

# TRANSPORTATION



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This section presents the transportation recommendations of the adopted Fairfax County Plan. These recommendations are best interpreted in the context of the analysis and underlying concepts summarized in Section I. The distinction between Plan recommendations and the process by which these recommendations are implemented should be emphasized. This implementation process is also described in this section, which is organized under four separate headings.

The first, Functional Classification, contains an explanation of the functional classification concept and the adopted functional classification for roads in Fairfax County.

The second, Countywide Recommendations, contains a narrative description of the major transit and roadway improvements.

The third, Actions Necessary After Plan Adoption, presents the programming procedures and processes that are used to implement the Plan recommendations, as well as other subsequent activities.

The fourth, the Area Plan Recommendations, includes community planning sector recommendations which were adopted for the four planning areas. This section includes recommendations of a more local nature than those under Countywide Recommendations.

A map showing the adopted countywide transportation plan is also included in this section.

## FUNCTIONAL CLASSIFICATION

A fundamental concept addressed in the transportation plan is the development of a functional classification system. This concept specifies the type of service which any given facility provides. Functional classification is very useful in considering the dual role of the transportation network in providing both travel mobility and access to property. Although access is a fixed requirement which is necessary at both ends of a trip, mobility can be provided at varying levels incorporating a wide range of elements.

Although the utilization of the various functional classes is seldom discrete or absolute (e.g. most local streets carry some nonlocal traffic), a substantial amount of the transportation problems in the County arises directly from the excessive mixing of functions on a particular facility. For example, one of the most frequently raised transportation issues in the County is the excessive use of local and/or collector streets by through traffic. Since these streets are not ordinarily designed for such usage, which usually occurs at peak hours, it is evident that a major cause is congestion and delay on the arterials. Further, this arterial congestion is itself often caused by traffic using the arterials for local access. Another similar problem involving a mixing of function is the excessive use of the Beltway, which was originally designed for interstate and regional travel, by short-distance trips covering only a few arterials. Further, this arterial congestion is itself often caused by traffic using the arterials for local access.

Another similar problem involving a mixing of function is the excessive use of the Beltway, which was originally designed for interstate and regional travel, by short-distance trips covering only a few interchanges. Obviously, a principal reason for this attractiveness of the Beltway is the congested and slow operation of most arterial highways in the circumferential direction. Travel on any high-speed, limited access highway become correspondingly reduced, by the presence of large volumes of entering and exiting traffic at frequent interchanges. Therefore, the additional traf-

fic attracted to the Beltway because of these inadequate arterials serves only to diminish its effectiveness in carrying the through-traffic it was originally designed to serve.

Clearly, then, the development of an effective circulation plan for any area should rely on the delineation of a basic functional classification system for that area. The extent to which this system is violated or compromised may determine the adequacy of circulation in the area.

Toward developing such a system, consideration was given to the magnitude and distribution of projected travel demand, and the types and spatial distribution of activities within the County. Because the effectiveness of any one type of transportation facility is dependent upon the adequacy of other types, it is necessary to determine the purpose and function of facilities and services prior to making recommendations.

For this document, the facilities and services of the total transportation system were classified according to their primary function. Transit service is classified according to primary function. Transit service is classified by line-haul service, and collection and distribution service. Highway facilities are classified by freeways and expressways, other principal arterials, minor arterials, collectors and local streets.

### Transit System Functional Classification

Line-haul transit service provides express or limited-stop high-speed travel over relatively long distances or between points which are relatively far apart. The guideway required for this service can be reserved exclusively for transit vehicles, or be shared with all traffic. The line-haul function can be fulfilled by either bus or rail vehicles. The critical elements determining the efficiency of the service are a concentration of travel demand between activity centers, sufficient access to the service through provision of parking facilities and integration with collection and distribution transit services, and adequate guideway capacity to ensure high speeds.

Collection and distribution transit service offers local travel between two activities or between an activity and a mode for line-haul transit service. Unlike line-haul service, most users walk to and from stops. Transit vehicles almost always share the guideway with other traffic unless the concentration of transit vehicles is quite high and their performance would be extremely adversely affected by shared use, as is the case in the downtown area of Washington, D.C.

Line-haul transit service is currently offered on the following roadways in Fairfax County: Shirley Highway, Arlington Boulevard, the George Washington Parkway, the Dulles Airport Access Road, the Capital Beltway, and I-66. For Shirley Highway, a small portion of Arlington Boulevard, and I-66 inside the Beltway, the guideway is reserved for high-occupancy vehicles. Most of these same buses perform collection/distribution functions at the outer terminus of their line-haul mode. For most bus routes the inner terminus is a Metro-rail station where the rail system is used for the completion of the line-haul transit trip. As the Metro-rail system expands, the role of buses will be increasingly oriented to feeding the rail stations and providing cross-County transit access. At the same time, the line-haul transit function will be substantially assumed by the rail system.

In addition to these transit services, specialized community-oriented transit services may be advantageous. Such systems are usually characterized by more personalized service with deeper neighborhood penetration and a much greater emphasis on local rather than regional trips. To determine the applicability and structure of such

systems requires careful analysis on a case by case basis to assure the most effective use of County resources.

Recommendations for improvement and services, including fringe parking lots, bus priority lanes and express bus thoroughfares, commuter rail service and rapid transit service are included in Section II. Due to the dynamic nature of bus transit service, recommendations for specific bus routes are not included in the Comprehensive Plan. However, the process for developing the route structure is included in the Programming and Priorities section.

### Roadway System Functional Classification

Freeways and expressways are controlled access facilities providing for high-volume travel. The concept of service to abutting land is subordinate to accommodating the through movement of vehicles. It is desirable that medians, shoulders, acceleration and deceleration lanes, and grade separated interchanges be included in the design. Parking and pedestrian travel along or very near the traveled portion of the roadway should not be allowed. A parkway is a special type of this facility classification which does not allow trucks.

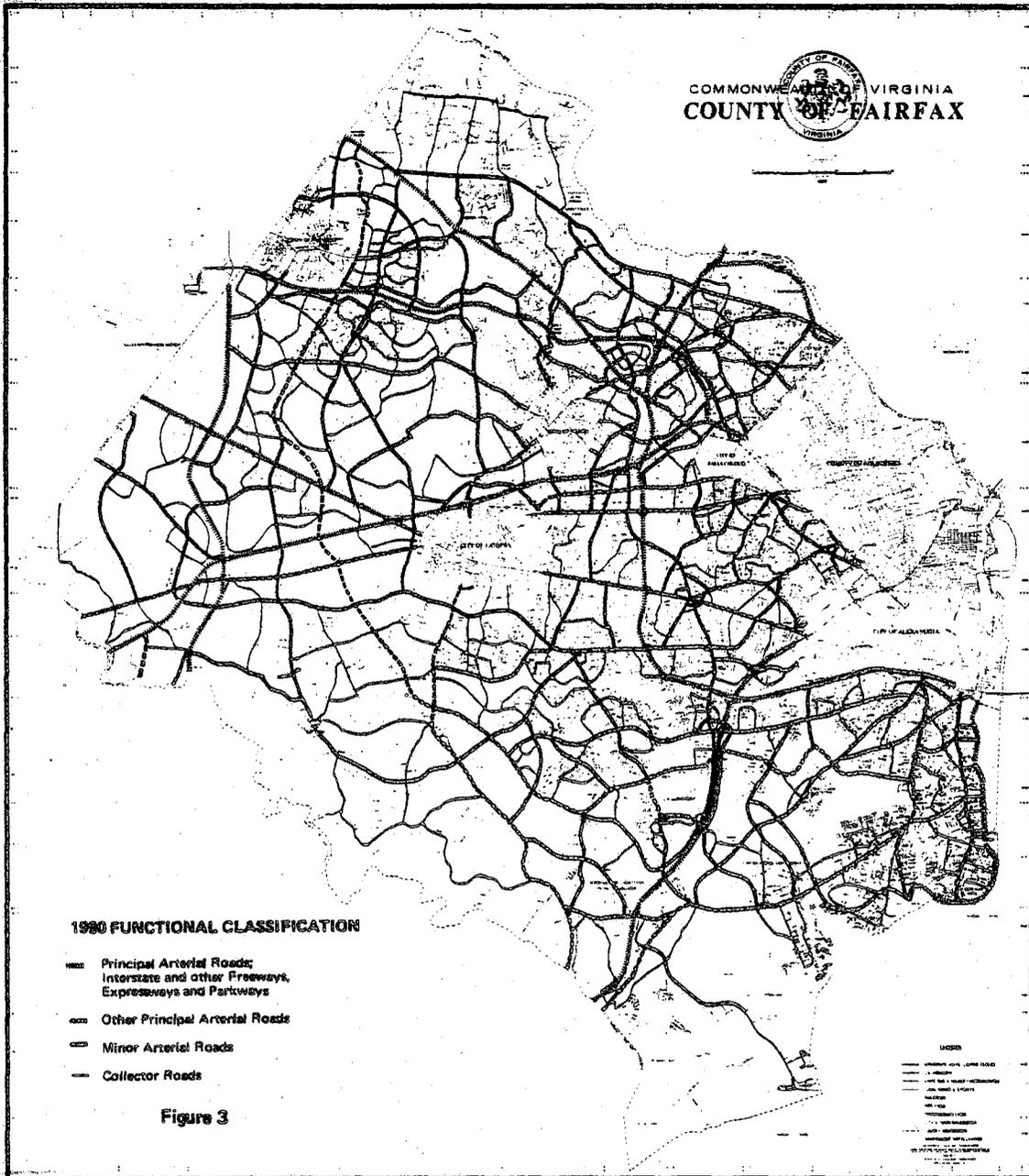
These facilities should provide a minimum of two travel lanes in each direction within a minimum right-of-way of 120 feet. Additional right-of-way is necessary for more than four lanes and for interchanges which provide all access to and from a freeway, and most access to and from an expressway.

Other principal arterials also serve main travel corridors. Some access is provided to abutting land, but the primary function of the roadway, particularly during peak periods, is to carry through traffic. Intersections with expressways and minor arterials should not be at grade. Where many turning movements could occur over a relatively short roadway section, service drives are desirable. Medians, shoulders, and acceleration and deceleration lanes are also desirable. Where shoulders cannot be provided, bus storage bays are desirable. Adequate and safe pedestrian and bicycle travel along and across these facilities should be included in the design. Parking should not be allowed.

These facilities should include four to six travel lanes with a minimum right-of-way of 90 feet and maximum of 160 feet.

Minor arterials usually carry an even mix of local and through traffic. They link collectors, and sometimes local streets, with principal (major) arterials. Minor arterials are lower service level roadways with partial control of access. Medians, shoulders, and turning lanes are desirable. Parking is optional. Sidewalks and/or bicycle trails should be provided on both sides of the road.

It is generally desirable for these facilities to consist of four travel lanes within a right-of-way of 90 to 110 feet. However, due to the diversity of development patterns and roadway conditions throughout the County, it is not recommended that all existing minor arterials be widened to four lanes. It should be emphasized that these facilities are an important element of the transportation network. In many cases, their present function has evolved very naturally over a period of years as development progressed along previously rural roads, which then became the principal (and often only) means of access to these developments. In general, these roadways have always served relatively longer distance travel. Their frequent characterization as local-serving or collector roads has meaning only when they are considered as serving an entirely rural area. For this reason, a realistic assessment of these facilities



should consider their improvement at some future date.

Collector streets provide direct service to and from local areas, routing traffic to the arterial street system. Generally, these roadways are not used for through trips. Collector streets are very important for the collection and distribution functions of transit service. As such, they should be designed in conjunction with the arterial system to permit safe boarding and alighting, and allow buses to safely enter, exit, and turn around if necessary. Medians, access control, and turning lanes are desirable only where traffic volume is expected to exceed about 5,500 vehicles per day. Parking is optional, and can generally be safely accommodated in most sections. Sidewalks and/or trails should be provided on both sides of the road.

These facilities should generally allow for two travel lanes with sufficient pavement width to permit safe bus operations. Where traffic volumes are anticipated to be high due to relatively intense use

of the area served, four travel lanes should be provided within 90 feet of right-of-way.

Local streets provide access to properties abutting the roadway and within the immediate vicinity. Traffic speed and volume should be low. Bus routes along local streets should be discouraged. Sidewalks and parking are desirable. Right-of-way widths should provide conformance with standards for safe operation and proper maintenance.

The above functional classification system for transit and highways has been kept in context in the development of recommendations for serving the trips generated in or traveling through the County. At this stage, it is essential to clearly understand that facilities intended to serve a certain type and magnitude of travel will require improvements consistent with such a function. The plan has been developed with heavy emphasis on separating local and nonlocal facilities by functional classification and maintaining the integrity

of local streets by recommending improvements on higher type facilities.

The functional classification of roadways in Fairfax County is shown on the map and alphabetical listing which accompanies this discussion.

**Table 1  
TABLE OF ARTERIAL ROADS IN FAIRFAX COUNTY  
(1990)**

	From	To	Magisterial <sup>1</sup> District
<b>A. Principal Arterials— Interstate and Other Freeways and Parkways</b>			
1. Capital Beltway (I-495 & I-95)			A D L M M V P
2. Dulles Airport Access Road (DAAR)	Loudoun County	I-66	C D P
3. George Washington Memorial Parkway	I-495	Arlington Co. Line	D
4. George Washington Memorial Parkway	Mt. Vernon	Alexandria City Line	MV
5. I-66	Prince William Co. Line	Arlington Co. Line	C D P S
6. Lee-Jackson Memorial Hwy. (Rt. 50)	Loudoun County Line	I-66	C S
7. Leesburg Pike (Route 7)	Loudoun County Line	I-495	C D P
8. Shirley Highway (Rts. I-95 & I-395)	Prince William Co. Line	Arlington Co. Line	L M M V S
9. Sully Road (Route 28)	Prince William Co. Line	Loudoun Co. Line	C S
<b>B. Other Principal Arterial Roads</b>			
1. Arlington Boulevard (Route 50)	Fairfax City Limits	Arlington Co. Line	M P
2. Chain Bridge Road (Route 123)	Fairfax City	Arlington Co. Line	C D P
3. Columbia Pike (Route 244)	Little River Turnpike	Arlington Co. Line	M
4. Lee Highway (Route 29)	Fairfax City Limits	Falls Church City Line	P
5. Lee Highway (Route 29)	Prince William Co. Line	Fairfax City Limits	S
6. Lee-Jackson Memorial Hwy. (Rt. 50)	I-66	Fairfax City Limits	C S P
7. Leesburg Pike (Route 7)	Falls Church City Line	Alexandria City Line	M
8. Leesburg Pike (Route 7)	I-495	Falls Church City Limit	D P
9. Little River Turnpike (Route 236)	Fairfax City Limits	Alexandria City Line	A M P
10. North/South Connector	Route 50	Route 29	P S
11. Ox Road (Route 123)	Fairfax City	Prince Wm. Co Line	A M V S
12. Richmond Highway (Route 1)	Prince William Co. Line	Alexandria City Line	L M V
13. Route 28 Bypass	Prince William Co. Line	I-66	S
14. Springfield Bypass	South Van Dorn Street Lockheed Boulevard	Route 7	C D L S P
<b>C. Minor Arterial Roads</b>			
1. Alban Road	Rolling Road	Backlick Road	L
2. Anderson Road	Route 123	Magarity Road	P
3. Annandale Road	Route 236	Falls Church City Limit	M P
4. Backlick Road	Route 236	Route 1	A L M M V
5. Baron Cameron Avenue	Herndon Town Limits	Route 7	C D
6. Beacon Hill Road	Route 1	George Washington Pkwy.	MV
7. Beauregard Street	Route 236	Alexandria City Line	M
8. Beulah Road	Route 7	Vienna Town Limits	C D
9. Beulah Street	Franconia Road	Telegraph Road	L
10. Blake Lane	Jermantown Road	Fairfax City Limits	P
11. Braddock Road	Columbia Pike	Stone Road	A M S L
12. Braddock Road	Loudoun County Line	Route 28	S
13. Burke Lake Road	Route 123	Braddock Road	A S
14. Carlyn Springs Road	Seminary Road	Arlington Co. Line	M
15. Cedar Lane	Gallows Road	Route 50	P C
16. Centreville Road/ Walney Road	Herndon Town Limits	Poplar Tree Road	C S D
17. Chain Bridge Road	Anderson Road	Route 123	D P
18. Clifton Road	Route 29	Route 123	S
19. Commerce Street	Old Keene Mill Road	Franconia Road	L
20. Compton Road	Route 28	Clifton Road	S
21. Connection to Rt. 28 near Horsepen Rd.	Centreville Road	Sully Road	C
22. Connection to Rt. 28 south of Rt. 50	Walney Road	Sully Road	S
23. Crowell Road/ Browns Mill Road	Hunter Mill Road	Beulah Road	D C
24. Dranesville Road	Route 7	Herndon Town Limits	D
25. Edsal Road	Backlick Road	Alexandria City Limits	L
26. Flint Hill Road	Vale Road	Route 123	C
27. Fort Hunt Road	Route 1	George Washington Pkwy.	MV
28. Fox Mill Road	Lawyers Road	Waples Mill Road	C
29. Franconia Road	I-95	Telegraph Road	L
30. Furnace Road/Lorton Road	Route 123	Route 1	MV
31. Gallows Road	Annandale Road	Columbia Pike	M
32. Gallows Road	Route 7	Annandale Road	M P
33. Georgetown Pike (Route 193)	Route 7	Route 123	D
34. Glen Carlyn Road	Route 7	Arlington Co. Line	M
35. Gosnell Road	Route 7	Old Courthouse Road	C
36. Graham Road	Annandale Road	Route 29	P M
37. Great Falls Street	Route 123	Falls Church City Line	D
38. Guinea Road	Route 236	Route 123	A S
39. Gunston Hall Road	Route 1	Gunston Hall	MV

Chart continued on next page

**COUNTYWIDE RECOMMENDATIONS**

Recommendations for improvements having countywide implications are presented in this section under separate headings for Countywide Transit Recommendations and Countywide Roadway Recommendations. Countywide Trails Recommendations are also noted.

**Countywide Transit Recommendations**

The countywide analysis indicated that the future provision of a high level of transit service could achieve significant increases in mode splits, although these increases would be most pronounced at the inner portion of the region and would progressively decrease away from the core area. The recommendations below are essential for the provision of the assumed level of transit service, which is significantly higher than that currently projected by COG or WMATA. Failure to implement these recommendations can only result in decreasing the transit ridership estimates obtained in the countywide analysis.

A. Rapid rail transit (Metro-rail). It is recommended that the Metro-rail adopted regional system (ARS), including the relocated Franconia/Springfield Station, be constructed in Fairfax County. In addition, a transit line should be extended in the median of the Dulles Airport Access Road between West Falls Church and Dulles Airport. In the vicinity of the Tysons quadrangle, the line could potentially deviate from the median in order to provide a station in the interior of the quadrangle. Other station locations that should be considered are Wolf Trap Farm Park (for performances only) and Reston.

B. Commuter rail. Efforts to establish commuter rail service on the Southern and RF&P Railroads should be pursued in light of the potential demand such service could accommodate. It should be noted that, as a portion of the transit zone established by the WMATA Compact, all requests for the provision of public transportation in Fairfax County must be coordinated through WMATA.

C. Major line-haul bus. For corridors which are not directly served by Metro-rail, a high level of express and feeder bus service to Metro stations must be provided to achieve the County's high modal split goals. The County should encourage the provision of such service under appropriate administration arrangements including community-managed commuter bus operations where the necessary community support and interest are present. This type of operation is intended to supplement and complement other transit service offered in the region. One of the major elements in securing success for any transit operation rests in making the service an attractive alternative to the automobile in terms of travel time. Accordingly, great attention should be focused on the facilities recommended for exclusive or express bus operations. These facilities can reduce bus travel times significantly, thereby offering two distinct benefits to Fairfax County:

1. attraction of additional transit ridership by reducing the transit travel times in relation to auto travel times, and
2. lowering transit operating costs by reducing the amount of equipment needed to operate a given level of service.

D. Preferential bus/carpool lanes. Additional lanes reserved for buses and carpools are recommended on a number of radial facilities to offer a high level of transit service both to Metro stations and to the central areas of the region. This recommendation is supported by the operational difficulties associated with the use of reverse or contra-flow bus lanes, coupled with the expected high level of automobile demand which will occur even with increased transit availability. More detailed studies of operating characteristics and transit operation plans should be made on a case-by-case basis prior to the implementation of such recommendations.

**Table 1 (Continued)**  
**TABLE OF ARTERIAL ROADS IN FAIRFAX COUNTY**  
**(1990)**

	From	To	Magisterial District	
40.	Haycock Road	Route 7	Westmoreland Street	D
41.	Henderson Road	Clifton Road	Old Yates Ford Road	S
42.	Hooes Road	Route 123	Pohick Road	S MV
43.	Hummer Road	Route 238	Annandale Road	M
44.	Hunter Mill Road	Baron Cameron Avenue	Blake Lane	C D P
45.	Igylwood Road	Cedar Lane	Great Falls Street	D P
46.	International Drive	Route 7	Spring Hill Road	D P
47.	Jermantown Road	Fairfax City Line	Blake Lane	P
48.	John Marr Drive	Ravensworth Road	Columbia Pike	A M
49.	Kirby Road	Great Falls Street	Route 123	D
50.	Lawyers Road/ West Ox Road	Fox Mill Road	Route 50	C P
51.	Lee Chapel Road	Burke Lake Road	Route 123	S
52.	Lewinsville Road	Route 7	Route 123	D
53.	Lincolnia Road	Columbia Pike	Beuregard Street	M
54.	Loisdale Road	Franconia Road	Backlick Road	L
55.	Magarity Road	Route 7	Great Falls Street	D P
56.	McLarren Road/ Lawyers Road	Sully Road	Vienna Town Limits	C
57.	Medford Drive	Route 238	Annandale Road	M A
58.	Mt. Vernon Highway	Route 1	Mount Vernon	MV
59.	Mt. Vernon Memorial Parkway	Route 1	Mount Vernon	MV
60.	North Kings Highway	Telegraph Road	Route 1	L MV
61.	Nutley Street	Vienna town Limits	Route 50	P
62.	Oakton Road	Fox Mill Road	Jermantown Road	P
63.	Old Courthouse Road	Beulah Road	Gallows Road	C P
64.	Old Dominion Drive	Georgetown Pike	Arlington Co. Line	D
65.	Old Keene Mill Road	Pohick Road	I-95	S L
66.	Old Mill Road	Woodlawn Road	Route 1	L MV
67.	Old Yates Ford Road	Prince William Co. Line	Henderson Road	S
68.	Ordway Road	Prince William Co. Line	Compton Road	S
69.	Park Street	Vienna Town Limits	Cedar Lane	P
70.	Patrick Henry Drive	Route 7	Route 50	M
71.	Pleasant Valley Road	Loudoun Co. Line	Route 29	S
72.	Pohick Road	Hooes Road	Route 1	S MV
73.	Poplar Tree Road	Braddock Road	Stringfellow Road	S
74.	Prosperity Avenue	Lee Highway	Route 238	P M
75.	Ravensworth Road	Route 238	Braddock Road	A M
76.	Reston Avenue	Route 7	Fox Mill Road	C
77.	Rolling Road	Braddock Road	Pohick Road	A S L
78.	Seminary Road	Carlyn Springs Road	Alexandria City Limits	M
79.	Sherwood Hall Lane	Route 1	Fort Hunt Road	MV
80.	Shirley Gate Road	Route 50	Braddock Road	A S
81.	Shree Road	Route 29	Route 7	P
82.	Silverbrook Road	Route 123	Lorton Road	S MV
83.	Sleepy Hollow Road	Columbia Pike	Route 7	M
84.	South Kings Highway	Telegraph Road	Route 1	L
85.	South Van Dorn Street/ Lockhead Blvd.	Alexandria City Limits	Route 1	L
86.	Spring Hill Road	Georgetown Pike	Route 7	D
87.	Springvale Road	Georgetown Pike	Route 7	D
88.	Stone Road	Route 29	Braddock Road	S
89.	Stringfellow Road	Route 50	Route 29	S P
90.	Sunrise Valley Drive	Centreville Road	Hunter Mill Road	C D
91.	Sunset Hills Road	Hemdon Town Limits	Hunter Mill Road	C
92.	Swinks Mill Road	Georgetown Pike	Lewinsville Road	D
93.	Sydenstricker Road	Old Keene Mill Road	Hooes Road	S
94.	Telegraph Road	Alexandria City Limits	Route 1	L MV
95.	Towiston Road	Old Dominion Drive	Trap Road	D
96.	Trap Road	Towiston Road	Beulah Road	C D
97.	Vale Road	West Ox Road	Plint Hill Road	C P
98.	Wakefield Chapel Road	Route 238	Braddock Road	A
99.	Walker Road	Georgetown Pike	Route 7	D
100.	Waples Mill Road	Fox Mill Road	Route 123	P S
101.	West Street	Route 29	Falls Church City Limit	P
102.	West Ox Road	Lawyers Road	Route 29	C P S
103.	Westmoreland Street	Chsin Bridge Road	Arlington Co. Line	D
104.	Westpark Drive	Route 7	International Drive	D
105.	Wheie Avenue	Loudoun County Line	Sunrise Valley Drive	C D
106.	Wilson Boulevard	Route 7	Arlington Co. Line	M
107.	Woodlawn Road	I-95	Route 1	L MV

NOTE: Collector Roads are not included in this listing

- A = Annandale
- C = Centreville
- D = Dranesville
- L = Lee
- M = Mason
- MV = Mt. Vernon
- P = Providence
- S = Springfield

With the exception of the Dulles Airport Access Road and Shirley Highway, these facilities should provide additional lanes reserved for the exclusive use of buses and carpools at least during the peak periods. Their operation would be similar to the bus/carpool lanes on Route 50 through Arlington County.

1. Richmond Highway (Route 1) from Sherwood Hall Lane to North Kings Highway. North Kings Highway from Route 1 to the Huntington Metro Station.
2. Springfield Bypass from Burke Lake Road to the Franconia/Springfield Metro Station. Please also refer to description of the Springfield Bypass (Hooes Road-Pohick Road) in the section under Countywide Roadway Recommendations.
3. Braddock Road (Route 620) and Guinea Road (Route 651) from Zion Drive to I-495. Construction of the additional pavement required for bus lanes along Braddock Road is to occur within the defined median of the present roadway.
4. Little River Turnpike (Route 238) from Columbia Pike to I-495. Construction of the additional pavement required for bus lanes is to occur within the median of the present roadway.
5. Arlington Boulevard (Route 50) from Fairfax Circle to Arlington County.
6. Dolley Madison Boulevard (Route 123) from Georgetown Pike to the George Washington Memorial Parkway to continue on the George Washington Parkway to Rosslyn as bus-on-freeway (see below).
7. Dulles Airport Access Road (DAAR) from Route 28 to the West Falls Church Metro Station. It is recommended that buses be allowed to use those lanes of the DAAR normally reserved for airport traffic only, even after the construction of parallel lanes for unrestricted use, recommended elsewhere in this Plan. Access to and from this facility for buses should be provided at Route 28, Centreville Road, relocated Dranesville Road, Reston Avenue, Hunter Mill Road, Trap Road, Route 7, Route 123, and Magarity Road.
8. Shirley Highway (I-95) from the present terminus of the bus and carpool lanes to the Prince William County line. Additional development in both Prince William County and Fairfax County, coupled with increased travel along I-95 as a major north-south road in the eastern United States, will place increased demands upon I-95. Some of the increase in travel in the corridor could be handled by commuter rail service. However, express buses remain the most flexible mode of travel, capable of circulating through many neighborhoods and carrying relatively high volumes on expressways. Commuter rail offers less flexibility and may not be able to handle the passenger volume without interfering substantially with freight movement. An express lane could carry high occupancy vehicles from southern Fairfax County and Prince William County around the anticipated congestion along I-95 and increase the capability of the highway to meet the forecasted travel demand.
9. Shenandoah Freeway (I-66) from Lee Highway (Route 29) in Centreville to the Vienna Metro Station. These bus lanes are to be constructed in the I-66 median.
10. I-66 from I-495 to the Theodore Roosevelt Bridge. This four-lane limited-access facility is to be limited to carpools and buses in the peak direction during peak periods. Please also refer to the description of I-66 under Countywide Roadway Recommendations.
- E. Bus-on-freeway. These recommendations apply to the use of limited access roadways by express buses. Some of the roadways included in this section are not currently limited access in the future. In these cases, additional exclusive bus lanes should be constructed prior to the limitation of access and operated in the interim similarly to the exclusive bus lanes recommended above. At

such time as access limitation is achieved, the facility may operate as an ordinary bus-on-freeway, without the reservation of exclusive lanes for buses.

1. I-495 from Route 236 to Shirley Highway;
2. Route 50 from Stringfellow Road to I-66;
3. Route 7 from Reston Avenue to the Dulles Airport Access Road; and
4. George Washington Memorial Parkway from Dolley Madison Boulevard to Rosslyn.

F. Fringe parking. In a suburban area with dispersed development patterns such as those found in Fairfax County, it is impossible to place bus service within walking distance of all residents due to excessive cost and operational problems. The establishment of fringe parking lots can provide access to transit for those who do not reside within walking distance of transit service. By providing a convenient place to meet, the existence of fringe parking can also encourage commuters to form carpools. By intercepting auto trips from outlying areas, fringe parking lots can help reduce congestion, increase transit ridership, and decrease bus operating cost by lessening the need for buses to provide the collection and distribution portion of the total trip.

G. Joint-use fringe parking. Fringe parking may be provided in several ways. The lowest cost alternative is the joint use of parking facilities where excess space exists during the hours when commuters would utilize them. This alternative may not provide as attractive an orientation to the demand as exclusive-use facilities and may not offer a long term solution to the problem since no assurance can be made of the continuing availability of parking facilities where excess space exists during the hours when commuters would utilize them. This alternative may not provide as attractive an orientation to the demand as exclusive-use facilities and may not offer a long term solution to the problem since no assurance can be made of the continuing availability of joint-use parking. This can be an especially serious problem when the location becomes popular with commuters and their presence begins to interfere with the primary use of the parking area. Because of the dynamic nature of this type of parking lot, the Plan does not include specific locations for joint-use parking; instead they must be evaluated on a case-by-case basis. The following policies shall be used to guide implementation of joint-use fringe parking.

1. Existing parking lots at County-owned facilities shall be made available to commuters to the extent that such use does not interfere with the primary purpose for these parking lots.

2. The County shall work with owners of private parking lots (shopping centers, churches, etc.) to establish cooperative arrangements for fringe parking for commuters.

H. Exclusive-use fringe parking. Exclusive-use fringe parking lots are the means by which the County can realize the most significant benefits of fringe parking facilities. These benefits can only be realized through careful planning of these facilities. These facilities should be fairly large (over 250 spaces) where transit service access is their main function; only by concentrating demand so that bus operating costs are reduced can the capital cost of such parking areas be justified. Smaller facilities can be used for carpool lots or as supplemental facilities along regular bus routes where land can be obtained for little or no cost. However, since small fringe parking lots do not offer the County the opportunity to reduce bus operating costs through more efficient routing, the high cost of acquiring land usually cannot be justified for small fringe lots.

In choosing the exact sites for fringe parking lots, many factors must be considered—access via arterial roads rather than residential streets, impact on surrounding neighborhoods, relationship to and size of the potential service area, relationship to existing bus service, location beyond

congested areas and absence of local congestion, distance to bus priority or limited access facility, visibility to commuters, and cost of real estate. Except for those sites which already exist or are committed, this plan does not attempt to specify the exact parcels on which fringe lots should be located. Instead, the locations recommended should be considered general areas which deserve further study for the precise location of fringe parking lots. Such study should include a detailed analysis of the factors mentioned above. Based on these factors, the following sites are recommended for construction of fringe parking lots:

1. Industrial Road, east of Backlick Road;
2. Route 50 at I-66 (joint-use parking should initially be pursued here);
3. Reston, adjacent to the DAAR at a point convenient for bus access to this facility;
4. Centreville, at the intersection of I-66 and Lee Highway;
5. Vienna, at the site of the Vienna Metro Station in advance of rail construction;
6. Braddock Road, between its intersections with Burke Lake Road and Twinbrook Road;
7. Tysons Corner (joint-use parking should initially be pursued here);
8. Newington, at the intersection of I-95 and Backlick Road (carpool-oriented parking);
9. Lorton, at the intersection of I-95 and Lorton Road (carpool-oriented parking);
10. Herndon, at the intersection of the DAAR and Centreville Road (access to the DAAR will need to be provided); and
11. Wolf Trap Farm Park (access to DAAR needs to be available—joint-use parking should initially be pursued here).

#### Countywide Trails Recommendations

It is recommended that commuter hiking/biking trails be provided along major and minor arterial roadways. Since these roads presently accommodate substantial commuter travel, the provision of hiking/biking trails adjacent to them would offer a natural alternative to the automobile. The most appropriate locations for such facilities are those leading to Metro stations, fringe parking lots, commercial areas and other major trip generators. The countywide trails plan includes both commuter and recreational trails. These recommendations are included under the section entitled Adequate Public Facilities.

#### Countywide Roadway Recommendations

As discussed in Sections I and III of this Plan, the travel analysis conducted at the countywide level indicated that automobile usage will increase in Fairfax County despite the provision of a high level of transit service. From these findings, together with the analysis of existing conditions, a recommended countywide roadway network has been developed. This network includes both radial and circumferential improvements, most of which lie in presently undeveloped areas. The radial network is expected by 1990 to operate at capacity at the outer screen line, and above capacity at the Beltway.

The major recommended improvements to the roadway system in Fairfax County are listed in this section. Features like turning lanes and median cuts are not discussed here. They are design considerations rather than planning ones, and as such are most appropriately addressed at the preliminary engineering stage of project development. Additional information concerning the preparation of plans for specific projects is included later in this section under the heading Actions Necessary After Plan Adoption.

#### General

Insofar as possible, the County should discourage development wherein residences front on arterial or collector streets and, in commercial/industrial areas, should encourage development

whereby each curb cut on such streets could serve several establishments.

Arterial streets should be designed so as to minimize the impact on adjacent, residential property to include buffering where possible. The design and type of buffering should be considered at the time of the development of the adjacent property and/or the construction of the roadway.

It is recommended that traffic signals in the County be synchronized or coordinated to the extent possible as a means of promoting smoother traffic flow. Such a system is most important along the major radial highways which are likely to receive increasing traffic volumes as the land uses recommended in the Plan materialize.

#### Buffering Roads and Highways

The present minimum standards for screening (e.g., 12 foot-wide planting strips with evergreen trees 12 feet on center) leave much to be desired. Construction of a fence, the provision of planting, and the establishment of transitional setbacks as prescribed in various ordinances are all minimum legal standards designed in advance to deal with the typical problems of incompatible and adjacent land uses and are called into plan during the development approval process. But when one knows the specifics of the situation, it is possible and desirable to apply more than the minimum solution. Who and what interferes with what and whom, to what extent, when and how, are significant questions. The key to buffering between incompatible activities is to consider each as a unique domain and to preserve the integrity of each at all times. To do this requires an emphasis on the acoustical privacy of each.

For the past 20 years, the average community noise level has risen one decibel annually. And for each 10-decibel increase in sound level, the apparent loudness approximately doubles. The following are typical noise levels:

- inside an average residence 45 decibels
- residential traffic 63 decibels
- nonlocal auto traffic 88 decibels

Although mounds of earth, walls, fences, plants, and distance can serve individually or in combination to buffer sound, dense barriers formed by planting several rows of trees closely together are probably most realizable and most effective. The following suggestions are to act as rule-of-thumb guides for particular situations:

- Plantings up to 50 feet wide are recommended for effective screening of noise along high-speed highways.
- Green belts 20 or more feet wide, placed 20 to 50 feet from the center of the nearest traffic lane, are effective in suburban settings.
- A 5-decibel to 10-decibel reduction, quite attainable with belts of trees and shrubs, will bring a 70-75 decibel level (generally satisfactory for daytime outdoor environments).
- In one study, a dense 20-foot-wide, 18-foot-high screen of cotoneaster shrubs and Austrian pine surrounding a residence, 80 feet behind the screen, reduced noise 15 decibels (a third as loud).
- In relatively quiet residential areas, even narrower screens can improve conditions. A cypress hedge only two feet thick reportedly reduced sound by 4 decibels.

It should be recognized, however, that:

- Barriers of vegetation will not completely eliminate sound, no matter how tall, dense, or wide.
- Deciduous trees lose their effectiveness when leaves fall.
- When small plants are used as buffer plantings, several years of growth are required to effectively control noise. Immediate results cannot be expected.

Appropriately scaled plant buffers can significantly reduce noise and visual pollution and preserve the integrity of the domain on each side of the buffer. Such buffers should first be negotiated

at the time of rezoning and later during subdivision and site plan review to augment the minimal buffer requirements of the existing ordinances. Site plan identified buffering, to be effectively enforced, must be in place prior to occupancy.

It should be emphasized that the projects described in the following paragraphs represent only a selection of those major improvements having countywide or significant importance, where additional descriptive material may be beneficial. Many other transportation improvements are shown on the adopted Plan map, and the absence of text regarding such improvements does not suggest that these improvements are excluded from the Plan.

- **Leeburg Pike (Route 7).** Widen to six lanes and limit access between Loudoun County and I-495. Since limitation of access will probably not occur prior to widening, use additional lanes for exclusive bus lanes until access control is achieved. This improvement will be needed to accommodate traffic generated in Loudoun County and the northern sectors of Reston and Herndon, where growth is estimated to be substantial. Provision of increased capacity on Route 7 is essential from the standpoint of reducing the use of Georgetown Pike and other roads north of Route 7 as short cuts and bypasses of congested areas. This is a serious problem at present and can only be solved by implementing improvements to Route 7 which are adequate to accommodate travel demand. (Area II, III)
- **Dulles Airport Access Road (DAAR).** Construct two parallel lanes in each direction for use of general traffic from Route 28 to I-495. Use lanes otherwise restricted to airport traffic for an exclusive bus facility, as noted above. In the short term, open the existing DAAR to traffic between Route 7 and I-495 to provide a bypass of Tysons Corner or construct this section of the parallel lanes as a first stage.

This recommendation is essential if the development planned for the Reston-Herndon area is to be provided adequate access. Since the DAAR bisects Reston, this facility would provide the most logical means of serving the area. In addition, it will further retard development of the Dulles and Reston-Herndon areas as employment centers because of continued poor access to the center and other parts of the region. (Area II, III)

In regard to a possible interchange at Spring Hill Road:

- It is a goal of the Comprehensive Plan to provide for the preservation of the Odricks Corner community to the north of the DAAR right-of-way.
- If a partial interchange is planned for Spring Hill Road at the DAAR, it should be limited to ramps on the south side of the DAAR connecting to Spring Hill Road providing for south-bound only ingress and egress to and from Spring Hill Road. Traffic movement to the north from these ramps would be precluded.
- Any future plans or further construction of access at Spring Hill Road and DAAR shall provide for access to and from the south and shall specifically preclude access to and from the north. Any and all further plans or construction of highways in this area shall be contained entirely within the existing DAAR right-of-way or shall be constructed on the south side of the DAAR. Under no circumstances shall additional land from the current boundaries of the Odricks Corner area be taken north of the existing DAAR right-of-way.
- Spring Hill Road shall continue as a state maintained north-south road under the DAAR and shall remain only two lanes essentially in its existing roadbed between the DAAR and Lawinsville Road.

-The clearly stated goal of this portion of the Plan shall be to provide an efficient transportation access south of the DAAR right-of-way while preserving the historic and residential areas to the north of the DAAR.

-Nothing in the language above shall be construed to preclude an urgent effort to find a more satisfactory solution to this transportation problem. This solution is only to be considered the best offered to date, but all interested parties and agencies of federal, state and County governments are urged to energetically continue study toward a better solution to this transportation problem.

- **Sully Road (Route 28).** Widen to four lanes and limit access from Prince William County to Loudoun County. The dependence of economic development in the Dulles area on regional accessibility has been repeatedly emphasized throughout the development of the Plan. If industrial and employment centers are to be attracted to this area, its access to regional markets must be improved. In particular, cross-County access to major shipping routes in the I-95 corridor to the south, and improved access to similar routes to the north, must be provided. The improvement of Route 28 will serve this purpose, as well as provide a north-south facility connecting likely development in Prince William, western Fairfax, and Loudoun Counties. (Area III)
- **Relocated Dranesville Road (Springfield Bypass and extension in the vicinity of the Dranesville and Centreville Districts).** Construct a new four-lane facility between Route 7 and Route 50. The alignment intersects Route 7 at a point west of the Dranesville Tavern Historic District and proceeds south basically along the western edge of the Upper Potomac Water Treatment facility. South of Rosier's Branch, it is located east of and parallel to Stuart Road in the vicinity of the Stuart Ridge Subdivision. To the south of Stuart Ridge, the alignment rejoins Stuart Road and proceeds to Baron Cameron Avenue. The alignment then south along the Colonial Pipeline easement to a point in the vicinity of Thompson Road, where it curves to the east to intersect Route 50 at approximately Acorn Ridge Road.
- **Reston Avenue.** Widen to four lanes between the DAAR and Fox Mill Road. Extend south to West Ox Road as a four-lane facility on the Lawyers Road alignment, realigning the Fox Mill Road/Lawyers Road intersection. Extend south to West Ox Road as a four-lane facility along the present Lawyers Road. Extend Reston Avenue north of the DAAR as a four-lane facility on new location to Baron Cameron Avenue, thence to Route 7 as a four-lane roadway on existing alignment. (Area II, III)
- **Lawyers Road (east of Reston).** Reconstruct to an improved two-lane roadway between Twin Branches Road and the Town of Vienna. With the planned growth of Reston exceeding 75,000 people by 1985, it is inconceivable that its only direct access to the east aside from the DAAR could continue to be a two-lane unpaved road. Improvement of Lawyers Road is strongly recommended to accommodate trips between Reston and Vienna. Failure to provide this connection will result in increases in average trip lengths (and corresponding increases in gasoline consumption and air pollution) for travel between these two centers. In addition, trips of such relatively short distance should be discouraged from using freeways such as the DAAR, since these are designed to accommodate longer subregional travel, and become progressively congested by the imposition of additional entering and exiting traffic volumes. (Area II, III)
- **Lawyers Road (west of Reston).** Extend on new location as a four-lane facility between Fox Mill Road and Route 28. The purpose of this recom-

mendation is to provide an east-west arterial in the south Reston area, linking it with major circumferential routes and particularly the industrial development near Dulles Airport. Without this facility, these trips will be forced on to Fox Mill, West Ox, and Centreville Roads. (Area III)

- **Hunter Mill Road.** Reconstructed to an improved two-lane roadway between Baron Cameron Avenue and Chain Bridge Road, realigning that segment between Sunrise Valley Drive and Tamarack Drive. Extend south of Chain Bridge Road to Blake Lane. Hunter Mill Road currently provides the only continuous north-south facility in the northern part of Fairfax County west of the Beltway. Even with a future extension of Reston Avenue to connections with Route 7 and Route 50 further west, the location of Hunter Mill Road between Reston (1985 population over 75,000) and Vienna (1985 population 19,000) will naturally lead to increases in traffic originating at the edge of both areas. This will be particularly acute if an interchange is provided with the proposed DAAR parallel lanes, as additional traffic will be attracted to the roadway. Provision of this interchange is essential to allow traffic to bypass Vienna and would reduce the burden otherwise placed upon Lawyers Road. (Area II, III)
- **Route 50.** Widen to six lanes between Loudoun County and the City of Fairfax, limiting access on the entire section. Implement exclusive bus lane between Stringfellow Road and I-86, as noted above. (Area II, III)
- **I-66 (west of Route 50).** Widen to six lanes between Prince William County and Route 50. Construct bus lanes in the median between Route 29 and the Vienna Metro Station, as noted above. This facility is needed to serve both Prince William County growth and large-scale development planned in the Centreville and Fairfax Center areas. (Area II and III)
- **Braddock Road.** Widen to four lanes between Ravensworth Road and Becklick Road. Implementation of this project, long programmed by VDH&T, will connect two existing four-lane sections of Braddock Road and remove two bottlenecks which currently exist at each end. The necessary right-of-way for this project is currently owned by VDH&T. This is one of the few roadway improvements being recommended inside the Beltway. (Area I)
- **Braddock Road.** Widen to four lanes between Guinea Road and Union Mill Road. Extend as a four-lane facility to the west across I-66 and connecting with Lee Highway at Stone Road. The present two-lane section of Braddock Road is inadequate to accommodate projected development south and west of the City of Fairfax. Failure to implement this recommendation will reduce the circulation needed at Centreville to serve that development center, overload the existing two-lane facility, and induce additional traffic volumes on Lee Highway. (Area III)
- **Braddock Road.** Widen to six lanes between Burke Lake Road and I-495 (Capital Beltway). This section of Braddock Road is extremely congested during week day peak periods and provision of additional lanes will greatly improve traffic flow on this location.
- **Stone Road/Poplar Tree Road.** Widen to four lanes divided from Lee Highway to Stringfellow Road, realigning Poplar Tree Road only to connect with Stone Road at Braddock Road, with all other improvements to these facilities to be along their existing alignment. This recommendation is designed to improve access to the development center at Centreville by relieving the major facilities (I-66 and Route 28) of local travel, which they are not intended to carry. (Area III)
- **Stringfellow Road.** Widen to four lanes from Route 50 to Lee Highway, realigning the intersection with Lee Highway to connect with Cliff-

ton Road. This recommendation is designed to provide a north-south connection in this corridor which bypasses the development center at Centreville. (Area III)

- **Shirley Gate Road.** Widen to four lanes from Route 50 to Braddock Road, realigning the southern portion to the east. With a development center planned for the area west of the City of Fairfax, improved access to and from the south should be provided. Failure to construct this project will result in the overloading of existing Shirley Gate Road, and force other trips to be made through the City of Fairfax. (Area II, III)
- **Jermantown Road.** Widen to four lanes between Blake Lane and Lee Highway. This improvement is designed both to provide a northern bypass of the City of Fairfax and improve access to the development center west of the city. (Area II)
- **Blake Lane.** Widen to four lanes between Jermantown Road and Lee Highway. Extend on new location south of Lee Highway as a four-lane facility to connect with Pickett Road east of Fairfax Circle. Pending completion of a study addressing all pertinent impacts, pro and con, envisioned from extension of Pickett Road across Routes 50 and 29 to connect with Blake Lane, to include analysis of the impact of added traffic on Blake Lane, the Pickett Road extension should not be completed. The Blake/Pickett connection should not be completed and Fairfax County should oppose the widening of Blake Lane unless the four-lane Pickett Road within the City of Fairfax is moved westward or noise attenuation devices are installed in order to reduce the impact on adjoining subdivisions and through trucks are prohibited along the Blake Lane/Jermantown Road corridor from Lee Highway to Chain Bridge Road and along the Pickett Road connection from Route 50 to Route 29. (Area II)
- **Nutley Street (Route 243).** Widen to six lanes between the Vienna town line and Route 29, and realign to intersect Route 29 directly opposite the section of Nutley Street south of Route 29. Complete necessary ramps to provide for all movements of the interchange with I-66.  
The advent of Metro and a development center in the area west of Nutley Street will attract a substantial amount of traffic. Access to this area from I-66 to the west is needed in order to avoid further loading of Route 123, which provides the only access in this direction at present. To minimize congestion in this area, Nutley Street should be widened to accommodate traffic oriented to Metro and to the development center, as well as through the area. The extension of Nutley Street to Route 50 will provide more direct access to the area from the south, as well as access to development between Lee Highway and Route 50. It would also reduce the impact on Fairfax Circle, which even under existing peak-hour loads operates inefficiently. (Area II)
- **Lee Highway (Route 29).** Widen to four lanes between the City of Fairfax and the City of Falls Church. This project will increase the capacity and improve safety on this section of Lee Highway and provide a continuous section throughout the length of the road from Fairfax Circle to Rosslyn. Widen Lee Highway to six lanes between I-66 and the City of Fairfax.
- **Lewinsville Road.** Widen Lewinsville Road to four lanes between Windy Hill Road and Dolley Madison Boulevard, and construct a grade-separated interchange at Dolley Madison Boulevard, if same is necessary to accommodate a possible employment center along Lewinsville Road. (Area II)
- **Georgetown Pike (Route 193).** Provide safety-related improvements without changing the basic two-lane section of this roadway. Examples of such improvements include vertical

and horizontal realignment to increase sight distance, additional turning lanes near Langley High School, improved signing and shoulders, and installation of guard rails at appropriate locations. (Area II)

- **McLean Circulation System.** The following actions are recommended as a means of improving both the flow of through-traffic and internal circulation within the McLean CBD:
    - Chain Bridge Road. Widen to 5 lanes between Westmoreland Street and Route 123 with the center lane to be used as turning lanes, and a planted median. Realign to intersect with Dolley Madison Boulevard opposite Churchill Road on the alignment of present Old Chain Bridge Road.
    - Old Dominion Drive. Widen to 5 lanes between Holmes Place and Route 123 with the center lane used as turning lanes and a planted median.
    - Ingleside Avenue. Improve to four-lanes between Chain Bridge Road and Poplar Place. Realign at Chain Bridge Road to a point directly across from Tennyson Drive.
    - Poplar Drive. Improve to four lanes between Ingleside Avenue and Elm Street. Extend to meet with Beverly Road.
    - Fleetwood Road. Extend to Elm Street as two 12-foot lanes.
    - Construct a new road of two 12-foot lanes connecting Poplar Place and Chain Bridge Road between Langley Shopping Center and Curran Street.
    - Prohibit median crossovers at the intersections of Ingleside Avenue/Old Dominion Drive, Ingleside Avenue/Dolley Madison Boulevard, and Dolley Madison Boulevard/Chain Bridge Road. Provide a median break at Dolley Madison/Elm Street.
    - Elm Street should be made one-way west-bound between Chain Bridge Road and Poplar Place.
    - Access should be provided to the McLean Square Shopping Center directly from Whittier Avenue.
- The recommendations for improvements in the McLean CBD represent the findings of extensive citizen study with staff support and are the best evaluation of the CBD at this time. However, these recommendations were developed in the absence of detailed land use and travel data which are necessary in order to develop a workable circulation plan. Given the existing magnitude of travel both to and through the area, and its projected increase, the measures suggested may not constitute an adequate solution to the provision for through traffic, internal circulation, and local access in the CBD. They do represent an initial framework which assuredly would improve the existing situation. Further study using more refined land use and travel data may yield additional or modified recommendations. Until such a circulation plan is developed, these recommendations should be considered an interim scheme for CBD circulation. (Area II)
- **Springfield CBD Circulation Plan.** Extend Amherst Avenue as a four-lane roadway from Cumberland Avenue to just north of Calamo Street, realigning Backlick Road near Calamo Street into Amherst Avenue as a through facility. Construct a bridge to carry Amherst Avenue across Old Keene Mill Road. Extend Bland Street and Springfield Boulevard across Backlick Road and Amherst Avenue as two-lane roadways with a turning lane. Continue to extend Bland Street from Backlick Road to Old Keene Mill Road. Once Amherst Avenue, Springfield Boulevard and Bland Street are extended, extend the median on Old Keene Mill Road from I-95 across Backlick Road. Improve Commerce Street to four lanes, and extend as a four-lane collector into and along Cumberland Avenue between Franconia Road and Old Keene Mill Road. Construct a two-lane roadway between Augusta Drive and Brandon Avenue. (Area IV)
  - **Gallows Road.** Widen to four lanes between Route 7 and Idylwood Road, with a realignment at Route 7 to connect with International Drive, as adopted in the Tysons Corner circulation plan. This recommendation is designed to improve the capacity of the currently heavily traveled road which links the intensive development at Tysons Corner with the planned Metro station at Dunn Loring, and continues through other industrial and commercial areas. Failure to implement this recommendation will impede circulation at Tysons Corner and access to the Metro station. (Area II)
  - **Route 50/I-495 Area.** The following recommendations are incorporated in the Route 50/I-495 Area recommendations.
    - Route 50. Widen to six lanes divided between Prosperity Avenue and Jaguar Trail. Provide additional lanes for buses (study required).
    - Lee Highway (Route 29). Widen to four lanes divided.
    - Gallows Road. Widen to six lanes divided from Route 50 to I-495, and to four lanes north of Lee Highway. The Gallows Road bridge over I-495 should be widened to four lanes.
    - Prosperity Avenue. Widen to four lanes divided between Route 50 and Hilltop Road, and ex-

tween Franconia Road and Old Keene Mill Road. Construct a two-lane roadway between Augusta Drive and Brandon Avenue. (Area IV)

- Prohibit median crossovers at the intersections of Ingleside Avenue/Old Dominion Drive, Ingleside Avenue/Dolley Madison Boulevard, and Dolley Madison Boulevard/Chain Bridge Road. Provide a median break at Dolley Madison/Elm Street.
- Elm Street should be made one-way west-bound between Chain Bridge Road and Poplar Place.
- Access should be provided to the McLean Square Shopping Center directly from Whittier Avenue.

The recommendations for improvements in the McLean CBD represent the findings of extensive citizen study with staff support and are the best evaluation of the CBD at this time. However, these recommendations were developed in the absence of detailed land use and travel data which are necessary in order to develop a workable circulation plan. Given the existing magnitude of travel both to and through the area, and its projected increase, the measures suggested may not constitute an adequate solution to the provision for through traffic, internal circulation, and local access in the CBD. They do represent an initial framework which assuredly would improve the existing situation. Further study using more refined land use and travel data may yield additional or modified recommendations. Until such a circulation plan is developed, these recommendations should be considered an interim scheme for CBD circulation. (Area II)

- **Springfield CBD Circulation Plan.** Extend Amherst Avenue as a four-lane roadway from Cumberland Avenue to just north of Calamo Street, realigning Backlick Road near Calamo Street into Amherst Avenue as a through facility. Construct a bridge to carry Amherst Avenue across Old Keene Mill Road. Extend Bland Street and Springfield Boulevard across Backlick Road and Amherst Avenue as two-lane roadways with a turning lane. Continue to extend Bland Street from Backlick Road to Old Keene Mill Road. Once Amherst Avenue, Springfield Boulevard and Bland Street are extended, extend the median on Old Keene Mill Road from I-95 across Backlick Road. Improve Commerce Street to four lanes, and extend as a four-lane collector into and along Cumberland Avenue between Franconia Road and Old Keene Mill Road. Construct a two-lane roadway between Augusta Drive and Brandon Avenue. (Area IV)
- **Gallows Road.** Widen to four lanes between Route 7 and Idylwood Road, with a realignment at Route 7 to connect with International Drive, as adopted in the Tysons Corner circulation plan. This recommendation is designed to improve the capacity of the currently heavily traveled road which links the intensive development at Tysons Corner with the planned Metro station at Dunn Loring, and continues through other industrial and commercial areas. Failure to implement this recommendation will impede circulation at Tysons Corner and access to the Metro station. (Area II)
- **Route 50/I-495 Area.** The following recommendations are incorporated in the Route 50/I-495 Area recommendations.
  - Route 50. Widen to six lanes divided between Prosperity Avenue and Jaguar Trail. Provide additional lanes for buses (study required).
  - Lee Highway (Route 29). Widen to four lanes divided.
  - Gallows Road. Widen to six lanes divided from Route 50 to I-495, and to four lanes north of Lee Highway. The Gallows Road bridge over I-495 should be widened to four lanes.
  - Prosperity Avenue. Widen to four lanes divided between Route 50 and Hilltop Road, and ex-

tend as four lanes divided on new location north of Hilltop Road into the Dunn Loring Metro Station.

-The Route 50/Gallows Road intersection should be reconstructed as a grade-separated interchange.

-The Lee Highway/Gallows Road intersection should be reconstructed as a grade-separated interchange.

Other recommendations for providing access to individual tracts in the Route 50/I-495 Study Area are shown on the countywide transportation plan map and discussed in the appropriate planning area of the Plan. (Area I, II)

- **Little River Turnpike (Route 238).** Widen to six lanes between I-495 and Shirley Highway (I-395). This recommendation will increase capacity and help improve circulation in the Annandale area. In the absence of adequate funds to complete this entire recommendation, all new development should be coordinated to provide for both the widening and the required service drives. Priorities should be given in the near future to measures which are suitable or feasible for implementation and provide immediate and measurable improvements to Route 238 operations.
  - Provide computerized traffic signals geared to the changes in traffic loads and flow rates.
  - Improve design construction of the problem intersections along Route 238, namely Hummer Road, the Annandale CBD, Braddock Road and Beauregard Street. These improvements should be designed to provide additional right turn triangles with yield signs, additional left turn stacking lanes, and service roads for new developments as they occur. (Area I)
- **Guinea Road.** Widen to four lanes from Braddock Road to Zion Drive, and extend as a 4-lane facility on new location to Ox Road (Route 123) north of the Southern Railroad. This improvement will provide needed arterial access to the east and west for the area between Burke and the City of Fairfax. Failure to implement this project will lead to increased traffic volumes on existing Guinea Road and Zion Drive. Construct bus lanes between Zion Drive and Braddock Road. (Area III)
- **Burke Lake Road.** Widen to four lanes between Braddock Road and the Springfield Bypass, realigning that section between the Lake Braddock Secondary School, just north of Lake Braddock Drive, and Burke Village Drive. This realignment would facilitate the proposed bridge crossing of the Southern Railroad, and together with the relocation of Burke Road to intersect Burke Lake Road north of the Southern Railroad, the two existing at-grade crossings could be combined so that only one bridge crossing would be necessary in this area. Development in the Burke area will create the need to improve many two-lane rural roads. Burke Lake Road will provide needed access to this area from the east in combination with the Springfield bypass. Failure to construct this project will result in the overloading of the existing facility, with corresponding reductions in its operating efficiency and safety. (Area III)
- **Springfield Bypass (Hooes Road/Pohick Road).** Construct a four-lane east-west facility on the general alignment of Hooes Road and Pohick Road with certain realignment between Ox Road and Backlick Road. The realignment between Gambrill Road and Huntsman Boulevard should allow a buffer of at least 100 feet between the property line of parcel 89-3 ((1) 59 and the road. Realign the section between Backlick Road and Ben Franklin Road to minimize the distance and skew of the I-95 crossing to the extent possible. Extend to the east, crossing I-95 south of Frontier Drive past the relocated Franconia Metro station to a connection with Beulah Street. The priorities for construction of the route should be as follows:
  - Rolling Road to Backlick Road;
  - Spur to I-95;
  - Backlick Road to Beulah Street.

-Rolling Road to Backlick Road;

-Spur to I-95;

-Backlick Road to Beulah Street.

This facility is needed to provide access to the rapidly developing Pohick area, to relieve Keene Mill Road and central Springfield of through-traffic destined to the Pohick, and to provide access to the Franconia/Springfield Metro Station. It is widely acknowledged that roads in this general area of the County are inadequate to accommodate the burdens recent development has placed on them. This facility is one of several which will be needed to adequately serve the area. Failure to implement it will result in increased congestion on Old Keene Mill Road and in central Springfield. In addition, this will greatly diminish the service area of the Franconia/Springfield Metro Station, thereby reducing transit ridership below anticipated amounts. (Area III, IV)

- **Springfield Bypass.** In the areas between Route 50 and Route 123, and Rolling Road and Route 1, the Springfield Bypass should be designed so as to accomplish the following objectives to the maximum extent possible:
  - grade-separated interchanges should be provided only at those locations where detailed traffic analyses indicate that at-grade intersections will not adequately provide traffic service;
  - a parkway-type facility should be designed;
  - the roadway should be designed so as to minimize potential impacts on the Occoquan watershed, specifically including measures to minimize potential land use changes resulting from construction of the road;
  - access should be provided from the Bypass to the proposed I-95 HOV lanes; and
  - potential adverse impacts on the Cannon Ridge/Buckner Forest/Brentwood Farms/Brentwood communities should be minimized. Several of these communities have been built since the environmental impact statement (EIS) was begun and therefore were not considered therein.

-In addition to the route which has been studied by TAMS, every effort should be made to consider an alignment to the east of the Buckner Forest/Brentwood Farms subdivisions, which is within the same corridor. This effort, as an initial step in final design, should include at a minimum a study to determine more exactly the engineering and administrative feasibility of an eastern alignment such as one utilizing Piney Branch Stream Valley Park as well as restudying the alignment previously considered by TAMS.

Nothing herein shall preclude consideration of other alignments, including one in the vicinity of the AT&T easement.

-The alignment selected by the Virginia Highway and Transportation Commission follows Rolling Road for a short distance south of Hooes Road; as such, it lies adjacent to several new housing developments. Every effort should be made to minimize impacts in this area, including the possibility of shifting the alignment as far to the east as possible onto Fort Belvoir property.

An initial step in final design should include at a minimum a study to determine more exactly the engineering and administrative feasibility of an alignment east of Rolling Road on Fort Belvoir property.

-The alignments evaluated in the draft EIS result in little or no impact on parkland. This is a desirable objective which the County supports; however, several instances exist wherein extreme measures were taken to avoid parkland and these measures result in disproportionate impacts on other adjacent properties. In many of these instances, the roadway is shown on the Plan and the parkland was obtained and/or designated in

full recognition of this Plan. In such cases, modest road realignments, which reduce the impacts on the adjacent properties by making modest use of parkland, should be considered. Examples of such instances include Popes Head Park, South Run Park, and Hooes Road Park.

-Potential adverse impact on the Greenbriar community should be minimized and every effort should be made to align the road as far to the east of the Greenbriar community as possible (preferably as much as 500 feet if possible), taking into consideration the impact such a change would have on the communities to the east.

-Potential adverse impacts on the Springfield Forest community should be minimized in the final design process. Measures such as the elimination of access between the community and the bypass and the provision of visual and noise buffers should be considered when more detailed engineering studies are initiated.

- **Old Keene Mill Road.** Widen to four lanes between Lee Chapel Road and Pohick Road. This improvement is needed to provide adequate capacity to this arterial which serves a number of subdivisions in the area. (Area III)

- **Rolling Road and Pohick Road.** Widen to four lanes from Old Keene Mill Road to Richmond Highway, with realignment near Springfield Village Drive, and minor realignments to Pohick Road between I-95 and Route 1. This facility is needed to provide north-south access through this rapidly developing area. (Area II)

- **Ox Road (Route 123).** Widen to four lanes from Marlborough Road to Prince William County. This road is the principal means of providing access between eastern Prince William County, the Pohick area, and central Fairfax. The existing two-lane facility will be inadequate to accommodate growth in these areas. (Area II, III)

- **Relocated West Ox Road—Springfield Bypass.** Construct a four-lane roadway on new location from the Route 50/relocated West Ox Road intersection to the Route 123/Springfield Bypass intersection. This connection will provide a needed link for circumferential travel in this corridor. Without it, movement between the western development areas at Centreville, Chantilly and Reston, and those in the south in the Pohick and at Springfield must pass through the City of Fairfax or the Braddock Road/Route 123 intersection. This connection will also improve the regional accessibility of the Reston, Herndon, and Fairfax Center areas, thereby improving their competitive ability to attract employment. (Area III)

- **Lee Chapel Road.** Widen to four lanes between Burke Lake Road and Ox Road. (Area III)

- **Shirley Highway (I-95).** Extension of the preferential bus/carpool lanes (HOV or high occupancy vehicle lanes) from the present terminus, Route 644-Springfield, to the Prince William County line.

Additional development in both Prince William County and Fairfax County, coupled with increases in travel along I-95 as a major north-south road in the eastern United States, will place increased demands upon I-95. Some of the increase in travel in the corridor could be handled by commuter rail service. However, express buses remain the most flexible mode of travel, capable of circulating through many neighborhoods and carrying relatively high volumes on expressways. Commuter rail offers less flexibility and may not be able to handle the passenger volume without interfering substantially with freight movement. An express lane could carry high occupancy vehicles from southern Fairfax County and Prince William County around the anticipated congestion along I-95 and increase the capability of the highway to meet the forecasted travel demand. (Area IV)

- **South Van Dorn Street.** Widen to six lanes north of Franconia Road. Extend South Van Dorn Street as a four-lane roadway south to provide a direct connection into Lockheed Boulevard extended. Construct partial interchange at Franconia Road, and improve interchange with I-95. At the present time, the large area encircled by Beulah Street, Franconia Road, and Telegraph Road can be crossed using Hayfield Road and Rose Hill Drive, neither of which is capable of handling much traffic. The improvement and extension of South Van Dorn Street is intended to serve the following functions:

-Provide access to the Van Dorn Street Metro Station.

-Create a major north-south artery to handle traffic originating from the Lehigh tract destined for I-95, western Alexandria, and the core, reducing demand placed upon Telegraph Road, Beulah Street, and Franconia Road. None of these roads can be easily widened to allow sufficient capacity if this facility is not provided.

-Together with Lockheed Boulevard extended and the Springfield Bypass, create a nearly direct east-west route from the central part of Mount Vernon to the Lehigh tract and to Springfield without using Franconia Road, North Kings Highway, Rose Hill Drive, and Richmond Highway, thereby allowing these facilities to provide a better level of service than otherwise. To accomplish this function, the alignment of Lockheed Boulevard should be as direct as possible to South Van Dorn Street extended. (Area IV)

- **Lockheed Boulevard Extended.** Extend Lockheed Boulevard to the west and curve to the north to connect directly to South Van Dorn Street at Franconia Road. This facility is proposed to provide needed east-west access from the Mount Vernon and eastern Rose Hill Planning Districts, thereby reducing demand on such facilities as Franconia Road, Rose Hill Drive, and portions of Telegraph Road, South Kings Highway, the Parkway, Harrison Lane, North Kings Highway, and Richmond Highway. It would also provide better access from Rose Hill to Hybla Valley and the Mount Vernon Hospital. A direct alignment would be most desirable for the road to function properly. Failure to construct this roadway will result in increased traffic volumes on the above streets, and failure to provide a continuous facility will limit the capability of the roadway to divert traffic from other arterials and collector roadways. (Area IV)
- **Woodlawn Road.** Widen to four lanes. Realign near Richmond Highway to intersect at Belvoir Road. Extend Woodlawn Road from Beulah Street to Shirley Highway at the interchange with the Springfield Bypass, subject to engineering and environmental studies that assure there shall not be any dislocation or adverse impact on existing communities.

The extension of Woodlawn Road is proposed to provide direct access from I-95 to Fort Belvoir, the large area planned for office development west of Beulah Street, and the industrial area on Cinder Bed Road. Not providing this facility would result in heavy traffic on Beulah Street, Newington Road, the Springfield Bypass, and Franconia Road at Springfield Mall. Unless this access to and from I-95 is provided, the Springfield Bypass will be used instead. This will saturate the Springfield Mall area with traffic at all hours of the day, making access to the Mall and to the relocated Franconia Station most difficult. If no connection were made to Loisdale Road, the roadway should not seriously impact residential areas. (Area IV)

- **Old Mill Road Extended.** Construct a minor arterial roadway from the present intersection of Old Mill Road and Pole Road through Fort Belvoir property to Telegraph Road west of the

Kingman Building, continue north and west crossing Beulah Street to intersect Woodlawn Road extended.

This facility is proposed to provide direct access from the Woodlawn area to areas such as Springfield Mall, Landmark, and the Lehigh tract without using Richmond Highway. This facility would also act as a minor arterial for anticipated Fort Belvoir development. Instead of proposing one road through Fort Belvoir (which would need to be an expressway) both Woodlawn Road and Old Mill Road extended are proposed as arterial roadways. The connection to Telegraph Road cannot be made at a more northerly point (such as at Old Telegraph Road) because of the proximity to the Kingman Building. Old Mill Road is extended to Beulah Street to reduce impact on Telegraph Road. It is extended still further to Woodlawn Road extended to provide access from the southern portion of the Lehigh tract to I-95, reducing travel demand on Beulah Street, the Springfield Bypass and Franconia Road. (Area IV)

- **Richmond Highway (Route 1).** Widen to six lanes between Belvoir Road and the Prince William County line. Implement exclusive bus lanes between Sherwood Hall Lane and North Kings Highway. Construct partial interchanges at its intersections with arterial roads between Fort Belvoir and I-495. Complete service drives. Implement progressive signal system to improve north-south flow.

The following intersections with Richmond Highway should be realigned to provide four-way intersections: Old Mill Road and Mount Vernon Memorial Highway; Reddick Avenue and Russell Road; and Highland Lane and the access road to the Terrace Townhouses of Woodlawn. Elimination of these offset intersections should improve traffic flow both along and across Route 1.

Several other facilities such as Old Mill Road extended, Lockheed Boulevard extended, and a collector street consisting of Pole Road, Buckman Road and Janna Lee Avenue extended should help to divert shorter trips from portions of Richmond Highway. Failure to provide improvements to Richmond Highway (and facilities to divert traffic from it) will result in increased congestion, and diversion of traffic to such roads as Mount Vernon Memorial Highway, Sherwood Hall Lane, and Fort Hunt Road. (Area IV)

- **North Kings Highway (Route 241).** Widen to four lanes. Implement exclusive bus lanes between Route 1 and the Huntington Metro Station. Existing traffic and expected additional traffic to the Huntington Metro Station will make this improvement imperative. (Area IV)
- **Backlick Road.** Widen to four lanes between Old Keene Mill Road and Richmond Highway. Realign near the Accotink area to coincide with the realignment of Pohick Road in the master plan for Fort Belvoir. Improvement to this roadway is necessary to handle existing traffic and additional traffic expected near Telegraph Road. Not providing this improvement would lead to increased congestion along the roadway, and the possible use of Newington Road as access between I-95 and Richmond Highway. (Area IV)
- **Lorton Road and Furnace Road.** Widen four lanes between Richmond Highway and Ox Road. This roadway provides a short but vital link between three arterials (Richmond Highway, Shirley Highway, and Ox Road) and provides access to Shirley Highway for a large, but mostly undeveloped area in the southern part of the County. Improvement is necessary to provide an uncongested link between the three arterials and to provide access to the I-95 and RF&P transit corridors. (Area IV)

- **Telegraph Road.** Widen to six lanes from Franconia Road to the City of Alexandria. Construct partial interchanges at the intersections with North Kings Highway and Franconia Road. Widen to four lanes from Franconia Road to Richmond Highway.

Existing traffic and traffic from presently undeveloped areas immediately adjacent to the roadway will place a great burden upon Telegraph Road. The recommended improvements are proposed to accommodate present traffic and to meet some of the additional traffic expected by 1990. Other facilities such as Lockheed Boulevard extended and South Van Dorn Street extended are proposed to reduce the amount of traffic which would otherwise use Telegraph Road. (Area IV)

- **Franconia Road.** Widen to six lanes between Grovedale Drive and South Van Dorn Street. Widen to four lanes between South Van Dorn Street and Telegraph Road.

These improvements are proposed to handle existing traffic and additional traffic expected from 1990 development adjacent to the roadway. To reduce the burden which would otherwise be placed upon Franconia Road, an additional east-west roadway consisting of Lockheed Boulevard extended, a portion of South Van Dorn Street extended, and the Springfield Bypass is proposed. (Area IV)

- **Fort Hunt Road and Collingwood Road.** Widen Fort Hunt Road to four lanes north of Belle View Boulevard, realigning to intersect Route 1 opposite Huntington Avenue. Improve Fort Hunt Road (between Belle View Boulevard and Vernon View Drive), and Collingwood Road and Parkers Lane (between Sherwood Hall Lane and Fort Hunt Road) to modified collector streets. The modified collector streets should consist of two 12-foot travel lanes, two eight-foot paved shoulders, and provisions, where appropriate, for turning movements, bus stop facilities, and off-street parking. The priorities for transportation improvement within the Mount Vernon Magisterial District, in descending order, should be access to the Huntington Metro Station, improvements to Collingwood Road/Parkers Lane from Sherwood Hall Lane to Fort Hunt Road, and improvements to Fort Hunt Road. (Area IV)
- **Sydenstricker Road.** Widen to four lanes between Old Keene Mill Road and the proposed Springfield Bypass (Hooes Road). (Area III)

#### Actions Necessary After Plan Adoption: Programming, Fiscal Considerations, and Project Development

The transportation plan attempts to:

- respond to land use plans and community objectives in Fairfax County; and
- provide for existing and anticipated demand, consistent with preservation of community values.

The specific recommendations and proposals in the plan need to be adopted for purposes of serving existing, committed, and anticipated demand, as well as to ensure that maximum flexibility is retained for long-range (post 1990) requirements. This is especially necessary in congested locations in order that grade separations, bus lanes, etc., can be implemented without incurring excessive right-of-way acquisition costs. There are several important steps that need to be followed subsequent to plan adoption. Several of these are as important as the adoption of the plan itself. They must be given careful attention as they all relate to critical aspects of the implementation process. These steps, and issues which affect them, are discussed in this section. In addition, the implementation chapters of this Section also provide insight into the necessary process for constructing the proposed improvements.

### Programming and Priorities

A major element and output of the transportation planning process is the separation of long-range issues from current and short-range issues. While the long-range policies and plans serve as a guide in day-to-day decision making, the reality of transportation facility improvements lagging far behind existing demand requires that a short-range plan guide project implementation. This plan or, more appropriately, program, should not undergo major changes each time a new long-range planning effort is initiated or major updates are conducted on existing plans. The very process of programming requires a certain stability over the short-range so that projects, priorities, and resulting fiscal requirements can be viewed with a fair degree of certainty and related to operating and capital budgets.

Thus, short-range program should not be held up because of longer run considerations such as the re-evaluation of long-range plans or questionable availability of funds to implement a total transportation effort. The following sections describe the roadway and transit programming procedures currently in use.

**Programming of Roadway Improvements.** The Virginia Department of Highways and Transportation (VDH&T) is responsible for the planning, construction and maintenance of roads in the system of interstate, primary and secondary highways. Funds are allocated for these purposes through acts of congress and state laws, and various combinations of federal-state fund matching are utilized for construction and maintenance on the various systems. The programming of highway construction and improvements is derived from the priorities for completing the interstate system, the state's arterial highway system and upgrading the secondary road system such that it can handle the traffic in accordance with state standards. In addition, the completion of a countywide transportation plan as part of the Comprehensive Plan has enabled the County to provide guidance to VDH&T in the allocation of highway funds.

Programming of highway funds to specific projects occurs in two basic categories. The first category includes interstate and primary highways while the second category relates to the secondary road system in the County. Different programming mechanisms are used for each of these two categories. These are briefly described as follows:

- The 10-year program prepared by VDH&T for the period 1972-82 formed the basis for proposed improvements to the interstate and primary highways during that period. This program has subsequently been amended to reflect a more current critical improvement program. Although the future and validity of the total scope of this program is most uncertain due to the current financial situation, priorities within the program are determined and projects are constructed in accordance with the yearly budget. Allocations to the interstate and primary system are made to the Culpeper construction district. Projects in Fairfax County compete with those in many other counties in the general Northern Virginia area for these allocations. In the spring of each year, VDH&T holds a preallocation public hearing at which time the Board of Supervisors endorses a priority list of interstate and primary project improvements for which the Board desires programming of funds. Based on the testimony received at this public hearing, VDH&T prepares a tentative allocation of funds to specific interstate and primary projects. Once this tentative allocation has been prepared, another final allocation public hearing is held and subsequent to this public hearing the allocations to these projects are finalized for the coming year.

- The programming of secondary funds for specific projects is done in a different manner. As opposed to interstate and primary funds which are allocated to the Culpeper construction district, the secondary road funds are allocated to the County and these funds must be spent within the County. Recently, the General Assembly amended and created Section 33.1-70.01 in the *Code of Virginia*, pursuant to which the Board of Supervisors can participate with VDH&T in the preparation of a six-year secondary road improvement program as well as hold joint public hearings on the program. The Board has elected to participate in the preparation of this program. In 1978, following a public hearing, the first six-year program prepared jointly by the County and VDH&T was adopted by the Board of Supervisors and approved by the Virginia Highway and Transportation Commission. The final program, as approved by the Commission, automatically becomes the guide for the annual construction budgets. The six-year improvement program is scheduled to be updated and revised through the same procedure as it was first prepared. This enables the program to remain current and reflective of updated priorities.

Due to the significant number of projects involving construction of new roadways as well as improvements to existing secondary roads, the programming process must recognize the need to program funds in both these areas. However, due to the inadequacy of funds compared to the needs in the County, major attention, by necessity, is focused on improvements to existing roadways. Nonetheless, the programming process utilized by the County is essential in order to set implementation priorities even within the constrained funding. The major reason for maintaining a program for improvements, in addition to an adopted transportation plan for the County, is to provide the implementation agencies with a comprehensive document stating short-range transportation needs. While these needs are far greater than the funds currently available, the continued emphasis upon the need may provide the impetus for securing additional funds in the future.

**Secondary Road Bond Program Funded by Fairfax County.** In 1981, the Virginia General Assembly passed legislation which permits Fairfax and certain other urban counties to spend a maximum of \$10 million a year for the purpose of constructing or improving roads which either have been or may be taken into the secondary system of State highways. All or a portion of this funding may come from the sale of general obligation bonds.

On November 3, 1981 a referendum was approved to issue \$30 million in general obligation bonds to supplement state funding of secondary road construction in Fairfax County. This approval initiated Fairfax County's participation in the funding of secondary road construction. Although Fairfax County is not obligated to continue such a program indefinitely, the County has indicated its intent to seek an additional bond referendum approval in 1984 which will incrementally extend what was initially begun as a three-year program.

The specific yearly program elements of these programs can be found in the annual update of the Capital Improvements Program (CIP) and in the annual "Listing of Projects in Priority Order for Interstate and Primary Projects".

**Transit Programming.** The planning and programming of transit improvements in Fairfax County is a function of those capital improvements included in the long-range plans of the Washington Metropolitan Area Transit Authority (WMATA) and the County. The major mandate of the WMATA plan is to complete the Metro-rail adopted regional system (ARS). The actual dates

of implementation of this system are dependent upon the receipt of federal, state and local funds for its financing. Any additions to the rail system beyond the adopted system such as those recommended in the countywide Plan may be programmed after the completion of the ARS and will be subject to the same constraints of funding availability. In addition to construction of the rail system, WMATA's capital programs provide for such items as construction of bus garages, acquisition of new buses and other capital needs.

Several elements of the County's transit program are implemented through the Virginia Department of Highways and Transportation (VDH&T) six-year and ten-year programs. Projects such as commuter fringe parking lots and bus lanes are funded and constructed essentially as highway projects and compete for funds with other primary and secondary road improvements. Transit facilities constructed in this manner include the Shirley Highway express lanes and the West Springfield fringe parking lot.

Although the Comprehensive Plan emphasizes the need for improved bus service throughout the County, long-range plans for individual bus routes are not included in either the Plan or any Washington Metropolitan Area Transit Authority (WMATA) program. Due to the inherent flexibility of bus service and the changing nature of demand for such service, it is impossible to prepare a long-range bus route network with any precision other than to outline the major corridors along which buses will travel. Since the opening of the initial Metro-rail segment in Virginia, buses have been utilized primarily as a feeder service to Metro-rail stations. This type of operation is expected to continue and expand as additional Metro-rail lines are opened. In addition to the feeder routes, buses are also used to provide cross-County circumferential connections between important activity centers. This type of service is expected to be expanded as fewer buses are needed to provide radial service.

Changes in individual bus routes are made through the WMATA public hearing process. For a major change in the system such as the opening of a new Metro-rail segment, WMATA staff normally prepares a comprehensive bus routing plan well in advance of the change. This plan then goes through extensive coordination with local jurisdictional staff before being presented to the public at a formal public hearing. Requests for hearings on more minor route changes may be initiated by WMATA or local staff or from the citizens themselves. Normally these requests are evaluated by staff and a decision is made as to whether a public hearing is held. In addition, a public hearing is held on any change formally requested by the Board of Supervisors. After public hearings, the proposals are reviewed in light of the testimony presented. The service changes are implemented only after the endorsement of the Board of Supervisors and the WMATA Board of Directors.

**Fiscal Considerations.** Because of severe financial constraints, agencies such as WMATA and the Virginia Department of Highways and Transportation (VDH&T) may be able to implement only a small percentage of the recommendations included in the transportation plan by 1990. The speed with which development has occurred and is expected to continue in the County will place a demand on the transportation system which the existing levels of funding cannot match.

The monies which are available for highway construction are negligible when compared with the funds needed to implement the highway improvements proposed in the transportation recommendations. The rapidly escalating cost of highway maintenance caused not only by inflation but also by the increased miles of roadway in the system, is resulting in a direct reduction of funds available each year for capital construction and roadway improvements.

Similar funding problems also exist for the implementation of transit projects. The provision of the transit facilities and services recommended in this plan will require substantial investment beyond that which has previously been made by Fairfax County. In 1979 the Metro-rail system construction was funded as far as the Ballston Station in Arlington County and the Huntington Station in Fairfax County. The completion of the remainder of the Vienna route and the Franconia/Springfield route will require substantial additional capital contributions from both the federal government and local jurisdictions.

Other transit facilities such as bus lanes and fringe parking have been funded primarily with highway funds. As such, these facilities will have to compete for this very limited funding with much needed roadway improvement projects.

The operation of both bus and rail transit facilities costs substantially more than the amount of revenue generated at the farebox. The difference between costs and revenues must be made up from general County revenue since no dedicated source of revenue to finance transit operating deficits exists at present. The preceding discussion clearly implies that the presently anticipated funding sources and levels will not enable the Plan recommendations to be implemented by the time the demand occurs. Land use commitments, however, have already been made that require several transportation projects to be implemented. It is obvious that the County by itself or in conjunction with the state or the federal government will have to expand existing sources of revenues or identify new ones. The presently inadequate funding levels cannot be accepted as a maximum while development continues to occur and overload the transportation system to an extent where severe environmental and other adverse impacts result.

It is, therefore, recommended that expanded emphasis be placed on the analysis of existing and potential future funding sources that would at least permit the implementation of projects needed to serve existing and committed growth. This would require a review of existing legislation and possible new legislation, both for purposes of generating new revenues and for an overall fiscal analysis of the net impacts of the growth proposed in the Plan.

#### Project Development

A number of major activities are required in order to translate any of the facility recommendations shown on the Plan to actual improvements. These activities vary somewhat with the nature and scope of the project. However, it is useful to recognize that such activities are necessary prior to actual construction. It may be noted that completion of these activities normally requires about five to seven years.

**Funding.** Obviously, funds must be available in order to begin an improvement. The program established to identify priorities and guide project development has been described previously. Normally, funds are allocated to a given project over a period of years. These allocations also serve to fund the preliminary engineering and design activities described below.

**Functional Drawings and Alignment Studies.** These preliminary schematic drawings are essential in providing guidance for reserving right-of-way and discussing fundamental concepts of the project. These drawings should be developed early in the planning process for maximum utility; however, it is recognized that substantial modifications may be made as a result of more detailed study. Public hearings are often held on these preliminary plans.

**Environmental Impact Statements or Assessments.** Depending on the nature of the project, environmental impact statements or assessments

may be required. If the improvement is a major one and federal funds are involved, a full environmental impact statement will probably be necessary. On relatively smaller projects, or where no federal funds are involved, more modest environmental assessments may be prepared. Both of these studies address environmental impacts associated with a particular project in more detail than is possible in the context of the Comprehensive Plan. They address such impacts as air and water pollution, noise, community disruption, and other impacts on other local facilities or unique areas such as schools, parks, historical sites, and the like. They are generally prepared in conjunction with the functional drawings or preliminary plans. Separate public hearings are also held on environmental impact statements.

**Design.** Once agreement is reached on the general nature of the project, more detailed design may begin. This activity involves the completion of the necessary engineering, including actual field surveys, required to estimate construction costs and to develop plans. It is only at this stage that specific issues such as turning lanes, median cuts, noise walls or berms, or other detailed design elements can be addressed. While the time necessary to complete this phase varies, it normally requires between one and two years. Public hearings are usually held during the design of the project.

**Project Approval and Right-Of-Way Acquisition.** After the necessary public hearings are held, the testimony is reviewed, and the design is finalized, the project is submitted to the Virginia Highway and Transportation Commission for approval. Once approved by the Commission, right-of-way may be acquired assuming funds are available, and the project may be advertised for construction.

#### External Agency Acceptance

Since the County presently has no responsibility regarding the implementation of transportation recommendations, it is essential that the plan be accepted or be modified to the point at which mutual agreement exists between the County and

coordinating agencies such as WMATA, VDH&T, and the Washington Council of Governments (COG). Unless agency acceptance can be obtained, the implementation of many elements of this ambitious 1990 transportation plan is doubtful.

#### Staggered Work Hours, Four-Day Week

At least in the peak periods, there are a number of noncapital intensive ways of "reducing" transportation demand and the concomitant need for facilities and services. Two of the most widely discussed are staggering of work hours and the four-day work week.

The staggering of work hours would involve either the adoption of flexible hours or a shifting of work starting and stopping times over a three-hour or longer period in the morning and evening. Currently, it is assumed that 60 percent of the peak-period travel occurs during the peak hours. The staggering of work hours might reduce the peak hour to 40 percent or less of the peak period.

The four-day work week could similarly reduce the demand for peak-hour transportation services. One could expect a 20 percent decrease in peak-hour travel if the total number of commuters was reduced by that amount.

It is recommended that Fairfax County take a leadership role in introducing and aggressively promoting a positive prototype program of both staggered work hours and the four-day work week. The County should urge this for all of its major employment centers, including its own County government operations. Aggressively supported implementation of these programs provides the opportunity to substantially reduce traffic congestion and obviate the need for additional costly highway improvements. It is strongly recommended that these programs be given the highest priority by Fairfax County.



Old Keene Mill Road at I-95 looking northwest.

## AREA AND SECTOR RECOMMENDATIONS

### AREA I RECOMMENDATIONS

Any sector or area-specific transportation recommendations for Area I are contained in the appropriate Area I section of the Plan.

### AREA II RECOMMENDATIONS

(These recommendations were adopted for the individual community planning sectors in Area II.)

#### McLean Planning District

##### Sector M1

A. Public bus transportation should serve the area directly, and service should be expanded as required to serve continued development.

B. If a shuttle bus service is introduced into the Tysons Corner Area, the service should be extended to the apartment developments along Magarity Road.

C. Magarity Road should be widened to four lanes along its entire length.

D. A public road link between Old Meadow and Magarity Roads should be provided.

E. Consideration should be given to an eastbound access ramp to and a westbound exit ramp from Magarity Road to the DAAR Extension, if this latter facility is constructed either as a busway or as a freeway.

F. The intersection of Magarity Road and Great Falls Street should be reconstructed to eliminate the open drainage ditch and improve sight distance.

G. The proposed pedestrian overpass across I-495 should be built to aid and encourage local residents to walk to the regional shopping center and thereby reduce vehicular traffic along Routes 7 and 123 between the area and the center.

##### Sector M2

A. Widen Haycock Road to a four-lane roadway, with turning lanes, between Leesburg Pike (Route 7) and Great Falls Street (Route 694).

B. To reduce local traffic requirements on the already congested Route 7 commuter radial:

1. The existing highway corridor overlay district should be extended from I-495 to the Falls Church boundary.

2. Service roads should be completed along Route 7 as part of a program to construct service roads from the Dulles Airport Access Road to Falls Church.

3. Construct a bridge across Pimmit Run at Redd Road or Hillside Drive to serve community needs, particularly those of school buses.

4. When the parcels between St. Luke's Church and the Peachtree apartments are developed, traffic access should be provided by connecting Dexter Drive, Burfoot Street or Kilgore Road to Route 7.

5. When the Pimmit Hills Shopping Center is redeveloped, a dedicated public right-of-way should be provided connecting Paxton Road with Route 7. The right-of-way should be incorporated into the VDM&T road system for responsibility and maintenance.

##### Sector M3

A. County transportation priorities in this sector should stress greatly improved public transportation service and increased capacity for principal arterials.

B. Widen Old Dominion Drive (Route 309) to four lanes, with turning lanes, between Mayflower Drive (Route 1550) and Holmes Place (Route 1809).

C. Widen Ingleside Avenue to two 12-foot lanes between Chain Bridge Road (Route 3547) and Poplar Street (Route 1898). Realign to intersect with Chain Bridge Road directly across from Tennyson Drive (Route 1808).

D. Widen Poplar Street to two 12-foot lanes between Old Dominion Drive (Route 309) and Ingleside Avenue (Route 1813). Realign to provide smooth transition to Ingleside south of the intersection.

E. Chain Bridge Road between Westmoreland and Great Falls Streets should be improved at its present two-lane width; the intersections of Chain Bridge Road with Davidson Road and Great Falls Street should be improved. Widen to four lanes, with turning lanes, or a fifth continuous turning lane, between Dolley Madison Boulevard (Route 123) and Westmoreland Street.

F. Improve traffic movement from George Washington Memorial Parkway to Kirby Road by appropriate traffic engineering improvements.

##### Sector M4

A. Widen Poplar Street (Route 1898) to two 12-foot lanes between Old Dominion Drive (Route 309) and Ingleside Avenue (Route 1813). Realign to provide smooth transition to Ingleside south of the intersection.

B. An entry ramp should be provided from the eastbound lanes of the DAAR, and an exit ramp should be provided from the existing westbound lanes of the DAAR to westbound lanes of Route 7. If access to the existing lanes for this 1.8 miles is not allowed, the aforementioned ramps should be connected to new parallel lanes to be constructed as soon as possible within the DAAR right-of-way. These lanes should terminate at the Beltway and have no access other than at Route 7 and I-495. The opening of the Reston ramps of the DAAR to car pools should be investigated.

C. Express bus lanes should be provided along Route 123 from its intersection with Route 193 to the George Washington Memorial Parkway and along the Parkway to the Arlington County line. This action should be coordinated with similar actions in jurisdictions closer to the metropolitan center.

D. Widen Elm Street (Route 3671) to two 12-foot lanes between Dolley Madison Boulevard (Route 123) and Ingleside Avenue (Route 1813). To reduce traffic volume within the CBD, construct a pedestrian overpass across Dolley Madison to connect the CBD with the McLean Central Park, library, community center and adjacent residential areas. To provide improved access to the library and community center, a median cut should be considered on Route 123 at Elm Street.

E. Balls Hill Road (Route 686) from Lewinsville Road (Route 694) to Georgetown Pike (Route 193) should be improved to two 12-foot lanes with minor realignments for safety purposes.

F. Lewinsville Road (Route 694) from Leesburg Pike (Route 7) to Balls Hill Road (Route 686) should be improved to two 12-foot lanes with minor realignments for safety purposes.

##### Sector M5

A. To aid local and commuter traffic, Georgetown Pike should be improved at two-lane width without significant realignment. Transportation planning must seek other means of satisfying demand in this area to preclude the necessity for further widening of this scenic byway at some future date.

##### Sector M6

To facilitate both commuter and local traffic:

A. Assign priority to improving principal arterials for traffic to the metropolitan center, particularly access to the DAAR or construction of parallel lanes from Route 7 to I-495. See discussion in Tysons Corner Area.

B. Act immediately to prevent the loss of effectiveness of Route 7 as an arterial by limiting direct access from new developments along the corridor.

As new development occurs, construction of a service road to limit access should proceed for reasons of both safety and efficiency. Reverse frontage for residential developments will also help.

C. Lewinsville Road (Route 694) from Leesburg Pike (Route 7) to Balls Hill Road (Route 686) should be improved to two 12-foot lanes with minor realignments for safety purposes.

D. Swinks Mill Road (Route 685) from Lewinsville Road (Route 694) to Old Dominion Drive (Route 738) should be improved to two 12-foot lanes with minor realignments for safety purposes.

##### Sector M7

To facilitate both commuter and local traffic:

A. Assign priority to improving arterials for traffic to the metropolitan center, particularly access to the DAAR or construction of parallel lanes from the western boundary of Area II to I-495. See discussion on Tysons Corner Area.

B. Act immediately to prevent the loss of effectiveness of Route 7 as an arterial by limiting access from new developments along the corridor.

C. Establish a fringe parking lot at Wolf Trap Park and provide express bus service lines from the western boundary of Area II to I-495. See discussion on Tysons Corner Area.

D. Engineering safety provisions should be made in order to correct the problem of access along Trap Road between Towiston Road and Route 7.

#### Vienna Planning District

##### Sector V1

A. To provide for increased traffic from stable area infill, Cedar Lane (Route 698) from Gallows Road (Route 650) to Arlington Boulevard (Route 50) should be improved to two 12-foot lanes, with minor realignments for safety purposes.

B. Improving access to Metro stations should have top priority for any funds allocated to Vienna Planning District for transportation improvements. To this end, it is recommended that the following improvements be effected:

1. Widen Blake Lane (Route 655) to four lanes, with turning lanes, between Jermantown Road and Lee Highway. Construct a new four-lane roadway extension of Blake Lane, with turning lanes, from Lee Highway south to Arlington Boulevard east of Fairfax Circle to connect with an extension of Pickett Road currently planned by the City of Fairfax.

Pending completion of a study addressing all pertinent impacts, pro and con, envisioned from extension of Pickett Road across Routes 50 and 29 to connect with Blake Lane, to include analysis of the impact of added traffic on Blake Lane, the Pickett Road extension should not be completed. The Blake-Pickett connection should not be completed and Fairfax County should oppose the widening of Blake Lane unless the four-lane Pickett Road within the City of Fairfax is moved westward or noise attenuation devices are installed in order to reduce the impact on adjoining subdivisions and through trucks are prohibited along the Blake Lane—Jermantown Road Corridor, from Lee Highway to Chain Bridge Road and along the Pickett Road connection from Route 50 to Route 29.

2. Widen Prosperity Avenue (Route 699) to a four-lane roadway, with turning lanes, between Arlington Boulevard (Route 50) and Lee Highway. Construct a new four-lane roadway extension of Prosperity Avenue northerly from Lee Highway behind the Lee-Hi Industrial Park and easterly into the western side of the Dunn Long Metro site.

3. Widen Lee Highway (Route 29) to a four-lane divided roadway, with turning lanes, between Fairfax Circle and the Falls Church city line and complete the service drive system.

4. Improve Five Oaks Road (Route 4949) to two 12-foot lanes between Blake Lane and the WMATA access road into the Vienna Metro Station.

C. With the intent of improving Metro express bus service, establish fringe parking lots at the planned Dunn Loring and Vienna Metro rapid transit stations. Provide express feeder bus service from these locations to central employment areas.

D. With the intent of encouraging pedestrian and bicycle movement within the sector, a citizen-proposed trails/bikeway system should include the use of the stream valley environmental quality corridors and consideration of pedestrian/bicycle access to shopping facilities from high- and medium-density residential areas. Consideration should be given to pedestrian/bicycle access to Metro stations from surrounding residential areas.

**Sector V2**

A. To improve access to the Dunn Loring Metro Station, widen Gallows Road (Route 650) to a four-lane divided roadway, with turning lanes, between Idylwood Road and Leesburg Pike (Route 7). Realign the Route 7 intersection of Gallows Road to a location in the vicinity of existing International Drive so as to provide a direct connection to this road. Citizens consider these improvements and the Old Court House Road widening to be the top priority projects in the planning district.

B. To improve access to the Vienna Industrial Park, improve Electric Avenue to two 12-foot lanes between Cedar Lane (Route 698) and Vienna corporate limits.

C. To provide for increased traffic from stable area infill, the following roads should be improved to two 12-foot lanes with minor realignments for safety purposes:

1. Idylwood Road (Route 625) from Leesburg Pike (Route 7) to Cedar Lane (Route 698).

2. Cedar Lane (Route 698) from Gallows Road (Route 650) to Arlington Boulevard (Route 50).

3. Park Street (Route 675) between Cedar Lane (Route 698) and the Vienna town line.

D. To encourage pedestrian and bicycle movement within the sector, a citizen-proposed trails/bikeway system should include the use of the W&OD environmental quality corridor and provide for pedestrian/bicycle access to shopping facilities from surrounding residential development, particularly from low- and moderate-income communities.

E. To meet the local circulation needs of the Town of Vienna, support the Town of Vienna's proposals for improving Park Street from Maple Avenue to Cedar Lane to preserve local beauty and to meet southeastern Vienna transportation needs.

**Sector V3**

A. To relieve congestion in the Tysons Corner Area:

1. Complete the service drive system along Leesburg Pike (Route 7) between the Dulles Airport Access Road and Falls Church except where interchanges exist.

2. Access to the Dulles Airport Access Road right-of-way should be sought for commuter travel between the western boundary of Area II and Route 123. If this alternative is not approved, then new parallel lanes should be built between the western boundary of Area II and I-495.

3. Construct a new four-lane divided Gosnell Drive, with turning lanes, from Leesburg Pike at existing Gosnell Drive to Chain Bridge Road in the vicinity of the existing Old Court

House Road intersection. This should provide a link between Vienna and Route 7 north.

4. Widen Old Court House Road to a four-lane divided roadway with turning lanes, from Chain Bridge Road (Route 123) to relocated Gallows Road in the vicinity of Aline Avenue (Route 3452).

B. To improve Metro express bus service:

1. Establish a fringe parking lot in the vicinity of Wolftrap Farm Park. Provide express feeder bus service from this location to central employment areas via the Dulles Airport Access Road and other facilities.

2. Provide an exclusive bus lane on Leesburg Pike (Route 7) between the Dulles Airport Access Road (DAAR) and the West Falls Church Metro Station. This lane should be used by buses from the Wolftrap fringe lot, by Reston buses coming off the DAAR, and by other local buses.

C. Provide moderate safety-related improvements to Trap Road (Route 676) between Old Court House Road (Route 677) and the DAAR near Wolftrap Farm Park. This will improve access to Wolftrap Park and the proposed fringe parking lot.

B. To encourage pedestrian and bicycle movement within the sector:

1. Any trail/bikeway system would utilize EQCs such as Piney Branch, Wolf Trap, and W&OD abandoned right-of-way where utilization is not consistent with the purposes of EQCs, thereby connecting and providing nonvehicular access to various points within and without the EQCs such as Freedom Hill Fort Park and Westbriar Elementary School.

2. In any trail/bikeway system, consideration should be given to providing pedestrian/bicycle access to the shopping facilities and employment centers of the Tysons Corner Area.

**Sector V4**

A. To improve access to Metro stations:

1. Improve Hunter Mill Road (Route 675) to two 12-foot lanes between Lawyers Road (Route 673) and Tamarack Drive (Route 3966). Hunter Mill Road should be extended to Blake Lane. This could be accomplished by realigning the Chain Bridge Road intersection to the east and using the Palmer Street right-of-way; or by moving the intersection to the west using the present Miller Road right-of-way and building the extension to Blake Lane on a new location. The exact location of any intersection realignment would be dependent on the completion of engineering studies, none of which has been initiated. Bicycle, walking, and horse paths should be included in the design at the time of improvement construction of Hunter Mill Road.

2. Access to the Dulles Airport Access Road right-of-way should be sought for commuter travel between the western boundary of Area II and Route 123. If this alternative is not approved, then new parallel lanes should be built between the western boundary of Area II and I-495.

B. To improve Metro express bus service:

1. Establish a fringe parking lot in the vicinity of Wolftrap Farm Park and provide express feeder bus service from this location to central employment areas via the Dulles Airport Access Road and other facilities.

2. Provide moderate safety-related improvements to Trap Road (Route 676) between Old Court House Road (Route 677) and the DAAR near Wolftrap Farm Park.

C. To provide for increased traffic from stable area infill, the following roads should be improved to two 12-foot lanes with minor realignments for safety purposes:

1. Lawyers Road (Route 673) from Twin Branches Road (Route 5301) to the Vienna town line.

2. Vale Road (Route 672) from Hunter Mill Road (Route 674) to Vienna town line.

3. Beulah Road (Route 675) from Meadowlark Road (Route 677) to Clarks Crossing Road (Route 676).

D. Bicycle, walking and horse paths should be considered in the design of Beulah Road and Lawyers Road at the time of improvement.

E. To encourage pedestrian and bicycle movement within the sector, a citizen proposed trails-bikeways system should include the use of the W&OD abandoned right-of-way.

**Sector V5**

A. Improve Sutton Road (Route 701) to two 12-foot lanes between Chain Bridge Road and Blake Lane. This will expedite movement into and out of the Vienna Metro Station from the Oakton area. Improvements are needed at the intersection of Sutton and Courthouse Roads to remove the hazardous school bus turning problem.

B. See Sector V1 transportation recommendations concerning Blake Lane and Five Oaks Road improvements.

C. A citizen-proposed trails-bikeway system should consider pedestrian and bicycle access to the Metro station from surrounding areas. Additional consideration should be given also to providing pedestrian access along Route 123 and Courthouse Road to Oakton shopping facilities in a trails-bikeway plan.

**Sector V6**

A. See transportation recommendations in adjacent community planning sectors that may affect the Town of Vienna.

**Fairfax Planning District**

**Sector F1**

To improve transportation capacity for both commuter and local traffic:

A. Improve public bus service by providing general cross-County bus service along Route 123 and specifically between the City of Fairfax and Fort Belvoir.

B. Widen Braddock Road (Route 620) to a four-lane divided roadway with turning lanes between Guinea Road and Ox Road. Plan extension westward to link with easterly realignment of southern portion of Shirley Gate Road. Improvements along Braddock Road should also include (1) service roads between Olley Lane and Pickett Road, (2) center island landscaping, (3) extension of bus service between Pickett Road and George Mason University and (4) fringe parking in the vicinity of Guinea Road/Braddock Road and Route 123/Braddock Road.

C. Widen Shirley Gate Road (Route 655) to a four-lane divided roadway with turning lanes to create a necessary western bypass of the City of Fairfax.

D. Continue coordinated planning with the City of Fairfax and VDH&T for improved traffic flow in and around the city.

E. Develop a trails plan within the sector with emphasis on linking new residential areas adjacent to George Mason University to the campus and connecting with the City of Fairfax trail system. To encourage pedestrian and bicycle movement and thereby reduce dependence on automobiles, construct 10-foot combination bicycle and walking paths in this sector to parallel primary arterial and collector roads such as Braddock Road, Olley Lane, Roberts Road and Route 123. This will provide access to George Mason University, shopping centers, fringe parking and ballfields.

**Sector F2**

To improve commuter and local traffic capacity:

A. Assign priority to improved public transit service along commuter arterials and to the Metro stations.

B. Widen Prosperity Avenue (Route 699) to two 12-foot lanes between Little River Turnpike and

Arlington Boulevard and provide an adjacent path for pedestrians and bicyclists.

C. To avoid through-traffic of neighborhood streets, streets in the Mantua area (between Routes 50 and 236) will not be connected to Pickett Road. All development plans will be submitted in accordance with this dictate.

D. Establish a trail system to enhance public access to Accotink Stream Valley Park and to connect to the City of Fairfax trail system.

E. If the Comprehensive Plan for the area south of O'Connell Drive, north of the Pine Ridge Subdivision, east of the Elks Lodge is approved for higher density residential or commercial uses, or increased traffic from currently approved commercial buildings along Williams Drive negatively affects the communities of Pine Ridge and Williams-town, the closing of Williams Drive at its junction with Highland Lane will be desirable.

An internal circulation plan desired to provide direct access to Prosperity Avenue and Gallows Road for this area as follows is hereby approved.

The internal circulation system would connect Prosperity Avenue and Gallows Road, south of Route 50, by a service drive from Prosperity Avenue to Williams Drive and via the realignment of O'Connell Drive and subsequent development of access roads between Williams Drive and Gallows Road. This internal circulation system should allow the intersection of Williams Drive and Route 50 to operate at an acceptable level of service after redevelopment of the area and to provide acceptable access to Route 50, via Williams Drive, of the large, potentially developable parcels lying west of Gallows Road and south of Route 50 adjacent to the Seth Williams subdivision. The exact location of the realignment of O'Connell Drive should be determined at the time of rezoning and subsequent redevelopment of the subject area.

#### Sector F3

To provide effective transportation service:

A. Establish feeder bus service to complement and supplement the Metro rail system. If Metro-rail does not reach the Vienna Metro Station as programmed, substitute express commuter bus transportation.

B. Widen Blake Lane (Route 655) to four lanes with turning lanes, between Jermantown Road and Lee Highway; build on new location as a four-lane roadway with turning lanes, from Lee Highway southerly across Arlington Boulevard east of Fairfax Circle to an extension of Pickett Road being planned by the City of Fairfax. Pending completion of a study addressing all pertinent impacts, pro and con, envisioned from extension of Pickett Road across Routes 50 and 29 to connect with Blake Lane, to include analysis of the impact of added traffic on Blake Lane, the Pickett Road extension should not be completed. The Blake-Pickett connection should not be completed and Fairfax County should oppose the widening of Blake Lane unless the four-lane Pickett Road within the City of Fairfax is moved westward or noise attenuation devices are installed in order to reduce the impact on adjoining subdivisions and through trucks are prohibited along the Blake Lane-Jermantown Road corridor, from Lee Highway to Chain Bridge Road and along the Pickett Road connection from Route 50 to Route 29.

C. Improve Five Oaks Road (Route 4949) between Blake Lane and the WMATA access road into the Vienna Metro Station.

D. Improve Hunter Mill Road (Route 675) to two 12-foot lanes between Lawyers Road (Route 673) and Tamarack Drive (Route 3966). Extend to Blake Lane either on new location or by realigning the Chain Bridge Road intersection and using Palmer Street right-of-way. This improvement should facilitate traffic movements between Reston and Fairfax, and enhance the accessibility of the Vienna Metro Station from the north.

E. Include provision for a trails system to con-

nect new residential developments with nearby commercial and recreational facilities, and to connect with the City of Fairfax trail system.

#### Sector F4

To facilitate local traffic:

A. Improve Hunter Mill Road (Route 675) to two 12-foot lanes between Lawyers Road (Route 673) and Tamarack Drive (Route 3966). It is recommended that Hunter Mill Road be extended to Blake Lane. This could be accomplished by realigning the Chain Bridge Road intersection to the east and using the Palmer Street right-of-way, or by moving the intersection to the west using the present Miller Road right-of-way and building the extension to Blake Lane on a new location. The exact location of any intersection realignment would be dependent on the completion of engineering studies, none of which has been initiated. This improvement should facilitate traffic movements between Reston and Fairfax, and enhance the accessibility of the Vienna Metro Station from the north.

B. Widen Jermantown Road (Route 655) to four lanes, with turning lanes, between Chain Bridge Road and the Fairfax City line at Route I-66.

C. Establish a trails plan in the sector to connect residential areas to adjacent parks and shopping centers and for residential purposes along Difficult Run and its principal tributaries.

#### Sector F5

A. Widen Shirley Gate Road to four lanes with turning lanes.

B. To serve and yet preserve stable area developments, transportation facilities constructed within complex areas should be planned to serve residents in existing residential areas and to reduce adverse impacts of traffic from higher density communities. This should apply especially to provisions for improved public transportation services.

C. The present Legato Road south of I-66 should be terminated in a cul-de-sac south of the new realigned Legato Road so as to avoid through-traffic on this quiet collector street.

D. A trails system to serve the entire sector should be incorporated in major development plans within the sector.

E. An industrial access road, requiring 60-feet of right-of-way, traversing parcels 56-2 ((1)) 15, 18 and 22, providing two points of access to Waples Mill Road should be provided to serve this industrial area.

### AREA III RECOMMENDATIONS

(These recommendations were adopted for the individual community planning sectors in Area III.)

#### Upper Potomac Planning District

##### Sector UP1

A. Prohibit an alignment of a regional circumferential through the area because of the severe impact on the Potomac River Environmental Quality Corridor and Wildlife Preserve and the existing community.

B. Provide sufficient access to public parkland in Sector UP1.

##### Sector UP2

A. Maintain Route 193 in its current condition. The present overload is partly caused by the inadequacy of Route 7. Improvements should be made to Route 7 (see Sector UP3). Retaining a deficiency on Route 193 yields the advantages of preserving a history-related road and preserving the semirural character of the area.

B. Generally, the other roads should be maintained as they exist in the sector with the exception of safety improvements.

C. Road improvements should include a six-foot right-of-way for trails where possible.

##### Sector UP3

A. Improve Route 7 to full freeway with limited access and grade separations. Access points in Sector UP3 should be limited to provide the minimum access necessary. A detailed study of intersections and grade separations should be undertaken. This will facilitate regional through movement and help preserve existing and future residential communities along Route 7. It will help prevent commercial stripping.

B. Hunter Mill Road should be limited to two lanes with trail and should have necessary safety improvements such as alignment and straightening of sharp corners but should not be widened to encourage its use as a north-south artery.

C. Undertake planning measures to determine improvements needed for the Route 7/Colvin Run Road intersection.

##### Sector UP4

A. Improve Route 7 to a full freeway with limited access and grade separations. Route 228 (Dranesville Road) should be upgraded to serve future development.

B. Extend Wiehle Avenue from Baron Cameron Avenue through Reston to the Loudoun County line. Between Dranesville Road and the Loudoun County line, Wiehle Avenue should be constructed as a two-lane road and between Baron Cameron Avenue and Dranesville Road should be a four-lane facility. Substantial buffering is to be provided throughout the length of Wiehle Avenue. Where right-of-way has not already been provided, sufficient right-of-way should be dedicated to allow for both the road and substantial buffering as a condition of any development intensity above the low end of the permitted density range. Where other undeveloped properties exist adjacent to this right-of-way, additional right-of-way should be provided to insure that substantial buffering is possible.

C. Relocated Dranesville Road (Springfield Bypass and Extension in the vicinity of the Dranesville and Centreville Districts). Construct a new four-lane facility between Route 7 and Route 50. The alignment intersects Route 7 at a point west of the Dranesville Tavern Historic District and proceeds south basically along the western edge of the Potomac water treatment facility. South of Rosier's Branch, it is located east of and parallel to Stuart Road in the vicinity of the Stuart Ridge subdivision. To the south of Stuart Ridge, the alignment rejoins Stuart Road and proceeds to Baron Cameron Avenue. The alignment then proceeds south along the Colonial pipeline easement to a point in the vicinity of Thompson Road, where it curves to the east to intersect Route 50 at approximately Acorn Ridge Road.

##### Sector UP5

A. Widen Reston Avenue to a four-lane facility between the Dulles Access Road and Fox Mill Road. Extend south along existing Lawyers Road to West Ox Road. Realign the Fox Mill Road—Lawyers Road intersection. Extend Reston Avenue north of the DAAR as a four-lane facility on a new alignment to Baron Cameron Avenue and to Route 7 as a four-lane facility on the existing alignment. Improve the bridge over the DAAR.

B. Build parallel lanes, or the equivalent, along the Dulles Airport Access Road to provide access to Washington, D.C., from the Reston-Herndon area. This proposal should be linked with potential bus and Metro rail movement on the I-66 right-of-way to meet travel demand.

C. A Metro transit line shall be located in the median of the Dulles Access Road, and should include stations at Reston and Dulles Airport.

D. Reserve land for a future fringe parking lot at the intersection of DAAR and Reston Avenue.

E. Exclusive bus lanes should be included in the median of Route 7. Commuter bus service should be expanded to serve this area.

F. Relocated Dranesville Road (Springfield Bypass and Extension in the vicinity of the Dranesville and Centreville Districts). Construct a new four-lane facility between Route 7 and Route 50. The alignment intersects Route 7 at a point west of the Dranesville Tavern Historic District and proceeds south basically along the western edge of the Potomac water treatment facility. South of Rosier's Branch, it is located east of and parallel to Stuart Road in the vicinity of the Stuart Ridge subdivision. To the south of Stuart Ridge, the alignment rejoins Stuart Road and proceeds to Baron Cameron Avenue. The alignment then proceeds south along the Colonial pipeline easement to a point in the vicinity of Thompson Road, where it curves to the east to intersect Route 50 at approximately Acorn Ridge Road.

G. Although traffic demand analysis indicates a need for a north-south arterial or major collector between Reston and Fairfax, there is a need to protect existing communities along Hunter Mill Road from increased traffic. Hunter Mill Road should be constructed to an improved two-lane facility between Baron Cameron Avenue and Lawyers Road.

H. Extend Wiehle Avenue from Baron Cameron Avenue north and west, crossing Reston Avenue and Dranesville Road and extending into Loudoun County.

I. Reconstruct Lawyers Road as an improved two-lane facility between Twin Branches Road and the Vienna town line.

J. When Route 7 is improved to a six-lane, limited access facility, grade-separated interchanges should be planned at Baron Cameron Avenue and Reston Avenue.

K. Extend Lawyers Road west of Reston as a four-lane facility between Fox Mill Road and Route 28. The purpose of this facility is to provide an east-west arterial in the south Reston area, linking it with major circumferential routes and the industrial development near Dulles Airport. Without this facility, traffic will be forced onto Fox Mill Road, West Ox Road and Centreville Road.

L. In the vicinity of the Reston Town Center Area, two collector roads are proposed; one to run north-south and the other east-west through the Town Center site. It is anticipated that some through traffic may use the east-west collector road as a short-cut from the Reston Area to the Springfield Bypass. While this traffic may not cause a significant functional misuse of this east-west road as a collector road, this road should be constructed with four travel lanes at a minimum.

#### Sector UP6

Fairfax County should support transportation improvements in the Herndon area which will help implement Herndon's land use and density plans. Specific transportation improvement recommendations are:

A. Relocated Dranesville Road (Springfield Bypass and Extension in the vicinity of the Dranesville and Centreville Districts). Construct a new four-lane facility between Route 7 and Route 50. The alignment intersects Route 7 at a point west of the Dranesville Tavern Historic District and proceeds south basically along the western edge of the Potomac water treatment facility. South of Rosier's Branch, it is located east of and parallel to Stuart Road in the vicinity of the Stuart Ridge subdivision. To the south of Stuart Ridge, the alignment rejoins Stuart Road and proceeds to Baron Cameron Avenue. The alignment then proceeds south along the Colonial pipeline easement to a point in the vicinity of Thompson Road, where it curves to the east to intersect Route 50 at approximately Acorn Ridge Road.

B. Complete dedication of right-of-way on Wiehle Avenue between Baron Cameron Avenue

and the Loudoun County boundary to help provide a loop around Herndon.

C. Complete the Herndon Parkway (Spring Street and Sunset Hills Road) between Herndon and Reston.

D. Land should be reserved for a future fringe parking lot at the intersection of Dulles Airport Access Road and Centreville Road.

#### Sector UP7

A. Widen Centreville Road/Walney Road to a four-lane facility between Poplar Tree Road and the Town of Herndon. This will provide improved north-south access to and from the planned industrial areas along both this corridor and the limited access Route 28 (Sully Road) corridor.

B. Extend Lawyers Road west of Reston as a four-lane facility between Fox Mill Road and Route 28. The purpose of this facility is to provide an east-west arterial in the South Reston area, linking it with major circumferential routes and the industrial development near Dulles Airport. Without this facility, traffic will be forced onto Fox Mill Road, West Ox Road and Centreville Road.

#### Sector UP8

A. Relocated Dranesville Road (Springfield Bypass and Extension in the vicinity of the Dranesville and Centreville Districts). Construct a new four-lane facility between Route 7 and Route 50. The alignment intersects Route 7 at a point west of the Dranesville Tavern Historic District and proceeds south basically along the western edge of the Potomac water treatment facility. South of Rosier's Branch, it is located east of and parallel to Stuart Road in the vicinity of the Stuart Ridge subdivision. To the south of Stuart Ridge, the alignment rejoins Stuart Road and proceeds to Baron Cameron Avenue. The alignment then proceeds south along the Colonial pipeline easement to a point in the vicinity of Thompson Road, where it curves to the east to intersect Route 50 at approximately Acorn Ridge Road.

B. Major improvement of West Ox Road is not recommended, and realignment should preserve existing homes.

C. Widen Reston Avenue to a four-lane facility between the Dulles Access Road and Fox Mill Road. Extend south along existing Lawyers Road to West Ox Road. Realign the Fox Mill Road-Lawyers Road intersection.

D. Extend Lawyers Road west of Reston as a four-lane facility between Fox Mill Road and Route 28. The purpose of this facility is to provide an east-west arterial in the south Reston area, linking it with major circumferential routes and the industrial development near Dulles Airport. Without this facility, traffic will be forced onto Fox Mill Road, West Ox Road and Centreville Road.

#### Sector UP9

A. Route 50 should be improved to a limited-access facility with six lanes between the Loudoun County line and the City of Fairfax.

B. Provide adequate access to Route 50 from existing residential areas.

C. Relocated Dranesville Road (Springfield Bypass and Extension in the vicinity of the Dranesville and Centreville Districts). Construct a new four-lane facility between Route 7 and Route 50. The alignment intersects Route 7 at a point west of the Dranesville Tavern Historic District and proceeds south basically along the western edge of the Potomac water treatment facility. South of Rosier's Branch, it is located east of and parallel to Stuart Road in the vicinity of the Stuart Ridge subdivision. To the south of Stuart Ridge, the alignment rejoins Stuart Road and proceeds to Baron Cameron Avenue. The alignment then proceeds south along the Colonial pipeline easement to a point in the vicinity of Thompson Road, where it curves to the east to intersect Route 50 at approximately Acorn Ridge Road.

### Bull Run Planning District

#### Sector BR2

A. Route 50 should be improved to a limited-access facility with six lanes between the Loudoun County line and the City of Fairfax.

#### Sector BR3

A. Integrate the improvement of Braddock Road with a circulation plan of Centreville. Improved access to I-66 will have to be provided for the stable and option areas, especially when new development occurs on Braddock Road. Specific recommendations for a Centreville circulation plan should be developed in the context of the Centreville complex area issues.

B. Route 50 should be improved to a limited-access facility with six lanes between the Loudoun County line and the City of Fairfax.

C. I-66 should be widened from the Prince William County line to Route 50 to serve planned growth in Prince William County and portions of Bull Run. Median bus lanes should be constructed on I-66 between the Vienna Metro Station and Lee Highway (Route 29) in Centreville.

#### Sector BR4

A. Route 50 should be improved to a limited-access facility with six lanes between the Loudoun County line and the City of Fairfax.

B. I-66 should be widened from the Prince William County line to Route 50 to serve planned growth in Prince William County and portions of Bull Run. Median bus lanes should be constructed on I-66 between the Vienna Metro Station and Lee Highway (Route 29) in Centreville.

#### Sector BR7

A. I-66 should be widened from the Prince William County line to Route 50 to serve planned growth in Prince William County and portions of Bull Run. Median bus lanes should be constructed on I-66 between the Vienna Metro Station and Lee Highway (Route 29) in Centreville.

B. Improve Braddock Road to a four-lane facility between Route 123 and Centreville.

### Pohick Planning District

#### Sector P1

A. Improve Route 123 to a four-lane facility.

#### Sector P2

A. Provide bus lanes on Guinea Road and Braddock Road between Zion Drive and I-495 (Area I), with access to the Franconia/Springfield Metro Station. Construction of the additional pavement for bus lanes along Braddock Road is to occur within the defined median of the present roadway.

B. Provision for fringe parking for use of public transit.

C. Wherever possible this fringe parking should be provided as a multiple use of parking for other purposes, such as commercial and recreational facilities (e.g., as part of PDH or commercial development).

D. Improve Braddock Road to four lanes from Guinea Road to Route 123. Widening in the vicinity of Sideburn Road should be primarily north of the present roadway to minimize impact on existing residential development in the southwest quadrant of the intersection.

E. Improve Hoopes Road and Pohick Road to a continuous four-lane facility from Backlick Road (Area IV) to Route 123. The alignment will be determined in the countywide Plan transportation analysis but will follow the existing alignment of Hoopes Road and Pohick Road. Improved interchanges will be necessary along the alignment.

F. Realign and upgrade Rolling Road as a four-lane facility between Old Keene Mill Road and Hoopes Road. Improve the section of Rolling Road south of Springfield Village Drive at the earliest

possible date to eliminate the existing hazardous curve. VDH&T is urged to use dedicated right-of-way to make this improvement.

G. Consider a commuter rail station in the Burke area.

H. Improve Rolling Road to four lanes with a service road between Braddock Road and the Southern Railroad tracks.

I. Construct the Roberts Road extension as a collector rather than as a principal arterial.

J. Widen Rolling Road to a four-lane facility between Old Keene Mill Road and Route 1, with realignment near "deadman's curve" and minor realignments to Pohick Road between I-95 and Route 1. This facility will be needed as development occurs in the area.

K. Improve Burke Lake Road to a four-lane facility between Pohick Road and Rolling Road near Braddock Road to provide access from the developing portions of the Pohick to I-495.

#### Sector P3

A. If commuter rail service is initiated on the Southern Railroad, as proposed by Prince William County, Fairfax County should consider a commuter rail station at Clifton. However, this may tend to increase development pressure which may be disadvantageous.

#### Sector P4

A. Only improvements for safety are appropriate.

B. If commuter rail service is initiated on the Southern Railroad, a station at Clifton should be considered, but it should be evaluated in terms of possible development that might result. If it is determined that the area development would adversely impact Clifton, a station should not be considered.

#### Sector P5

A. Improvements of Route 123 to a four-lane facility from Fairfax to Occoquan to provide access through the southeast region of the County.

B. Prohibit other major transportation facilities and improvements in the area because of the impact on the environment and existing communities.

C. Maintain secondary roads as two-lane facilities to preserve the semirural character of the sector. Safety and alignment improvements are appropriate.

D. Widen Lee Chapel Road to a four-lane facility.

#### Sector P6

A. Construct a four-lane, east-west facility on the general alignment of Hooes Road and Pohick Road, with certain realignments between Ox Road (Route 123) and Backlick Road (Area IV). The facility will connect with the Franconia/Springfield Metro Station. This facility is needed to provide access to the rapidly developing Pohick area.

B. Two additional lanes for buses should be provided between Burke Lake Road and the Metro station. The construction of these additional lanes should occur after the initial four-lane roadway is constructed and the widening necessary for the bus lanes should occur entirely within the median of the four-lane facility, which is recommended for construction at the earliest date.

C. Fringe parking lots should be located at both Sydenstricker Road where it connects with Hooes Road, and Burke Lake Road where it connects with Pohick Road.

D. Widen Lee Chapel Road to a four-lane facility between Burke Lake Road and Route 123.

#### Sector P7

A. Improve Pohick Road and Hooes Road to a four-lane facility from Springfield to Route 123 for increased access to adjacent sectors.

#### Option Area 1

(Portions of Sectors UP4 and UP5.)

A. Relocated Dranesville Road (Springfield Bypass and Extension in the vicinity of the Dranesville and Centreville Districts). Construct a new four-lane facility between Route 7 and Route 50. The alignment intersects Route 7 at a point west of the Dranesville Tavern Historic District and proceeds south basically along the western edge of the Potomac water treatment facility. South of Rosier's Branch, it is located east of and parallel to Stuart Road in the vicinity of the Stuart Ridge subdivision. To the south of Stuart Ridge, the alignment rejoins Stuart Road and proceeds to Baron Cameron Avenue. The alignment then proceeds south along the Colonial pipeline easement to a point in the vicinity of Thompson Road, where it curves to the east to intersect Route 50 at approximately Acorn Ridge Road.

B. Additional bus and mass transit use is recommended for the Route 7 corridor. Grade-separated access points should be located at Dranesville Road and Reston Avenue. Substantial new development will require new internal roads to supplement Dranesville Road and the new subdivision road.

#### Option Area 2

(Portions of Sectors UP7, UP8 and UP9.)

A. Parallel lanes to Dulles Access Road need to be constructed (total eight-lane facility) and grade separated access points built at Route 28 and Centreville Road. Fringe parking should be provided in the vicinity of the Route 28 interchange. Route 28 is to be a four-lane limited-access road, with service roads and limited access, to serve regional traffic demand.

B. Extend Lawyers Road west of Reston as a four-lane facility between Fox Mill Road and Route 28. The purpose of this facility is to provide an east-west arterial in the south Reston area, linking it with major circumferential routes and the industrial development near Dulles Airport. Without this facility, traffic will be forced onto Fox Mill Road, West Ox Road and Centreville Road.

#### Option Area 3

(Portions of Sectors BR2, BR3 and BR4.)

A. This area is in close proximity to Route 50 which is planned to be improved to a six-lane transportation facility. There will be access points with grade separation at Route 28 and Centreville Road. Consideration must be also given to an access point with grade separation at Route 28 and Popular Tree Road. The former is planned for four-lane improvement by 1985. New development will necessitate the improvement and construction of new internal roads.

### AREA IV RECOMMENDATIONS

(These recommendations were adopted in individual community planning sectors in Area IV.)

#### Lower Potomac Planning District

##### Sector LP2

A. Silverbrook Road should be realigned so that it intersects Lorton Road at a common intersection with Sanger Street or further west. At that time the present entrance from Silverbrook onto Lorton Road should be closed.

##### Sector LP3

A. A left-turn lane should be provided on Gunston Road southbound, to facilitate entrance into the Pohick Bay Regional Park.

#### Sector LP4

A. Transportation improvements in the area should facilitate full realization of the area's industrial potential while also serving the nonindustrial recommended uses in greater safety and efficiency. For example, redesign and reconstruction of the Lorton Road/I-95 interchange should permit access to the industrial area by large vehicles. Improvement of Lorton Road near I-95 should serve not only that industrial traffic but also residential and school traffic in the area.

B. The bridge on Pohick Road which passes over the RF&P Railroad should be improved by VDH&T. Improvement of Pohick Road and its bridge should provide better service to Pohick Estates and other residential areas west of I-95.

C. There should be no industrial access from Pohick Road.

D. VDH&T should improve the horizontal and vertical alignment of Gunston Cove Road to provide two good travel lanes.

#### Sector LP5

A. Road improvements to serve the planned on-post housing are needed by Fort Belvoir. The County also has an interest in such improvements because of their connection with off-post traffic networks and because of the County's own regional transportation needs.

#### Mount Vernon Planning District

##### Sector MV1

A. Metro access through the Jefferson Manor subdivision by nonresidents of Jefferson Manor should be discouraged. However, this movement will be more effectively eliminated by provision of the recommended Metro access improvements to Telegraph Road, Huntington Road, North Kings Highway, and their intersections than by enacted restrictions on alternative access routes.

B. The intersections of North Kings Highway and Huntington Avenue with Telegraph Road should be improved to provide a single intersection with the latter. Such a connection would facilitate transit traffic through the area and minimize its disruption of local activities.

##### Sector MV2

A. The horizontal and vertical alignment of Harrison Lane should be improved to provide two safe travel lanes.

##### Sector MV3

A. VDH&T should improve the horizontal and vertical alignment of Quander Road to provide two safe travel lanes.

B. Fort Hunt Road should be realigned or linked to intersect with Route 1 directly opposite the west Huntington Avenue/Route 1 intersection and the already scheduled Huntington Avenue improvement. This will result in a greatly improved access to the lower entrance to Huntington Metro Station.

##### Sector MV4

A. Intersections along the George Washington Memorial Parkway should be improved to permit safer access to and from the parkway.

##### Sector MV5

A. Fort Hunt Road improvement is already programmed.

B. Existing major street corridors in the Gum Springs community are endorsed. The series of cul-de-sac streets recommended to serve the community, rather than completion of a grid pattern, is endorsed by this plan as the best means of community preservation.

C. The feasibility of barring through truck traffic on Sherwood Hall Lane and other Gum Springs corridors should be explored.

D. A need exists to conduct a traffic analysis and traffic pattern study to determine alternatives available to minimize a difficult traffic condition, to discuss the relative advantages/disadvantages of each alternative and to bring forth recommendations advancing attending fiscal, political, environmental and related aspects of each. Such a study should be undertaken and completed in 1977 and brought to the Planning Commission in 1977 for its deliberations and recommendations to the Board of Supervisors.

E. Pending completion of a thorough traffic study of the western Sherwood Hall Lane area, an intersection improvement at Sherwood Hall Lane and Richmond Highway, an improved two-lane cross-section for Collingwood Road, and a proposed new facility linking the Harrelson tract to Route 1, are improvements of sufficient importance in the area to be tentatively placed on the transportation plan. It should be recognized that those improvements will not necessarily eliminate traffic congestion in the area.

#### Sector MV6

A. The improvement of Collingwood Road and Parkers Lane as currently programmed should be done, with initial priority given to elimination of vertical curves in the segment between the Harrelson tract and Fort Hunt Road.

B. All intersections or collector roads with the George Washington Memorial Parkway should be improved to provide safer access to and from the Parkway.

C. Bus service should be extended to the area west of Fort Hunt Road and south of Sherwood Hall Lane. Minor improvements to inadequate roadways in the area may be necessary to permit safe bus transit operation.

D. Riverside Road and Elkin Street should have improved shouldering, curbs, gutters, and sidewalks to provide safe corridors for elementary school children walking to and from school.

#### Sector MV7

A. Richmond Avenue should be widened and improved to assure safe school bus operation and to insure the safety of students walking along the avenue to Walt Whitman Intermediate School.

B. A pedestrian overpass should be constructed across Route 1 in the vicinity of Reddick Avenue and Russel Road (in Sector MV8) to provide for safe walking access to Walt Whitman School by Lee District students (from west of Route 1) assigned to that school.

C. The intersection of Ferry Landing Road and Mount Vernon Memorial Parkway should be improved at the time of adjacent development, to eliminate the present acute angle intersections and shared roadway at that point.

D. Lukens Lane, Old Mill Road, and Old Mount Vernon Road should be improved to two twelve-foot lanes.

E. The intersection of Mount Zephyr Street and Woodley Drive should be improved to provide safe school bus operations.

F. The Old Mill Road/Mount Vernon Memorial Highway/Richmond Highway intersection should be realigned to allow more safe and efficient turning movements, and to provide a straight through crossing from Mount Vernon Memorial Highway to Old Mill Road.

#### Sector MV8

A. The Old Mill Road/Mount Vernon Memorial Highway/Richmond Highway intersection should be improved to provide more efficient and safe flow of traffic.

#### Route 1 Corridor Area

A. Transportation recommendations for the Route 1 Corridor Area are included in that section of Area IV.

### Rose Hill Planning District

#### Sector RH1

A. The Capital Beltway/South Van Dorn Street interchange should be improved to provide better sight distance and turning movements.

B. Franconia Road from Grovedale Drive to South Van Dorn Street should be improved to a divided six-lane facility. Consideration should be given to limiting curb cuts along the improved roadway, for this corridor is proposed by residents as a major element of a commuter bike trail system. Where they can be safely provided along Franconia Road, sidewalk curb cuts to facilitate such bike trail access at intersections are recommended.

C. Circulation for the Franconia area should be designed to limit impact on surrounding areas and access should be provided to Franconia Road via a single curb cut. This access should be located so that no additional traffic lights are required on Franconia Road.

#### Sector RH2

A. Ciermont Drive underpass should be closed to vehicular traffic following the completion of four-lane improvements to Franconia Road eastward to Telegraph Road, and in conjunction with Cameron Run development in Alexandria. Bike and pedestrian access through the underpass will continue to link the community with nearby commercial areas as well as Metro.

B. The feasibility of extending appropriate bus service to the interior of residential neighborhoods between Franconia Road and I-95 should be examined. Roadways in this area may require major improvement to permit safe and efficient bus operation.

C. The respective development patterns of the park and surrounding residential areas should provide for trails connection to Brookland-Bush Hill Park and neighborhood schools.

D. The present Bush Hill Drive Bridge across the Capital Beltway is not met at either end by an adequate roadway. Bush Hill Drive, over its southern portion, is a subdivision collector street in the Franconia area, but for approximately half its length between Franconia Road and the Beltway it is nothing more than a path across undeveloped land.

The bridge presents a potential traffic impact to the stable neighborhood and should be restricted to pedestrian and bicyclist use only with improvements to provide safe, attractive nonauto access to the Metro station from all uses in the area south of the Beltway. Development in the area should provide pedestrian and bike paths to link with the bridge.

E. Provision should be made for a "no parking" ordinance to discourage misuse of neighborhood streets near Metro by commuters and other motorists.

#### Sector RH3

A. Burgundy Road should be improved to provide two good travel lanes.

B. Provision should be made for the improvement of the East Drive/Burgundy Road/Telegraph Road intersection in conjunction with improvements in the North Kings Highway/Telegraph Road and Huntington Avenue/Telegraph Road intersections (Huntington Metro Station Area).

#### Sector RH4

A. Van Dorn Street should be extended southward from Franconia Road, directly aligned with its northward segment, extending past Edison High School into the Lehigh tract. (The westward extension of Lockheed Boulevard, recommended in the Mount Vernon and Rose Hill community planning sector specific transportation recommendations would intersect the recommended South Van Dorn Street extension.)

B. The Springfield Bypass, proposed earlier in this Plan, should be extended eastward across Beulah Street, south of the present Beulah Street/Hayfield Road intersection, to link with an improved Hayfield Road southeast of the commercial uses now found on that road near the Beulah Street intersection. No eastward extension of Hayfield Road is recommended beyond its present terminus in the subdivision, so through-traffic is not introduced into Hayfield.

C. The southern portion of the Lehigh tract should be provided a road to I-95 that does not require use of Franconia Road.

D. Old Telegraph Road between the Coast Guard property and a point where it rejoins new Telegraph Road, southwest of Hayfield High School, should be improved and again made the main corridor of Telegraph Road, to remove through-traffic from the immediate vicinity of the high school, elementary school, and Hayfield subdivision.

E. Bus service should be extended to an improved Beulah Street to provide better service to residents along this roadway.

F. Pedestrian access across Telegraph Road should be improved at the Hayfield School area. If Telegraph Road is realigned as recommended, the problem of safe access for school children may be alleviated.

G. Edgewood Drive should be extended westward to Gum Street.

H. Edgewood Drive east of Guilford Drive should be reconstructed as a closed loop rather than as a stub street awaiting extension.

#### Sector RH5

A. Good access to Lee District Park should be a concern of all land use and transportation decisions taken in the sector.

#### Sector RH7

A. Lockheed Boulevard should be extended westward from its present terminus at Harrison Lane, to intersect Telegraph Road.

B. Harrison Lane should be improved between Lockheed Boulevard and South Kings Highway. The improvement is necessitated by the need for safe access for buses to and from Groveton Elementary School and for residential traffic. At the same time, the character of improvement should be designed to both enhance and provide improved access to the Huntley Historic District, south of the school.

### Springfield Planning District

#### Sector S1

A. Bus service should be extended to Saturdays and evenings.

#### Sector S3

A. The realignment of Rolling Road through the Larwin property, to eliminate the "deadman's curve," is endorsed.

#### Sector S4

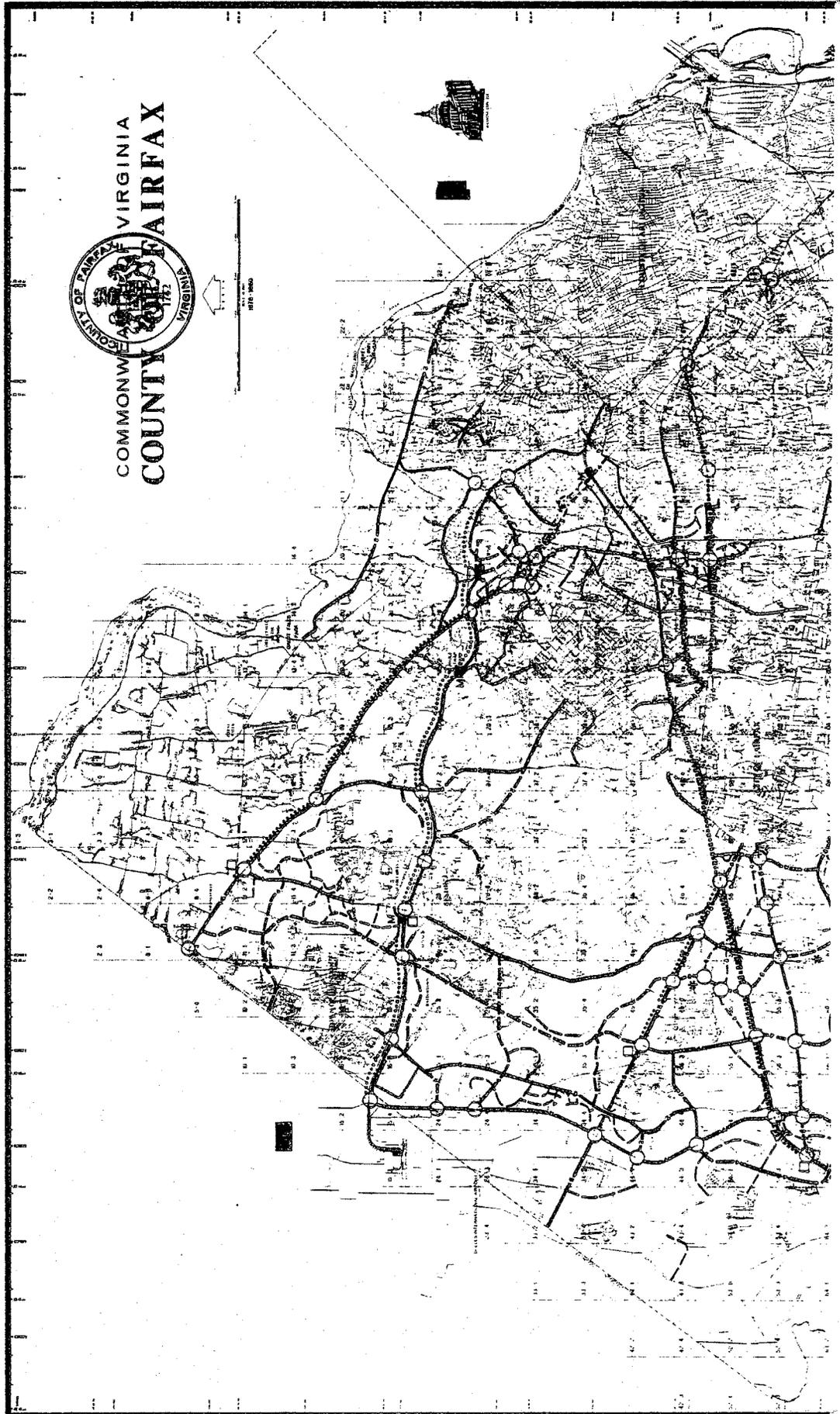
A. The planned southeast spur between the Springfield Bypass (Hooes Road) and I-95 should not be located opposite Ridgeway Drive or any other street entrance which would tend to direct through-traffic into the interior of Springvale.

B. Bus service should be extended to serve Backlick Road.

C. The number of curb cuts along Backlick Road south of Old Keene Mill Road should be greatly reduced in order to improve the safety characteristics of this stretch of roadway.

#### Sector S6

A. Beulah Street should be widened to a four-lane facility from Franconia Road to Telegraph Road, since Beulah Street will serve as the eastern terminus of the Bypass spur in the vicinity





of the proposed Franconia/Springfield Metro Station. Also, the vertical and horizontal alignment of Beulah Street should be improved here.

B. The Newington Road/Accotink Road intersection and the Newington Road underpass at the RF&P Railroad should be improved.

**Sector S7**

A. Provision should be made for safe, improved pedestrian access across Franconia Road.

B. Congestion within Springfield and around Springfield Mall requires a circulation plan for the entire area. The analysis of present and future traffic has not yet been performed in sufficient detail to lead to a circulation plan for greater Springfield.

C. The location of entrances to the Springfield Mall from Loisdale Road should be reevaluated to assure that traffic waiting to enter the Mall is not backed up onto Franconia Road. This reevaluation should be in the context of circulation plans for the area, properly staged to accommodate existing and future development.

D. The recommended spur between Hooes Road and Shirley Highway, with an interchange at the latter, should be designed and located to avoid adverse impact on Loisdale Estates.

**Sector S8**

A. Obtain right of way along Commerce Street in order to permit widening of the street and to provide a pedestrian/bikeway along the street and across the Commerce Street bridge.

B. Provide pedestrian crosswalks and light controls at the Loisdale/Franconia Road/Commerce Street intersection and the Frontier Drive/Franconia Road intersection.

C. Designate the sidewalks along Franconia Road as bikeways and place appropriate signs along the sidewalks.

D. Install a crosswalk and traffic light with pedestrian control at the Thomas Inwood Drive/Franconia Road intersection, and designate as a bikeway.

E. No direct vehicular access to the Beltway Metro Station should be provided from Franconia Road or any adjacent development area.

F. Walkways and bikeways to the Metro station from surrounding areas should be provided to promote nonvehicular use of Metro by residents of Sector S8.

G. A single entrance from Franconia Road should serve the vacant land to the south of the proposed Metro station. Kitson Lane should not be the access street as its use would create double-frontage lots on the west side. A new roadway to the east should be selected, with Kitson Lane being vacated as a roadway. Rose Street extended would appear to be the logical location for such an entrance.

**Sector S9**

A. The proposed Springfield Bypass should be constructed across the southern portion of the area, in the vicinity of Alforth Avenue.

**Springfield CBD Area**

A. Transportation recommendations for the Springfield CBD are included in that section.