city/county services such as information technology and finance departments to avoid duplicating these resources on their own small staffs.

For further information, contact:

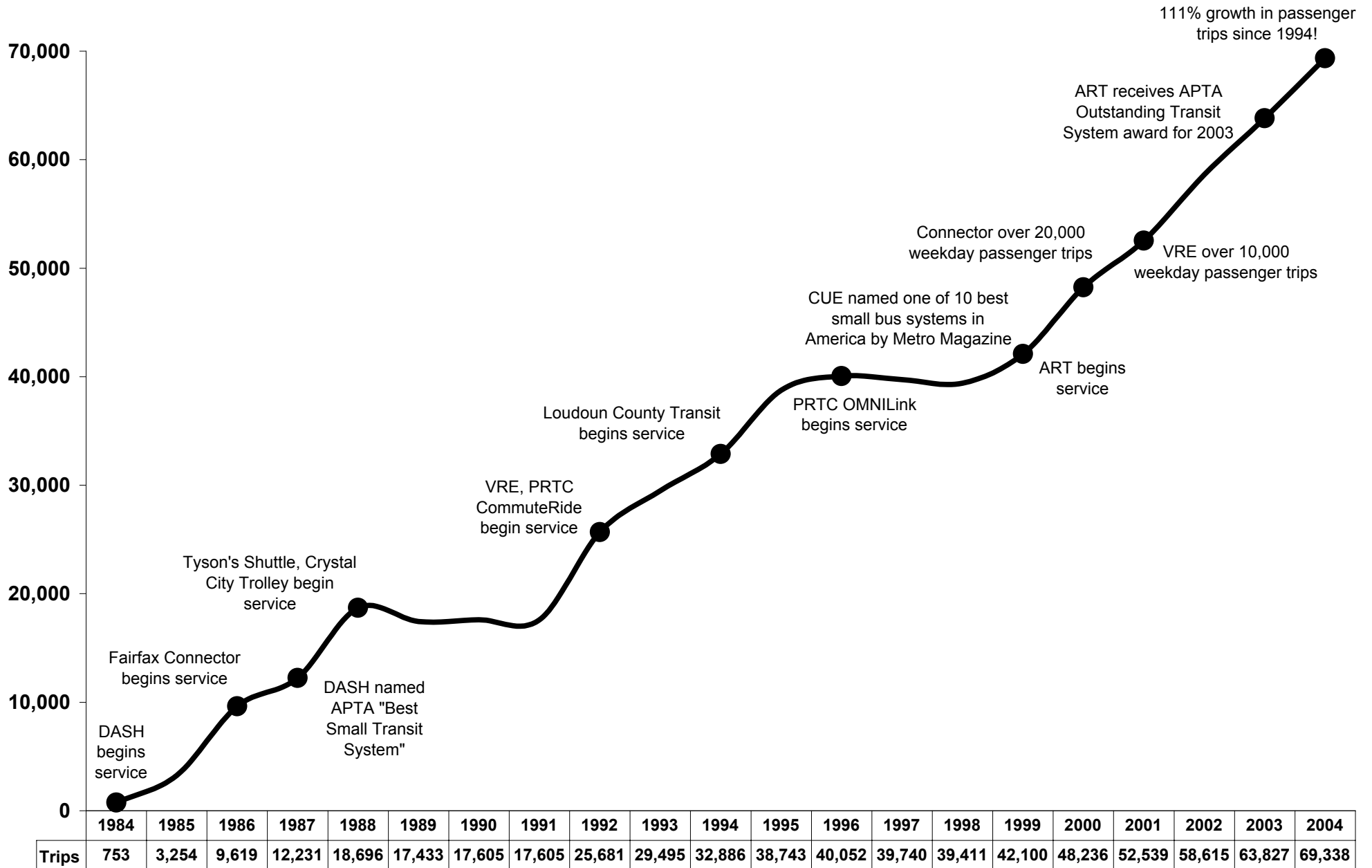
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Figure 1: Northern Virginia Average Weekday and Annual Public Transit Passenger Trips, FY 2003 - 2004

System	Average Weekday Passenger Trips, FY 2003	Average Weekday Passenger Trips, FY 2004	Annual Passenger Trips, FY 2003	Annual Passenger Trips, FY 2004
<u>Metrorail Virginia</u>	282,070	294,258	83,529,741	87,817,948
<u>Metrobus Virginia</u>	71,470	65,381	20,855,658	19,190,908
<u>Fairfax Connector</u>	27,765	28,590	7,595,138	7,990,825
<u>DASH</u>	10,235	10,864	2,986,631	3,131,284
<u>VRE</u>	13,231	14,529	3,179,957	3,645,434
<u>PRTC Omni Ride</u>	4,639	5,185	1,182,996	1,251,316
<u>PRTC Omni Link</u>	2,547	2,450	649,405	604,586
<u>CUE</u>	3,282	3,438	925,000	985,500
<u>Loudoun County Transit</u>	1,152	1,642	281,829	392,901
<u>ART</u>	976	2,640	397,001	674,806
Total	417,367	428,977	121,583,356	125,685,507

Figure 2: Average Weekday Passenger Trips on Northern Virginia Transit Systems*, FY 1984-2004



* Northern Virginia Transit Systems for 2004 include DASH, Fairfax Connector, CUE, VRE, PRTC OmniRide and OmniLink, Loudoun County Transit, and Arlington Transit (ART). Previous years may include data from RIBS, Tyson's Shuttle, Crystal City Shuttle, and Loudoun County Commuter Service. WMATA MetroRail and MetroBus data not included. CUE began service in FY 81.

**Figure 3: Public Transit Systems Operating in Northern Virginia
Operating Statistics and Performance Indicators, FY 2004**

	Fairfax Connector	Potomac and Rappahannock Transportation Commission		Virginia Railway Express (VRE)	Alexandria DASH	City of Fairfax CUE	Arlington Transit (ART)	Loudoun County Transit	Washington Metro Area Transit Authority	
		Omni Ride	Omni Link						Metrobus (Northern Virginia)	Metrorail (Northern Virginia)
Annual Passenger Trips	7,990,825	1,251,316	604,586	3,447,971	3,131,284	985,500	674,806	392,901	19,190,908	87,817,948
Vehicle Miles	7,171,115	2,713,555	658,820	1,984,992	1,355,343	441,430	576,502	907,051	12,896,550*	21,070,916*
Passenger Miles	54,507,027	27,526,818	3,458,232	103,651,104	8,995,299	3,606,808	553,824	13,351,607	57,362,907*	527,998,396*
Fleet Size	170	80	19	69	57	12	27	17	365	346
Average Age of Fleet (years)	5.2	3.5	3.1	22	7.1	3.5	3.7	9	8.5**	17**
Average Weekday Boardings	28,590	4,907	2,371	13,903	10,684	3,438	2,716	1,642	65,381	294,258
Average Trip Length (miles)	6.82	22.00	5.72	30.06	2.87	3.66	0.82	33.98	2.99**	6.01**
On Time Performance	95%	<i>Not available</i>		87.0%	93.2%	97.0%	98.3%	96.3%	87.8%**	98.2%**
Operating Costs	\$25,091,872	\$14,117,664		\$35,764,754	\$6,946,999	\$2,230,883	\$2,563,031	\$2,956,992	\$78,252,403	\$145,943,787

Source: Operating Information obtained directly from individual transit systems

* Estimated based on WMATA systemwide data

** WMATA systemwide averages

*** WMATA buses are classified "not on time" if they are early or more than two minutes late.

FIGURE 4

**OWNERSHIP AND MANAGEMENT OF NORTHERN VIRGINIA'S
PUBLIC TRANSIT SYSTEMS**

<u>Transit System</u>	<u>Created</u>	<u>Ownership</u>	<u>Management</u>
WMATA Metrorail Metrobus	1967	Interstate Compact. Board of Directors from Maryland, D.C., Virginia	CEO/GM with 10,000 employees
Virginia Railway Express (VRE)	1992	NVTC and PRTC. Operations Board	CEO with 40 employees contracting with Amtrak for operations and CSXT and NS for access.
Fairfax Connector	1985	Fairfax County	County staff currently contracts with Connex for operations.
Alexandria DASH	1984	Alexandria Transit Company with City Council as owner. Board of Directors appointed by Council.	ATC currently contracts with First Transit for General Manager. First Transit owns Transit Management of Alexandria, Inc. that provides other employees (120 total).
Arlington Transit (ART)	1999	Arlington County	Arlington staff currently contracts with ATC/Vancom for operations.
City of Fairfax (CUE)	1980	City of Fairfax	City Staff
PRTC Omni Ride Omni Link	1992 1996	PRTC	Commission staff currently contracts with First Transit.
Loudoun County Transit (LCT)	1994	Loudoun County	County staff currently contracts with Connex.
Falls Church (GEORGE)	2004	Falls Church	City staff contracts with WMATA.