

Route 1 Corridor Bus Study

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with
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EXECUTIVE SUMMARY

Route 1 is a major traffic artery. In addition to carrying high volumes of auto and truck traffic, it also serves buses carrying passengers to and from activities along the corridor and pedestrians walking to and from these activities and the bus stops.



Significant changes are planned for Route 1. A 1997 study for VDOT recommended reconstruction from the Prince William-Stafford County line to the Capital Beltway. The recommended road would be six lanes wide south of Route 235 (WalMart/Multiplex) and eight lanes wide north of Route 235. A median would be provided with turn lanes at intersections. In most locations, the frontage roads would be eliminated. Sidewalks or paths were recommended on both sides of the road. Grade separated interchanges were proposed for five locations in Fairfax County and three locations in Prince William County.

These studies also recommended new transit services and facilities in the Corridor. A study to further define the scope and magnitude of the roadway improvements is now in progress. The study of bus service needs in the Route 1 Corridor was initiated in July of 2000.

These studies, funded by the state through the Northern Virginia Transportation Commission, have considered transit needs and operations in the Route 1 Corridor, addressing both the specific bus services to be operated and the facilities required to support and promote use of these services. The bus studies will complement and provide information to the concurrent highway Corridor Location Studies.

Those who travel Route 1 understand that while bus services are quite good in some sections, especially in the area north of Fort Belvoir, facilities for access to and from the bus and the waiting areas often leave something to be desired.



Proper waiting areas with shelters and benches are provided in some locations,



but often the need to "fit in" the transit facility has led to a less than desirable placement that is too close to the high speed traffic and isolated from nearby activities.



Where no facilities are provided, passengers often make their own accommodation



But in some places, even the most determined bus riders will have difficulty.

There are three agencies providing bus service in the Corridor. WMATA and the Fairfax Connector in Fairfax County, PRTC's OmniRide and OmniLink in Prince William County.

The current bus services are well used. There is crowding at some times on the buses in Fairfax County. Passengers can be seen waiting for buses at all times of day. In Prince William County, the Dumfries service is the most used OmniLink route and is approaching the capacity of a route deviation operation.

The Metropolitan Washington Council of Governments projects that, even without any improvements, transit use in the corridor will increase by 20% over the next two decades due to growth in both population and employment. Fort Belvoir alone may add 15,000 or more workers.



Background Conditions	
Projected Growth 2000 to 2020	
Households	+21% in Fairfax Co., +34 % in Prince William Co.
Employment	+27% in Fairfax Co., +30% in Prince William Co.
VDOT Route 1 Centerline Location Studies	
8 lanes proposed	Beltway to Route 235 (at Buckman Road)
6 lanes proposed	Route 235 to Stafford County

The study process has involved both analytic studies and extensive field work. The studies have involved analysis of the projected development and travel patterns. Guidelines for bus service, similar to those being used in a concurrent WMATA regional bus operations study, were applied. Current operations were compared against these standards. In most locations, existing bus services were found to meet guidelines today and to continue to do so over the next twenty years. In the northern section of the corridor, additional service will be required to provide adequate capacity to serve demand.

Field work included a full inventory of the conditions at all bus stops, review of pedestrian access and riding buses to record both travel times and the causes of delay.

The study team met in two rounds with representatives of groups with an interest in the Corridor; in the initial first round to hear views on services and needs and in a second round to receive comments on a proposed service and facilities enhancements plan. The recommended plan reflects those comments.

The Recommended Plan includes four primary elements.

- New and expanded bus services
- Improvements to bus stops coupled with facilities to permit safer access to bus stops including sidewalks, crosswalks and pedestrian signals.
- "Transit Centers" in selected locations with Park-Ride at the Multiplex, Beacon Mall and Michael's. Details of providing park-ride will need to be negotiated with the owners.
- Use of Intelligent Transportation Systems (ITS) technology to provide bus information to passengers and to support preferential treatment for buses at traffic signals

Sidewalk and bus stop improvements are suggested for inclusion in the larger Route 1 reconstruction project as is the provision for bus priority at traffic signals.

Bus Service enhancements in Fairfax County would include:

- Route 105 - 12 minute peak frequency, Saturday evening service
- Route 105 - Saturday service to Lorton
- Route 105 X - Express service from Multiplex to/from Huntington
- Route 107 - 4 buses per hour in weekday peak hours
- Route 202 or 303 - Midday service Lorton/Belvoir to/from Springfield

In Prince William County the recommendations are for:

- additional trips on the Route 1 OmniRide Commuter service coupled with Park- Ride at Murumsco Plaza
- a new OnmiLink route from Dumfries to Woodbridge

Other recommended bus service improvements are:

- A bus connection between VRE commuter rail and Fort Belvoir to tap the market of those who live in Stafford and Spottsylvania Counties but work at Fort Belvoir.
- Bus service connecting Fairfax and Prince William Counties, operating along Route 1 from Huntington to Potomac Mills, to serve commuters to Fort Belvoir, as well as connecting residents of the corridor in Fairfax County to job and shopping opportunities at Potomac Mills.

Accommodations for bus riders are often lacking along the corridor. Here, where there is a shelter for southbound passengers but no shelter or bench for northbound passengers, the bus riders have made their own accommodation.



The concept plan recommends bus stop enhancement at 62 locations in Fairfax County (31 NB, 31 SB) with shelters at 30 of these.

PASSENGER FACILITY RECOMMENDATIONS	
Improved Bus Stops with:	
	Paved waiting area
	Passenger information
	Benches and shelters at higher use stops
Transit Centers:	
	Off-street
	Major centers have enclosed waiting areas
	Real-time bus information by use of ITS

Off-street "transit centers" are suggested at Beacon Mall (to reduce the need to cross the road) and Fort Belvoir (to facilitate transfers).

Minor transit centers, off-street with shelters, are recommended in Fairfax County at the new Southeast Government Center, the Multiplex and at Michaels. In Prince William County, a new Transit Center is proposed to serve both OnmiLink and Greyhound in Triangle outside the Quantico Marine Corps Base. Real-time information would be available at the transit centers.

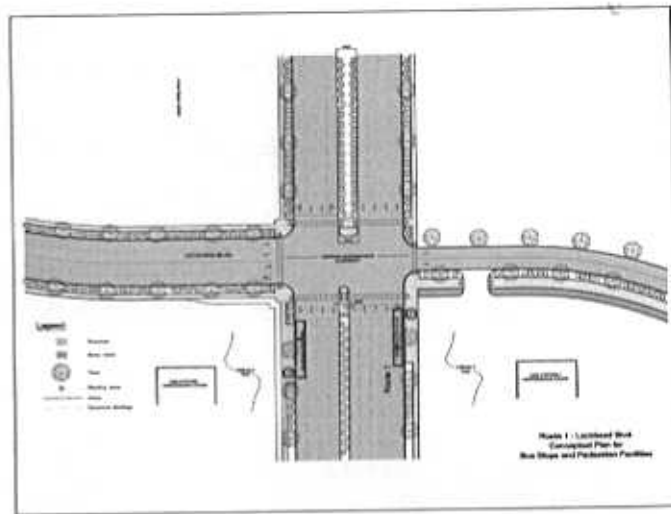
A typical bus stop serving 50 or more passengers per day should look something like the bus stop illustrated here.



Pedestrians should not be enticed to cross multiple lanes of traffic at unprotected locations. Safe and protected places to cross the road are an integral element of the bus service plan. The recommended plan suggests signals and illuminated crosswalks within 250 feet of all bus stops.



Concept plans illustrate how this might be done at selected locations.



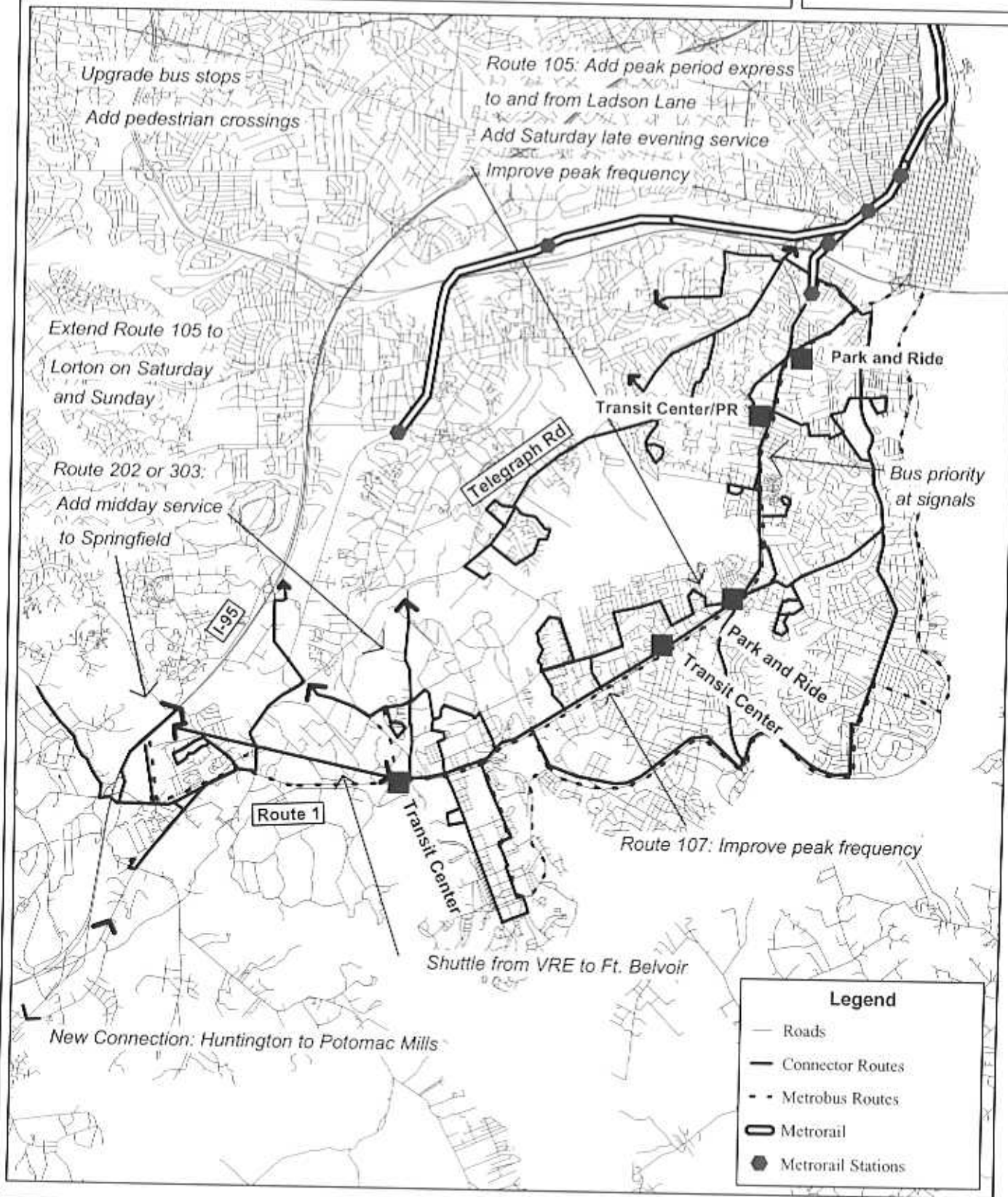
Implementation of the recommended physical facilities - bus stops, benches and shelters, off-street "transit centers", and enhanced pedestrian crossings - is estimated to cost \$7.3 million. Standard pedestrian crossings, sidewalks and paths are proposed as part of the roadway improvement project. The sidewalk areas would provide the paved surface at bus stops.

The cost for additional bus services, over and above those being provided today, is estimated to be \$2.6 million per year, depending in part on which option is selected for serving specific markets.

Some of the recommended service improvements (e.g. Saturday evening operation of Fairfax Connector Route 105) can be operated with vehicles from the existing fleet. Other services that will operate in peak hours may require additional vehicles depending on how the operation meshes with the other scheduled operations. It is estimated that the Fairfax County services would require eight new buses, the Prince William services would require five new buses and the other services would also require five buses.

Several of the bus service enhancements required to respond to current rider demand are recommended for implementation as soon as practicable. These include the expansion of Fairfax Connector Route 105 and the new Triangle-Woodbridge OmniLink route. Other bus service changes will be needed by 2020 to keep pace with growth. The provision of sidewalks, crosswalks, pedestrian signals and bus stop improvements is required now in many locations. They should be implemented as soon as practicable and included as an integral element of the Route 1 highway reconstruction projects.

**Recommended Services and Facilities in the Route 1 Corridor
(Fairfax County)**



Legend

- Roads
- Connector Routes
- - - Metrobus Routes
- ▭ Metrorail
- Metrorail Stations

Recommended Services and Facilities in the Route 1 Corridor

(Prince William County)

