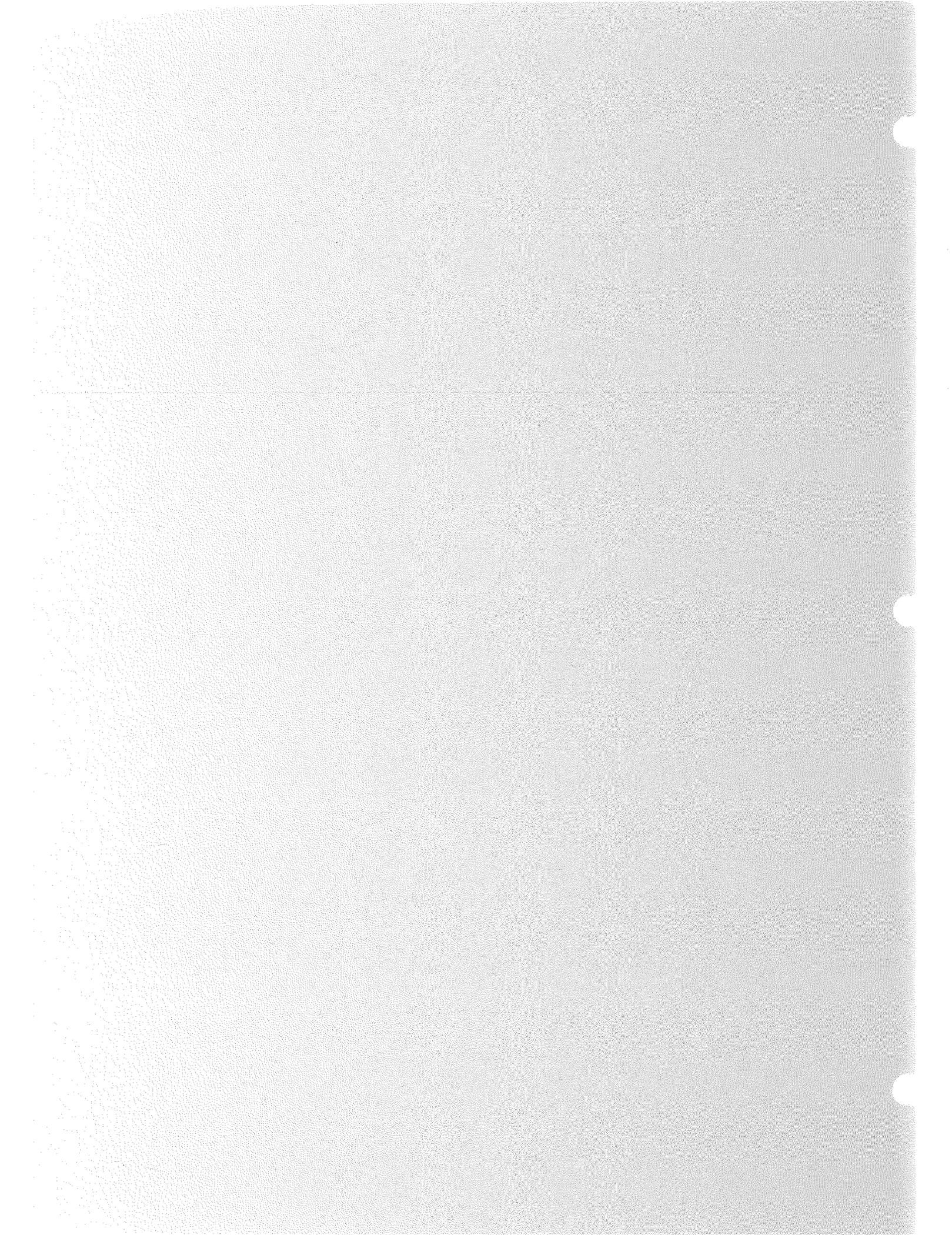


AREA II



AREA II

OVERVIEW

Key concepts embodied in this document include:

- interim development and redevelopment policies;
- planned development centers; and
- environmental quality corridors.

Community planning sectors have been established to provide a framework for detailed recommendations. Population estimates have been made for a 15-year period. Stable areas have been designated for the purpose of reinforcing neighborhood stability by:

- encouraging infill with compatible land uses;
- insisting on adequate buffering between conflicting land uses;
- reducing through-traffic on neighborhood streets;
- containing commercial expansion;
- protecting environmentally valued resources; and
- acquiring land for recreation and open space purposes.

Complex areas have been designated where pressures for changes exist and the situation defies simple solutions. These areas require:

- plan guidelines and criteria for evaluating major public and private proposals;
- a system for conducting such an evaluation—project impact evaluation system (PIES);
- the use of medium-density development to contain commercial expansion; and
- improved access to major shopping facilities by trails, sidewalks, and small area transit.

Regional-scale planned development centers are proposed at Tysons Corner and the Fairfax Center Area (west of the intersection of Route 50 and I-66).

Economic analysis has provided recommendations to:

- increase job opportunities within the area by full utilization of potential job sites such as Tysons Corner, Merrifield, and the Fairfax Center Area.

Environmental protection and enhancement are recommended through:

- establishment of low-density development in environmentally sensitive areas such as the Difficult Run, Bull Neck Run, and the Potomac palisades;
- reduced automobile use by encouraging greater mass and small area transit use;
- review of environmental constraints and prohibitions on a site-by-site basis to minimize development impacts;
- development of an air quality maintenance plan; and
- delineation and protection of environmental quality corridors.

Improvement of housing opportunities and neighborhood conditions for all income levels are recommended through:

- inclusion of low- and moderate-income units in planned development centers;
- conservation of existing moderate-income housing units; and
- monitoring neighborhood design and housing construction to promote open space and structural quality.

Transportation strategies and growth control are linked by:

- recommending compatible infill development at densities sufficient to encourage more mass transit ridership and small area transit systems;
- promoting planned development centers to facilitate mass transit use; and
- proposed improvements to Route 7 and the Dulles Airport Access Road.

Public facilities investment patterns are recommended which:

- phase timing of facilities to guide growth;
- reduce public facility costs by encouraging planned development; and
- promote increased public investment in neighborhood parks and needed school facilities.

Plan implementation is promoted by coordination of public and private actions, including:

- innovative programs such as the small area transit systems or local commuter bus groups;
- public policy decisions (zoning, administrative rulings, etc.);
- public investment (capital improvement program (CIP), park dedication and advance acquisition, highway programming, land banking, etc.);
- private input to public policy (citizen review of CIP, participation in PIES, neighborhood project initiatives); and

BACKGROUND

Rapid Suburbanization and Traffic Congestion

A few years ago, peaceful rolling farmland and quiet crossroads towns characterized the 70 square miles in the northeast central part of the County which make up Area II. The relentless movement of Washington's suburban growth and the opening of two interstate highways which transverse and converge within the area have transformed these rural clusters into a densely populated suburb except at the western perimeter along Difficult Run and along the Potomac palisades. Provided with excellent access to downtown Washington and Montgomery County, Maryland, as well as to most employment centers in Northern Virginia, the area has become a mecca for both residential and nonresidential growth. Between 1960 and 1983, population increased by 77,873 persons and Tysons Corner has become the largest industrial/commercial complex in the County. Congestion along the transportation networks and environmental impacts from this congestion have become the major problems of the area.

Area II has been fortunate in its growth. Since much of its development followed the 1958 countywide plan, it does not suffer substantially from the intrusion of incompatible land uses into residential neighborhoods, strip commercial development along arterial roads, or a lack of public facilities such as schools and parks. Pedestrian circulation to shopping, recreation facilities, and adjacent neighborhoods is somewhat limited. But the area's residential sprawl provides a classic example of a land use configuration which is uneconomic for delivery of public services and wasteful of transportation-related energy resources. The transportation network itself has lagged behind development creating congestion along major corridors and encouraging motorists to bypass major intersections by cutting through residential neighborhoods.

Clearly, the criteria for land use planning have changed since the beginning of development in Area II. The issues now revolve around how to fill in the gaps with harmonious development and meet new requirements for energy conservation and protection of natural resources.

County officials are making an effort to encourage mass transit usage through the planning process. The introduction of bus and rail transit considerations could change the type of development undertaken in the future. The impact of primary emphasis on rail transit is particularly pertinent to Area II since three of the six County Metro stations in the adopted regional system will be in the area.

High-density residential nodes have already developed near Tysons Corner, Fairfax Circle, at the Gallows Road-Route 50 intersection, and along Route 123 north of Fairfax City. While none of these concentrations is within walking access of a Metro station, all are well-located in relation to present and potentially improved feeder bus service. There will be pressures for high-density development in several areas, especially near Metro stations.

Conflicts will be inevitable. One challenge to planning will be to ameliorate the effects of intensive land uses in complex areas on predominantly low-density residential development. But the improvements in transportation and the increase in economic opportunity which can accompany well-planned multiuse higher density development centers could benefit the whole community.

Two of the main objectives of the plan for Area II are to respond to changes in growth patterns and to address larger concerns such as environmental protection, energy conservation, and pollution abatement. Other purposes include improving the mechanisms of planning and land use control and increasing public involvement in the entire process.

Analyses and recommendations in this document extend countywide policies to the district and community sector levels in Area II. But the analyses and recommendations also reflect considerable input from local residents, businessmen, and community organizations.

THE AREA IN THE OCCOQUAN BASIN

Part of Area II is within the watershed of the Occoquan Reservoir, the source of drinking water for over 600,000 Northern Virginians. The reservoir has serious water quality problems resulting from runoff pollution. In 1982 Fairfax County adopted the *Occoquan Basin Study* which includes a series of recommendations designed to protect the reservoir while achieving the planning objectives relating to the selection of locations for economic development, airport noise, land use compatibility planning and the implementation of environmental quality corridors. A synopsis of the *Occoquan Basin Study*, a map showing the boundaries of the Occoquan Basin and a description of the specific recommendations regarding water quality, aircraft noise and environmental quality corridors which apply to all lands within the basin are presented under a section titled Protection of the Occoquan Basin and the Public Water Supply at the beginning of the Area III recommendations section. These recommendations apply to that part of Area II in the Occoquan Basin.

SHORT TERM FORECASTS

As has been discussed in the introduction section of the Plan, countywide forecasts of population to 1990 have been lowered to 686,000. This new forecast is based on demographic trends which were observed during 1976 and verified in more recent work done for the Metropolitan Washington Council of Governments Cooperative Forecasting Program.

The reduction in countywide population forecasts will impact on the timing of expected housing units in individual planning areas, districts and sectors. Detailed small area data reflecting these impacts are presented in 5-year increments up to the year 2000 in computer printouts which are available in the Fairfax County Office of Research and Statistics. In addition, plan buildout data by supervisor district, planning district and subcensus tract can be found in the 1983 edition of *Standard Reports*, published by the Office of Research and Statistics.

To augment the data found in *Standard Reports*, detailed existing housing estimates as of January 1983, and newly developed data on plan capacities in housing units are presented in the following tables. The tables also include dwelling units as of January 1, 1975. This is approximately the time the original PLUS program plan was adopted. Thus, the data enable comparison of the level of residential development at the time of plan adoption with that of 1983 and with projected plan capacity. In addition, the data include existing dwelling units and plan capacity as of January 1983 in order to show the differences caused by plan changes in the previous annual plan review. The data in these tables supersede data presented in other tables of this Plan.

All of the data has been generated on a parcel-by-parcel basis. Existing units are from the January 1, 1983 Urban Development Information System parcel file. Additionally planned units are assumed to be built on undeveloped and underutilized land (adjusted for floodplains) at the midpoint of the planned density ranges. For example, an area planned for 1-2 dwelling units per acre is assumed to represent a density of 1.5 dwelling units per acre.

The plan definitions for residential unit types are as follows:

Planned Density Du/Ac	Unit Type Mid-Point Planning
.1-.2, .2-.5, .5-1, 1-2, 2-3, 3-4	100% SFD
4-5	50% SFD/50% TH
5-8	100% TH
8-12	50% TH/50% GA
12-16, 16-20	100% GA
20 or more (e.g. 20-40 du/ac)	100% EA (30 du/ac)

SFD: single-family detached
TH: townhouse
GA: garden apartment
EA: elevator apartment

**Existing and Projected Housing Units by Type
January 1983 — Plan Buildout**

Residential Unit Type	Area II					
	Jan. 1975 Dwelling Units	Jan. 1982 Dwelling Units	Jan. 1983 Dwelling Units	Additional Planned Units	Jan. 1983 At Plan Capacity	Jan. 1982 Previous Capacity
Fairfax Planning District						
Single Family Detached	5,140	6,823	6,784	3,554	10,338	10,485
Townhouse	745	1,789	1,911	1,720	3,631	2,548
Apartment	3,478	3,343	3,542	2,518	6,060	6,556
Mobile Home	254	256	256		256	256
Total	9,615	12,011	12,493	7,792	20,285	19,825
McLean Planning District						
Single Family Detached	12,858	14,599	14,706	5,578	20,284	20,224
Townhouse	965	1,173	1,197	430	1,827	1,621
Apartment	2,749	4,484	4,734	1,140	5,874	5,623
Total	16,302	20,256	20,637	7,148	27,785	27,468
Vienna Planning District						
Single Family Detached	9,963	11,548	11,663	3,886	15,549	15,529
Townhouse	1,120	3,017	3,059	1,237	4,296	4,239
Apartment	2,429	2,861	2,878	1,473	4,351	4,334
Total	13,512	17,426	17,600	6,596	24,196	24,102
Planning Area Total	39,429	49,693	50,730	21,536	72,266	71,395

**Existing and Projected Housing Units by Type
January 1983 — Plan Buildout**

Residential Unit Type	Area II Fairfax Planning District					
	Jan. 1975 Dwelling Units	Jan. 1982 Dwelling Units	Jan. 1983 Dwelling Units	Additional Planned Units	Jan. 1983 At Plan Capacity	Jan. 1982 Previous Capacity
Sector F1						
Single Family Detached	1,621	2,256	2,339	861	3,200	3,231
Townhouse			46	79	125	61
Apartment		3	2	20	22	23
Mobile Home	254	256	256		256	256
Total	1,875	2,515	2,643	960	3,603	3,571
Sector F2						
Single Family Detached	1,755	2,042	2,083	553	2,636	2,645
Townhouse	468	890	890	55	945	945
Apartment	1,746	1,477	1,677		1,677	1,477
Total	3,969	4,409	4,650	608	5,258	5,067
Sector F3						
Single Family Detached	607	372	369	383	752	756
Townhouse	227	891	955	133	1,088	999
Apartment	1,730	1,857	1,857	1,066	2,923	3,165
Total	2,614	3,120	3,181	1,582	4,763	4,920
Sector F4						
Single Family Detached	945	1,755	1,797	1,408	3,205	3,317
Townhouse		4	16	328	344	101
Apartment				931	931	1,036
Total	945	1,759	1,813	2,667	4,480	4,454
Sector F5						
Single Family Detached	212	198	196	349	545	516
Townhouse		4	4	1,125	1,129	442
Apartment		6	6	501	507	855
Total	212	208	206	1,975	2,181	1,813
Planning District Total	9,615	12,011	12,493	7,792	20,285	19,825

STABLE AREAS

Existing and Projected Housing Units by Type
January 1983 — Plan Buildout

Area II McLean Planning District						
Residential Unit Type	Jan. 1975 Dwelling Units	Jan. 1982 Dwelling Units	Jan. 1983 Dwelling Units	Additional Planned Units	Jan. 1983 At Plan Capacity	Jan. 1982 Previous Capacity
Sector M1						
Single Family Detached	120	45	45	44	89	99
Townhouse	200	244	244		244	244
Apartment	1,832	3,453	3,453	634	4,087	4,086
Total	2,152	3,742	3,742	678	4,420	4,419
Sector M2						
Single Family Detached	2,112	2,198	2,198	185	2,383	2,378
Townhouse				109	109	109
Apartment	340	340	340	363	703	703
Total	2,452	2,538	2,538	657	3,195	3,188
Sector M3						
Single Family Detached	6,744	7,187	7,212	1,630	8,842	8,792
Townhouse	552	629	648	317	963	964
Apartment	307	441	441	101	542	542
Total	7,603	8,257	8,299	2,048	10,347	10,298
Sector M4						
Single Family Detached	1,303	1,519	1,519	637	2,156	2,140
Townhouse	200	264	270	4	274	268
Apartment		250	300	42	542	292
Total	1,503	2,033	2,289	683	2,972	2,700
Sector M5						
Single Family Detached	573	911	919	687	1,606	1,612
Townhouse	13	34	35		35	34
Total	586	945	954	687	1,641	1,646
Sector M6						
Single Family Detached	1,475	1,859	1,918	1,905	3,823	3,842
Townhouse		2	2		2	2
Total	1,475	1,861	1,920	1,905	3,825	3,844
Sector M7						
Single Family Detached	531	882	895	490	1,385	1,373
Total	531	882	895	490	1,385	1,373
Planning District Total	16,302	20,256	20,637	7,148	27,785	27,468

Existing and Projected Housing Units by Type
January 1983 — Plan Buildout

Area II Vienna Planning District						
Residential Unit Type	Jan. 1975 Dwelling Units	Jan. 1982 Dwelling Units	Jan. 1983 Dwelling Units	Additional Planned Units	Jan. 1983 At Plan Capacity	Jan. 1982 Previous Capacity
Sector V1						
Single Family Detached	667	669	664	686	1,330	1,345
Townhouse	716	1,877	1,878	856	2,334	2,330
Apartment	1,584	1,532	1,532	556	2,088	2,086
Total	2,979	3,878	3,874	1,878	5,752	5,763
Sector V2						
Single Family Detached	1,452	1,692	1,699	657	2,356	2,344
Townhouse	111	147	147	20	187	187
Apartment	3			154	158	156
Total	1,566	1,839	1,846	833	2,679	2,687
Sector V3						
Single Family Detached	1,782	2,010	2,054	1,119	3,173	3,201
Townhouse	47	79	58	277	338	338
Apartment	4	504	521	102	623	608
Total	1,813	2,593	2,633	1,498	4,131	4,145
Sector V4						
Single Family Detached	1,776	2,386	2,427	946	3,373	3,318
Townhouse	47	318	318	6	324	324
Apartment	300	300	300	8	308	308
Total	2,123	3,004	3,045	960	4,005	3,948
Sector V5						
Single Family Detached	249	458	479	204	683	685
Townhouse	85	486	543	219	762	733
Apartment				536	638	638
Total	314	944	1,022	1,059	2,081	2,054
Sector V6						
Single Family Detached	4,047	4,333	4,340	294	4,634	4,638
Townhouse	132	310	315	59	374	347
Apartment	538	525	525	15	540	540
Total	4,717	5,168	5,180	368	5,548	5,525
Planning District Total	13,512	17,426	17,600	6,596	24,196	24,102
Planning Area Total	39,429	49,693	50,730	21,536	72,266	71,395

Planning Area II is composed of the McLean, Vienna, and Fairfax Planning Districts.

A wide range of local environments is found in Area II, varying from open farms and wooded areas in the western portion to established communities in the eastern portion. This section of the Plan designates stable areas and focuses upon evaluations and recommendations for areas which have been identified as stable. Protection, compatible infill, and enhancement of these stable areas is a major objective of the Area II section of the Plan.

What is a Stable Area?

The three-part land classification system developed for the district planning process tailors a planning approach and broad strategy for stable, complex, and option areas based on the characteristics of each type of area.

The key to the definition of a stable area is the state of development. A given area may be entirely single-family homes or all multifamily dwellings, all commercial or industrial, or any combination of these elements. Further, a stable area may include significant amounts of undeveloped land. But the main feature is the existence of sufficient development and pattern of use on the land to establish a definite character which should be respected by future development on the remaining land.

Policies for Stable Areas

Protection and enhancement involves taking positive actions necessary to reinforce the existing character of the area and preventing actions which would compromise or degrade this character.

For the most part, stable neighborhoods in Area II are residential with a scattering of institutional structures, parks, and open spaces and some small commercial and industrial zones. The physical condition of the homes and the public and private structures is generally good although several small pockets of substandard or marginal-quality housing do exist.

Six general policies for stable areas have been formulated to provide key guidelines for specific recommendations designed to protect and enhance the quality and character of individual stable areas.

- Development Control—Impose development controls which limit the negative impacts of conflicting land uses (existing and proposed), provide for buffers and other ameliorating measures, and insure that infill development is in character with the surrounding area.
- Community Organizations—Encourage community organizations to identify community problems and seek solutions through County government and local action.
- Through-Traffic Diversion—Divert through-traffic away from neighborhood streets and channel flows onto higher capacity routes.
- Public Facility Improvement—Improve public facilities such as parks, playgrounds, community centers, and schools, as needed.
- Public Transit. Develop transit alternatives to the automobile, where feasible.
- Community Service Programs—Develop programs and facilities that serve the special needs of current residents; consider the reuse or multiple use of available public facilities (such as schools) which have excess capacity or potential for other than primary uses.

The Framework for Analysis: Community Planning Sectors

To facilitate the analysis and development of recommendations and to provide a tool for citizen review of localized information, 19 community

planning sectors have been defined by boundaries which have been drawn to permit the use of existing small area data sources and, for the most part, follow principal roadways and natural barriers. The sectors divide each planning district into several parts and are identified by a letter/number code. The letter is the planning district reference (M-McLean, V-Vienna, F-Fairfax) and the number is simply a sequential designation. The sectors are also identified by names for easy reference. The community planning sectors are not meant necessarily to delineate neighborhoods in the strictest sense and they may have limited utility for other purposes such as neighborhood housing improvement or variable service area public facilities programming. No one system can meet all needs. The community planning sectors, nevertheless, offer a useful way to present information for small areas within planning districts.

The order of discussion by planning district will be from the urbanized eastern portion of the County to the more rural portion to the west.

Characteristic Problems and Recommended Solutions for Stable Areas

The following are characteristic problems identified from the evaluation of stable areas in Area II, with recommended approaches to their solution.

Commercial Encroachment into Stable Residential Neighborhoods and Commercial Sprawl Along Transportation Corridors

Commercial uses, except designed local-serving shopping centers, whether located at an intersection or along a highway corridor, tend to generate activity not generally compatible with stable residential (particularly low-density residential) neighborhoods. Characteristic of this situation, single-family residential properties adjacent to or near commercial activity are often purchased for their speculative, nonresidential potential, subsequently rented, often undergoing a period of deterioration. This deterioration, in turn, may be cited as an argument for more rapid conversion of the property to nonresidential uses. In its cumulative effects, such a redevelopment scenario is self-perpetuating. The McLean Central Business District is the principal site in Area II where encroachment into stable residential neighborhoods occurs. However, there are several arterials where pressures for commercial sprawl along transportation corridors exist. Several actions may be taken to resolve or at least ameliorate the effects of this situation.

It is necessary to assess whether a given commercial center satisfies local or regional needs (or some mix of both). Once determined, it is possible to project the commercial square footage required to support that type of center and thereby satisfy the appropriate need. To illustrate the point, if the retail center is to serve only the needs of local residents, then there is a limit to the number and type of shops and offices as well as a limit to the floor/area ratio beyond which this center should not expand. Once the extent of the need and its appropriate market area have been determined, it is possible to define the physical boundary of the commercial activity area.

In order to minimize the adverse impacts of incompatible land uses in close proximity to one another and to stabilize the boundary of commercial activity, it is necessary to establish transitional land uses or natural barriers between residential and nonresidential uses. In addition to blocking adverse visual and noise impacts, appropriately placed transitional land uses act as a geographic step-down from higher intensity to lower intensity land uses. Given the situation where adjacent vacant, undeveloped land is available between commercial activity and stable residential neighborhoods, transitional uses such as medium- to high-density residential units (5 dwelling units per acre to 20 dwelling units per

acre), low-intensity institutional uses, or open space parkland may be created to buffer the stable residential units. In some instances where existing single-family residences abut commercial or commercially-zoned properties, it would be appropriate to establish a transitional use zone which permitted professional office use of existing single-family structures, while maintaining the single-family character of the structures and the neighborhood. In such a zone, parking facilities, signs, lighting, and access would be in strict conformance with the single-family character of the neighborhood. (This has been somewhat successfully employed in sections of Annandale.) In other areas a preferred alternative would be redevelopment of single-family uses into medium- or high-density uses.

Abutting Incompatible Land Uses With Minimal Buffering

In general, there should be a transitional use step-down between low-density residential neighborhoods and high-density residential complexes. In those situations, however, where high- and low-intensity uses abut one another, wherever possible, natural buffering such as landscaped earth berms, screening, and existing vegetation should be utilized to minimize adverse visual and noise impacts. Such natural buffering should be required of developers and in those instances where development has already taken place, the County should act to enforce such screening provisions around high-intensity activity areas.

In the following community planning sector evaluations, buffering should be recommended at specific locations where its absence constitutes a major problem.

Heavy Volumes of Through-Traffic at Peak-Hour Periods along Major Corridors and Through Neighborhoods

Due to the geographic location of Area II, the majority of peak-hour trips along major thoroughfares in Area II is through-traffic moving either into or from the major employment centers in metropolitan Washington. This has resulted in severe traffic congestion along major transportation corridors, particularly at major intersections with consequent high air pollution levels.

In an effort to avoid severely congested arterials, nonlocal traffic is utilizing local neighborhood streets.

The solution to congested major arterials and related air pollution problems is countywide. The problem could be ameliorated in part by diverting through-traffic to the Metro system, encouraging public transit use by reducing travel time and providing amenities such as bus shelters. The symptoms and adverse effects of traffic congestion are problems for stable areas. Such is the case with the heavy use of local streets by nonlocal traffic. Since it has been determined that the placement of physical barriers across publicly maintained local roads is not legal, excessive through-traffic must be discouraged by:

- the improvement of presently congested intersections and major thoroughfares, especially by the provision of service roads and adjacent reverse frontage development to reduce unlimited access;
- the use of necessary control devices along local roads; and
- The creation of one-way traffic patterns which discourage the use of nonarterial roads by through-traffic.

Lack of Pedestrian Circulation and Access Routes to Shopping, Recreation Facilities, and Adjacent Neighborhoods

At the present time, pedestrian mobility is limited to the use of occasional sidewalks within a neighborhood (which rarely connect with the sidewalks in contiguous neighborhoods), stream valley pathways, and roadways. Whereas pedes-

trian mobility between neighborhoods is extremely limited, it is almost nonexistent between commercial and residential areas. The result is a nearly complete reliance upon the automobile for shopping, recreation, and employment trips.

A partial solution would be the development of a well-coordinated series of paths through subdivision, parks, open space and stream valleys, and environmental quality corridors that link with access points to recreation and commercial activities which are in those locations desired by local residents. While caution would have to be exercised in the location of these walkways and access points to minimize destabilizing effects on residences abutting commercial activity areas, nevertheless the positive feature of such an integrated walkway system would be the provision of a real option to the automobile.

Imbalance in Housing Stock

The housing stock of the area is 66 percent single-family, 12 percent townhouse, and 22 percent apartments. The price of most of this housing, especially new construction, is beyond the reach of a large segment of the County's population.

The goal of a wider variety and mix of housing types and costs can be achieved through a combination of available tools. Encouraging imaginative use of the planned development approach along with County actions to improve the review and approval process, land banking, density credits, etc., may all be used to attain this goal.

Inadequate Public Facilities

The results of analysis of park adequacy in Area II indicate that there is some need for development of existing parks and new local-serving parks; that is park land, open space, and recreational facilities within close access of local neighborhood residents. Also, the expected in-fill population will contribute to or create a substantial need of its own. The provision of a number of small, closer local parks encourages pedestrian movement, thus further reducing auto trips. This objective may be attained not only by Park Authority acquisition of land, but by the clustering of residential development, where possible, in order to preserve open space and by encouraging the use of planned unit development which will include open space amenities.

MCLEAN PLANNING DISTRICT

The McLean Planning District is located in the northeast portion of Fairfax County. It is bounded on the northeast by the Potomac River, on the southeast by Arlington County and Falls Church City, on the southwest by Route 7 and the Dulles Airport Access Road, and on the northwest by Difficult Run, Route 7, Towlston Road, and Old Dominion Drive.

Planning History

The 1958 comprehensive plan showed what is now the McLean Planning District as low-density residential development with commercial and/or industrial concentrations in the McLean CBD and at Tysons Corner. A Tysons Corner plan was adopted in February 1963. In May 1965 an amendment added detailed land use planning for the acreage along the west side of Route 7 between Chain Bridge Road and the Dulles Airport Access Road.

The first McLean plan was prepared in 1965, presented to the Board of Supervisors in February 1966 and adopted May 18, 1966. The plan was modified by amendment ten times with the last amendment providing a trails and bikeways system. There were two major amendments to the plan. *The Difficult Run Watershed Study* was adopted January 4, 1967, and covered the area west of Spring Hill Road not included in the 1966 plan. The McLean CBD plan, adopted July 8, 1970, revised land uses and the road pattern by proposing higher density and a CBD bypass in that section of the district. The other amendments included changes in the public facilities plan with respect to fire stations and parks, a reevaluation of the land uses along Lewinsville Road between Dolley Madison Boulevard and the Beltway, Fleetwood Drive extension, right-of-way standards for the CBD, a revised road pattern for the Tysons Corner area, and a pedestrian overpass for the Capital Beltway near the Tysons Corner regional shopping center.

The purpose of the 1966 McLean plan was to provide a guide for the future growth of the district and at the same time provide a balanced viable community. The general objective was to show the most beneficial arrangement of ultimate land use for the area. Specific objectives were that single-family densities would remain as the predominant land use, that densities of ten units or more be confined generally within or immediately adjacent to the community commercial areas, that high-intensity industrial and commercial be limited to the Tysons Corner area, and that the area adjacent to Dolley Madison Boulevard between the George Washington Parkway and the Dulles Access Road remain free of commercial or higher density residential uses except within CBD. None of the plan amendments has changed these objectives.

The McLean plan was a traditional land use plan also showing major transportation elements and proposed generalized public facility locations. The 1966 plan made no specific provisions for implementation using zoning as a tool. The CBD plan amendment proposed, as implementation tools, application of newer zoning techniques, institution of design controls, advance acquisition for highway improvements, and adoption of a capital improvement program, but these tools, with the exception of design standards developed by a citizens committee, were never developed or utilized.

Major Issues

The major issues which the Plan for the McLean Planning District Plan addresses are:

- the accommodation of regional transportation demands from areas outside the Belt-

way to the metropolitan area core without adversely impacting existing neighborhoods and the general quality of life in the planning district;

- the balancing of the economic demand for growth in the Tysons Corner area with internal and external traffic problems generated by regional and local travel, and with the need to avoid an adverse environmental impact on the air and water quality of the surrounding area;
- guiding development within the McLean CBD at a scale compatible with the CBD's continued use by surrounding McLean residents for their service and shopping needs and compatible with the CBD's transportation facilities;
- the need to provide improved access to the West Falls Church Metro Station while at the same time preserving the quality of life of existing neighborhoods;
- continuing to contain commercial and higher density residential development within the McLean CBD and Tysons Corner;
- providing maximum environmental protection for the Potomac palisades, its tributary stream valleys and steep slopes, and along Georgetown Pike which is designated as a scenic and historic byway;
- identifying potential general locations for providing a mix of housing types including moderate-cost housing; and
- the need for and acceptability of additional neighborhood shopping facilities to reduce traffic congestion in the CBD and for energy conservation.

Land Use

McLean is predominantly a stable, low-density residential district. Single-family residences which comprise over 70 percent of its housing units occupy nearly 66 percent of the total developed land in the district. The Federal Government owns 12 percent of the developed land. There are approximately 3600 acres of vacant, zoned land in the McLean Planning District.

All multifamily, commercial, and industrial development in McLean, with a few minor exceptions, is located in Tysons Corner, the Central Business District (CBD), or in four neighborhood shopping areas. Except on the CBD fringe, there is no encroachment of nonresidential uses into residential neighborhoods.

Economic analysis reveals that existing neighborhood and community shopping centers are not adequately serving existing demand; the ratio of shopping floor space to population in McLean is barely one-half that of the County average. Remedy for the present deficiency and provision for projected growth requires that additional space for shopping centers be allocated both inside and outside the Beltway. This action would also have a beneficial effect on traffic congestion within the CBD and Tysons Corner, energy consumption, and air quality.

Transportation

The McLean Planning District is cross-hatched by numerous major and minor arterials used in interstate, daily commuter, and local travel. The Capital Beltway, George Washington Memorial Parkway, and Route 7 carry a mixture of travelers in all three categories. Dulles Airport Access Road is dedicated to airport traffic and has only recently been opened to local public transport. Route 123 carries a heavy volume of cross-county commuter traffic as well as local trips. Collector and local streets are designed primarily to serve neighborhoods and other abutting land uses.

The most significant transportation problem of the district is that all categories of travel are mixed in the road network at Tysons Corner, a regional attractor because of its large commercial and industrial park businesses. The resultant congestion has caused high volume spillover from the principal arterial streets to neighborhood streets; these incursions should be discouraged by traffic control devices and by improving the major arterials. Resolution of this problem is essential as a public obligation of government to its citizens and to satisfy the economic demand for expansion of Tysons Corner, a demand not equalled elsewhere in the County. This expansion would benefit the County as a whole.

There are many alternatives which may be employed in various combinations. These are discussed under the Tysons Corner Area section of the Plan. Stable area transportation discussions by sector are confined to local problems and remedies and the impact in each sector of major transportation alternatives. In either event, increased emphasis must be given effective and affordable public transportation systems.

Transportation planning must produce both short- and long-range programs for increasing capability to handle traffic between the planning district and the metropolitan core.

Public Facilities

The following table indicates the existing public facilities located within the Planning District.

Sewering of Bull Neck Run is apparently not favored by most residents. So long as this attitude and low-density residential zoning prevail, there is no need for provision of this service to communities in this watershed during the period of this Plan.

Environment

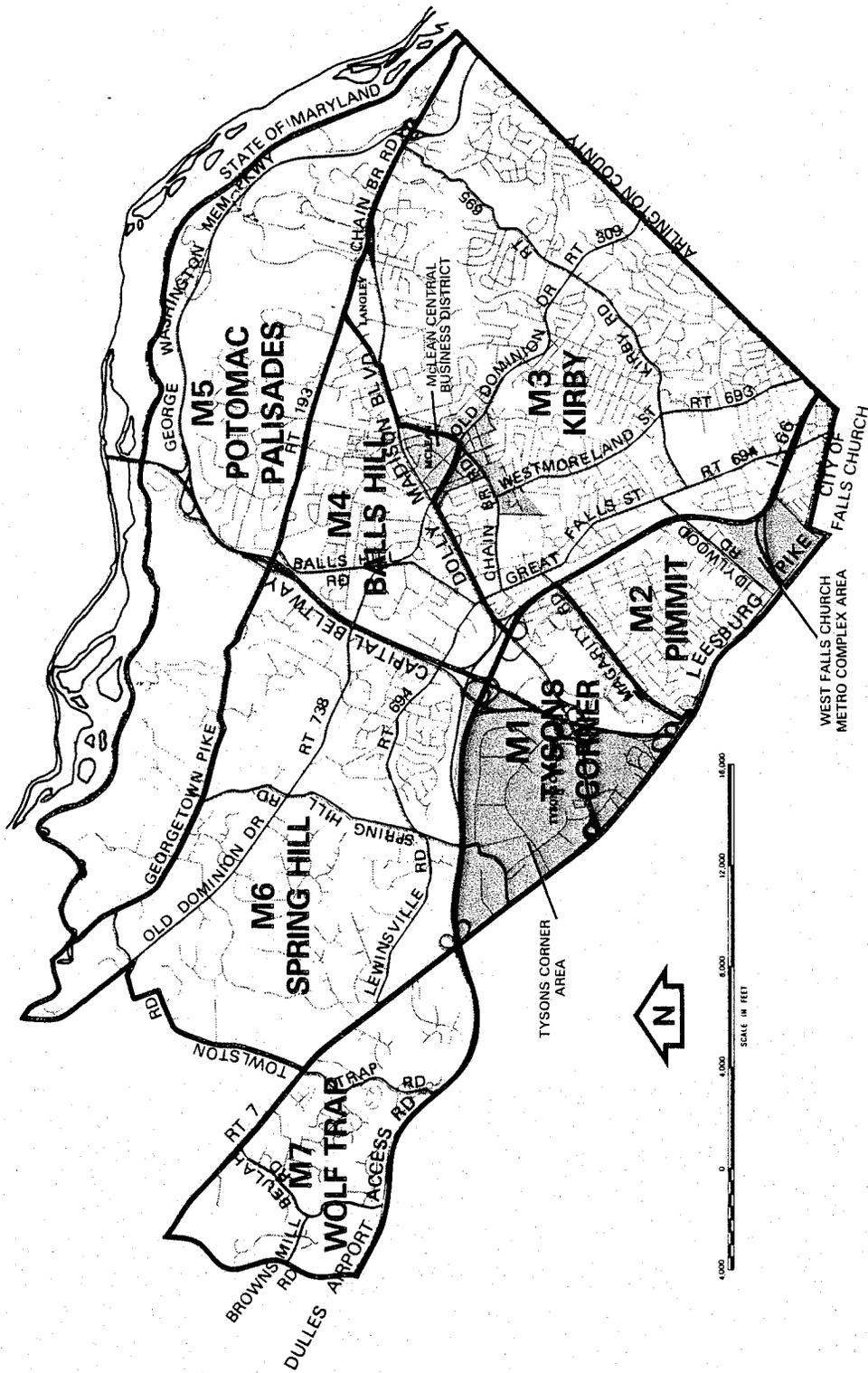
This district is contained within several of the County's major watersheds: Difficult Run, Bullneck Run, Scott Run, Dead Run, Turkey Run and Pimmit Run. Except for Pimmit Run, all of these drain into the Potomac River just upstream from a principal County water source; thus a premium must be placed on protection of the extensive floodplains, headwaters and stream valleys within these watersheds. The McLean Planning District, located in the Piedmont Geologic Province, also contains considerable highly erodible soils and steep slopes. These factors, coupled with the natural beauty and relative environmental fragility of the Potomac palisades and Difficult Run, impose a considerable environmental constraint on development and provide numerous amenities which merit protection.

An open space network linking these environmental amenities has been delineated for the McLean area. The environmental quality corridor open space network is based primarily on the floodplains, shorelines, and major parks of McLean and also includes such resources as steep slopes and wildlife habitats. The citizen inventory of environmental resources conducted in the McLean Planning District provided valuable environmental information. Many of these resources, such as the Potomac Palisades, Scott Run, and Black Pond are incorporated into the EQC system. Historic sites such as Bethel Primitive Baptist Church, Wolf Trap Farm and Langley Friends Meeting House are also part of the system.

Air and noise pollution are concerns, particularly in the eastern sectors along principal road arterials (e.g., Route 7, Route 123, George Washington Parkway and I-495).

A portion of the stream valley and adjacent land within this Planning District/Planning Sector

AREA II



MCLEAN PLANNING DISTRICT

EXISTING PUBLIC FACILITIES
June 1983

Sector	Schools			Parks, Recreation and Open Space	Other Public Facilities
	Elementary	Intermediate	High School		
M1	Westgate			Westgate, Scotts Run Stream Valley	Tysons Fire Station
M2	Lemon Road			Olney, Griffith, Fisher, Pimmit View, Lemon Road, Lisle, Pimmit Hills, Tysons-Pimmit and Mt. Royal	Pimmit Hills School, Tysons-Pimmit Library Site, George Mason High School and Mt. Daniel Elementary School (City of Falls Church)
M3	Franklin Sherman, Haycock, Chesterbrook, Kent Gardens	Longfellow	McLean	Bryn Mawr, Dolley Madison Estates, Franklin Woods, Haycock-Longfellow, Kent Gardens, Lewinsville, Lineway Terrace, McLean High, Potomac Hills, Kirby, Pathfinder, Springvale, Pimmit Run Stream Valley, Laven Preserve	Lewinsville School, Fort Marcy (U.S. Park Service), McLean Fire Station
M4	Churchill Road	Cooper		Churchill Road, McLean Central, McLean Knolls	Dolley Madison Library, McLean Governmental Center, McLean Community Center, Dead Run School Site
M5			Langley	Langley Oaks, Langley Fork, Tollbrook Ridge, Dranesville District, Scotts Run Stream Valley	George Washington Parkway (Federal)
M6	Spring Hill			Greenway Heights, Hamlet, Timberly, McLean Hunt Estates, Spring Hill School Site, Falstaff, Difficult and Bull Neck Stream Valleys	
M7				Wolftrap and Difficult Run Stream Valleys	Wolf Trap Farm Park (Federal)

is within the dam failure impact area for a proposed or existing dam. The extent of development within these impact areas should be minimized in the interest of public welfare and safety. For details on the extent of this area, refer to the section on potential dam failure impact areas, in the Environmental Chapter.

History

Following are some of the historic features worthy of protection. Others are listed in the sector discussions:

District of Columbia Boundary Stones. Sandstone markers were erected in 1791 when the Capital boundaries were first determined. The original area of the District was ten miles square, and 40 markers were placed on one-mile intervals along the boundary. Remains of the stones have all been recovered and are under the protection of the Daughters of the American Revolution. There are four boundary stones along the Arlington boundary.

Langley Ordinary. Langley hamlet at the intersection of Georgetown Pike and Old Chain Bridge Road contained a drover's rest, a toll house, a blacksmith shop, and a store. This mid-19th century building, once used as a tavern, served during the Civil War as a hospital and headquarters for Union General McCall.

Salona. The house in which President James Madison took shelter the night in 1814 when the British burned the Capitol and the White House. The house, built about 1805, is a two-story brick structure. Its wings were destroyed during the Civil War and only one was rebuilt afterward.

Wolf Trap Farm. A log, clapboard and stone structure, one and a half stories located in Wolf Trap Park. It was the scene of a meeting which precipitated the initial discussion leading to the creation of the United Nations.

Old Georgetown Pike. Route 193, between Route 123 in Langley and Route 7 in Dranesville, was designated by VDH&T as the state's first Virginia byway. Originally a buffalo trail and later a familiar trail for the Susquehannahs and Iroquois, it served from the early 1800's to 1932 as a toll road for the transport of agricultural produce toward Georgetown and Alexandria.

Pimmit Run. The mouth of Pimmit Run in Arlington County was probably the site of the Northern Virginia landing of Captain John Smith in 1608. The run was traversed by several early roads and several mills were built along it, including one in the McLean area in which the Declaration of Independence and Constitution are reputed to have been stored overnight during the War of 1812.

RECOMMENDATIONS

The primary planning guidelines for the McLean Planning District are:

- preservation of stable neighborhoods in the low-residential densities which generally characterize them now;
- use of PDH for residential infill on selected sites where space permits to capitalize on its ability to preserve open space, configure housing to the topography, and reduce public facilities cost;
- continued development of Tysons Corner as a regional-scale planned development center contingent upon the provision of adequate transportation facilities and upon the protection of surrounding areas from adverse environmental impact;
- concentration of high-density residential and most commercial development within Tysons Corner and the CBD;
- adoption of land use and transportation policies and programs designed to alleviate current transportation problems on both principal arterials and neighborhood streets and to accommodate a reasonable amount of future growth with minimum adverse impact;
- prevention of strip commercial intrusion on stable residential areas along routes radiating from existing commercial sites by providing viable economic alternatives to buffer commercial zones; and
- preservation of the environmental quality corridors (EQCs).

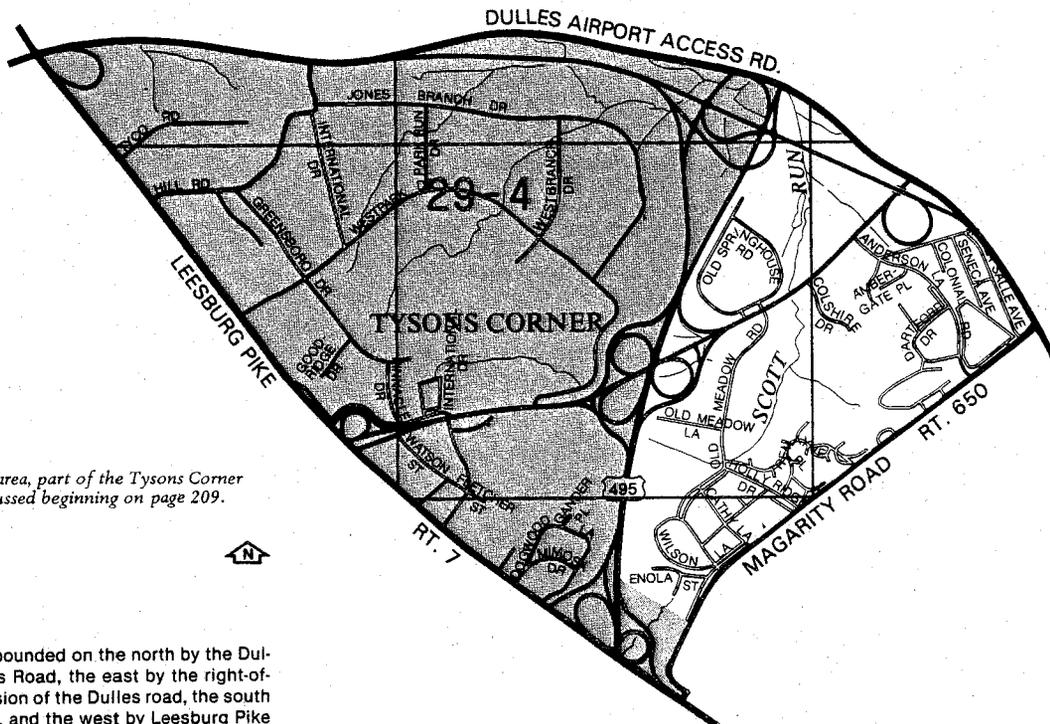
Many recommendations for stable portions of community planning sectors are influenced by the planning assumption that the adopted regional system for Metro-rail will be built. If that system is not completed, at least to West Falls Church, these recommendations will require a reevaluation. The importance of this factor is highlighted by the present assignment of first priority in transportation to improving access to proposed Metro stations.

PLANNED RESIDENTIAL INFILL—McLEAN PLANNING DISTRICT

Unit Type	Existing (1983)		Estimated Additional		At Buildout	
	Number	Percent	Number	Percent	Number	Percent
Single-family	14,706	71.3	5,578	78.0	20,284	73.0
Townhouse	1,197	5.8	430	6.0	1,627	5.9
Apartment	4,734	22.9	1,140	16.0	5,874	21.1
Total	20,637	100.0	7,148	100.0	27,785	100.0

Source: Office of Research and Statistics, January 1983.

M1 TYSONS CORNER COMMUNITY PLANNING SECTOR



The shaded area, part of the Tysons Corner Area, is discussed beginning on page 209.

This sector is bounded on the north by the Dulles Airport Access Road, the east by the right-of-way for the extension of the Dulles road, the south by Magarity Road, and the west by Leesburg Pike (Route 7).

The entire sector is included in the Tysons Corner Area.

Land Use

The remaining area, east of I-495, is predominantly developed with an equal mix of medium-density apartments and industrial research and development uses. The area contains a small single-family subdivision, Hunting Ridge, at the eastern perimeter.

Transportation

Traffic congestion is the principal problem of this area. Two peripheral arterials, Route 7 and 123, carry a high volume of through-traffic at peak hours. Two I-495 interchanges and the terminal exit of the Dulles road are adjacent to the area. Tysons Corner regional shopping center and the commercial and industrial uses in the sector generate traffic which further impacts Routes 7 and 123. During peak-hour portions of I-495, Routes 7 and 123 and Magarity Road in or adjacent to the area are subject to low speeds, unstable traffic flow and intermittent stoppages. The traffic generated by uses within the area is limited to three collector streets—Anderson Road, Old Meadow Road, and Magarity Road. These streets now function well internally except at peak-hour when the heavy volume on the peripheral arterials creates a backup of traffic. The situation is particularly bad at the intersection of Magarity Road, Lisle Avenue, and Route 7, where the closeness of the Beltway exit limits solution options.

The proximity of large apartment developments to the major shopping facilities makes mall access by walking and bicycle trails particularly important here. Potential benefits in convenience, reduced congestion and air pollution, and energy conservation are apparent.

A pedestrian overpass is now being planned across the Beltway approximately midway between the Routes 7/123 interchange. It will aid primarily the residents of the sector living north of Magarity Road.

Elements of the trails plan in the sector include:

- a network of combination 8-foot walking and bicycle trails along Leesburg Pike, Magarity Road, Chain Bridge Road, Dolley Madison Boulevard, and portions of the proposed network of roads within the Tysons quadrangle;
- a Fairfax County Park Authority trail along the entire length of Scott Run and continuing out of the sector to the Potomac River; and
- a short pedestrian trail along the northern boundary of Westgate Elementary School to connect the trail on Magarity Road to the Scott Run trail.

Public Facilities

Schools

Westgate Elementary School is located within the sector.

Parks, Recreation and Open Space

This sector is served by a park in the Scott Run stream valley and Westgate Park. Some active recreation facilities are located at schools. In addition, five existing apartment developments and four others either planned or under construction include swimming pools and other private recreational facilities.

Nevertheless, there are not sufficient public park facilities in Sector M1 to serve existing residents and the large increment of expected growth. Some of those needs can be met through development of Scott Run Park. Need for large active facilities such as ballfields, however, will have to be met at Olney Park (See Sector M2) and new development at Lewinsville Park (See Sector M3).

Other Public Facilities

The Tysons Fire Station is located within the sector of Spring Hill Road just east of Route 7.

Shopping

The area is adequately served by commercial activity centers. The area is easily accessible to the Tysons Plaza shopping area as well as the McLean Central Business District.

Housing

All of the apartment developments in the area have been built in the past ten years and are in good condition. Rents and condominium prices range from moderately high to luxury level. The Hunting Ridge subdivision contains the only single-family housing in the area.

Environment

Topographically prominent because Gantt Hill in the Tysons quadrangle is the highest elevation in the County, the Tysons Corner sector lies in the headwaters of the Scott Run watershed. Scott Run, which flows north to the Potomac River, has flooding problems near its mouth which are aggravated by intensive development along its course. The Scott Run watershed lies within the watershed protection area designated to protect the Potomac River water source above the Little Falls pumping station. This water quality problem is complicated by highly erodible soils and soils which are not well-suited to septic tank construction. The floodplains, stream influence zones and parks associated with Scott Run and Difficult Run comprise the major elements of the environmental quality corridors in this area.

Location of the sector at the junction of several heavily traveled highway routes has created an adverse air quality impact which demands a concerted effort to resolve current traffic congestion problems. Concentrations of photochemical oxidants have been measured near this sector and have been found to be substantially in excess of air quality standards.

RECOMMENDATIONS

Additional land use recommendations were adopted as part of the Tysons Corner Area. See Land Use Recommendations for Tracts C1 through C4 in the Tysons Corner Area section of the Plan.

Land Use

A. The basic pattern of commercial, industrial, and high-density residential development in stable areas is in accordance with current plans and the land is zoned accordingly. Site plan review must devote some special attention to the reduction of adverse transportation impacts resulting from infill.

Public Facilities

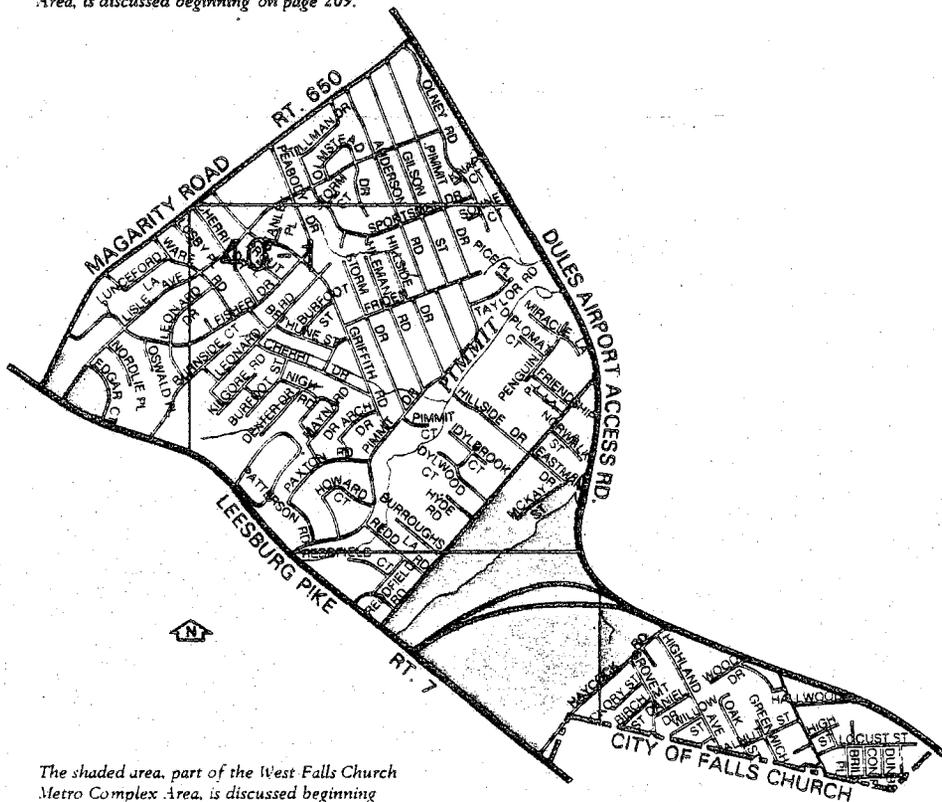
- A. Develop the Scott Run Park near Westgate Elementary School.
- B. Construct the Tysons/Pimmit Regional Library within the Beltway.
- C. Acquire and develop a community park in the Tysons/Spring Hill Road area.

Environment

- A. Most urgent is completion of proposed transportation improvements to alleviate existing and projected traffic congestion problems on principal arterials to reduce adverse impact on air quality and energy consumption.
- B. Acquire privately-owned portions of the Scott Run stream valley between Scott Run Park and the Potomac to preserve the stream valley and facilitate completion of the trail system.

M2 PIMMIT COMMUNITY PLANNING SECTOR

The shaded area, part of the Tysons Corner Area, is discussed beginning on page 209.



The shaded area, part of the West Falls Church Metro Complex Area, is discussed beginning on page 223.

This sector is bounded by Magarity Road, Dulles Airport Access Road (DAAR)/I-66 right-of-way to the Arlington and Falls Church boundaries, and by Leesburg Pike (Route 7).

The area generally south of the DAAR/I-66 merger to Route 7 and between Idylwood and Haycock Roads comprises the West Falls Church Metro Station Complex Area. The Magarity Road/Lisle Avenue intersection in the southwestern corner of the sector is part of the Tysons Corner Area.

Land Use

The remainder of the sector is a stable area which is predominantly long established, relatively modestly priced single-family residential.

There are two areas of vacant tracts. One is located along Leesburg Pike between St. Luke's Methodist Church and Peachtree of McLean; the other along Idylwood Road north of the Metro station site, primarily on the west side, and extends to Great Falls Street. The rather limited site along Leesburg Pike is bounded by a church, single-family homes and medium-density residential development. Compatible development here should be either low- or medium-density residential.

The second site is larger but the portion already developed is at low residential density which should be retained despite redevelopment pressures expected upon completion of the West Falls Church Metro Station.

Commercial activities within the sector are limited. The Pimmit Hills Shopping Center provides convenience shopping and is proximate to the proposed Metro site. An office building has been constructed next to St. Luke's Methodist Church and another office complex is located across Route 7 from St. Luke's Church. Additional local-serving shopping is justified by present demand and will be needed to meet future infill growth. An increase in commercial facilities can be provided by expansion of the existing shopping center or construction of a new center. The relatively limited number of potential sites and the desire to avoid community disruption favor expansion of the existing facilities.

Transportation

Magarity Road is subject to low-speed, unstable traffic flow and intermittent stoppages at its major intersections.

Leesburg Pike is a high-volume radial route leading to Falls Church and Alexandria. Additional local traffic may be generated by commuter traffic to the Metro station. Haycock Road will be the prime means of access to the station from the northeastern portion of McLean. WMATA traffic studies project peak-hour traffic congestion with-

in several blocks of the station. Highway programs to support Metro station access are discussed as part of the West Falls Church Metro Complex Area.

There is much merit to the proposal to have a low-capacity bridge over Pimmit Run. It would facilitate local traffic to and from the Lemon Road School for the large majority of its students while simultaneously improving safety and reducing local traffic on Route 7. The present McLean plan provides for such a bridge on Redd Road. Hillside Drive is the preferred site to reduce the likelihood of use of this route as a commuter bypass. The bridge should have adequate capacity for school buses but be limited capacity to prevent truck use.

Elements of the trails plan affecting this sector are:

- an eight foot suburban trail divided for walking and cycling along Leesburg Pike, Idylwood Road, Haycock Road, and portions of Great Falls Street and Magarity Road to connect or supplement existing sidewalks;
- a Park Authority trail along Pimmit Run from the Lemon Road School through Olney Park and continuing into Sector M3;
- a National Park Service trail along the I-66 and DAAR rights-of-way.

Public Facilities

Schools

Lemon Road Elementary School is located within the sector. No additional school facilities will be required.

The Mount Daniel Elementary School is located on North Oak Street within this sector. The school is owned and operated by the City of Falls Church and is not part of the County's school system.

Parks, Recreation and Open Space

Pimmit Run, which traverses the sector from south to north, has recently been made an open concrete culvert. The stream valley remains an environmental asset. There are nine parks within the sector as follows: Mount Royal, Olney (located partially in Sector M3), Griffith, Fisher, Pimmit View, Lemon Road, Lisle, Pimmit Hills, and Tysons/Pimmit. A park district maintenance facility is located on a portion of the Olney Park.

With 49 acres in community parks and several facilities at Olney and Lemon Road Parks and at area schools, service should be generally adequate through 1990.

Other Public Facilities

The leased Tysons/Pimmit Library is located within the sector and will be replaced by a permanent facility colocated with a park at 7550 Leesburg Pike.

The surplus Pimmit Hills School is located within the sector.

Shopping

This sector is immediately adjacent to Tysons Corner, a regional shopping center. Community shopping facilities are also available in the McLean CBD, Vienna and Falls Church. Local-serving shopping is available in the Pimmit Hills Shopping Center; however, this center may not meet the demand for such shopping facilities.

Housing

Housing in this well-established stable area is largely older single-family residential. Sites for additional housing are limited and future development should be compatible. Most likely areas are those described previously along Leesburg Pike and Idylwood Road.

Higher density residential construction is common adjacent to the sector north of Magarity Road. Completion of the West Falls Church Metro Station will create economic pressures for multi-family units within that area.

Environment

Pimmit Sector lies entirely in the headwater regions of the Pimmit Run watershed and is bisected by floodplains of Pimmit Run. An open concrete channel in the Pimmit Run reduces its value as an environmental asset in the sector. Because this community is highly developed, the impact of its highly erodible soils is somewhat reduced. Yet erosion prevention will remain an essential factor in any Metro and highway construction and in any development in the vacant areas identified along Leesburg Pike and Idylwood Road and any such facilities should be designed to retain stormwater runoff. Maintenance of air quality is a concern particularly at both the western and eastern extremities of the sector.

RECOMMENDATIONS

Land Use

A. To preserve stable portions of the sector, infill should be residential and compatible with existing uses. Specifically,

1. The vacant site, north of Route 7, between St. Luke's Methodist Church and the site of the planned Tysons/Pimmit Regional Library, should be planned for medium-density residential development at 5-8 dwelling units per acre. However, low-rise office is an option, provided all of the following conditions are met:
 - development should be located in the central portion of the site;
 - the provision of an integrated overall design which would recognize the parcel's distinctive topography and would render any buildings and ancillary facilities visually compatible with adjacent structures. In particular, as Pimmit Hills is of a higher elevation than the subject property, roof elements such as mechanical ducts and elevator motor rooms, etc., should be screened from higher elevations so as not to create any adverse visual impact;
 - the provision of all necessary lighting and signs in a manner which would make them unobtrusive to any nearby existing or planned residences;
 - the provision of an effective stormwater management and erosion control system which would coordinate the site development of the library, scheduled for construction between late 1982 and 1983, with any development on parcel 39. Any retention pond that would service the combined properties and be at least partially located on the library site should be managed by the County.
 - the provision of vehicular access so as not to exacerbate traffic flow on Route 7 and to facilitate traffic movement from Pimmit Hills via Kilgore Road and the nonresidential development adjacent to the site. This could be achieved by having one access point north of Route 7 and opposite George Marshall Drive to connect to Pimmit Hills, the library and park, and parcel 39.
2. Low-density residential infill should also be continued for ultimate development along Idylwood Road between the school and Great Falls Street to preserve the character of the neighborhood.

B. To provide needed additional local-serving shopping:

1. Limited expansion of the Pimmit Hills Shopping Center should be permitted with two floors of commercial office space above reconstructed retail stores to make redevelopment economically feasible. To fulfill demand, this may require additional shopping in adjacent areas—perhaps across Route 7.

A study should be undertaken to determine whether the Pimmit Hills Shopping Center along Route 7 can be expanded and reconstructed to better provide a community center which would meet area needs for the foreseeable future. Difficult topography would require architectural and landscaping excellence to provide an attractive center.

Public Facilities

A. Complete development of Olney and Lemon Road Parks.

B. Develop Lisle Park and Fisher Park.

C. Construct the Tysons/Pimmit regional library on the site purchased adjacent to the Peach Tree garden apartments.

D. Develop Tysons/Pimmit Park.

Environment

A. Acquire remaining segments of Pimmit Run stream valley between Lemon Road Park and the Dulles Airport Access Road for incorporation with the trails system.

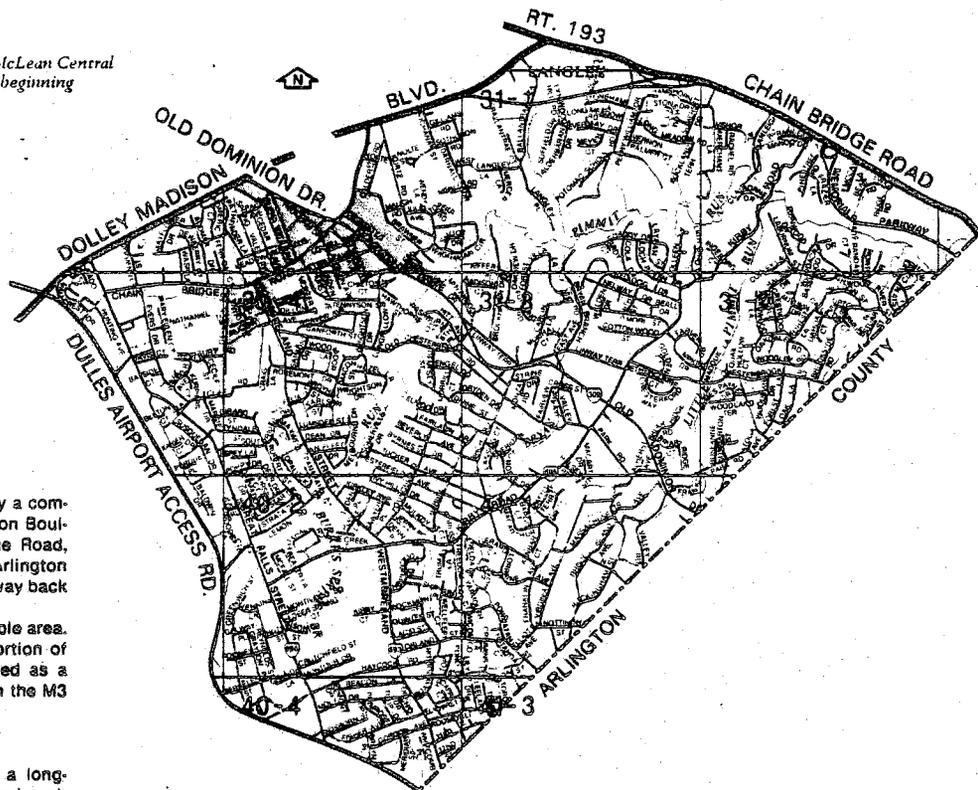
B. Air quality should be considered in planning for the Route 7 corridor.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

M3 KIRBY COMMUNITY PLANNING SECTOR

The shaded area, part of the McLean Central Business District, is discussed beginning on page 166.



This sector is bounded on the north by a combination of roads including Dolley Madison Boulevard, Old Dominion Drive, Chain Bridge Road, and Georgetown Pike. It follows the Arlington boundary to I-66, then the DAAR right-of-way back to Dolley Madison Boulevard.

The entire sector is classified as a stable area. The central business district (CBD), a portion of which lies within the sector, is discussed as a special area. The CBD area is outlined on the M3 sector map.

Land Use

The sector is characterized best as a long-established, stable single-family detached residential area with a wide range in size, age, and cost of housing.

Sector commercial facilities are located in that part of the CBD located in the sector and in the Chesterbrook neighborhood shopping center. Existing demand and projected population increases may require allocation of additional local-serving shopping within the sector.

Transportation

There are two basic transportation problems in this sector. The most significant results from over-taxed capacity of the existing road network to handle commuter traffic to the center city. Because principal radials (Dolley Madison Boulevard and Leesburg Pike) are congested, minor arterials (Great Falls Street and Old Dominion Drive) are used by commuters. At peak-hour Old Dominion Drive, Chain Bridge Road, Great Falls Street and Kirby Road between Old Dominion Drive and Chain Bridge Road are subject to low speeds, unstable traffic flow and intermittent stoppages.

The second problem stems from the inadequacy of local streets to handle local traffic effectively and safely. Many of these streets carry a traffic volume which would justify widening and straightening by VDH&T standards. Local residents oppose such changes both because of the loss of rustic neighborhood characteristics and because higher capacity avenues will attract more commuter traffic. Community opposition has created an impasse inasmuch as VDH&T is unwilling to carry out the more modest straightening improvements. However, commuter traffic should be channeled to encourage mass transit in order to reduce pressure on minor arterials, collectors and neighborhood streets.

Elements of the trails plan affecting this sector include principally:

- an 8-foot suburban trail divided for walking and cycling along the entire length of Dolley Madison Boulevard and Chain Bridge Road on the east, and similar connecting or sup-

plementing links for existing sidewalks along Great Falls, Westmoreland, Kirby, Chesterbrook, Old Dominion, Tennyson, Longfellow, and Chain Bridge on the north;

- a Park Authority trail along Pimmit Run from Great Falls Street to the Arlington County line; and
- a series of pedestrian trails along low-volume residential streets, generally in an arc around the CBD.

Public Facilities

Schools

The Franklin Sherman, Haycock, Chesterbrook and Kent Gardens Elementary schools, Cooper and Longfellow Intermediate schools and Langley and McLean High schools are located within the sector.

Parks Recreation and Open Space

Pimmit Run, which bisects the entire sector from south to north, is the primary ecological asset of the area. There are twelve community parks serving the area as follows: Bryn Mawr, Dolley Madison Estates, Franklin Woods, Haycock-Longfellow, Kent Gardens, Lewinsville, Linwood Terrace, McLean High, Potomac Hills, Kirby, Pathfinder, and Springvale.

In addition, there is the Pimmit Run Stream Valley Park (including Pimmit Bend) and the Leven Preserve which can be used for botanical purposes only.

Park distribution is quite good. There is a potential for creation of additional neighborhood parks in conjunction with infill development. The stability of the sector suggests that priority should be given to further development of existing parks. However, steep slopes and location within floodplains limit certain types of development in all of the neighborhood and community parks except Lewinsville (the Hamel tract). The 9.5 acres in

Potomac Hills, for example, consist of five separate areas located behind individual homes, thereby making them virtually inaccessible to the public. Additionally, these 9.5 acres constitute floodplain and steep ravines with little or no land suitable for an active recreational park.

Fort Marcy, a 15-acre U.S. park, is also in the sector between Chain Bridge Road and the George Washington Memorial Parkway near the Arlington boundary.

With the existing community parkland and large amounts of other open space, adequate service is provided with two major exceptions: (1) development of parkland west of Old Dominion Drive and (2) acquisition and development of land for active recreation east of Old Dominion and south of Pimmit Run. Schools within the sector provide numerous athletic facilities which compensate in part.

Other Public Facilities

The McLean Fire Station is located within this sector.

Shopping

This sector has immediate access to the regional shopping center in Tysons Corner and community shopping centers within the CBD and Falls Church. Neighborhood convenience shopping is also available in the Chesterbrook Shopping Center.

Housing

Housing in this well-established, stable area is predominantly single-family residential. It is a mixture of old and new, large and small units, which commingles housing for a broad spectrum of income levels but with the preponderance of homes at the upper income levels. Homes are generally well-maintained and most lots contain mature trees.

There are two townhouse developments—Westmoreland Square and Hallcrest Heights. Similar developments can be incorporated in part of some of the current vacant land. Through careful site plan regulation and use of PDH development on larger sites, mixed housing types can be provided which will not be incompatible with existing housing and which will provide housing for a mix of income levels.

Environment

Kirby Sector lies primarily within the Pimmit Run watershed. Both Pimmit and Little Pimmit Runs contain extensive floodplains throughout the sector and the stream valleys in the northern part are characterized by steep topography. These factors plus the presence of highly erodible soils, especially west of Kirby Road and north of Chesterbrook Road, make stream valley and watershed protection an essential planning consideration. The Pimmit Run floodplains, stream influence zones and parks associated with them are included in the proposed environmental quality corridor system. The historical significance of the sector is highlighted by Fort Marcy, scattered remnants of Civil War trenches, old churches and grave sites, and cornerstone markers of the former boundary of the District of Columbia. Many of these features are included in the environmental quality corridor network.

Maintenance of air quality is a general concern but is more particularly a problem along the commuter routes with greatest volumes of traffic; i.e., both the southernmost and northernmost parts of the sector.

RECOMMENDATIONS

Land Use

To preserve the residential nature of this sector, infill in this sector should be primarily single-family detached. Exceptions should be made for inclusion of medium-density townhouse developments or PDH development which may include townhouses on selected sites, specifically A, B, C, D and E below:

A. Additional townhouses in the 5-8 unit density range in the southeast quadrant of Dolley Madison and Great Falls Street across from Hallcrest Heights.

B. Additional townhouses in the southeast quadrant of Great Falls Street and Chain Bridge Road at a density range of 4-5 units per acre. Development should be adequately buffered from the adjoining low-density neighborhood.

C. Additional townhouses in the 5-8 unit per acre density range in the southeast quadrant of Kirby Road and Westmoreland Street adjacent to Westmoreland Square.

D. In the vicinity of Kirby Road and Great Falls Street, encourage PDH development in the 4-5 unit density range. To minimize impact on the surrounding area, development should include reverse frontage, heavy tree buffer, single-family detached housing at the perimeter to interface with existing types, exclusion of tall buildings which are incompatible with the vistas of the surrounding community, and an internal circulation system.

E. Townhouse at a density of 5-8 dwelling units per acre may be allowed on the property located on parcel 30-2 ((7)) (2) 37 and 38, in West McLean, if the property is consolidated with the property located on parcel 30-2 ((7)) (2) 41-46.

F. Residential development on the 51 acres surrounding the Linway Terrace Park, west of Kirby Road, should be permitted in the 2-3 unit density range. The higher end of the range could only be attained with appropriate land consolidation.

G. Low density residential in the 1-2 unit per acre density range (1/2-acre cluster) is recommended for the tract between the Ballantrae and Evermay communities. Cluster development should be encouraged to preserve the pond site

and fence line trees (hickories and Virginia red cedars) in common space and provide a transition between the two-acre estates in Ballantrae and the half-acre housing in Evermay.

H. Compatible infill not to exceed one dwelling unit per acre is recommended for the area south of Dolley Madison Boulevard, north of Pimmit Run, west of Potomac School and Lynwood subdivision and east of the Salona Village subdivision.

I. Residential development in the 2-3 dwelling unit per acre range is recommended for vacant or resubdivided parcels on both sides of Pimmit Run between Kent Gardens Park and Old Dominion Drive.

J. Residential development on vacant or resubdivided land in the area south of the McLean CBD, east and north of Tennyson Drive and west of Longfellow Street, is encouraged in the 2-3 unit per acre range. Since the substantial existing development is single-family detached housing at a lesser density than that permitted by current zoning, it would be desirable that new development should be limited to the same structure type and density as the existing development.

K. Residential development on vacant or resubdivided land in the area bounded by Old Chesterbrook Road, Old Dominion Drive, Sixth Place and Pimmit Run should be permitted only at the low end of the range.

L. The residentially-planned area bounded by the Arlington County line, Powhatan Street, the eastern boundary of the Nantucket and Marlborough subdivisions, the northern boundary of the Marlborough subdivision, Kirby Road, and Route 123 is recommended for residential uses at 1-2 dwelling units per acre. Because of the character of existing development in the area, new development at or near the high end of the range would be appropriate, except in those subareas where steep slopes and storm water runoff into the streams feeding Little Pimmit Run require less density to maintain adequate environmental protection.

M. Consider the expansion of Chesterbrook Shopping Center within the constraints of currently-zoned commercial space.

N. The service station at the intersection of Kirby Road and Dolley Madison Boulevard while considered to serve a function to area motorists using the George Washington Memorial Parkway, represents a nonconforming use and no commercial rezoning for expansion should be granted. Any modernization should be consistent with the current restriction on such nonconforming uses. Dolley Madison Boulevard from the Parkway to Tysons Corner has been protected from abutting commercial uses except along the CBD frontage as a result of sustained local citizen association activity. The approach to Washington from Dulles International Airport should continue to be protected from commercial development.

O. Low-density residential uses in the 1-2 unit per acre range are recommended between the May property and Ballantrae Farms on the north side of Route 123 to provide a transition between the 2-3 unit per acre development recommended to the east and the less than one unit an acre platting in Ballantrae Farms to the west. Reverse frontage development should be required.

P. On the south side of Dolley Madison Boulevard, the area from Kurtz Road eastward to Ballantrae Farms should develop at 1-2 units per acre with appropriate interior and exterior noise attenuation measures. The Salona historic site should be preserved.

Public Facilities

A. Develop the Lewinsville and Haycock/Longfellow Parks.

B. Develop Kent Gardens Park.

C. Provide a tot lot at Franklin Sherman Elementary School to serve children in and around the McLean CBD.

D. Develop Bryn Mawr Park.

E. Develop Linway Terrace Park.

F. Consideration should be given to providing a McLean south fire station in this sector.

G. Acquire and develop a community park to serve the Franklin Park area off Kirby Road.

H. The Lewinsville Elementary School site is appropriate for uses allowed by right, special permit, or special exception, under the existing R-3 zoning district which are compatible with the residential area adjoining it on four sides. Specifically, activity related to such uses shall not adversely impact the adjoining residential community in terms of traffic, vehicular access, parking requirements, lighting, signing, outside storage, length and intensity of outside activity, or general visual impact.

Environment

A. Provide a parking lot adjacent to the Leven Preserve.

B. Historic sites within the sector should be preserved within any future developments. Notable are Langley Ordinary and Salona, described in the introduction to McLean Planning District.

C. Acquire connecting segments of Pimmit Run and Little Pimmit Run stream valley in the sector for preservation and to facilitate completion of the trails system to the Arlington County line.

D. Include Georgetown Pike and abutting properties as part of the environmental quality corridor network. To protect the aesthetic character of this Virginia byway, Fairfax County should secure a scenic easement on the land abutting the Pike running in a band on both sides for a depth of 100 to 150 feet.

History

Langley Fork Historic District

The provisions of the Langley Fork Historic District (Appendix 1, A1-900 of the Zoning Ordinance) limit uses within the district to residential. Present uses include a church and school as well as a service station with a grandfathered use on residential land.

All exterior improvements should be designed to be compatible with the scale and appearance of the cluster of historic sites. All development will be reviewed by the Architectural Review Board.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

MCLEAN CENTRAL BUSINESS DISTRICT

The McLean Central Business District (CBD) is a large community shopping, service, and residential area approximately 230 acres in size centered at the intersection of Chain Bridge Road and Old Dominion Drive. The triangle bounded by Old Dominion Drive, Route 123, and Chain Bridge Road is in Sector M4, while the rest of the CBD is in Sector M3. This arbitrary division was made to facilitate transportation impact analysis.

The McLean CBD is classified as a stable area. Since a separate citizens task force was established to study the CBD and since several land use and transportation recommendations will be set forth with some specificity, a special section is appropriate in the Plan.

A major change has been made in the boundaries of the CBD area as defined in the plan adopted by the Board of Supervisors in 1970. The area north of Dolley Madison Boulevard which is developed in residential and public uses is discussed and planned as part of the Sector M4. Minor boundary changes have also been made (1) south of Whittier Avenue between Tennyson Drive and Laughlin Drive where the boundary line was moved one parcel closer to Whittier and (2) on the west side of Tennyson Drive where the boundary was moved three parcels north so that all the properties in this portion of the CBD (a) will have access directly to Whittier, (b) will have access directly to Whittier from the commercial portion of Tennyson Drive north of the south side of Whittier without impacting on the residential portion of Tennyson Drive, and (c) no potential commercial traffic will impact on Linden Hurst Avenue and the residential portions of Tennyson, Laughlin or Emerson, these being south of the north side of Whittier.

ISSUES

The McLean CBD is comprised of several neighborhood shopping centers stretched out along Chain Bridge Road and Old Dominion Drive. Interspersed among these centers are a number of automobile service stations, fast food establishments, free-standing banks and a number of former residences being used for real estate and professional offices or small retail establishments.

An office district is located between Dolley Madison and Chain Bridge Road, and a secondary office/retail area is growing along Old Dominion Drive southwest of the Old Dominion Drive/Chain Bridge Road intersection. Recent residential construction consists of the 2-building, 544-unit high-rise on Fleetwood and Beverly Roads, as well as townhouse developments east of Old Dominion and west of Westmoreland Street. Single-family residential is found mainly west of Ingleside Avenue north of Chain Bridge to Pathfinder, and in the area between Lowell and Whittier.

The CBD provides shopping and professional services to the surrounding community. It is located within two miles of Tysons Corner, a major regional center providing employment and extensive shopping opportunities. In order to coexist with the Tysons area and to preserve its identity, the McLean CBD will have to continue to serve the needs of the surrounding community without attempting to compete with the regional facilities being offered at Tysons Corner. All identifiable community needs should be accommodated in the CBD plan—retail commercial, medical and professional services, other services and repair, limited office and medium-density residential apartments and townhouses to accommodate future growth.

The congestion along Elm Street and at the intersection of Old Dominion Drive, Chain Bridge

Road and Elm Street is exacerbated by the traffic generated by the post office on Elm Street. The new separate Post Office on Spring Hill Road in the Tysons Corner area to serve the portion of McLean at or near Tysons Corner will alleviate some congestion along Elm Street and at the intersection.

The proximity of Tysons Corner has another effect on the CBD. Some of the transportation arteries serving Tysons Corner also constitute the approaches to the CBD, and severe traffic congestion of these major roads during peak hours diverts commuter traffic into and through the CBD. Access from the CBD to Dolley Madison Boulevard (Route 123) during peak hours is hindered. The traffic pattern within the CBD suffers because the planned street network has not been implemented. Existing streets are inadequate and future improvements will depend on scarce highway funds. At present most internal traffic within the four sectors of the CBD has to use the central intersection of Old Dominion Drive, Chain Bridge Road and Elm Street. The capacity of this intersection is limited without the construction of a major overpass or underpass for Old Dominion Drive. While some relief can be achieved by the construction of alternate circulation routes to accommodate turning movements, no alternative exists for through-traffic. The possible solution of a commuter traffic bypass has been suggested but was not approved in the past because of overwhelming citizen opposition and prohibitive cost projections.

With a clear delineation of the different roles of the CBD and Tysons Corner, a plan has been formulated that reflects land use densities consistent with the idea of the CBD as a community center as well as recognizing the need for not overloading an already poor traffic circulation network.

The present McLean CBD has no real focal points and no vistas. Sidewalks are lacking for the most part, discouraging pedestrian movement between shopping centers. However, distances between centers are great enough to mitigate against complete conversion to a pedestrian-oriented center even if sidewalks and walkways were provided. The dispersion of these shopping centers together with the new higher intensity development has added to traffic congestion created by through-traffic and threatens the character and community service role of the CBD.

In 1975, there were about 60 acres of vacant land in the CBD. While recognizing the pressure for higher density development of vacant or underutilized land, too intense development would destroy the essential community-character of the McLean CBD, making it incapable of supporting itself or the surrounding residential area with essential services and transportation.

One major site for new development remains in the McLean CBD. A 13-acre site abuts Old Dominion Drive just south of McLean Mews. There is a residence on this land.

The land along Lowell, Emerson, and the north side of Whittier Streets is presently developed, but existing housing is relatively old and several residential structures are of marginal quality.

A problem exists where old residences along Ingleside, the east side of Old Dominion (between Ingleside and Dolley Madison Boulevard), the north side of Chain Bridge Road (between Buena Vista Avenue and Pathfinder Lane) and the south side of Whittier Avenue already have special permits allowing professional and real estate offices. Designation of these areas for eventual townhouse construction is suitable while the continuation of allowing special permits appears logical until tracts of land are assembled.



Ideally, the CBD area would be essentially redeveloped to separate local from through-traffic, to group retail uses, to encourage pedestrian movement between stores, and to provide a focal point for the area. However, the legal and economic mechanisms to accomplish these objectives in an overall massive fashion are not available. Therefore, interim measures must be taken which will encourage private development and redevelopment actions into a pattern which will most nearly accomplish the same objectives, supporting and enhancing the role of the CBD as an attractive and effective community center.

RECOMMENDATIONS

Land Use

A. The area bounded by the Franklin Sherman Elementary School site, Old Dominion Drive, the Old Dominion Square townhouses and Salona Village Subdivision should develop in residential uses at 8-12 dwelling units per acre. Consideration of any density in excess of eight units per acre shall be dependent upon the provision of substantial landscaped open space around the periphery of the tract. PDH development is encouraged to enhance the character of this site within the central business district. In particular, proper buffering and single-family detached or attached housing are recommended for the perimeter adjoining Salona Village.

In lieu of construction of a service drive along Old Dominion Drive, it is recommended that coordinated public access be provided between Corner Lane, Whittier Avenue, and the internal circulation scheme of the proposed development.

B. The area east of Elm Street and west of McLean House and Langley Shopping Center between Fleetwood Road and Chain Bridge Road should develop as a mixture of apartments, retail and office uses.

1. Residential—The northwest 5 acres within the CBD should be developed for apartments in the 20-30 units an acre density range with a height limit of 90 feet. (Under the preferred PDH zoning district, flexibility in height may be considered with the total height not to exceed 10 stories.) Development at the upper end of the range would be contingent upon provisions for the completed construction of the remaining portion of Fleetwood Road as a critical link in the CBD circulation plan and other amenities such as pedestrian ways linking the residential uses with the retail uses along Chain Bridge Road, developed open space, structured parking and exceptional design. McLean House had been granted a very high planned density of 40 units per acre under the previous plan, largely in consideration of extensive road construction, a sizeable off-site contribution toward a pedestrian overpass and construction of a pedestrian connection with the large supermarket/Salona Village as well as compliance with landscaping and on-site retention before these became requirements. The adjacent area (approximately 6 acres), extending easterly toward Poplar Street, should be developed at a density of 16-20 dwelling units to the acre.

2. Nonresidential—Retail and office uses would occupy the remaining acreage. The retail-office mix on both sides of Poplar Street and along Curran Street can be best approximated by present C-5 or C-6 zoning which would provide for flexibility in use and design and retain the essentially retail function of the parcel south of Poplar Place extension. Heights should be limited to 40 feet. The floor area ratio (FAR) should not exceed 0.5. A slightly higher FAR (0.8) may be granted the retail/office mix between Poplar and Chain Bridge Road in return for integrated development which would include most of the parcels in this block. The relocated Curran Street should be paralleled by a pedestrian way. A continuation of this pedestrian way to Fleetwood Road would connect the

residential and commercial uses and serve the entire development.

An alternative option permitting low-rise office uses could be considered for the entire acreage bounded by Elm Street, Fleetwood Road, McLean House and Beverly Road/Poplar Place if:

- the offices were planned in a coordinated fashion and appropriately integrated site development were assured; integrated site development should be viewed from an urban design perspective and consider how these structures would interface with surrounding properties and with each other. A combination of office and apartment uses in a single structure could be considered. Retail uses could be permitted on the first floor of those structures on land abutting the north side of Poplar Street where retail would have been permitted under the conventional zoning alternative above;
- the height of the buildings would be limited to 40 feet. The FAR throughout would be no higher than 0.5. On the northernmost five acres of this tract, such a low-rise office use would be further contingent upon the dedication and construction of Fleetwood Road by the present or subsequent owners or developers. Bonus height up to a total of 90 feet may be granted to compensate for the land area lost through dedication of Fleetwood Road;
- a minimum six-foot wide pedestrian way with plantings and street furniture were provided. These amenities should be in accordance with McLean CBD Design Standards to result in a pleasing pedestrian facility which would provide access to the various office buildings, and indirectly, to the Post Office on Elm Street;
- the transitional yard requirement of the landscaping and screening ordinance were to apply to all parcels abutting on the residential area to the east, and this transitional yard would be waived only to the extent that it includes the 6-8 foot pedestrian facility. Parking enclosed in a building or structure and/or additional landscaping would be encouraged to reduce the visual impact of any parking areas from the upper floors of McLean House.

C. Land along Lowell, Emerson and the north side of Whittier Avenue, with the exception of parcels already zoned for commercial use, should develop in residential uses at a density of 8-12 units an acre with the stipulation that no apartments are contemplated under this density range. However, the small parcel, map 30-2 ((9)) parcels 77 and 78, in the northeast side of Emerson Avenue, north of Lowell Avenue, that is zoned R-4, may be developed in the commercial use if such development retains the residential scale and has an FAR no greater than 0.5 and is heavily buffered and screened along Emerson Avenue to minimize visual impact on the nearby residential area and that the height be limited to two stories measured from the Emerson Avenue elevation.

D. Commercial activities in the CBD should be concentrated and intensified in areas where they now exist. Further commercial encroachment on surrounding residential uses should not be permitted.

E. The problem of special use permits allowing commercial office uses in old residences within the CBD should be approached from a design point of view. The areas between Ingleside and Buena Vista, the west side of Old Dominion between Park Avenue and Dolley Madison Boulevard, the north side of Chain Bridge Road between Buena Vista Avenue and Pathfinder Lane, and the east side of Emerson Avenue south of Whittier Avenue should be designated for eventual development to townhouse at a 5-8 unit an acre density range. Use permits should be allowed only

along the following streets: Ingleside Avenue, Old Dominion Drive, Chain Bridge Road, Emerson Avenue between Lowell Avenue and Chain Bridge Road.

Private recreation would be a suitable alternative use for the land area between Ingleside and Buena Vista Avenues south of Meadowbrook Avenue.

F. The land along the south side of Whittier Avenue, except that area near Old Dominion Drive already developed in commercial retail use, would be most appropriately developed in residential townhouse use at 5-8 units per acre to provide a transition between the commercial retail and office uses in the CBD and the low density single-family residential neighborhood to the south. However, the existing zoning and development along the south side of Whittier Avenue west of Emerson Avenue limits the possibility of attainment of this preferred transitional objective. Therefore, the tier of parcels having frontage on the south side of Whittier Avenue between Emerson Avenue and Tennyson Drive may be considered for office use, preferably in townhouse type structures, limited to the uses and not to exceed the bulk permitted in the C-1 zoning district, with heavy buffering and screening provided along all perimeters adjacent to areas planned for residential use.

The properties south of Whittier Avenue and east of Emerson Avenue as far east as the adopted retail located west of Old Dominion Drive are recommended for residential townhouse use at 5-8 dwelling units per acre. An option for transitional, townhouse office use shall be considered on the condition that the building height not exceed three stories and that a substantial landscaped open space buffer be provided along the southern perimeter to eliminate any adverse impact on the planned residential development to the south. The townhouse office option for lots 12 and 13 will only be considered if the appropriate consolidation with the lots to the east between the zoned commercial fronting on Old Dominion Drive and lots 12 and 13 occurs. Although adjacent parcels to the east and south have been developed at a floor area ratio of 0.25, a floor-area-ratio greater than 0.25, but not to exceed 0.40, may be considered for these properties if vehicular access is coordinated with commercial activities fronting on Old Dominion Drive to the east and south to permit access to Whittier Avenue.

G. The area south of Chain Bridge Road between Westmoreland Street and Davidson Road is designated in the density range of 8-12 dwelling units per acre. In order to be compatible with present development, infill shall consist of townhouses only.

H. Location of commercial retail activities is appropriate for present retail locations and existing commercial retail zoned land in the CBD and as infill between these existing uses along Chain Bridge Road, Old Dominion Drive and Old Chain Bridge Road.

1. The land on the east side of Ingleside Avenue, north of Poplar Place and south of the Koenig Building could have a retail-office option if the following conditions are met:

- consolidation of the properties;
- all ingress and egress to the property is via Poplar Place;
- height not to exceed that allowed under a C-2 zoning category;
- approximately ¾ of the parking will be underground;
- only one sign shall be permitted on the Ingleside Avenue side of the building and it must be affixed to the building;
- lighting on the Ingleside Avenue side of the building shall be shielded so as not to impact the residences across the street;
- all lighting and landscaping will be in conformance with the McLean CBD Design Standards;
- there will be a full transition yard on Ingleside Avenue;

- open space will be the same as under a C-2 zoning category (30 percent); and
- a maximum FAR of .7 may be permitted.

2. The property located in the northwest quadrant of Old Dominion Drive and Poplar Place, currently zoned for retail commercial uses, is suitable for low-rise office and retail uses. Egress and ingress shall be via Poplar Place. Right turn only channelized ingress and egress from one curb cut on Old Dominion Drive, located as far as possible from the intersection with Poplar Place, may also be permitted. A floor area ratio not to exceed .7 is permissible provided the following conditions are met:

- Height should not exceed 40 feet.
- The street-level floor should be designed and developed for retail uses.
- The developer shall provide below-grade parking.

I. Location of low-rise commercial offices is appropriate for present office locations and existing commercial office zoned land in the CBD—the triangle bounded by Ingleside Avenue/Old Dominion Drive/Poplar Place, area fronting Dolley Madison Boulevard north of Fleetwood Road (development in this area should not be permitted to have curb cuts to Dolley Madison), area between Elm Street and Old Dominion Drive with the incorporation of present retail uses and present retail zoning, and the tract of land south and east of the medical building fronting on Chain Bridge Road.

J. Commercial areas should be well-buffered from residential uses around the periphery through green-screens and other natural buffering.

K. The highway corridor districts along Old Dominion Drive and Chain Bridge Road should be retained.

L. Existing curb cuts should be reduced if possible and additional curb cuts should be minimized along Old Dominion Drive and Chain Bridge Road. The areas specified for town-house/use permit development along these roads should be served by service roads.

M. The McLean design standards for site development, shoppers' amenities, and tree planting should be complied within any future development in the CBD. These were developed by the McLean Planning Committee in conjunction with a professional planning consultant. Efforts should be made to strengthen these standards and incorporate them where possible in a new CBD zoning district.

N. Underground parking and maximum utilization of existing parking facilities should be encouraged with orientation toward improving pedestrian circulation.

O. The strip southeast of Chain Bridge Road between Corner Lane and Dolley Madison Boulevard constitutes a buffer zone to the Salona Village residential community. All construction should be limited to no more than two-story height or C-1. The same stipulation shall apply to the parcel adjoining Holmes Place between Emerson Avenue and Old Dominion Drive.

P. A new CBD zoning district should include sign regulations tailored to a CBD.

Transportation

These recommendations represent the findings of extensive citizen study with staff support and are the best evaluation of the CBD at this time. Further detailed technical study of circulation in this area should be carried out which may yield refined and additional recommendations.

A. Widen Chain Bridge Road (Route 3547) to four lanes, with turning lanes or a fifth continuous turning lane, between Dolley Madison Boulevard (Route 123) and Westmoreland Street utilizing Old Chain Bridge Road right of way to form a four-way intersection at Route 123 and Churchill Road.

B. Widen Old Dominion Drive to four lanes, with turning lanes, between Mayflower Drive (Route 1550) and Holmes Place (Route 1809). This improvement should provide two through lanes on Old Dominion Drive. Prohibit crossovers at Ingleside Avenue.

C. Poplar Place should be extended to Beverly Road and should be uniformly widened and upgraded between Old Dominion Drive and Ingleside Avenue.

D. Ingleside Avenue should be widened between Poplar Place and Chain Bridge Road and realigned to intersect with Chain Bridge Road at the same point as Tennyson Drive. The present Ingleside Avenue right of way should be used to provide a free right turn from Ingleside onto Chain Bridge Road. Attention must be paid to improved safety with regard to traffic engineering at this intersection.

E. A through-route utilizing the improved Poplar Place and Ingleside Avenue should be instituted to relieve congestion created by through-traffic at the intersection of Old Dominion Drive and Chain Bridge Road. This would require a turning lane from Old Dominion combined with realignment of the Poplar/Ingleside intersection to provide continuity from Poplar into Ingleside.

F. Eliminate traffic light cycle for Elm Street at Chain Bridge/Old Dominion intersection and make Elm Street one-way to Poplar to help relieve Old Dominion/Chain Bridge congestion.

G. Additional traffic signals will be provided when standard national warrants are met.

H. A new street should be constructed to connect Chain Bridge Road and Poplar Place.

I. Chain Bridge Road between Old Chain Bridge and Route 123 should be retained for local and eastbound traffic and pedestrian use.

J. Elm Street should be widened to a uniform four-lane width between Poplar Street and Dolley Madison Boulevard. A median cut should be considered in Route 123 at Elm Street with proper engineering precautions taken.

K. Throughout the CBD, left-turn traffic should be channelized by special turning lanes and/or planted median strips.

L. On-street parking, except where specifically designated, should be banned throughout the CBD.

M. Curran Street right of way should be retained as a pedestrian-way and extended to Fleetwood Road.

N. Sidewalks should be provided and completed along all street frontage.

O. Plans for bicycle and pedestrian paths in the CBD should conform to the adopted McLean trails plan with first priority being given to the need for a safe pedestrian route along or parallel to Old Dominion Drive.

P. A pedestrian overpass of Dolley Madison Boulevard connecting the CBD and the Library/Community Center should be built in a location agreeable to citizens and VDH&T engineers.

Q. The CBD and the surrounding community should be considered for mini-bus service after an experimental project has been tested in the County.

It is recognized that scarce highway improvement funds will lead to delay or no action on many of these recommendations. For this reason, it is recommended that any funds available for CBD improvements be directed first towards the following top priority improvements already recommended:

1. widening of Chain Bridge Road;
2. widening of Old Dominion Drive; and
3. institution of a through-traffic route utilizing Old Dominion Drive/Poplar Place/Ingleside Avenue.

R. Uniform street plantings should proceed throughout the CBD along all thoroughfares.

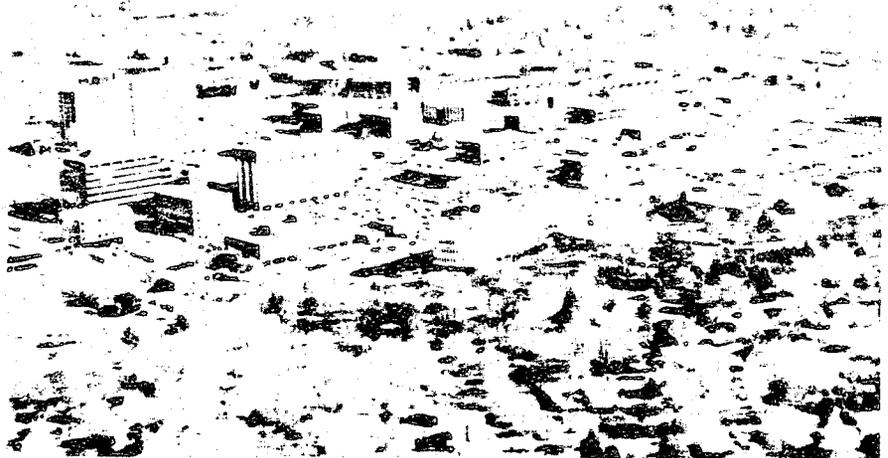
S. Any center islands installed for channelization of traffic and pedestrian safety should be landscaped.

T. At the time Chain Bridge Road and Old Dominion Drive are widened, all utility wires should be put underground along these two major routes.

Environment

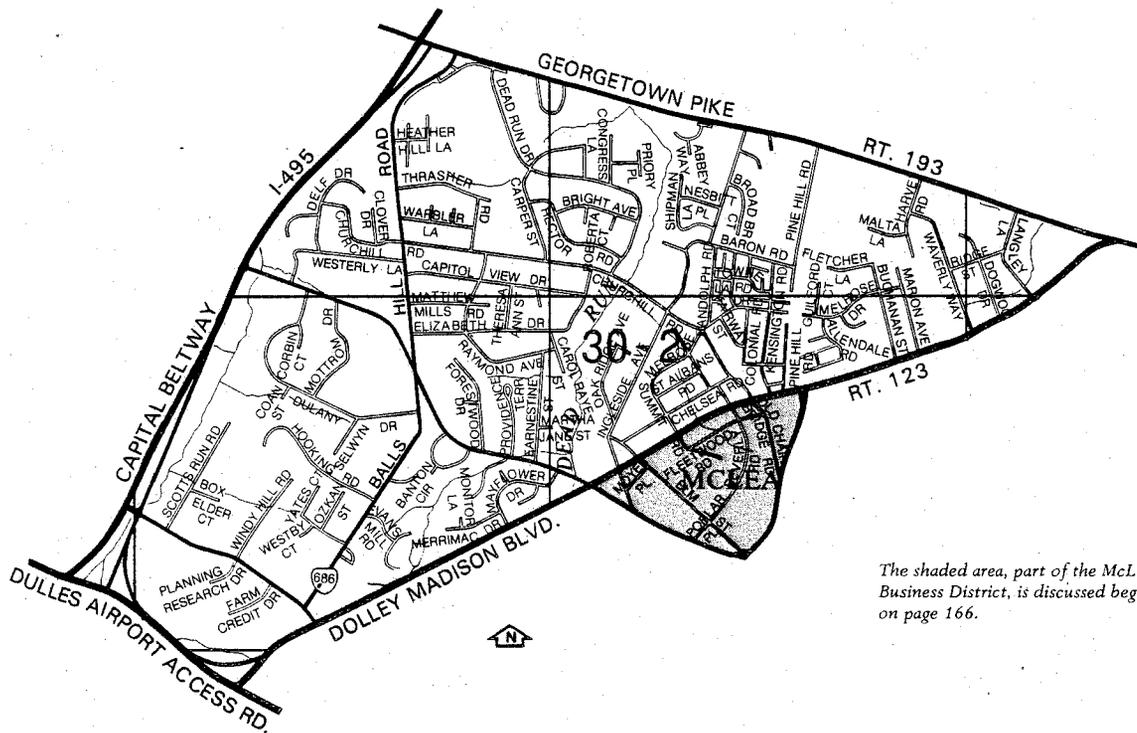
A. Control future development so that the water quality and quantity of Dead Run are not adversely affected.

B. Include Pimmit Run and abutting properties as part of the environmental quality corridor network.



McLean Central Business District looking northeast.

M4 BALLS HILL COMMUNITY PLANNING SECTOR



The shaded area, part of the McLean Central Business District, is discussed beginning on page 166.

This sector is bounded on the north by Georgetown Pike, along the southeast by a combination of roads passing through the Central Business District (CBD) which includes Chain Bridge, Old Dominion, and Dolley Madison, and on the west by I-495.

The sector includes that portion of the CBD in the Dolley Madison, Old Dominion, and Chain Bridge triangle. (The CBD area is discussed separately as a special area.)

Land Use

This is a residential sector with a considerable range in home style, age and cost. It is primarily single-family residential, the exception being the Kings Manor townhouse development. The only commercial facilities are those located within the CBD special area.

Vacant tracts are found in three somewhat limited sites: one is in the Ingleside/Churchill Road triangle opposite the CBD, another along the north side of Lewinsville Road, and the third along the south side of Lewinsville Road, is the site of the proposed Control Data Corporation development. In the 1966 Plan, as amended, these areas are largely designated for low-density residential development.

The Rucker tract is located on the north side of Dolley Madison, east of Pine Hill Road across from the CBD. Because of the relatively small size of the site, the problem of access to Dolley Madison and the presence of a neighborhood of single-family detached homes immediately adjacent to the site, it would be desirable to limit development to no more than five dwelling units per acre.

Planning townhouses on this site adjacent to the CBD but separated by a major arterial is controversial. The location of higher density residential units near commercial activity is generally appropriate. In this case, grade-separated pedestrian and bicycle access would seem an essential part of justification. A pedestrian overpass should be built near Elm Street.

Townhouse development within this area could be made compatible with existing residential uses which include the Kings Manor townhouse development. Townhouses, at five units per acre, would be an acceptable resolution which would be compatible with present single-family housing and more readily adaptable to the odd lot sizes and configurations. In any event, development should be sited to restrict access to Dolley Madison Boulevard to current intersections.

Transportation

The most significant transportation problem within the sector is the congestion which results from daily commuter traffic on Lewinsville Road, Old Dominion Drive and Dolley Madison Boulevard. Some of this traffic is generated by the severe congestion at Tysons Corner which tempts commuters living west of Route 123 in the Route 7 corridor to use minor arterial and collector street bypasses. At peak-hour I-495, Georgetown Pike, and Old Dominion Drive between Balls Hill Road and Dolley Madison Boulevard are subject to low speeds, unstable traffic flow and stoppages.

Completion of the proposed Control Data Corporation facility in the western quadrant of the Lewinsville/Dolley Madison intersection could add an estimated 1100-1500 peak-hour trips to sector traffic. Citizens are concerned about the impact of this facility on traffic congestion and air quality. Special attention must be given to solving these problems.

Resolution of the basic transportation problem will be aided primarily by actions taken to remedy the Tysons Corner congestion. These include improved public transit service, construction of the Tysons Corner circulation plan, and opening of the DAAR to public use or alternatively, building parallel lanes across the northern edge of the Tysons quadrangle.

Construction of the pedestrian/bicycle overpass across Dolley Madison in the vicinity of Elm Street would serve to reduce automobile traffic

between the CBD and the adjacent residential area which includes McLean Central Park, Dolley Madison Library, and the community center.

Elements of the trails plan in the sector include:

- an extensive network of proposed eight-foot combination walking and bicycle trails to supplement limited sections of existing concrete or asphalt sidewalks. The planned trails parallel Dolley Madison Boulevard, Lewinsville Road, Old Dominion Drive, Pine Hill Road, and Georgetown Pike through their entire length within the sector. They also include a trail along Balls Hill Road from Lewinsville Road to Churchill Road and one along Baron Road from Pine Hill Road to Churchill Road. A trail is also planned through the Churchill Road School property, Churchill Road Park, and Cooper Intermediate School property to connect Churchill Road and Georgetown Pike. A short section parallels Elm Street from the CBD to the Dolley Madison Library and McLean Community Center.
- A short trail following low-volume residential streets passes through Kings Manor connecting the Pine Hill Road trail with the sidewalk along Churchill Road.
- A Fairfax County Park Authority trail parallels the Beltway from Lewinsville Road to Old Dominion Drive, then follows Scott Run to the Potomac River passing through Dranesville District (Burling) Park.

Public Facilities

Schools

The Churchill Road Elementary and Cooper Intermediate schools are located within the sector. The school administration holds a 10.2-acre site in the southeast quadrant of Georgetown Pike and Pine Hill Road for a future elementary school.

Parks, Recreation and Open Space

There are four community parks in the sector: Churchill Road, Dead Run, McLean Central and McLean Knolls.

The existing park distribution and quantity are partially adequate for the present population and would be supplemented by recommendations for additional public facilities in Sectors M3, M5 and M6. There is a limited potential for additional community parks in conjunction with infill development. Recreation facilities such as a playground, open play area, bicycle path and lighted tennis courts are found at the Churchill Road and McLean Central Parks.

Other Public Facilities

The McLean Governmental Center, McLean Community Center and the Dolley Madison Library are located within the sector.

Shopping

Residents in this community have ready access to shopping within the McLean CBD and at Tysons Corner. The combination provides regional- and local-serving shopping. No commercial facilities are required in the sector, nor should any be allowed.

Housing

Housing in this well-established, stable residential area is primarily single-family detached. Although a considerable portion of the homes are high cost, large-lot residences, there is a broad range including relatively moderately-priced older dwellings.

One townhouse development, Kings Manor, is located near and just north of the CBD special area on a site designated for townhouse development in the present CBD plan.

Fifty-one units of the McLean House residential community are under construction for use as below-market housing (section B).

Environment

About 80 percent of Balls Hill Sector comprises the upper half of the Dead Run watershed, while the remainder of the sector is in the Scott Run watershed. Scott Run and its floodplain border the sector on the west between Lewinsville Road and Old Dominion Drive. Highly erodible soils are present throughout the sector. These factors make watershed protection essential here since both Dead Run and Scott Run empty into the Potomac just above the Little Falls pumping station.

The environmental assets associated with Scott Run and Dead Run form the basis of the environmental quality corridor network in the Balls Hill Sector. Several stream valley parks are linked by the floodplains and stream influence zones of these two streams.

Air quality maintenance is presently a concern along the Route 123 sector boundary. Continued development to the west without concomitant improvement in transportation systems would extend air pollution to the west along each of the minor arterials now being used extensively by commuters. Air pollution monitors at the McLean Governmental Center show high levels of hazardous air pollutants which frequently exceed air quality standards.

RECOMMENDATIONS

Land Use

To preserve the existing residential nature of the sector:

A. Infill should be primarily single-family detached residential. The area opposite the CBD is recommended for a 4-5 units per acre density range except for a tract where 5-8 units per acre could be appropriate which extends from Dolley Madison Boulevard's intersection with Chain Bridge Road 1000 feet to the boundary of the Merryhill historic site. Any new development west of the Chain Bridge Road intersection should respect the existing scattered development through buffering or compatible structure types.

B. A grade-separated interchange may be required to handle traffic at this intersection as volumes on these roads continue to increase.

C. Single-family detached residential uses at 1-2 units per acre are recommended for the tracts along the north side of Lewinsville Road except for those parcels having frontage on Balls Hill Road where a density range of 2-3 units per acre would be appropriate.

D. The area south of Elmwood Estates and north of McLean Knolls and the present termini of Windy Hill Road and Scotts Run Road between Balls Hill Road and Scott Run Environmental Quality Corridor, should be developed in the 1-2 dwelling units per acre range to provide a desirable transition in density from the large lots in Elmwood to the small lots in McLean Knolls. Half-acre cluster development is recommended.

E. The parcel of land owned by the McLean Citizens Association at the western end of Merri-mac Drive is recommended for residential use at 2-3 units per acre if the land passes out of private recreational use. The adjoining parcel 30-1 ((1)) 40 as well as remaining land between the Spring Side subdivision, Webb Lane and the Langley School is recommended for residential use at 3-4 units per acre.

Public Facilities

A. Complete development of Churchill Road Park and the McLean Central Park/Community Center complex according to their master plans.

B. Develop McLean Knolls Park

C. Consider the provision of active recreation facilities, including playing fields, on the vacant Dead Run elementary school site.

Environment

A. Infill potential is largely within the sensitive Scott Run watershed and must be closely regulated. Additional Scott Run stream valley parkland should be acquired as part of the environmental corridor network, and to complete the trail system from the Scott Run Park to the Potomac River.

B. Numerous historic sites should be preserved within any future developments.

C. Improve peak-hour commuter mass transit service to reduce auto traffic using major arterials during heavy use periods.

D. Include Georgetown Pike and abutting properties as part of the environmental quality corridor network. To protect the aesthetic character of this Virginia byway, Fairfax County should secure a scenic easement on the land abutting the Pike running in a band on both sides for a depth of 100 to 150 feet.

History

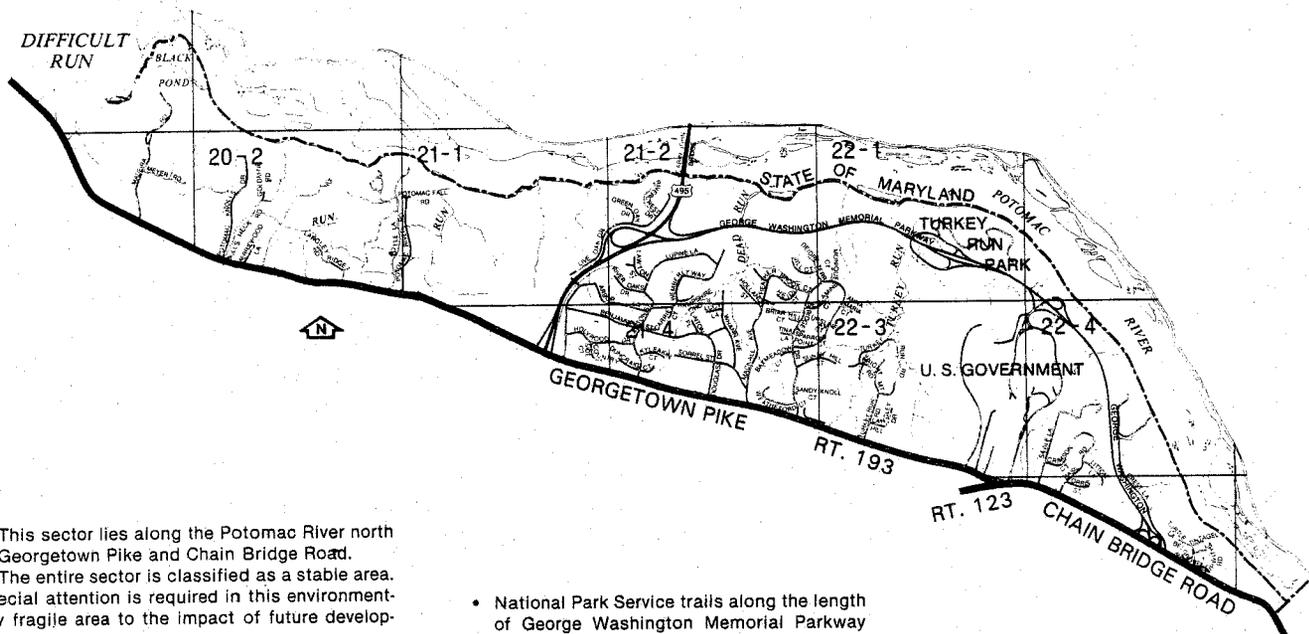
Langley Fork Historic District

A portion of the Langley Fork Historic District lies within the Community Planning Sector M4. Regulations are discussed in Sector M3.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

M5 POTOMAC PALISADES COMMUNITY PLANNING SECTOR



This sector lies along the Potomac River north of Georgetown Pike and Chain Bridge Road.

The entire sector is classified as a stable area. Special attention is required in this environmentally fragile area to the impact of future development.

Land Use

Large portions of this sector are devoted to public or institutional uses: federal agencies and parks, a county park and school, and the Madeira School.

Beyond those uses, the sector is entirely residential. Except for the Merrywood townhouse development, all the housing is currently the single-family detached type.

There are currently no commercial facilities in this sector. There appears to be no demand or requirement for such facilities because of relatively ready access to regional and community shopping centers. Limited convenience shopping facilities strictly in accordance with the use limitation of PDH zoning might prove appropriate.

Transportation

Since the two major highways through this sector are limited access, the primary transportation concern is access to Georgetown Pike and Chain Bridge Road and the traffic conditions on those routes. Georgetown Pike used by abutting residents as well as commuters bypassing Tysons Corner, is subject to low speeds, unstable traffic flow and intermittent stoppages at peak hours.

The road is commonly acknowledged to be a traffic hazard; it is also generally acceptable in its present condition to local residents. It has recently been designated a Virginia byway. Changes in vertical alignment to improvement safety are needed and desired; major changes to straighten alignment or widen the road would be strongly opposed by local residents; however, as population continues to grow along the pike, especially in areas farther west, the current sentiment among many new and younger residents for improvement may result in increased demand for upgrading road capacity. Planning efforts must focus on other means of coping with increased traffic volume anticipated to maintain this historic and scenic byway.

The trails system provides for trails primarily in the eastern half of Sector M5. Major elements include:

- a Fairfax County Park Authority trail along Scott Run through Dranesville District Park and extending south to Scott Run Park at Tysons Corner;

- National Park Service trails along the length of George Washington Memorial Parkway and extending along the I-495 right-of-way to connect to the Dranesville District Park and a McLean trail at the Beltway;
- other extensions connect a trail using Whann Avenue and a trail along the western boundary of the Langhirst tract, and a segment in the Turkey Run Farm recreation area; and
- McLean trails are those previously mentioned (along the Beltway right-of-way, through the Langhirst tract, and along Whann Avenue), a trail using Benjamin Street, and a small network of trails in the Turkey Run recreation area.

Public Facilities

Schools

Langley High School is located within the sector.

Parks, Recreation and Open Space

The natural beauty, scenic vistas, low-density development, and the large areas being preserved in this sector lend it a park-like setting.

Parkland in the area includes the federally-owned Turkey Run and Great Falls Parks and the George Washington Memorial Parkway. The Fairfax County Park Authority maintains Langley Oaks Park, Dranesville District Park, Tollbrook Ridge Park and Langley Fork Park. While this regional-serving parkland is complemented by the athletic facilities available at Langley High School, there are no community parkland and facilities in this sector. As the population continues to grow, these will be needed for residents of Sector M5, and to some extent by those living in Sector M4.

The Park Authority has arranged for the use of land and recreation facilities at Turkey Run north of Route 193.

Shopping

There are currently no shopping facilities within the sector. Population growth within the sector is unlikely to generate sufficient demand for commercial facilities except possibly for neighborhood convenience shopping of the type which might be provided within a PDH development. CBD and Tysons Corner shopping is easily accessible and probably more acceptable to residents than providing local facilities in the sector.

Housing

Housing in this stable sector is primarily high-cost, single-family detached homes. Many of these homes are located on large wooded lots with private drives. There is one luxury townhouse development, Merrywood on the Potomac, located in the easternmost portion of the sector.

Environment

Potomac Palisades Sector is generally accepted as environmentally fragile. It contains the lower reaches of five watersheds along the Potomac. From east to west they are: Turkey Run, Dead Run, Scott Run, Bull Neck Run, and Difficult Run. The rough terrain, steep slopes, and high erodibility of the soils all combine with rugged beauty to emphasize the need for stringent environmental protection with these watersheds. Slopes in excess of 15 percent are especially common along the Potomac shoreline and along Bull Neck Run.

There are many historic sites, a splendid variety and exemplary specimens of flora, and numerous wildlife habitats throughout the area. The environmental fragility, ecological variety and historical significance combine to create a unique area which merits special consideration.

Many of these amenities occur near the lower reaches of Dead Run, Scott Run, Bull Neck Run and Difficult Run in this sector and are included within the proposed environmental quality corridors. As a scenic and historic byway, Georgetown Pike and a zone on both sides should also be considered as a potential environmental quality corridor to be maintained in very low-density in order to retain the open scenic qualities of the pike and to restrain future traffic volumes.

Air quality maintenance remains a concern in this sector, particularly along the Capital Beltway corridor and at the merger of Georgetown Pike, Chain Bridge Road and the George Washington Memorial Parkway.

A portion of the stream valley and adjacent land within this Planning District/Planning Sector is within the dam failure impact area for a proposed or existing dam. The extent of development within these impact areas should be minimized in the interest of public welfare and safety. For details on the extent of this area, refer to the section on potential dam failure impact areas, in the Environmental Chapter.

RECOMMENDATIONS

Land Use

To protect this scenic and environmentally fragile sector, low-density development should be continued throughout this sector.

A. West of the Beltway, where three stream valleys cross the sector and where the land is not sewerred, a density not to exceed 0.2 units per acre is recommended.

B. East of the Beltway where the land is partly sewerred and most of the land, with the exception of the Langhirst tract, is already developed, compatible unfill at a density not to exceed 1 unit per acre is recommended.

C. Use of PDH-1 is recommended for the Langhirst tract as a means of protecting the environment, preserving open space, and achieving unique benefits such as scenic or active recreation areas not otherwise obtainable. However, housing types should be limited to single-family detached and attached units.

D. General commercial development should not be permitted.

Public Facilities

A. Acquire and develop a community park suitable for active recreation in the area west of Langley High School to serve existing and projected population.

B. Develop Dranesville District Park.

C. Develop Turkey Run with recreational facilities.

Environment

A. The sector's proximity to the Potomac River and location at the termination of several watersheds, the presence of highly erodible soils and steep slopes, the abundance of flora and fauna, and presence of historically significant sites dictate that development plans be carefully reviewed to preserve this environmental quality.

B. The above should include preservation of Bull Neck and Turkey Run. In the case of Turkey Run, this should be accomplished through acquisition in areas of new development.

C. To preserve the Scott and Pimmit Run stream valleys and completely link the valleys for trail purposes, all land along the stream beds should be acquired.

D. Encourage continued efforts to conserve land along the Potomac River shoreline by the Northern Virginia Regional Park Authority and the federal government.

E. Include Georgetown Pike and abutting properties as part of the environmental quality corridor network. To protect the aesthetic character of this Virginia byway, Fairfax County should secure a scenic easement on the land abutting the pike running in a band on both sides of a depth of 100 to 150 feet.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

M6 SPRING HILL COMMUNITY PLANNING SECTOR

This sector is bounded on the north by Georgetown Pike, on the east by I-495, on the south by the Dulles Airport Access Road (DAAR), and on the west by Leesburg Pike, Towlston Road, and Old Dominion Drive.

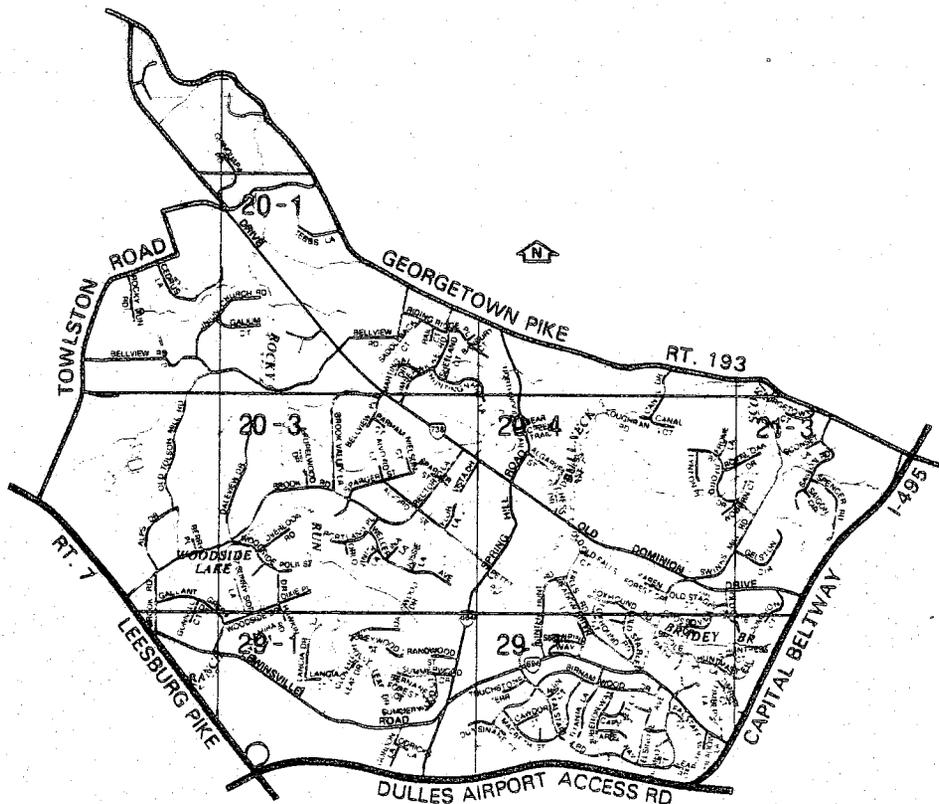
Land Use

The sector is classified as stable and can be characterized as essentially a suburbanizing low-density residential area comprised of single-family detached dwellings. The DAAR serves as a demarcation line between the expanding commercial and industrial areas in the Tysons quadrangle. Present development within the sector is compatible with similar growth in western portions of the McLean Planning District and adjacent portions of the Upper Potomac Planning District.

There is one industrial location, Hazleton Laboratories, Inc., in the eastern quadrant of the Route 7/Towlston Road intersection. The facility is operating on a special permit on land zoned for residential use at one unit per acre.

Transportation

Continuing population growth in the sector and areas to the west has created a considerable transportation problem. Primarily because of the congestion in the Tysons Corner area, many commuters seeking to use Leesburg Pike, the major radial to the metropolitan center, are attracted to alternate routes along minor arterials and collector streets through residential communities. Therefore, the pending decisions on extension of I-66 and the DAAR inside the Beltway, opening of the DAAR to general use or construction of parallel lanes along the DAAR—all possess potential for resolving some of the growing transportation problems within the sector. Expansion of major highway facilities and increased use of mass transit are needed. Appropriate land use decisions along primary routes can help to maintain the effectiveness of these arterials. Georgetown Pike, Old Dominion Drive, Lewinsville Road and I-495 are subject to low speeds, unstable flow and intermittent stoppages at peak hours.



Completion of the approved Metro-rail system and possible extension of Metro-rail to Dulles Airport offer only long-range potential to alleviate the problem. Expanded bus service would do little to aid residents of this sector directly because current land use patterns do not favor economical use of buses.

As in residential sectors inside the Beltway, there is substantial citizen resistance to upgrading minor arterial and collector roads because of the adverse impact on neighborhood characteristics and the increased attraction to commuter traffic.

Elements of the McLean trails plan in this sector include:

- three trails proposed to traverse the sector on parallel north-south axes along Scott Run, Bull Neck Run, and Difficult Run;
- a network of 4' walking trails recommended by the Fairfax County Park Authority along sections of Lewinsville Road, Spring Hill Road, Brook Road, Towlston Road, Leesburg Pike, Georgetown Pike and Leigh Mill Road; and
- several stretches of 8' combination walking and bicycle trails along Spring Hill Road, Lewinsville Road, Swinks Mill Road, Old Dominion Drive, and Georgetown Pike.

Public Facilities

Schools

Spring Hill Elementary School is located within the sector.

The school administration owns several sites for additional schools if they are required. They include the 11-acre Old Dominion elementary school site adjacent to Greenway Heights Park and the 70-acre Spring Hill secondary school site north of Lewinsville Road opposite Spring Hill Elementary School.

Parks, Recreation and Open Space

There are seven community parks located in the sector: Greenway Heights, McLean Hamlet, Timberly, McLean Hunt Estates, Spring Hill School Site, and Falstaff. Also, a part of the Difficult Run Stream Valley Park lies in the sector and much of the remainder of the stream valley is immediately adjacent.

The large lot size in many residential areas, the large areas of undeveloped land, and the numerous stream valleys give ready access to nature areas. While the sector is adequately served in terms of park acreage, there is a lack of facilities and land suitable for development of facilities.

Shopping

Except for extremely limited convenience shopping at the Spring Hill Road-Old Dominion Drive intersection, there are no commercial shopping facilities in the sector. Existing demand must be satisfied at shopping centers at Tysons Corner and in the McLean CBD. As the population grows, increased demand will necessitate construction of additional centers in the McLean Planning District.

Housing

While there is a broad range of housing costs in the Spring Hill Sector, housing is primarily single-family detached. There is a large amount of recent residential construction in the sector, much of it in middle to high cost homes on one acre or larger lots. Because the area west of Spring Hill Road is unsewered, much of the construction is on septic field.

Several small communities predating suburbanization and providing homes for low- and moderate-income families are located in the southeastern portion of the sector. The need for

additional dwelling units for low- and moderate-income households is acute, especially in the Tysons Corner area.

Environment

Spring Hill Sector is naturally enhanced by several stream valleys which cross it enroute to the Potomac. These include parts of the Scott, Bull Neck, and Difficult Run watersheds. The ruggedness of the terrain coupled with high erodible soils makes watershed protection an essential planning consideration for future development and new construction.

Soils in this sector are generally suitable for individual septic tank development. This factor is important because large portions of the sector are presently unsewered. Among these, the Bull Neck watershed is most noteworthy because it is unsewered and largely undeveloped.

The Scott Run and Difficult Run stream valleys are part of the proposed environmental quality corridors. Throughout the sector, there are several historic sites and a rich variety of flora and fauna including both endangered species and other outstanding specimens which deserve protection within the environmental quality corridor system. These amenities will be preserved through a number of legal tools which will vary from low-density or cluster zoning to public acquisition, depending on the resources to be protected.

RECOMMENDATIONS

Land Use

A. Low-density residential development should be continued. Large-lot (2 acres) or estate (5 acres or more) development in the western portions of the sector and extending into the Upper Potomac Planning District is recommended as a means of achieving the low-density development sought in the Difficult Run Environmental Quality Corridor. This area is bordered on the south and east by Woodside, Woodhaven, and Greenway Heights.

B. Vacant land south of Lewinsville Road and east of Gordons Lane should be developed at 2-3 units per acre. Cluster development should be encouraged so that land immediately adjacent to the Dulles Airport Access Road would remain as open space and provide a buffer to the residential area.

C. Vacant land between McLean Hunt and I-495 should be developed at the same density as McLean Hunt, with clustering to protect Bradley Branch and buffer the residences from the Beltway.

D. All other residential development in this sector except as noted above is recommended for a density not to exceed 1 unit per acre. The area already has substantial development at 1 unit per acre. Its character varies from the large lot and estate development in the western portions of the sector.

E. Land along the north side of Route 7 should maintain the present 1 unit per acre density but permit cluster development so that land immediately adjacent to the highway would remain as open space and provide a buffer for the residential area.

F. Allow no additional industrial or commercial uses.

Public Facilities

A. Consider limited development of Greenway Heights Park and McLean Hamlet Park.

B. Provide recreation facilities on the Spring Hill secondary school site.

Environment

A. Protect the Bull Neck Run, Rocky Run and Difficult Run stream valleys as part of the proposed environmental quality corridor system partly by low-density zoning and development and conservation easements without public access, and partly through dedication in areas of new development where the stream valley is on the Comprehensive Plan for acquisition as a public park.

B. Protect the wildlife habitat in the Bull Neck Run area from the harmful effects of urbanization.

C. Acquire remaining segments of Scott Run for incorporation into the trails system.

D. Maintain as much natural ground cover as possible in the Rocky Run area to protect wildlife and prevent erosion.

E. Protect Spring Hill Road and Swinks Mill Road as scenic routes between Old Dominion Drive and Georgetown Pike. The best way to remove through-traffic from these facilities is to implement major improvements to Route 7 and to improve circulation at Tysons Corner.

F. Include Georgetown Pike and abutting properties as part of the environmental quality corridor network. To protect the aesthetic character of this Virginia byway, Fairfax County should secure a scenic easement on the land abutting the pike running in a band on both sides for a depth of 100 to 150 feet.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

M7 WOLF TRAP COMMUNITY PLANNING SECTOR

This is a pie-shaped sector bounded on the north by Leesburg Pike, on the south by Dulles Airport Access Road (DAAR), and on the west by Difficult Run.

Land Use

This sector is primarily a stable area of new residential development interspersed with scattered older farm homes. Residences are single-family detached in a medium- to high-cost range on low-density lots, primarily one-half acre. The DAAR serves as a demarcation line between the expanding commercial and industrial areas in the Tysons quadrangle. Recent development within the sector is compatible with similar growth in western portions of the McLean Planning District and adjacent portions of the Upper Potomac Planning District.

There are presently no commercial or industrial facilities in the Wolf Trap Sector. There are numerous parcels zoned for, and remaining in, agricultural uses.

A rather large expanse of undeveloped land remains in the southwest corner of the sector between Beulah Road and Difficult Run. It is currently zoned 1-acre residential.

Prominent in the sector are Wolf Trap Farm Park, a federally-owned cultural center, and the headquarters of the National Wildlife Federation on Leesburg Pike.

Transportation

Leesburg Pike provides the primary access for residents of the Wolf Trap Sector. Beulah and Trap Roads provide secondary routes across the Dulles Access Road to the south. Continuing population growth in the sector and areas to the north and west will increase-use of Leesburg Pike which already suffers from severe congestion in Tysons Corner. Residents have benefitted from the extension of I-66. They will also benefit from extension of DAAR inside the Beltway and particularly from the construction of parallel lanes along the DAAR.

In the long run, establishment of commuter bus service or extension of Metro-rail to the vicinity of the Route 7/DAAR intersection or Wolf Trap Farm Park, where parking facilities already exist, offers potential for reducing congestion.

Commuting problems are the result of congestion further east since both Leesburg Pike and Beulah Road have adequate capacity within the sector for stable traffic flow at peak hour.

The McLean trails plan in the sector includes a Fairfax County Park Authority trail connecting the Bull Neck Run trail with the Difficult Run trail along a route passing through Wolf Trap Park and paralleling the Dulles Airport Access Road west of the park to Difficult Run. The Fairfax County Park Authority has recommended trails along Beulah Road and Leesburg Pike.

Public Facilities

Schools

The school administration owns one 12.6-acre school site for future use if required. This is Andrew Chapel elementary school site between Towiston and Trap Roads just south of St. Athanasius Church.

Parks, Recreation and Open Space

This sector is served by the Wolf Trap Farm Park, a 117-acre federally-owned cultural center. It has one picnic area which can serve community activities. The Wolf Trap Run stream valley extending west of the park provides some additional scenic nature areas for local residents.

However, the absence of any active recreational sites will become more important if the large amount of expected population growth occurs. The relatively long distances to school sites with facilities effectively deny their use by sector inhabitants.

Shopping

There are currently no commercial facilities in the Wolf Trap Sector.

Housing

Housing in the Wolf Trap Sector is predominantly new single-family detached in the mid to high cost range and located on half-acre lots. Older homes are those associated with earlier or continuing agricultural uses.

Environment

Wolf Trap Sector lies within the Difficult Run watershed and is drained by Wolf Trap Creek and its main tributary, Old Courthouse Spring Branch. A combination of highly erodible soils throughout most of the sector, substantial floodplains, and steep slopes along the streams makes watershed protection a basic concern.

Wolf Trap Creek and Difficult Run are part of the proposed system of environmental quality corridors.

Much of the open space in the sector is presently zoned for and devoted to agricultural uses (a vegetable farm, fruit orchards, and a Christmas tree farm); these farms, along with several historic buildings in the sector which are suitable for preservation, would be valuable additions to the environmental quality corridor open space network.

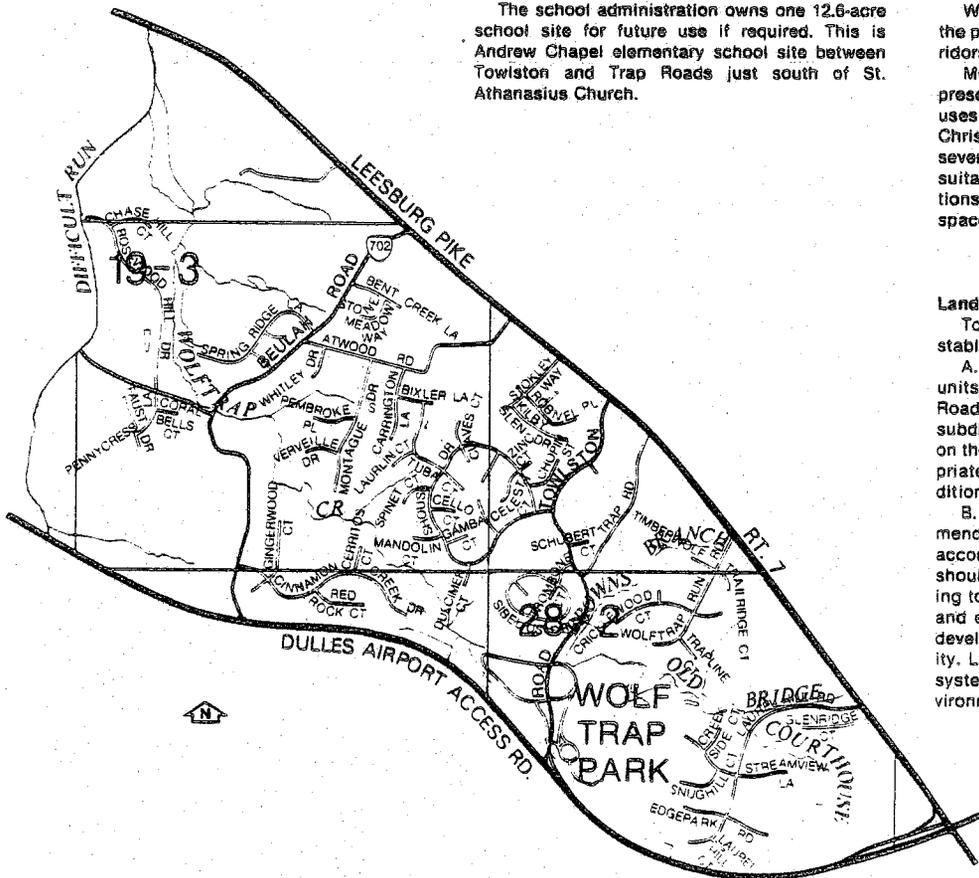
RECOMMENDATIONS

Land Use

To provide compatible development within the stable residential portion of the sector:

A. Low density residential development at 1-2 units per acre is recommended east of Beulah Road except for a small area west of Beau Ridge subdivision and north of Wolf Trap Run as shown on the plan map where 2.5 units per acre is appropriate because of floodplain and steep slope conditions.

B. Development west of Beulah Road is recommended for 2.5, .5-1 and 1-2 units an acre in accordance with the Area II Plan map. Developers should design with varying lot sizes corresponding to the planned land use densities on the map and existing development even if the area to be developed covers more than one residential density. Larger lots may include portions of the EQC system. Further policy guidance is found in the environmental recommendations.



C. Land along the south side of Route 7 should maintain the pattern of an average density of 1-2 units per acre, but permit cluster development so that land immediately adjacent to the highway would remain as open space and provide a buffer for the residential area.

D. To maintain the present scenic attractiveness of Route 7 in this area, site plans for all developments should be encouraged to continue to feature greater than normal setbacks from the highway and natural buffering as many recent developments have done. To implement this policy proposal, a zoning ordinance amendment should be considered.

E. Route 7 through this sector should be kept free of additional commercial-industrial development west of the Dulles Airport Access Road.

Public Facilities

A. Acquire and develop the Andrew Chapel elementary school site if it is declared surplus, or acquire an alternate site for a community park capable of supporting active facilities.

Environment

A. Preserve the Difficult Run, Old Courthouse Spring Branch and Wolf Trap Creek stream valleys from the adverse effects of development by prohibiting development in the floodplains and requiring strict adherence to County erosion and vegetation policies. These stream valleys form part of the environmental quality corridor open space system and should be protected through a variety of measures such as zoning, scenic easements without public access, or park acquisition so that environmental amenities are not lost.

B. The environmental quality corridor (EQC) designation includes the 100-year floodplain, adjacent steep slopes, major streams and swales, existing parkland and the stormwater runoff filter strip. It is intended as a limit of clearing.

C. All major subdivision roads should be oriented to the uplands and ridge lines. Small subdivision streets or access roads should not cross streams or major swales as this interrupts and disregards the EQC network, promotes nonpoint source pollution loadings and excessive cut and fill.

D. Lot consolidation may be appropriate in some areas prior to development. This will facilitate the achievement of the overall plan design recommendation.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

VIENNA PLANNING DISTRICT

The Vienna Planning District is located in the central northeast portion of the County. It is bounded on the northeast by Route 7, on the east by I-495, on the south by Route 50, Prosperity Avenue and Route 29, on the west by Blake Lane, Route 123, Hunter Mill Road and Difficult Run, and on the north by the Dulles Airport Access Road.

Population growth in the Vienna Planning District has been rapid—in 1960 there were 11,440 persons in the town and 12,653 persons in the unincorporated portion. As of January 1983, the town had an estimated population of 14,942, while the rest of the district had grown to 33,333 persons. By buildout the population will be 12,502 in the town and 41,092 in the County portion.

As of January 1983 the residential density in the Vienna Planning District (including the town) is 1.6 units or 4.5 persons per acre. The addition of committed and anticipated residential development would increase this density to 2.1 units and 4.8 persons per acre.

Some of the Vienna Planning District's demographic characteristics include the following:

- higher median income than the County average; and
- higher educational levels than the County average.

Planning History

The 1958 comprehensive plan indicated the area now designated as the Vienna Planning District to be planned for single-family residential use except for supporting public facilities, neighborhood shopping and the Tysons Corner complex. A Tysons Corner plan was adopted in February 1963 and amended in May 1965 to add detailed land use planning for acreage along the southwest side of Route 7 between 123 and the Dulles Airport Access Road.

The *Upper Accotink Watershed Study*, adopted in two parts in July 1963 and November 1965, proposed high-density residential uses at the Nutley Street/I-66 interchange, advocacy of the I-66 median strip for a rail rapid transit route and possible transit station locations. Of particular interest was the County's determination to maintain the identities of the Town of Vienna and Fairfax City through the promotion of low-density land use between the two established clusters.

The *Difficult Run Watershed Plan*, which was adopted January 4, 1967, clearly embodied the principles of the suburban cluster development concept.

The *Vienna Planning District Comprehensive Plan* was prepared in 1966, presented to the Board of Supervisors in February 1967, and adopted October 2, 1967. It incorporated substantial input from the Upper Accotink and Difficult Run plans. The plan has been modified by amendment three times. The Oakton community amendment provided for a community center with well-designed commercial, public/semipublic and residential uses. The *Tysons Corner Circulation Plan*, adopted October 2, 1973, provided a revised road pattern to alleviate congestion. The January 28, 1974, amendment placed the Vienna Metro line and two of its stations on the plan. Three additional studies have been completed since the Vienna plan was adopted in 1967. The Merrifield and Wolf Trap-Amanda neighborhood analyses were prepared in 1969 and 1972 respectively as part of the County's workable program. These analyses examined the nature, extent and causes of blight in the study areas. A study of possible secondary access routes from Technology Park to Cedar Lane and Route 7 was prepared in the fall of 1973 but was withdrawn from Board consideration.

The objectives of the 1967 Vienna plan were:

- the provision of the widest possible range of housing types;
- the efficient use of transportation channels, including rail rapid transit;
- a wide range of choice for employment center location;
- the establishment of well-balanced communities, supported by adequate community services and facilities;
- the provision of adequate areas for active recreation, and the preservation of other desirable open space for both passive recreation and resource conservation; and
- the design of a flexible plan, subject to beneficial changes warranted by future technological advances and the receipt of new information.

The Vienna plan was a traditional land use plan also showing major transportation elements and

proposed generalized public facility locations. It had a policy of noncontainment requiring that the plan suitably accommodate a population of approximately 52,000 in the horizon year. The land use pattern was a synthesis of the concentric zones of decreasing density and suburban cluster concept—that is, the concentric zones of decreasing density would center on the suburban cluster of Vienna rather than the District of Columbia. The Vienna plan had no implementation features except zoning.

Land Use

The Vienna Planning District surrounds the Town of Vienna which has roughly one-quarter of the acreage of the planning district. The Vienna Planning District draws its character from the town with many residents identifying with Vienna as their community center for activities and in spirit.

Approximately 80 percent of the land in the Vienna Planning District (outside the town) has already been developed. The district (including the town) is predominantly stable residential with single-family residences constituting 66 percent of its housing units on 67 percent of the developed land.

A mix of higher density residential uses is concentrated along the Lee Highway and Arlington Boulevard corridors. Medium-density townhouse developments are scattered in areas south of Route 123 with some concentration in the area between Lee Highway and Arlington Boulevard. Existing medium and higher density residential uses account for about 3271 units on 144 acres. Outside of the town, the Vienna Planning District contains two industrial parks, (Merrilee and Lee-Hi) located on Lee Highway near the Dunn Loring Metro Station site and comprising about 240 acres of the land in use. The town has a 75-acre industrial park bordering the County. Several neighborhood shopping centers and one community shopping center combined with scattered strip-commercial uses total around 165 acres. Much of the district is served by the large amount of commercial retail uses in the Town of Vienna along Maple Avenue. Total commercial retail and office use acreage in the district is approximately

EXISTING PUBLIC FACILITIES

June 1983

Sector	Schools			Parks, Recreation and Open Space	Other Public Facilities
	Elementary	Intermediate	High School		
V1	Fairhill			East Blake Lane, Hideaway Towers, Villa Lee	Dunn Loring and Vienna Metro Stations, Merrifield Fire Station
V2	Stenwood	Thoreau		Dunn Loring, Tysons Woods, W&OD Railroad Regional Park	W&OD Railroad Regional Park, Dunn Loring School
V3	Freedon Hill, Westbriar, Wolftrap	Kilmer		Freedom Hill, Ragland Road, Waverly, Wolf Trail, Foxstone, Eudora, Wolftrap Stream Valley, W&OD Railroad Regional Park	Dunn Loring Fire Station
V4	Flint Hill		Madison	Ashlawn, Peterson Lane, Kemper, Clarks Crossing, Tamarack, Difficult Run Stream Valley, W&OD Regional Park	Elementary School Site
V5	Marshall Road		Oakton	Nottoway	Intermediate School Site
V6	Louise Archer, Cunningham Park, Vienna			Cunningham, Peterson Lane, W&OD Railroad Regional Park	Cedar Lane School, Vienna Fire Station, Patrick Henry Library, Vienna Town Government

485 acres, compared to a total of 109 acres in the Town of Vienna.

The Vienna Planning District currently contains approximately 1673 acres of unimproved land.

Transportation

The Vienna Planning District is crossed by several major highways: I-66, Lee Highway (Route 29), Arlington Boulevard (Route 50), Leesburg Pike (Route 7); and two major circumferential highways, the Capital Beltway (I-495) and Route 123. Strip-commercial development in the Town of Vienna along Route 123 has caused some traffic congestion problems there. Bottleneck congestion occurs at the Route 123/Route 7 intersection in the Tysons Corner area. Except for these problems, the major highways provide relatively good service within this district despite the heavy commuter through-traffic during peak hours.

Two Metro rapid rail stations are planned in this district as part of the WMATA adopted regional system. The Dunn Loring Metro Station site is located in the I-66 right-of-way near the intersection of Gallows Road/I-66 and the Vienna Metro Station site is located in the I-66 right-of-way near the intersection of Nutley Street/I-66.

Except on the two interstate routes (I-66 and I-495), local and regional bus service is available on all major highways in the district. Transportation planning must produce both short-range and long-range programs for increasing capability to handle traffic between the planning district and the metropolitan core.

The proposed bypass north of the Town of Vienna which was part of the 1967 Vienna Planning District plan has been removed. The Board of Supervisors is opposed to the use of either Abotsford Drive or Clarks Crossing Road for such a purpose since a bypass road in either location would disrupt established stable neighborhoods.

A comprehensive trails-bikeway plan is now under development which will tie in with the Town of Vienna adopted plan.

Public Facilities

The following table indicates the existing public facilities located within the Planning District:

(Insert Vienna Planning District Existing Public Facilities table here from Comp Plan BB document 338)

Environment

The Vienna Planning District is located primarily in the headwaters and upper tributary regions of Difficult Run and Accotink Creek watersheds; thus, any development ultimately affects the water quality and fish/wildlife resources of the Potomac River and estuary. This factor plus the widespread occurrence of highly erodible soils, especially in Sectors V3 and V4, makes stream valley protection an essential planning consideration. Septic tank limitations and extensive floodplains along Bear, Long and Hunters branches of Accotink Creek and Piney Branch, Wolf Trap Creek and Old Courthouse Spring Branch of Difficult Run are other environmental factors which should affect type and intensity of development.

These branches of Difficult Run and Accotink Creek are part of the environmental quality corridor open space network. The floodplains, parklands, steep slopes, and dense vegetation associated with each of these branches merit protection and have recreational and educational potential. Wherever the demand exists, and wherever the ecological carrying capacity permits, a lineal recreation system should be planned within these EQCs. The EQCs should be used to structure the shape of future urbanization.

Air pollution is a concern throughout much of the district, particularly along major arterial roads in the Dunn Loring area of Cedar Sector and most of Lee Sector. Noise pollution also occurs along major transportation corridors.

History

The Vienna Planning District and Town of Vienna have several historic features worthy of protection:

Ash Grove. This is one of only two Fairfax Family houses still standing in Fairfax County. Built about 1790, the house is "T" shaped and covered with white clapboard. The outbuildings include an exterior brick kitchen and a clapboard smokehouse.

Moorefield. This house of Jeremiah Moore, an influential early Baptist leader in Fairfax County, was built in 1790 as a frame and clapboard structure and is now covered with brick. Adjacent to land programmed for the Vienna Metro Station, this house was assured of preservation and use in its present location by a recent rezoning in the Town of Vienna.

Windover Heights. Built in 1869, this is Fairfax County's best example of the Italian villa style of building, very popular in this country after the Civil War. This site is located in the Town of Vienna.

Other historic sites which are included in a Fairfax County inventory of historic sites are mentioned in the community planning sector descriptions.

RECOMMENDATIONS

The primary planning guidelines for Vienna Planning District are:

A. The preservation of stable neighborhoods and the basic low-density character of the town and district.

B. The concentration of commercial and industrial activities in designated areas. New commercial development outside the complex areas should be limited to well-designed neighborhood shopping centers where there is a demonstrable need and where provision has been made for additional traffic to be generated.

C. The location of medium and higher density residential in areas with private access to planned Metro stations, existing bus service, and major thoroughfares.

D. The prevention of further strip-commercial expansion along roads in the district by concentrating commercial development in centers, providing sufficient commercial acreage to meet future population demands, and providing other economically viable alternatives. No additional strip-commercial zoning should be permitted on the roads in the district.

E. The top priority for road improvements and construction should be given to improving access to Metro stations.

F. The preservation of environmental quality corridors as recommended here and in the county-wide section of the Plan.

G. The obtainment of access for express bus and/or commuter car pool use of the Dulles Airport Access Road.

It should be noted that any recommendations for the stable portions of the community planning sectors are based on the assumption that the present WMATA adopted regional rail system will be completed.

PLANNED RESIDENTIAL INFILL—VIENNA PLANNING DISTRICT

Unit Type	Existing (1983)		Estimated Additional		At Buildout	
	Number	Percent	Number	Percent	Number	Percent
Single-family	11,663	66.3	3,886	58.9	15,549	64.3
Townhouse	3,059	17.4	1,237	18.8	4,296	17.7
Apartment	2,878	16.3	1,473	22.3	4,351	18.0
Total	15,600	100.0	6,596	100.0	24,196	100.0

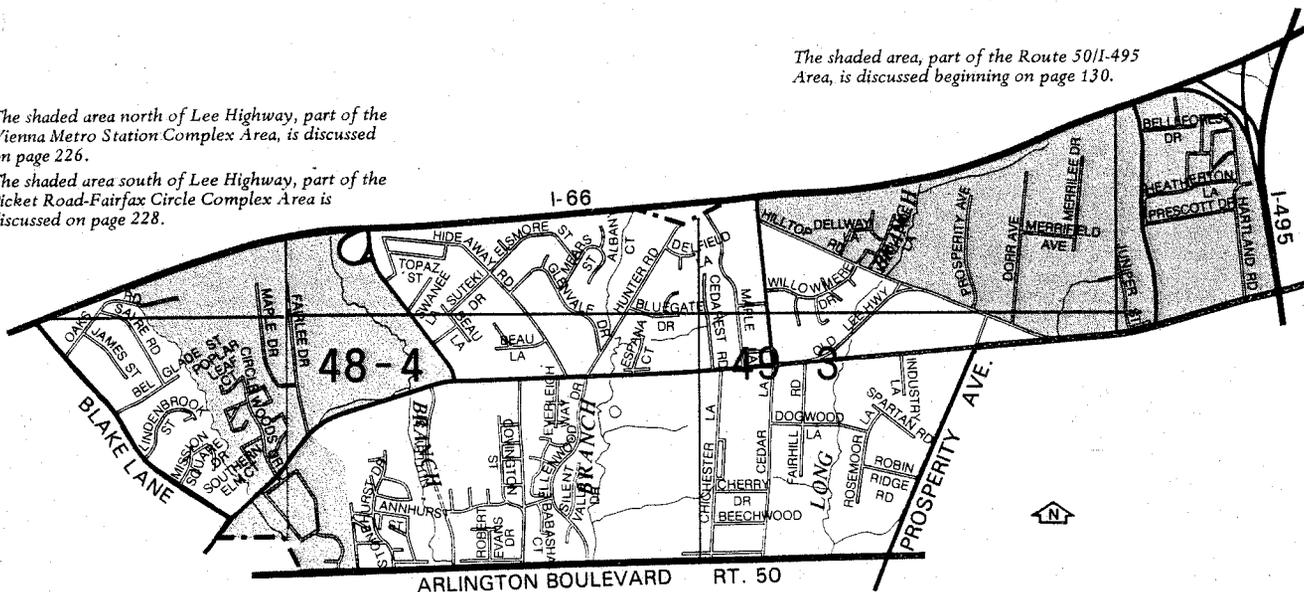
Source: Office of Research and Statistics, January 1983.

V1 LEE COMMUNITY PLANNING SECTOR

The shaded area north of Lee Highway, part of the Vienna Metro Station Complex Area, is discussed on page 226.

The shaded area south of Lee Highway, part of the Pickett Road-Fairfax Circle Complex Area is discussed on page 228.

The shaded area, part of the Route 50/I-495 Area, is discussed beginning on page 130.



This sector located south of the Town of Vienna is bounded by I-66 on the north, the Capital Beltway (I-495), Lee Highway (Route 29), and Prosperity Avenue on the east, Arlington Boulevard (Route 50) on the south, and Blake Lane, Lee Highway, and the City of Fairfax boundary on the west.

Portions of this sector at the east and west ends of the corridor between Lee Highway and I-66 lie within the Vienna and Dunn Loring Metro Complex Areas.

The land area between Arlington Boulevard and Lee Highway, west of the Stonehurst townhouse development and northeast of the Fairfax City line is part of the Pickett Road-Fairfax Circle Complex Area.

Land Use

The stable areas in Lee Sector are characterized by a variety of land uses including commercial, industrial park, high-rise and garden apartment, townhouse, and single-family residential uses. Single-family residential is the predominant land use.

Commercial uses are concentrated along Lee Highway in strip-type development. Pressures for further strip-commercial development exist along both Lee Highway and Arlington Boulevard, and may develop along future Metro access routes as Metro becomes operational.

The portion of Lee Sector between Lee Highway and Arlington Boulevard has experienced most of the higher density residential development and is likely to continue to develop in this manner. This area's proximity to three major radial transportation routes and two planned Metro stations marks it as a prime site for higher density residential and commercial uses. Safeguards must be established to protect the character of existing uses.

The largest amount of uncommitted vacant land in the stable area in Lee Sector lies within the corridor between Lee Highway and Arlington Boulevard, particularly in two large tracts—one east of Bear Branch stream valley and one north of the Providence Hall apartments.

The Lee-Hi and Merrilee Industrial Parks are located north of Hilltop Road and are included in the Dunn Loring Metro Complex Area. Together,

these industrial parks are one of the better developed and more attractive industrial use areas in Fairfax County. The industrial uses adjacent to these parks that result as infill occurs on vacant industrial zoned land should be buffered from surrounding residential areas. Presently, this industrial area is tightly defined by surrounding residential and commercial uses.

Several stable single-family residential developments border the Metro complex areas. These areas should be protected from encroachment by Metro-related noncompatible uses through the use of natural buffering and available site plan and design review control tools.

Continued stabilization of the Lee Sector can be achieved by:

- identification of commercial, office, and industrial activity boundaries. This should relieve pressures for strip-commercial expansion as well as protecting stable residential and industrial areas.
- residential infill compatible with present residential uses, including mixtures of housing types where appropriate.

Any consideration of this sector must include the possibility of a future cutback in the Metro adopted regional system because of financial problems. The alternative impacts of this action on the stable areas around Metro complex areas should be investigated and considered in recommendations for the Vienna Metro corridor.

Transportation

There are three major radials in this sector—Route 50, Route 29 and I-66. Other major access roads in this sector are Blake Lane, Nutley Street, Cedar Lane and Gallows Road. Cedar Lane and Gallows Road between Route 29 and Route 66 are subject to low speeds, unstable traffic flow and stoppages at peak hours.

Additional problems relating to future access to Metro stations are currently being studied. This situation will have very significant impact on all roadways in this sector in the future as Metro becomes operational.

One intersection in this sector represents the point of most congestion because it brings together two roads with high traffic volumes—Route 29 and Gallows Road. Possible other future

problem intersections that may impede traffic flow are Blake Lane/Route 29, Nutley Street/Route 29 and Prosperity Avenue/Route 29.

Three possible new roads are foreseen in this sector: an extension of Prosperity Avenue north of Route 29 to improve Metro access; a Nutley Street extension between Route 50 and Route 29; and a Blake Lane extension between Routes 50 and 29.

The two planned Metro stations in this sector are to be located in the median of I-66 at the Gallows Road intersection (Dunn Loring Station) and the Nutley Street intersection (Vienna Station.) The Vienna Metro Station will be the terminal station on that line under the adopted regional system.

No significant bikeways exist in this sector.

Public Facilities

Schools

Fairhill Elementary School is located within the sector.

Parks, Recreation and Open Space

The East Blake Lane, Hideaway, Towers, and Villa Lee Parks are located within the sector.

Other Public Facilities

Merrifield Fire Station is located within the sector.

Shopping

Convenience shopping facilities for Lee Sector are available in the Fairfax Circle Area, Yorktowne Shopping Center, Pickett Shopping Center and in five shopping centers in the Town of Vienna. Regional shopping facilities are readily accessible in the Tysons Corner and Seven Corners Shopping Centers. Shopping facilities serving this sector are adequate to meet present population needs.

Housing

Approximately 40 percent of the existing housing units in Lee Sector are high-rise or garden rental apartments. Another 36 percent of the residential units in this sector are townhouses. The remainder of the housing in this sector are single-family units.

The majority of the housing units in this sector are relatively new and almost all units are in good structural condition.

The prices of housing in Lee Sector range from slightly below to slightly above the County's median cost but there is very little low- or moderate-cost housing available. Rental units in this area are middle-range cost, but again provide no low-income housing opportunities. These rental units meet a growing demand in Fairfax County where construction of new rental units has decreased drastically and conversion of existing rental units to condominium ownership has increased substantially. Future residential developments in this area must be encouraged to provide low- and moderate-cost housing. This is appropriate in Lee Sector with its proximity to an employment center, two planned Metro stations, three major roadways and good public bus service.

Seventeen units of the Circle Woods residential community have been proposed as public housing units. Twelve units of the Townes of Vienna residential community have been designated as below-market housing under the moderate income direct sales program.

Environment

Lee Sector is located in the headwater regions of the Accotink Creek watershed and is within the Lower Potomac Pollution Control Plant service area. This sector is crossed from north to south by three upper tributaries of Accotink Creek—Hunters Branch, Bear Branch and Long Branch—all of which have broad floodplains suitable for open space or recreational use. As such, all three have been designated as part of an environmental quality corridor system which also includes the two neighborhood parks and an area of dense vegetation in this sector. Portions of the sector between Lee Highway and Route 50 have high erosion-prone soils.

All of this sector is in an air quality impact area. This means it is in a zone of measured high air pollution levels resulting from a combination of one or more pollution factors, e.g., vehicular traffic congestion or industrial pollution sources.

RECOMMENDATIONS

Land Use

The demarcation line separating planned commercial, industrial and higher density residential development has long been established in adopted County plans as Prosperity Avenue between Routes 29 and 50. This affirms the continuation of the demarcation line at Prosperity Avenue on the east and Fairfax Circle east as far as Bear Branch on the west with low-density residential in the intervening area separating two intensively planned and developing cluster areas centered on Fairfax Circle and at the Yorktowne intersection of Gallows Road and Route 50. Therefore:

A. In the area between Routes 50 and 29 all additional commercial retail, office and industrial uses on land not already zoned for these uses should be confined to the area east of Prosperity Avenue and the area in the vicinity of Fairfax Circle. Conversion of industrially-zoned land to commercial retail zones should not be permitted except for the expansion of existing automobile dealerships.

B. The tract fronting Lee Highway bounded by Stonehurst townhouses, Providence Hall apartments and Hampton Court townhouses has been designed by court order for a commercial shopping center use. This is not consistent with good land use planning. Any portion of this tract not built in accordance with the existing commercial zone is recommended for development in the 8-12 units per acre range. Any development should respect the adjacent cemetery and floodplain and

should be designed for minimal adverse impact on the Lee Highway/Nutley Street intersection.

C. In the area between Bear Branch, Prosperity Avenue, Route 50 and Lee Highway, except for land already zoned for industrial and commercial use, development should be in the 2-3 units per acre density range except along the west side of Prosperity Avenue. Higher density residential development and commercial or industrial uses other than those now zoned and planned shall not be permitted in this area. Care has been and will continue to be taken to insure that commercial and industrial development west of Prosperity Avenue is so buffered, set back, landscaped and facaded so as to make it a compatible transitional neighbor to the low-density residential planned for the west side of Prosperity Avenue.

To provide a transitional use between the homes to the south, southeast and west and the industrial uses to the north and northeast, low-rise offices are an appropriate option to residential use at 2-3 dwelling units per acre for the area immediately southwest of the industrially planned land south of Route 29 and west of Prosperity Avenue (parcel 51 and the western portion of parcel 50). However, the following conditions need to be satisfied:

1. the provision of a substantial and effective landscaped buffer between the offices and any planned and existing residential uses to reduce adverse visual impact. Existing trees should be preserved where possible and supplemented, if necessary, by new plantings;

2. the limitation in the height of offices to a maximum of three stories from any elevation;

3. the provision of signs and lighting features whose character, size, and location shall be compatible with and result in no adverse visual impact upon adjacent existing and planned residential units;

4. the design of the low-rise offices should be compatible with the residential character of the adjacent planned and existing residential communities through the architectural treatment of the buildings in terms of scale, detail of building components and materials. Exterior landscape elements adjacent to any residential development should be well-designed and in harmony with the nearby residential development.

To provide a transitional use between the homes to the south and west and the industrial uses to the north, low-rise townhouse offices are appropriate for the area immediately south of the industrially planned land south of Route 29 and west of Prosperity Avenue (lot 39 and southern portion of lot 50). However, the following conditions need to be satisfied:

1. the provision of a substantial landscaped open space buffer between the townhouse offices and any existing and planned residential uses to reduce any adverse visual impact. Existing trees should be preserved where possible and supplemented, if necessary, by new plantings.

2. the limitation in the height of townhouse office units to a maximum of three stories;

3. the provision of signs and lighting features whose character, size, and location shall be compatible with and result in no adverse visual impact upon adjacent existing and planned residential units. Signs and lighting features should, wherever possible, be located on the part of the property near the industrial uses and not in close proximity to the residential units.

4. the provision of an access road into the property which should be from Prosperity Avenue, and, together with any parking, should be located on the northeast portion of the property near the industrial uses to reduce the effect of vehicular noise and light glare upon nearby residential units; and

5. the design of the facade of the townhouse office units facing any existing or planned residential development should be compatible with the residential units. The facades should be architecturally treated in terms of scale, detail of building components and materials. Exterior landscape elements adjacent to these facades should be well-designed and in harmony with the residential development to the south and west.

Highway, especially major highways, have long been recognized by planners, developers and citizens as appropriate demarcation lines between low-density, single-family detached residential development and more intensive, industrial, commercial and high-density residential development. Prosperity Avenue, between Routes 29 and 50, widened to four lanes, serves and should continue to serve, as such a firmly established land use demarcation line.

D. Parcels along the west side of Prosperity Avenue where platting, topography, adjoining uses and street noise may make the development of single-family detached housing infeasible may be reconsidered for residential development at 3-4 units per acre provided such development is clustered away from the street, does not exceed two stories in height and is well-buffered from the area planned or developed at 1-2 and 2-3 units per acre. Such structures will be sited and designed so as to serve as an effective and aesthetically pleasing transitional use.

E. The Fairfax County Park Authority should acquire the tract located on Arlington Boulevard between Stonehurst and Boulevard Estates, through dedication, for use as local-serving parkland at the time of development of the community shopping center in the sector. Because of a large amount of stream valley, this tract is virtually undevelopable except as parkland or open space uses.

F. On the north side of Lee Highway industrial infill should be permitted as far west as Long Branch. Low-rise offices are recommended as a transitional use along the north side of Old Lee Highway and Lee Highway to a point approximately 180 feet east of Cedar Lane. No other commercial or industrial uses should be permitted along the north side of Lee Highway in the stable portion of this sector. Emphasis should be placed on aggregation of small lots and green screen buffering of nonresidential development from surrounding residential uses.

G. Vacant land and land subject to redevelopment fronting the north side of Lee Highway between Old Lee Highway and Hunter Road should develop in residential uses at a density range not to exceed 4-5 units per acre. Townhouse uses at this density should not be permitted unless enough parcels can be assembled to ensure developments large enough to provide amenities needed (5 acres and above). Townhouse uses should be buffered from adjacent commercial and single-family residential uses. Where land assembly for townhouse use is not feasible, development of single-family detached housing using reverse frontage or local residential street orientation would be appropriate.

Vacant land and land subject to redevelopment fronting along the north side of Route 29 between Nutley Street and Hunter Road should develop in coordinated residential uses at a density of 4-5 units per acre. Consolidation of parcels to a four-acre minimum is encouraged, with a substantial, landscaped open space buffer provided to complement existing topography and vegetation along that portion of the land adjacent to Route 29. Such a buffer shall eliminate any potential for adverse visual impact from Route 29 or nearby commercial activity. Residential units shall be sited in such a manner as to minimize any highway noise impact, with vehicular access from residential development coordinated with currently planned intersections along Route 29.

In view of the impact of highway noise from nearby Route 29, new development must provide adequate noise attenuation measures including acoustical treatment of all units in order to reduce the interior and exterior noise levels to County accepted levels or standards.

H. Residential infill in the portion of the sector east of Nutley Street and north of frontage property on Lee Highway should be limited to residential uses at a density of 1-2 units per acre.

I. Land northwest of the Lee Highway frontage on the northeast side of Blake Lane southeast of the Floyd development is recommended for residential use at 5-8 units per acre.

J. A highway corridor overlay district should be applied to Route 29 (Lee Highway) in this sector.

K. In view of the size, configuration and location of parcel 48-3 ((1)) 12, south of I-66, it is recommended for residential development at 2-3 units per acre as compatible infill to maintain the stability of surrounding low-density residential uses. In view of the impact of highway noise from nearby I-66, new development must provide adequate acoustical treatment of all units to reduce the maximum interior noise level of such units to County accepted levels.

Public Facilities

A. Acquire land for a community park in the area between Route 50 and Route 29.

B. Develop Circle Towers and Blake Lane Parks to serve the active recreation needs of the community.

Environment

A. Prohibit development in the floodplains along the three stream branches of Accotink Creek. Citizens have expressed a special interest in protecting the environmental resources along Hunters Branch as it runs through areas of potential high-intensity development in the stable and complex areas of this sector.

B. Protect highly erodible soils during and after construction, including development prohibition on the most vulnerable soils and selective cutting when vegetation is removed. Restrict development on the steep slope areas where not suitable for certain land uses.

C. Restrict auto-oriented uses and industrial/commercial uses which contribute significantly to further air quality degradation in this area.

D. Protect the Accotink Creek Environmental Quality Corridors (Bear, Hunters and Long Branches) through acquisition or land use controls.

Transportation

A. The transportation recommendations for this area are included in the Transportation section of the Plan.

V2 CEDAR COMMUNITY PLANNING SECTOR

This sector located east of the Town of Vienna is bounded by Electric Avenue, Cedar Lane, and Gallows Road on the north, the Capital Beltway (I-495) on the east, Interstate Route 66 on the south, and the Vienna Town Boundary on the west.

The northeast tip of this sector lies within the Tysons Corner Area.

Land Use

A major portion of the Cedar Sector is developed in single-family residential uses interspersed with two small commercial areas and a small townhouse development.

A townhouse/neighborhood convenience retail commercial cluster is located in the Gallows Road/Electric Avenue/Cedar Lane triangle area with another small neighborhood convenience retail commercial area located adjacent to the Town of Vienna's Cedar Park Shopping Center on the corner of Park Street and Cedar Lane.

Strip commercial uses along Gallows Road must be prevented since they would be a safety hazard and would impede Metro traffic flow. Any need for additional neighborhood commercial facilities should be met by clustering these facilities in the Gallows Road/Electric Avenue/Cedar Lane triangle.

Most of the uncommitted vacant land in this sector exists in smaller parcels north of the W&OD Railroad Regional Park between Gallows Road and the Capital Beltway. This vacant land is intermixed with single-family residential uses which are developed in varying lot sizes.

Bordering development in the Town of Vienna is mostly single-family residential with the exception of Cedar Park Shopping Center and an adjacent garden apartment development on Cedar Lane.

Stable residential uses bordering the Tysons Corner Area may undergo redevelopment pressures as Tysons Corner develops. These stable developments should be protected through transitional land uses combined with use of buffering and other design tools.

Transportation

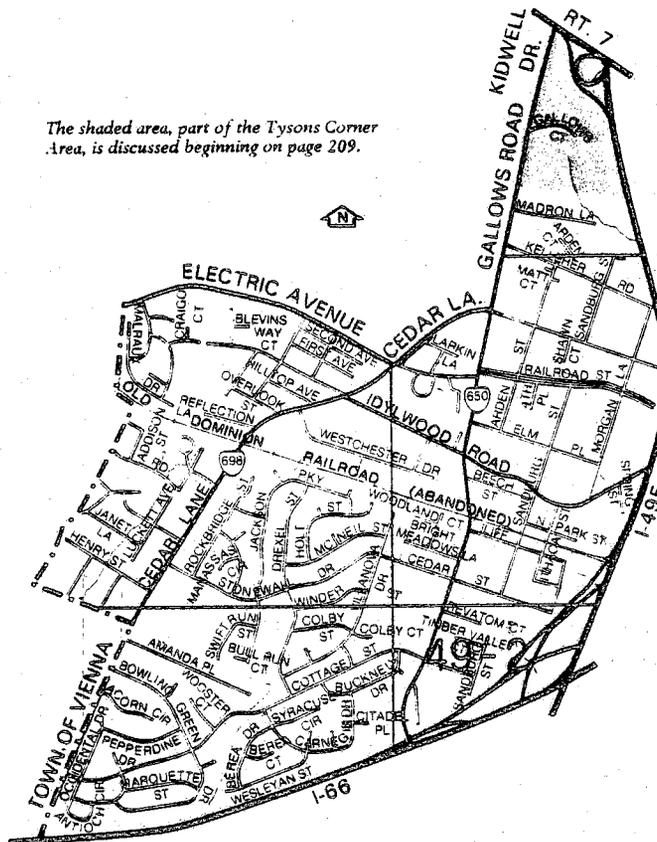
This sector contains one minor circumferential road (Gallows Road) and has one major circumferential route bordering it (the Capital Beltway). Gallows Road and the Beltway are subject to low speeds, unstable traffic flow and stoppages at peak hours. Widening of the Beltway to eight lanes and programmed widening of Gallows Road by VDH&T to four lanes should relieve this problem.

Idylwood Road, a connecting link between Gallows Road and Route 7, currently is providing a good level of service. Electric Avenue has recently been connected by the Town of Vienna in such a manner as to improve access to the Technology Park through residential areas of the County.

One intersection in this sector is a point of great congestion because it brings together two roads of high traffic volume—Gallows Road and Route 7. Implementation of the Tysons circulation plan should relieve congestion by rerouting traffic north of this area on a new facility to align with International Drive at Route 7. No other new road construction is foreseen in this sector. A potential congestion point and safety hazard exists at the Cedar Lane and Gallows Road intersection.

No significant bikeways exist in this sector; however, utilization of the W&OD Railroad Regional Park as part of a trails-bikeway system may be feasible.

The shaded area, part of the Tysons Corner Area, is discussed beginning on page 209.



Public Facilities

Schools

Stenwood Elementary and Thoreau Intermediate Schools are located within the sector. Dunn Loring School, within this sector, has been declared surplus by the School Board.

Parks, Recreation, and Open Space

The Dunn Loring and Tyson Woods parks are located within the sector. The sector also contains a portion of the Northern Virginia Regional Park Authority's W&OD Railroad Regional Park.

Shopping

Convenience shopping facilities for Cedar Sector are available in Cedar Park Shopping Center, Yorktowne Shopping Center, the Tysons/Route 123 area, and in four shopping centers on Maple Avenue in Vienna. Regional shopping facilities are readily accessible in the Tysons Corner and Seven Corners Shopping Centers.

Shopping facilities serving this sector are adequate to meet present population needs.

Housing

Housing units in Cedar Sector are almost exclusively single-family detached, relatively older in construction and in good structural condition.

Amanda Place is a cluster of homes in poorer structural condition with lower income residents who are unable to provide necessary improvements when needed.

Environment

Cedar Sector drains into the Accotink Creek, Cameron Run, Pimmit Run and Difficult Run watersheds and is crossed from north to south by Long Branch of Accotink Creek and Holmes Run; both originate in this sector and are intermittent streams with no broad floodplain. This sector is within the Lower Potomac Sewage Pollution Control Plant service area west of Gallows Road and within the Alexandria, Westgate and Blue Plains sewage treatment plant service areas in the rest of the sector.

The sector is crossed east to west by the W&OD Railroad Regional Park, which together with some adjacent vacant land, has been designated as part of an environmental quality corridor in the County.

The area in this sector just north of I-66 is within an air quality impact area.

RECOMMENDATIONS**Land Use**

To achieve residential infill compatible with present residential uses and to protect stable developments from redevelopment pressures from the Tysons Corner Area:

A. Residential infill is appropriate in the section bounded by Cedar Lane, Gallows Road, Idylwood Road and Electric Avenue at a density range of 4-5 units an acre. This area should be buffered from existing single-family residential and commercial uses in the area.

B. Amanda Place is a potential redevelopment site in Cedar Sector. This area should be redeveloped without displacing existing residents. If an acceptable redevelopment plan for this study area is submitted to the County, the Amanda Place neighborhood should be allowed to develop and redevelop at a density range of 5-8 units per acre. However, straight residential infill on existing vacant lots should be limited to a density range of 3-4 units per acre.

C. The portion of the sector south of Railroad Street and east of Gallows Road should be limited to residential uses at a density range of 3-4 units per acre. Consideration may be given to development at a density in excess of 3 units per acre if the following conditions are satisfied:

1. the provision of a substantial landscaped permanent screen along the periphery of the acreage to ensure the elimination of any adverse visual impact upon nearby existing or planned residences from Gallows Road and the commercially-zoned parcel in the southeast quadrant of the junction of Gallows Road and Railroad Street if this parcel should develop as a commercial facility;

2. the appropriate consolidation of adjacent parcels to ensure coordinated development;

3. the provision of coordinated vehicular access so as not to exacerbate traffic flow along Gallows Road. Where possible access should be from secondary roads such as Railroad Street, Arden Street and Elm Place.

In view of the potential impact of highway noise from nearby Gallows Road, new development should provide adequate noise attenuation measures in order to reduce the interior and exterior noise levels in keeping with the adequate protection of public health and welfare.

D. In view of their proximity to Gallows Road and planned commercial activity, parcels 39-4(1)62-71, 73 and 74 and ((11) 2, 3 and A located along the east side of Gallows Road, north of Railroad Street and south of the intersection of Gallows Road and Wolftrap Road are planned for residential development at 4-5 units per acre. Consideration may be given to development at a density in excess of 4 units per acre if the following conditions are satisfied:

1. the provision of a substantial landscaped open space buffer and permanent screen along the western and southern edge of the property where adjacent to Gallows Road and commercial uses, and along the northern and eastern periphery where adjacent to existing or planned low-density detached single-family residential use so as to ensure compatible development and eliminate any potentially adverse impacts;

2. the appropriate consolidation of adjacent parcels to ensure coordinated development, the preservation of environmental amenities such as mature hardwoods, and the siting of residential buildings towards the interior of the property to minimize any disruptive effect on adjacent existing and planned detached single-family homes;

3. the provision of coordinated vehicular access so as not to exacerbate traffic flow along Gallows Road. When possible, access to and egress from the property should be via Railroad Street and Arden Street.

In view of the potential impact of highway noise from nearby Gallows Road, new development should provide adequate noise attenuation measures possibly including such features as acoustic fencing where necessary, in order to reduce the interior and exterior noise levels in keeping with the adequate protection of public health and welfare.

E. A single-family detached residential density of 2-3 units per acre is recommended for the area bounded by Electric Avenue (Route 697) to the north, Williams Avenue (Route 896) to the east, Idylwood Road (Route 695) to the south and the Tysons Woods subdivision to the west. However, single-family detached residential uses at 3-4 units per acre might be considered in the event of the substantial land consolidation of small lots to a minimum consolidated size of 8 acres and incorporating a sound internal vehicular circulation system. A residential density in excess of 2-3 units per acre should only be permitted on those parcels which, if developed, would not be disruptive to the stable residential character of this area.

F. The remainder of this sector including old subdivisions which predate zoning in the County (such as Grange Camp, Cedar Lane and Wedderburn Heights) should be limited to residential uses in the 2-3 unit per acre density range except in substantially developed subdivisions where the current zoning indicates other densities for compatible infill.

On the condition that planned densities of 2-3 dwelling units per acre be maintained and development be restricted to single-family detached residential units, higher density zoning categories may be considered if they would provide for more development flexibility for small sites.

To prevent strip commercial uses and to promote clustering of neighborhood commercial facilities:

G. Any additional neighborhood commercial uses in this sector should be confined to the triangle area bounded by Cedar Lane, Gallows Road and Electric Avenue. No additional strip commercial uses should be permitted in this sector.

H. No additional commercial expansion should be permitted in the Cedar Lane/Park Street area.

Public Facilities

A. Complete the development of Dunn Loring Park.

B. Develop Tysons Woods Park and obtain access to the W&OD trail.

Environment

A. Continue plans for the acquisition and development of the W&OD abandoned right-of-way as part of the EQC network through the Northern Virginia Regional Park Authority. Consider acquisition of the privately-owned open space bordering both sides of the W&OD abandoned right-of-way as it extends east from Gallows Road, if acquisition is necessary to preserve existing park use of the land.

B. Protect highly erodible soils during and after construction.

C. Preserve citizen designated environmental resources.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

V3 SPRING LAKE COMMUNITY PLANNING SECTOR

This sector located north of the Town of Vienna is bounded by the Dulles Airport Access Road on the north, Leesburg Pike (Route 7), Gallows Road and Cedar Lane on the east, Electric Avenue and the Vienna Town Boundary on the south and the W&OD Railroad Regional Park, Clark's Crossing Road and Trap Road on the west.

A large portion of this sector along the Route 7 corridor lies within the Tysons Corner Area.

Land Use

Present development in the Spring Lake Sector stable area is almost entirely in single-family residential uses. There is one small commercially developed parcel and an office of the Virginia Division of Motor Vehicles on the south side of Old Court House Road.

The stable area between Old Court House Road and Wolftrap Road is experiencing heavy pressure for higher intensity uses and redevelopment of some existing single-family residential areas because of its proximity to the Tysons Corner Area. Pressure also exists for continuation of the strip commercial development along Route 123 toward the Town of Vienna. A substantial amount of this area is undeveloped. Many of the existing homes are over twenty years old and are situated on lots larger than one acre. Stabilization of this particular area will require that all commercial activity remain in the Tysons Corner area north of Old Court House Road and within the present commercial zoned land along the south side of Route 123. Transitional higher density residential uses along the complex area boundary and along Route 123 will relieve market pressures for continued expansion of commercial activity in these areas. Stable neighborhoods and transitional uses should be buffered from the Tysons Corner area.

The area between Wolftrap Road and Electric Avenue has a large amount of vacant land and is subject to much the same higher density and redevelopment pressures as the area immediately adjacent to Tysons Corner. Many of the homes are more than twenty years old. Some of the parcels in the Wolftrap neighborhood are landlocked with no access and platting of land is generally very irregular in the area. These conditions have led to a situation where no new construction has occurred and existing blight is increasing. Stabilization of this area will require a sociological, economic and physical design approach which can deal with existing problems of inadequate public facilities, circulation and access, poverty and deteriorating housing conditions.

The portion of the stable area west of Route 123 is primarily newer single-family residential subdivisions. A few medium-sized vacant parcels of land are clustered between Spring Lake and Ankerdale subdivisions with several bordering the Tysons Corner Area. Additional vacant land is scattered in single medium-sized tracts surrounded by single-family residential subdivisions. Stabilization can be achieved in this area through single-family residential infill and adequate buffering along the complex area boundary.

Bordering land uses in the Town of Vienna are primarily single-family residential with the exception of the Technology Industrial Park which is adjacent to a stable single-family residential subdivision on Electric Avenue and Woodford Road.

Transportation

The major radial route in this sector is Route 7 which is subject to low speeds, unstable traffic flow and stoppages at peak hours between Route 123 and the Beltway. A major point of congestion occurs at the Route 123/Route 7 interchange. The

major circumferential route in this sector is Route 123. One of the major safety hazard areas in Vienna Planning District occurs between Old Court House Road and Route 7 on Route 123 because of strip commercial uses and inadequate ingress and egress from these uses.

A minor radial in this sector is Old Court House Road. Future land development around Tysons Corner will necessitate an improvement in the portion of Old Court House Road between Gallows Road and Route 123. The road is currently a safety hazard because of its narrow width and its use as a bypass to avoid Route 7 congestion. Future commercial uses along Old Court House Road and the implementation of the Tysons Circulation Plan will require widening of part of this section of Old Court House Road and improvement of the remaining section to reduce safety problems.

Wolftrap Road is currently not a through-road and is in poor condition along with other public facilities in the Wolftrap neighborhood area.

Other secondary roads in this sector have satisfactory levels of service at present. The need for improved Metro access from north of the Town of Vienna will impact this area considerable as Metro becomes operational.

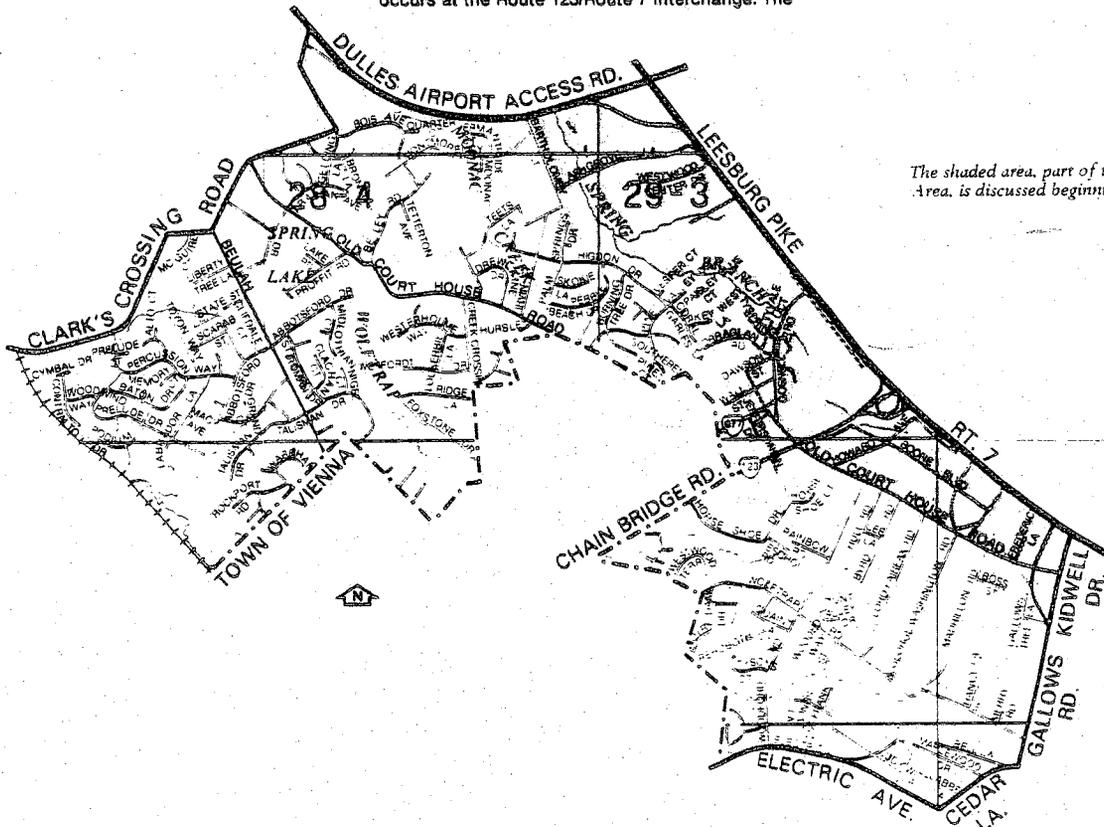
No new road construction is foreseen in this area.

No significant bikeways exist in this sector; however, utilization of the abandoned W&OD right-of-way as part of a trails/bikeway system may be feasible.

Public Facilities

Schools

The Freedom Hill, Westbriar and Wolftrap Elementary and Kilmer Intermediate school are located in the sector.



The shaded area, part of the Tysons Corner Area, is discussed beginning on page 209.

RECOMMENDATIONS

Parks, Recreation and Open Space

Spring Lake Sector contains eight parks: Eudora Park, Foxstone Park, Freedom Hill Park, Raglan Road Park, Symphony Hills Park, Waverly Park, Wolf Trails Park, and Wolftrap Stream Valley Park.

The sector contains a portion of the Northern Virginia Regional Park Authority's W&OD Railroad Regional Park.

Other Public Facilities

Dunn Loring Fire Station is located within the sector.

Shopping

Convenience shopping facilities for Spring Lake Sector are available in Tysons Plaza Shopping Center, the Tysons/Route 123 area and in four shopping centers on Maple Avenue in Vienna. Wolftrap Road residents currently have problems of access to these shopping facilities. Regional shopping facilities are readily accessible in the Tysons Corner Center.

Shopping facilities serving this sector are adequate to meet present needs.

Housing

The majority of housing units in the Spring Lake Sector stable area are single-family detached.

Most of the units north of Route 123 in this sector are relatively new, all are in good structural condition, and most are located on smaller lots (one-half acre or less). Housing south of Route 123 in this sector is relatively older in construction, ranges from poor to good structural condition and is located mostly on larger lots (one acre or more). Portions of this area would benefit from any neighborhood improvement program the County may undertake.

Housing costs have a broader range than in other sectors especially in the area south of Route 123. However, the lack of any low- and moderate-cost housing, except for some units in poor structural condition, should be alleviated by future residential construction.

Thirty units of the Briarcliff residential community at Wolftrap Road are occupied as Section 8 cooperative housing. Twenty units are proposed at Briarcliff as public housing.

Environment

Spring Lake Sector is located within the Difficult Run watershed and is in the Blue Plains Sewage Treatment Plant service area. This sector is crossed from east to west by three tributaries of Difficult Run—Old Courthouse Spring Branch, Wolftrap Creek and Piney Branch—all of which have upper-reach portions as well as broad floodplains suitable for open space or recreational use. Almost the entire area north of Route 123 in Spring Lake Sector has high erosion prone soils.

Wolftrap Creek and the Wolftrap Stream Valley Park are part of the Difficult Run Environmental Quality Corridor which runs from the northern boundary of this sector through the Town of Vienna and includes part of Wolftrap Creek east of the town boundary. This sector also contains Piney Branch of the Difficult Run Environmental Quality Corridor encompassing the W&OD Railroad Regional Park and Eudora Park, as well as the Old Courthouse Spring Branch of the Difficult Run EQC.

Land Use

The portion of this sector southeast of Route 123 is planned as a residential community, primarily of detached single-family homes. To protect its residential character no commercial or office uses will be permitted except those authorized by present zoning, and as indicated in Recommendations B, E1 and G. In general, it is the policy of the County to maintain Old Court House Road and the adjoining segment of Gallows Road as the line of demarcation between the Tysons Corner Area and this portion of the sector's residential community.

A. All of the land area south of Old Court House Road and west of the rear lot lines on the west side of Lord Fairfax Road between Wolftrap Road and Old Court House Road is recommended for single-family detached residential use at 2-3 units per acre except for subdivisions already developed at 3-4 units per acre, commercial retail and office zoned land near the intersection of Route 123 and Old Court House Road and a strip of land on the southwest side of Old Court House Road approximately 350 feet deep.

B. Parcels 39-1 ((1)) 57-63; ((10)) 1-9, 12, (3) 4, 5, 9, 10, (4) 8-10; ((9)) 1, 2, 30, 30A, 30B; and 39-2 ((11)) 31, 31A located along the south side of Old Court House Road west of George Washington Road are planned for residential development at 5-8 units per acre. In view of the potential impact of highway noise from nearby Old Court House Road, new development must provide adequate noise attenuation measures including acoustical treatment of all units in order to reduce the interior and exterior noise levels in keeping with the adequate protection of public health and welfare.

An option for townhouse office development may be considered on the subject property as a transition to nearby planned residential activity in the event that the following conditions are satisfied:

1. The appropriate consolidation of adjacent parcels to ensure the desirable, coordinated siting and clustering of buildings; coordinated vehicular access and internal circulation for the transitional low-rise office development so as not to exacerbate traffic flow on Old Court House Road.

2. The provision of a substantial landscaped open space buffer along the periphery of the property which would ensure the elimination of any adverse visual impact from commercial activity upon nearby existing or planned single-family residences to the south and residential uses planned at 8-12 units per acre to the east. Existing vegetation of mature trees shall be preserved in open space buffer areas.

3. Any office buildings and ancillary uses developed on the site should have a residential character, especially in terms of height (which should not exceed three stories), bulk, building component scale and the selection of building materials.

4. The provision of lighting and signs, whose size, character and location shall be compatible with, and result in no adverse visual impact upon, adjacent existing and planned residential units.

C. Land between Cedar Lane and Woodford Road between Wolftrap Road and Electric Avenue, not otherwise committed, is planned for single-family detached residential use at 2-3 units per acre. However, except for land otherwise committed, single-family detached residential uses at 3-4 units per acre could be considered in the event of substantial land consolidation incorporating an improved internal circulation system.

D. Between the planned realignment of Gallows Road and Kidwell Drive, south of the existing alignment of Old Court House Road, offices not to exceed five stories are recommended.

E. The area bounded by Old Court House Road, Gallows Road, Wolftrap Road and the rear lot lines of Lord Fairfax Road, except as set forth in Recommendation B, is recommended for a combination of uses which could include garden apartments, residential townhouses and single-family detached homes in the following general patterns:

1. The area east of Freedom Hill Elementary School and north of Kilmer Intermediate School is planned for townhouses at 8-12 units per acre, with the option of PDH-12 which could include some garden apartments. Under the PDH option, building heights shall be limited to those permitted for garden apartments and density should be graduated downward from the Gallows Road and Old Court House Road frontage. Consideration may be given to development at a density in excess of 8 units per acre if the following conditions are met:

- the provision of a substantial landscaped open space buffer and permanent screen between the area planned for 8-12 units per acre and the existing and planned lower density residential areas located to the south and west so as to eliminate any adverse impacts;
- sufficient consolidation of parcels to ensure the appropriate siting of residential units, coordinated vehicular access, and internal circulation;
- the retention of mature hardwoods and evergreens and minimal disruption of existing topography.

In view of the potential impact of highway noise from nearby Old Court House Road, new development must provide adequate noise attenuation measures including acoustical treatment of all units in order to reduce the interior and exterior noise levels in keeping with the adequate protection of public health and welfare.

In order to act as a reasonable transitional use in proximity to the Virginia Department of Motor Vehicles facility located on parcels 79, 80 and 81 and in view of the current commercial zoning of parcels 57A and 58A an option for townhouse office development may be considered for: 1) Tax Map 39-2 ((11)) parcels 55A, 55B, 56A, 56B, 57A, 58A and 59 in the southwestern quadrant of realigned Gallows Road and Madrilion Road; and 2) Tax Map 39-2 ((12)) parcels 82, 83 and Tax Map 39-2 ((1)) parcel 18, subject to the following conditions:

- the consolidation of parcels 82, 83 and 18 and parcels 55A, 55B, 56A and 56B to ensure the desirable siting of buildings; coordinated vehicular access and internal circulation to ensure a minimum number of vehicular access points onto realigned Gallows Road;
- the provision of a substantial landscaped open space buffer and permanent screen along Old Courthouse Road (including substantial parking lot landscaping) and along the periphery of the acreage to ensure the limitation of any adverse visual impact;
- the limitation in the height of the townhouse office units to a maximum of three stories from all elevations;
- the provision of an architectural character and siting which is residential in terms of bulk, scale, height and material;
- the provision of lighting and signs whose size, character and location shall be compatible with, and have no adverse visual impact upon, any nearby existing or planned residences.

2. The land area along the west side of Lord Fairfax Road and south of Freedom Hill Elementary School to a depth of about 700 feet as far east as the upper Wolftrap Creek channel is recommended for single-family detached residential use at 3-4 units per acre.

3. The narrow strip of land between Gallows Road and Kilmer Intermediate School is recommended for ancillary use by the recommended townhouse or PDH development to the north. Townhouse office use might be considered in this location if parcels were consolidated and only one access to Gallows provided, open space were aggregated at the south and near the fire station, height were limited to 2 stories, the floor area ratio did not exceed 0.25, occupancy were limited to professional uses, signing were minimal and parking and landscaping were planned to approximate residential appearance. This exception to the general prohibition of commercial uses stated above in the preamble is based on the extreme narrowness and unique situation of the land in question.

4. The remaining land along Wolftrap Road between the channel and the rear lot lines on the west side of Lord Fairfax Drive is recommended for single-family detached residential use at 3-4 dwelling units per acre. The land between the channel and Kilmer School is recommended for single-family detached residential use at 3-4 dwelling units per acre.

F. No commercial uses of any kind and no commercial-type special exception or special permit use shall be permitted on the southeast side of Route 123 between the northeast entrance to Horseshoe Drive and the Vienna town line.

G. No commercial retail uses shall be permitted along the southwest side of Old Court House Road or along Gallows Road north of the Dunn Loring Fire Station.

H. Nothing in the foregoing shall negate any floodplain, public or private open space, or quasi-public uses existing or recommended which may appear elsewhere in the text or on the Plan map.

To prevent the extension of commercial uses along the northwest side of Route 123 between Tysons Corner and the Vienna town line, to provide for step-down of intensity of uses from Tysons Corner, and to achieve single-family residential infill in the stable area west of Route 123 except along its frontage:

I. The block between Old Court House Road and Route 123, Freedom Hill Park and the Vienna town line may develop at 5-8 units per acre except where commercial zoning already exists.

J. The tier of three parcels between the Tysons Court townhouse development and the Mosscrest subdivision is recommended for residential use at 4-5 units per acre, subject to the dedication of at least 33 percent of the total area to buffer park at the western and northwestern perimeter, as described in (L) below; adequate buffering to the Mosscrest subdivision; and the relocation of Raglan Road to serve the acreage parcels adjacent to Carters Green subdivision not accessed through the parkland to the north. The Mosscrest subdivision and the acreage parcels between it and the planned buffer to the west are recommended for residential use at 2-3 units per acre.

K. The remaining vacant area west of Route 123, except for designated public space, should be limited to single-family residential uses:

1. at 1-2 units an acre in the area bounded by Old Courthouse Road, Trap Road, the Dulles Airport Access Road, Bartholomew Court, and the Tysons Green subdivision;

2. at 2-3 units an acre except for the area described in K-1 above.

L. A natural buffer zone shall be preserved and maintained along the Old Courthouse Spring Branch stream valley from the Dulles Airport Access Road to Gosnell Road, and from the stream valley to Freedom Hill Park. In addition to the stream valley and land already dedicated or about to be dedicated to the County for open space, this buffer shall include the stream influence zone and any tree stands which protect the adjacent low-density residential areas from the visual intrusion

of the existing and planned high-intensity uses in the Tysons Corner Area. The whole of this buffer zone shall be incorporated in the Old Courthouse Spring Branch Environmental Quality Corridor.

M. No commercial strip development should be permitted west of Route 123 along Old Court House Road. There is a need for continual monitoring and restudy of the area bounded by Old Court House Road, Freedom Hill Park, the Town of Vienna and Route 123.

Public Facilities

A. Provide additional recreational facilities to the residents north of Route 123 by developing Eudora Park.

B. Acquire community parkland in the Wolftrap neighborhood area for residents in the south-eastern portion of the sector.

C. Develop Freedom Hill Fort historic site as part of the County historic preservation program.

D. Develop Raglan Road Park.

E. Expand and develop Wolf Trails Park.

Environment

A. Preserve the Old Courthouse Spring Branch Environmental Quality Corridor in its natural state through acquisition. A trail should be provided within the EQC along the stream valley with a connecting link to Westbriar Elementary School and Freedom Hill Park.

B. Preserve the Wolftrap Creek stream valley as part of the Difficult Run Environmental Quality Corridor. Acquire privately-owned portions of the Wolftrap Creek stream valley between the Dulles Airport Access Road and Route 123.

C. Protect highly erodible soils in this sector during and after construction.

D. Recognize branches of the Difficult Run Environmental Quality Corridor and the accompanying restrictions in this area.

E. Protect historic sites from adverse impacts of surrounding development and include them in the EQC network wherever possible.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

V4 PINEY BRANCH COMMUNITY PLANNING SECTOR

This sector located west of the Town of Vienna is bounded by the Dulles Airport Access Road on the north, Trap Road, Clark's Crossing Road, the W&OD Railroad Regional Park, and the Vienna Town boundary on the east, Chain Bridge Road (Route 123) on the south and the Difficult Run stream valley and Hunter Mill Road on the west.

Land Use

Piney Branch is the largest sector in Vienna Planning District and approximately 80 percent of the residential uses are single-family units on the developed land.

The Oakton Shopping Center located on Route 123 and Hunter Mill Road is buffered on the east by the Oakton Manor townhouses which are developed at a lower density (5 units an acre) than is typical in townhouse developments.

Near the Town of Vienna line on Route 123 are two parcels of commercial development across from the Berkeley Square Apartment complex. The Vienna Commons townhouse development is bisected by the town boundary and lies partially within the County just north of Route 123.

Pressure exists for extension of strip commercial development south from the Town of Vienna along Route 123. A significant amount of vacant land borders the Route 123 corridor on the north. Additional pressures exist for higher intensity development in this Route 123 area because of the proximity to the planned Vienna Metro Station.

Stabilization of this area will require three actions:

- determination of actual need for additional neighborhood shopping facilities to serve present and future growth in the area. Any additional facilities should be clustered in developments such as Oakton Shopping Center which can serve as a model shopping facility for the entire Vienna Planning District. The boundary of any commercial activity area should be strictly defined;
- protection of existing neighborhoods through transitional residential uses along parts of Route 123 and adequate buffering of these uses; and
- single-family residential infill on vacant land that is bordered entirely by single-family subdivisions.

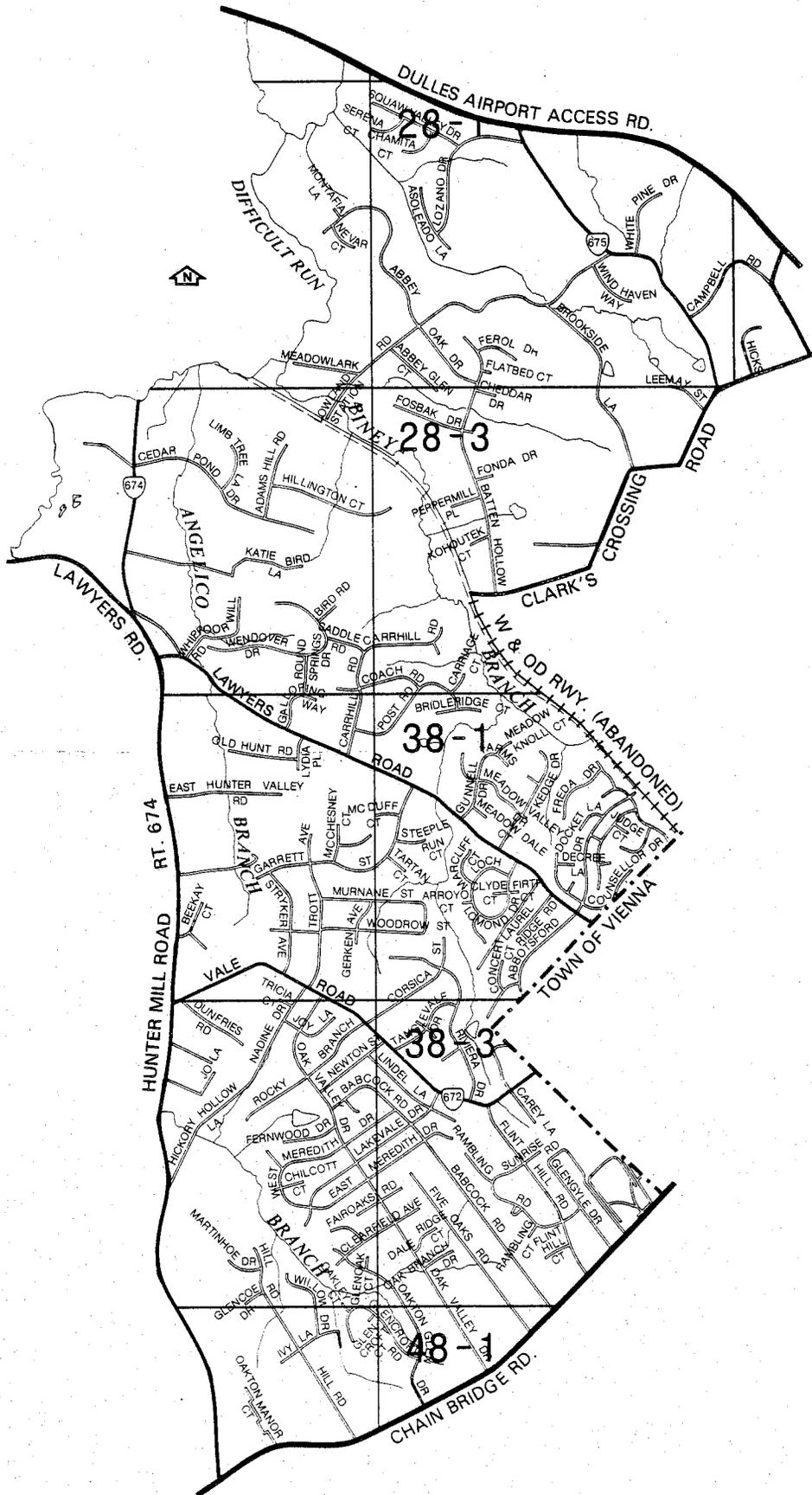
The middle portion of this stable sector is almost entirely developed in newer single family residential uses. Committed and anticipated development plans indicate that this area will be stabilized by continued infill of the same type of residential development.

The northern portion of the Piney Branch sector contains large tracts of vacant land along with some scattered low-density single family residential development. Recent rezonings encompassing a large acreage indicate that this area will continue to develop in very low-density residential uses not exceeding two dwelling units an acre.

Bordering uses in the Town of Vienna include some vacant tracts surrounded by single-family residential with the exception of commercial and townhouse uses along Route 123.

Transportation

One major access road to this sector, Hunter Mill Road, is subject to low speeds, unstable traffic flow and stoppages at peak-hour. This road will require an improvement of the existing two lanes for safety and Metro access reasons. Lawyers Road will also require improvement of the existing two lanes for safety and Metro access reasons. Currently, VDH&T plans to widen this road to four lanes, but this has been opposed by County and town citizens who feel it will only lead to a bottle neck on Maple Avenue.



Route 123 in this sector has a good level of service with no major points of congestion. This section of Route 123 has been improved recently to four lanes.

Need for improved Metro access from Reston and other northern parts of the County will impact this area considerably as Metro becomes operational.

No new road construction is foreseen in this area except the possible realignment of Hunter Mill Road at its intersection with Route 123.

No significant bikeways exist in this sector. Opportunities exist for provision of trails and bikeways as residential infill occurs and as road improvements are made in this sector.

Public Facilities

Schools

Flint Hill Elementary and Madison High Schools are located within the sector. This sector also contains one vacant elementary school site.

Parks, Recreation and Open Space

The Piney Branch Sector contains Clarks Crossing District Park, Kemper Park, Ashlawn Park, Fox Hunters Park and portions of the Difficult Run Stream Valley Park.

Many large tracts of privately-owned undeveloped land in this sector provide open space and recreational opportunities to owner-residents of these areas. An example of this is the Hunter Valley Association which offers its members horseback riding, hiking trails and other recreation facilities while striving to preserve the open space character of the northern part of this sector and sharing cooperatively in developing its own recreational activities.

Given these resources, the existing population is well served. In the future, however, a substantial number of new residents are expected to live in the sector for whom additional amenities will be needed.

Shopping

Convenience shopping facilities for Piney Branch Sector are available in the Oakton Shopping Center and in four shopping centers in the Town of Vienna. Regional facilities are available at Tysons Corner Center.

Shopping facilities serving this sector are adequate to meet present population needs. Future population growth north of the town and around the Vienna Metro Station may require an additional neighborhood shopping center in this area to serve the population.

Housing

With the exception of a townhouse development and rental garden apartment development on Route 123, the Piney Branch Sector contains only single-family detached housing units on small and large lots.

The majority of housing units in this sector are relatively new and almost all units are in good structural condition.

Housing costs in this sector are in the higher range for the most part. A broader range of housing costs may be provided through residential infill and transitional residential uses along Route 123 excluding the infill in the northern portion of this sector.

Environment

Piney Branch Sector is located almost entirely in the Difficult Run watershed. This sector is bounded on the west by Difficult Run and is crossed from east to west by Piney, Angelico, and Rocky Branches of Difficult Run. The sector is primarily within the Blue Plains sewage treatment plant service area except for a small area north of Route 123 which is serviced by the Lower Potomac Pollution Control Plant.

This sector contains several small areas with slopes greater than 15 percent, mostly in stream valley areas; one exception is steep-slope areas near Meadowlark Drive and Brookside Road. Almost the entire Piney Branch Sector has highly erodible soils. A small area north of Route 123 and an area between Hunter Mill Road and Angelico Branch have soil septic tank limitations.

Many environmental amenities are found in this sector and are included in the environmental quality corridor network. In the north, the main stem of Difficult Run surrounded by floodplains, steep slopes, and densely vegetated wildlife habitats has been designated an EQC. Piney Branch with its associated stream valley parks, vegetation, steep slopes, and the W&OD Railroad Regional Park, and Rocky Branch, with many similar amenities, are part of the Difficult Run EQC.

This sector contains the following historic sites included on the Fairfax County inventory of historic sites and the citizen inventory of environmental resources: Lacey House, Plantation, Merry-Go-Round and Oakton School.

The citizen inventory also listed a large undeveloped wooded tract fronting on Route 123 known as Twin Oaks as an environmental resource worthy of protection because of its unique vegetation and wildlife.

RECOMMENDATIONS

Land Use

A. To prevent strip commercial development along Route 123 south from the Town of Vienna and to define strictly commercial activity areas:

1. All future commercial uses and activity in this sector should be limited to the existing Oakton shopping center site and the adjacent land already zoned for commercial use.

2. The business area of Oakton should be encouraged to continue to develop under a village concept and no further commercial rezoning in the area should be considered. This area, which also includes portions of Sectors F3 and F4, should be designated as a special study area requiring continual monitoring and restudy especially with respect to issues of achieving plan objectives in implementation and the phasing of public facilities.

3. No additional strip commercial uses of any type should be allowed along Route 123 in this sector.

B. To protect existing stable neighborhoods through transitional residential uses along sections of Route 123:

1. The two tracts, bounded on the west by Flint Hill Road and on the east by apartment-zoned land, fronting Route 123 should develop in medium-density residential uses at a density of 5-8 units per acre.

2. The parcel of land bounded by Route 123, Oakton Manor Court, Oakcrest subdivision, and the northern boundary of Oakton Manor Court extended in a northeasterly direction to intersect the western boundary of Oakcrest should develop in low-density residential uses at a density of 3-4 dwelling units per acre. Planned unit development should be encouraged in this area to provide open space and adequate buffer zones along Route 123.

The northern portion of the subject property (parcels 105, 108, 109 and the northern part of 110) should be developed at 2-3 dwelling units per acre to act as a transition between the 3-4 dwelling units per acre to the south and the 1-2 dwelling units per acre to the north.

C. To encourage single-family residential infill on vacant land bordered by single-family subdivisions:

1. The area north of Lakevale Estates to Lawyers Road and Clarks Crossing Road should develop in low-density residential uses at a density range of 1-2 units per acre.

D. To preserve the rural large lot and open space character of the northern part of this sector as well as to protect the critical environmental area adjacent to Difficult Run, Angelico Creek and Piney Branch:

1. The area northeast of the W&OD Railroad Regional Park and northwest of a line made by Clarks Crossing, Beulah Road and Trap Road should develop in residential uses at .5-1 units per acre as shown on the Plan map.

2. The area between Lawyers Road and the W&OD Railroad Regional Park northwest of the Carriage Hill subdivision should develop in residential uses at .2-5 units an acre as shown on the Plan map. If public sewer is provided in the optional sewer area shown on the Plan map, densities of .5-1 units an acre could be appropriate.

3. In both of the areas covered by Recommendations D1 and D2 above, developers should design with varying lot sizes corresponding to the planned land use densities and existing adjacent development, even if the area to be developed covers one or more than one planned residential density category. The development of similar lot sizes in those areas bordering existing and committed residential subdivisions will provide a necessary visual and social transition. Smaller lots may be platted within the respective plan category areas to achieve allowed densities for those plan categories shown on the map. The varying lot sizes which will eliminate visual monotony should be executed under a cluster option. The EQC network should be preserved through the use of open space dedication. In no case may the density of the Plan category acreages shown on the map be exceeded through the application of EQC density credits. The natural features of the EQC network could extend into the larger lots.

4. In the optional sewer area, steep slopes, highly erodible soils, thinner overburden, and a narrow ridgeline orientation dictate large lots (2-5 acres) at .2-5 units per acre if developed using septic systems. However, if sanitary sewer is provided for this portion of the study area, then development could occur at a .5-1 dwelling unit per acre range provided that strict adherence to environmental concerns are maintained (i.e., minimal vegetation loss, minimum grading, erosion control measures, stormwater infiltration measures, adherence to EQC network as limits of clearing, and access roads to follow ridgelines) and that the land use recommendations listed as D3 are also maintained.

5. The County should encourage scenic easements and consider a program of tax incentives to preserve the rural large-lot open space character of this part of the sector.

6. Any viable sites for potential reservoirs along Difficult Run should not be preempted for development prior to completion of a County master drainage plan.

Public Facilities

A. Acquire community parkland in areas of major development. Consider acquiring Lawyers Road elementary school land for park use if it becomes available.

B. Develop Clarks Crossing Park to help serve the needs of the Vienna area.

C. A trails/bikeway system proposed by citizens should include the use of the Northern Virginia Regional Park Authority's W&OD trail, Piney Branch Environmental Quality Corridor, and the Rocky Branch Environmental Quality Corridor. Additional consideration should be given to pedestrian access along Route 123 and Hunter Mill Road to Oakton shopping facilities in a trails/bikeways plan.

D. Acquire and develop a community park in the area of high deficiency west of the Town of Vienna boundary.

E. Develop Ashlawn Park.

Environment

A. Require that any development in the headwaters of Difficult Run valley be sensitive to water quality issues. Such sensitivity includes minimal impervious surface, stringent sediment control during construction, and stormwater management designed to protect water quality.

Design controls for the Difficult Run headwaters include the following:

1. All major collector and subdivision roads should be oriented to uplands and ridge lines.

2. Small subdivision streets or access roads should not cross streams or major swales as this interrupts and disregards the EQC network, promotes nonpoint source pollution loadings and excessive cut and fill.

3. The Difficult Run Environmental Quality Corridor should be protected by dedication or acquisition.

4. Tract consolidation may be appropriate prior to development.

5. Developers are encouraged to design with varying lot sizes corresponding to the planned land use densities, even if the area to be developed involves more than one land use density category.

6. The use of adequate buffers, landscaping and substantial building setbacks should be provided to preserve the present character of this area when viewed from collector and minor arterial roads.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

V5 NUTLEY COMMUNITY PLANNING SECTOR

This sector located southwest of the Town of Vienna is bounded by Chain Bridge Road (Route 123) on the north, the Vienna Town boundary on the east, I-66 on the south, and Blake Lane, Edgelea Road, and Courthouse Road on the west. Part of this sector between Nutley Street and Sutton Road lies within the Vienna Metro Complex Area.

Land Use

Existing development in Nutley Sector stable areas is primarily single-family residential. The Waterford townhouse development is located along Blake Lane and several small commercial uses exist along Route 123 next to the town boundary. There is a small expansion of townhouse development north of the Waterford Community.

A significant amount of vacant land lies south of the Route 123 corridor. Pressures exist for strip commercial development or higher intensity uses of this property. Stabilization of this area can be achieved through transitional residential uses and delineation of commercial activity centers if any are found to be necessary to serve future growth.

A large amount of acreage in this sector is occupied by the Oakton High School and Nottoway Park which together almost completely border the Vienna Metro Complex Area on the west and north. Bordering the Vienna Metro Complex Area on the east is a stable single-family residential area which should be protected from any noncompatible Metro-related uses which may occur.

This entire sector can be subject to pressures for rapid change in character. Although a single-family residential low-density character has not been firmly established it is desirable to protect those communities such as Vienna Oaks and Town and Country Estates from any adverse effects of a change in land use character.

Bordering Town of Vienna uses include a large amount of vacant land, including that portion of the DeLuca tract located within the town. Commercial uses along Route 123 and single family residential comprise the remainder of the border uses. Good coordination with the Town of Vienna is necessary to assure that adverse impacts of any land development bordering Fairfax County can be minimized.

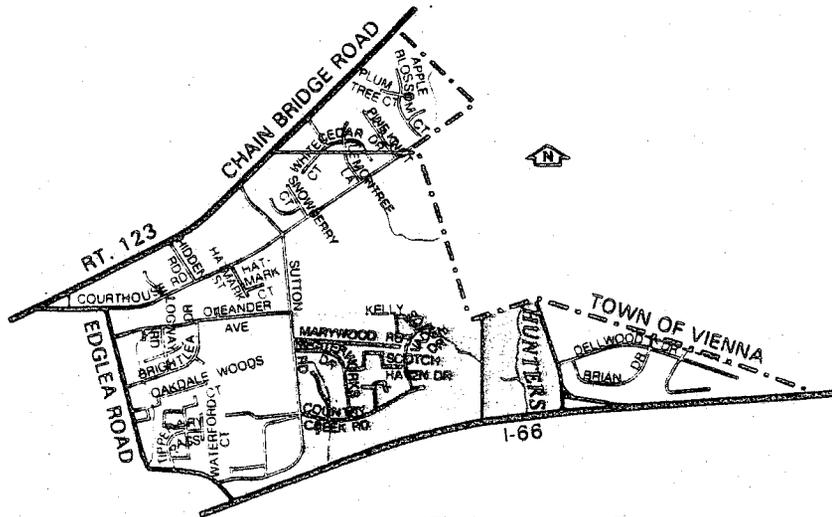
Transportation

This sector lies almost entirely within a one-mile radius of the planned Vienna Metro Station. All roads in this sector especially Nutley, Sutton and Blake Lane will be heavily impacted by future development and the need for future Metro access.

No major points of congestion currently exist on present roadways although future congestion areas may develop at Nutley Street and Maple Avenue and Blake Lane and Route 123 (outside this sector).

No new road construction is foreseen in this area currently and no significant bikeways exist in this sector.

Because of its proximity to Metro, new development plans and road improvement plans for this area should emphasize pedestrian facilities, bike-ways, mini-bus service, and lack of dependence on the auto for Metro access (still meeting the need for auto access from outside this sector). Proper design and site planning could alleviate internal circulation problems in this sector, relieve some of the air pollution associated with a large amount of auto traffic converging on one site, and provide a better environment sociologically and physically for those living close to Metro.



The shaded area, part of the Vienna Metro Station Complex Area, is discussed on page 226.

Public Facilities

Schools

Marshall Road Elementary and Oakton High Schools are located within the sector. This sector also contains one vacant intermediate school site owned by Fairfax County.

Parks, Recreation and Open Space

Nutley Sector contains the 84-acre Nottoway District Park which provides numerous active facilities. This park serves a large part of the Vienna Planning district as well as adjacent districts. Improvement of bike, car and pedestrian access to this area is necessary along with the park development.

Additional recreation opportunities are provided by school facilities in the sector.

Shopping

Convenience shopping facilities for Nutley Sector area are available in the Oakton Shopping Center, the Fairfax Circle area, and in four shopping centers in the Town of Vienna. Regional facilities are available at Tysons Corner and Seven Corners Shopping Centers.

Housing

The Nutley Sector contained 1,022 housing units as of January 1983. Most of these units are in the Country Creek, Vienna Oaks and Town and Country Estates subdivisions. Most housing units in this sector are in good structural condition with the exception of several units fronting Route 123 which may be neglected because of redevelopment expectations.

The provision of low- and moderate-cost housing in the Nutley Sector should be encouraged in view of its proximity to good public transportation and a planned Metro station.

Thirty-three units of the Country Creek residential community have been proffered to the County for use as below-market housing.

One hundred and fifty units on the DeLuca tract between Sutton Road, Nutley Street and I-66 have been proffered to the County for use as below-market housing.

Environment

Nutley Sector is located in the headwater region of the Accotink Creek watershed and is within the Blue Plains and Lower Potomac sewer service areas. The sector is crossed from north to south by the upper reach portion of Hunters Branch of Accotink Creek.

The citizen inventory of environmental resources shows a special interest in protecting the environmental resources along Hunters Branch as it runs through the DeLuca tract in the Vienna Metro Complex Area. The adjacent portion of the DeLuca tract in the Town of Vienna includes the historic Moorefield house.

RECOMMENDATIONS

Land Use

To prevent strip commercial development south along Route 123 from the Town of Vienna and to strictly define commercial activity areas:

A. All future commercial uses and activity in this sector should be limited to the Vienna Metro Complex Area.

B. Additional need for local-serving shopping facilities will be met by provision of a small neighborhood center in Treebrooke (Sector F3) and expansion of the shopping district in the Town of Vienna.

C. The parcel of land with 200-feet of frontage along Route 123 between the restaurant and the Emmanuel Church should be permitted to develop as a transitional low-rise office to the depth of the church property, provided the use is buffered from the adjoining residential land to the southeast and is not incompatible with the church activity. No other additional commercial uses of any type should be allowed along Route 123 in this sector.

D. Land bounded by Edgelea Woods, Oakton High School, Blake Lane and Edgelea Road should be shown on the plan map in the 8-12 units per acre range. However, development of vacant land in this area should not exceed 10 units an acre to be compatible with existing development.

E. Subdivisions platted at less than 3 units per acre and adjacent parcels where development would be considered infill should continue development at existing densities.

F. Other vacant land in this sector should be permitted to develop at 3-4 units per acre.

G. Because of traffic and vehicular noise problems, the small portion of land directly north of I-66 and bounded by Sutton Road and Blake Lane, should develop with appropriate noise attenuation measures, at 1-2 dwelling units per acre or as one of the nonresidential, noise-compatible uses permitted under the R-1 or R-2 zoning districts. In the event of development, the two parcels should be consolidated, with one access only from Sutton Road.

Public Facilities

A. Acquire the one acre inholding and develop Nottoway Park in accordance with existing plans with no through streets.

Environment

A. Protect and preserve environmental resources along Hunters Branch in the EQC network. The Nottoway Park should be linked through Hunters Branch to the EQC system.

General

A. The area bounded by Nutley Street, Old Court House Road and Route 123 should be designated as a special study area requiring continual monitoring and restudy especially with respect to

issues of achieving plan objectives in implementation and the phasing of public facilities.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

V6 TOWN OF VIENNA

The Town of Vienna has jurisdiction over its own planning functions. Fairfax County supplies many public facilities for the town, including schools, health facilities, libraries, social services, fire services, and sewer capacity. The Town of Vienna can be classified as a stable area although Fairfax County planning does not control land use planning.

Town of Vienna Plan

The Town of Vienna has been engaged in comprehensive planning for many years. The town adopted its official zoning map on June 1, 1959. During the late 1950's a three-volume plan was prepared by Garland Wood Associates, but not adopted by the Town Council.

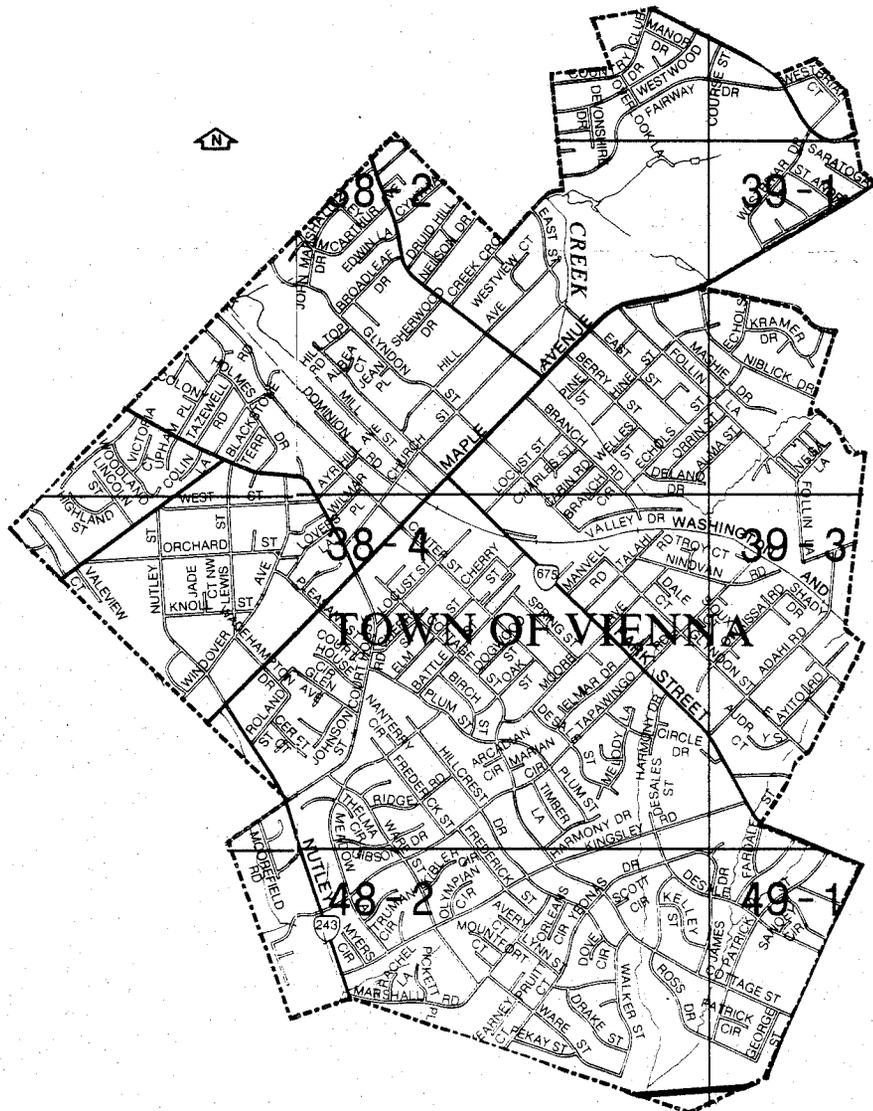
A short-lived planning department was created in 1963 which set about preparing a five-part comprehensive plan: land use, streets, water and sewer, parks and schools, commercial and industrial. An effort was made in 1964 to prepare a residential master plan but this was not adopted; in lieu thereof, the 1959 zoning map was re-adopted. The Council adopted a master street plan on March 15, 1965.

A statement of goals and objectives was adopted on June 1, 1970, and readopted (as revised) on February 7, 1972.

Vienna's primary goal is to retain its present character and identify as a predominantly single-family residential town, while encouraging the growth of a strong and residentially compatible economic base. Seven broad objectives were adopted as basic steps toward attainment of this goal.

During 1971, work was undertaken on a three-part comprehensive plan in conformance with requirements of Section 15.1-446 of the Code of Virginia. The Planning Commission and Town Council held a series of work sessions and public hearings during 1972 and 1973.

On April 17, 1972, the Council readopted the 1959 zoning map as the land use plan and then on August 6, 1973, approved a land use plan comprised of a base parcel map, overlaid by zoning boundaries and specific land uses. On January 29, 1973, the Council adopted the map of arterial, collector and local streets of the Vienna traffic circulation plan and, on November 4, 1974, readopted a slightly revised version of that map. (The map is one part of a total plan which is intended to encompass all transportation modes—pedestrian, bus, bicycle and automobile.)



In addition to these efforts to prepare a comprehensive plan related to a capital improvement program, the Departments of Parks and Recreation and Public Works maintain ongoing annual programs in their specific areas of land use and transportation responsibility.

Land Use

Vienna has an area of 4.30 square miles and a current population of 14,942. The town estimates that committed and anticipated growth and future growth to 1990 will bring this population to approximately 13,467 people. This slower rate of growth contrasts to the roughly 50 percent increase in population from 1960 to 1974. The increase of about 850 dwelling units between 1975 and 1990 should have a minimal impact on County public facilities and surrounding land use and transportation conditions in Fairfax County.

The character of the town is shaped by the large amount of land in single-family residential uses. Only a very small number of medium- to high-density residential units exist in the town. The majority of commercial activity is concentrated along Maple Avenue (Route 123) in a continuous strip including four shopping centers. Cedar Park Shopping Center is located at the intersection of Park Street and Cedar Lane. Industrial activity is centered in the Vienna Industrial Park and adjacent to the W&OD Railroad Regional Park. Approximately 66 percent of the land in the town is developed in single-family uses and 9 percent is used for commercial and industrial activity. The town presently has approximately 111 acres of unimproved land.

The Town of Vienna should retain its stable character through minor residential, commercial and industrial infill. Quality new commercial and industrial development such as Village Green and Wolftrap Motel has been possible because of the town's Board of Architectural Review Standards.

Main issues concerning the Town of Vienna are land use developments adjacent to the town in Fairfax County including the following:

- high density development around Metro stations and the adverse impact of this on the Town of Vienna transportation and public facilities; and
- strip commercial development between the town line and Tysons Corner on Route 123. The town favors no further extension of this type of land use along Maple Avenue.

Continued coordination of land use planning in Vienna and adjacent portions of Fairfax County is necessary to evaluate and control the impact of future growth in these areas.

Transportation

Transportation is the Town of Vienna's most critical planning problem. The town is the hub of a network of highways and more than 35,000 cars pass back and forth on Maple Avenue daily.

Maple Avenue is the major east-west highway in the town and is currently at a low level of service due to strip commercial activities and commuter through-traffic. No improvement of Maple Avenue is foreseen because of the impact on existing businesses. The solution to improving service on Maple Avenue lies in diversion and elimination of through-traffic by use of the Vienna Metro Station, express bus service, community bus service, and additional east-west routes serving Vienna and the planning district.

Some of the key north-south secondary routes which intersect with Maple Avenue in the Town are Nutley Street, Cottage Street, Park Street, Lawyers Road, Beulah Road and Creek Crossing Road.

The town has adopted a bikeway and trail system, has established an express bus service to the District of Columbia, is working on providing

community bus service and generally has made an exemplary effort in seeking to reduce auto congestion and air pollution.

The main transportation issues concerning the Town of Vienna include the following:

- reducing congestion on Maple Avenue;
- minimizing use of residential streets by people seeking access to metro stations;
- improving Park Street without widening to VDH&T standards in order to preserve rustic town character of this corridor;
- providing improved access to the Vienna Industrial Park. This objective has been attained with the opening of Electric Avenue although this road still needs to be improved in the County. Measures for protection of County residential neighborhoods needs remain to be studied and dealt with;
- concern over the financial future of Metro and the feeling that, because of this unsure situation, planning should be done primarily on the basis of commuter convenience;
- providing commuter access to Dulles Airport Access Road;
- seeking the opening of an east-west highway bypass of Vienna to relieve traffic congestion within the town;
- improving bus and auto access to the Vienna Metro Station; and
- expanding express bus service from the town to The District of Columbia if demand is generated.

Public Facilities

The Cunningham Park, Louise Archer and Vienna schools are located within the sector.

The town provides its own police service. Fire service is provided by the Vienna Station and is considered adequate. Patrick Henry Library located in the town provides adequate service.

Within the Town limits there are currently over 350 acres of public and private land for open space and recreation purposes. Vienna manages its own Park and Recreation system which includes 55 acres of neighborhood parks, 60 acres of community parks, and 65 acres in stream valleys and linear parks. Most of the parks have some development with two totally developed in ballfields, tennis courts, multi-use courts, open play areas, and picnic facilities. Additional recreation facilities are provided at schools and the Town's Community Center. Plans for improvements and further development of several parks over the next five years will assure that all sections of the Town continue to be well served.

Environment

The Town of Vienna lies in the headwaters or upper reaches of two major watersheds, Accotink Creek and Difficult Run. The town is within both the Lower Potomac Pollution Control Plant and the Blue Plains sewage treatment plant service areas.

The town contains three streams—Wolftrap Creek, Hunters, and Bear Branches of Accotink Creek. Wolftrap Creek includes significant floodplains.

Wolftrap Creek and Bear Branch are part of two of Fairfax County's environmental quality corridors. The town is crossed by the W&OD Railroad Regional Park which along with some adjacent vacant land has been designated as part of an environmental quality corridor.

Some air pollution problems exist along Maple Avenue during peak hours.

RECOMMENDATIONS

Land Use

A. The land use and density plans of the Town of Vienna apply to this sector.

B. Fairfax County should plan land use and density in areas adjacent to Vienna to be compatible with the plans and goals established by Vienna for itself and the needs of the County.

Public Facilities

A. Develop Peterson Lane Park.

Environment

A. Preserve the Wolftrap Creek and Bear Branch Environmental Quality Corridors.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

FAIRFAX PLANNING DISTRICT

Fairfax Planning District is located at the approximate center of Fairfax County. It is bounded on the northeast by Hunter Mill Road, Chain Bridge Road, Edgelea Road, Blake Lane, and Route 50; on the east by Gallows and Woodburn Roads, Route 236, Olley Lane, Long Branch, and Guinea Road; on the south by Braddock Road; and on the west by Shirley Gate Road, Route 29, West Ox Road, Vale Road, Stuart Mill Road and Difficult Run. It surrounds but does not include the City of Fairfax. However, Sector F6 containing the County Government Center lies within the city boundaries. Planning requires continuous coordination with the City of Fairfax.

Planning History

At the time the 1958 countywide plan was adopted, the Fairfax Planning District was still largely outside the area of rapid urban development. The plan emphasized one-acre residential development and provided for shopping centers at Oakton and Kamp Washington. The Upper Accotink plan, adopted in July 1963 and November 1965, recommended increased single-family residential densities and provided for multifamily residential uses and more commercial uses in that portion of the planning district both north of the City of Fairfax and east of Jermantown Road. The *Difficult Run Watershed Plan*, adopted on January 4, 1967, recommended increased single-family residential uses. The plan also recommended some multifamily densities, a regional shopping center, and industrial uses west of the City of Fairfax in the area along Routes 50, 66 and 29.

The 1966 *Comprehensive Plan for the Fairfax Planning District* was adopted on October 2 and 4, 1967, and September 18, 1968.

Major land use features of the plan were:

- George Mason University;
- suburban residential densities on all sides of the City of Fairfax except to the northwest and southwest, where large lot development is shown;
- some multifamily development on Little River Turnpike, Arlington Boulevard, and Gallows Road;
- substantial multifamily development in the area north of the city;
- substantial multifamily, commercial, and industrial land west of the city in the transportation corridor; and

- a major stream valley park along Difficult Run.

The plan recommended an eventual population of 135,880.

Major transportation features included:

- an emphasis on road widening, road straightening, and intersection improvement rather than new highway construction; and
- the extension of Roberts Road to the north and south and the extension of Jermantown Road to the south to form a loop system around the City of Fairfax.

Land Use

The Fairfax Planning District is a preponderantly stable, low-density residential area surrounding and greatly influenced by the City of Fairfax. Single-family residences which comprise approximately 56 percent of the housing units occupy 63 percent of developed land area. There are approximately 2523 acres of undeveloped land remaining in the Fairfax Planning District.

Future growth will be affected by continued expansion of George Mason University, which will create a demand for off-campus student and faculty housing, and by development in the Fairfax Center Area.

Numerous sites offer a potential for planned unit development and PDH applications should be encouraged for the advantages accruing from reduced public facilities costs, preservation of open space, and providing housing for a mix of income groups generally near employment centers and public transportation.

Population growth in the Fairfax Planning District has been very rapid. In 1960, the population was 6,362 persons; as of January 1983, the population was estimated at 32,708.

Transportation

The district and the City of Fairfax within it encompass the intersection of numerous major arterials radiating from the metropolitan center and Route 123, the major cross-County circumferential outside the Capital Beltway. This transportation network and the local government facilities continue to lend impetus to commercial and intense residential development, and thus create the economic market factors to support a planned development center combining commercial, industrial, and high-density residential components.

Transportation planning must produce both short- and long-range programs for increasing capability to handle traffic between the planning district and the metropolitan core.

With the adoption of the *Occoquan Basin Study* recommendations for changes in various County land uses, a reevaluation of the Fairfax County transportation plan will be needed in the areas affected by these changes, especially in the Centreville area and Route 50 corridor, to adequately address the future transportation needs of the County.

Public Facilities

The following table indicates the existing public facilities located within the Planning District:

Parks, Recreation and Open Space

Eastern sectors of the district where most development has occurred are generally well endowed with parkland. Priority here should be placed on provision of recreation facilities. Additional acquisition should be sought in conjunction with the larger infill projects.

Most new development is now located in the northern and western sectors. Priority should be on park acquisition to preserve sites for future development as population grows. There are numerous potential sites along headwaters of the many streams emanating within the district, and acquisition for parkland will enhance watershed protection.

Environment

The Fairfax Planning District's location at the headwaters of several major watersheds—Difficult Run, Accotink Creek, Pohick Creek and Pope's Head Creek—plus the widespread occurrence of highly erodible soils make stream valley protection an essential development constraint. Soil septic tank limitations also occur in the district and are especially significant in Sectors F3 and F4.

The floodplains and parks associated with each of these watersheds form the basis for the environmental quality corridor (EQC) network in the Fairfax Planning District. In addition, there are extensive steep slopes and significant vegetation, primarily along Difficult Run, which enhance this open space system. Such historic sites as the Ox

EXISTING PUBLIC FACILITIES
June 1983

Sector	Schools			Parks, Recreation and Open Space	Other Public Facilities
	Elementary	Intermediate	High School		
F1	Fairfax Villa, Olde Creek	Frost	Woodson	Fairfax Villa, Surrey Square, University, Old Forge, George Mason, Long Branch Stream Valley	Housing and Community Development Headquarters, George Mason University
F2	Mantua			Eakin, Karen, Accotink Creek Stream Valley, Eakin (Mantua Section)	Fairfax Hospital, Fairfax House, Woodburn Mental Health, State Mental Health, Annandale Fire Station
F3	Mosby Woods			Borge Street, Mosby Woods, Villa Deste	Elementary School Site
F4	Oakton			Foxvale, Wayland Street, Tattersall, Oak Marr, Oak Borough Square Difficult Run Stream Valley	Oakton Fire Station
F5				Dixie Hill	County Government Site
F6					County Government Complex

Hill memorial markers, Aspen Grove, Lawyers Road, Oakton United Methodist Church and Squirrel Hill are part of the EQC system.

Air and noise pollution are concerns throughout much of the district, particularly along major arterials, e.g., Route 123, Route 50, Route 236 and I-86.

A portion of the stream valley and adjacent land within this Planning District/Planning Sector is within the dam failure impact area for a proposed or existing dam. The extent of development within these impact areas should be minimized in the interest of public welfare and safety. For details on the extent of this area, refer to the section on potential dam failure impact areas, in the Environmental Chapter.

History

The district contains some historic structures worthy of protection:

Fairfax County Courthouse. Completed in 1800 according to plans by James Wren. This two-story brick building, topped by an octagonal cupola, is the third courthouse built since the organization of Fairfax County in 1742. Several additions have been made to the original structure which was restored during the 1960's. The courthouse is on the Virginia Landmarks Register and the National Register of Historic Places.

Legato School. A frame one-room school house built in 1877, located within the County complex at 4100 Chain Bridge Road is proposed for use as a museum.

RECOMMENDATIONS

The primary planning guidelines for the Fairfax Planning District are:

- Preservation of stable neighborhoods in the low residential densities which generally characterize them now.
- Use of medium-density PDH for residential infill on selected sites where space permits to capitalize on its ability to preserve open space, configure housing to the topography, and reduce public facilities cost.
- Prevention of strip commercial intrusion along highways by providing viable economic alternatives to buffer commercial zones.
- Adoption of land use and transportation policies and programs designed to alleviate current transportation problems on both principal arterials and neighborhood streets and to accommodate future growth with minimum adverse impact.
- Develop land use and transportation alternatives for evaluation in determining the scale and design of the planned development center west of Fairfax.
- Preservation of environmental quality corridors and other features of natural beauty or historical significance.
- The cluster concept is reaffirmed as a planning policy for land use and development in the Fairfax Planning District where many rezoning proposals are seeking favorable action, albeit with justification to "spot" or "strip" zone. Any effort to abort the principle of low-density residential development or retention of greenbelt areas between the intensively planned cluster areas is especially prevalent along arterial highways. Planner and citizen must be extremely vigilant in "holding the line" and limiting cluster area demarcation lines.

Many recommendations for stable portions of community planning sectors are influenced by the planning assumption that the adopted regional system for Metro-rail will be built. If that system is not completed to the two stations in the Vienna Planning District, these recommendations will require reevaluation. The importance of this factor

is highlighted by the present assignment of first priority in transportation to improving access to proposed Metro stations.

CITY OF FAIRFAX PLANS

The plan for the City of Fairfax was adopted for all but the center city area on June 18, 1968. This plan recommended:

- suburban residential densities for most of the city, including along some of the major thoroughfares;
- multifamily densities near the city center and at scattered locations;
- commercial development primarily along Route 236, Route 50 and Route 29;
- industrial development at four locations; and
- a system of stream valley parks.

No construction of new highways, except an extension of Roberts Road to form an inner eastern loop around the city center, was recommended. The *Center City Comprehensive Development Plan*, adopted by the Fairfax City Council on May 22, 1973, is also shown on the summary map.

The Fairfax City Planning Commission began work on a new comprehensive development plan in mid-1973 and presented it to the City Council in October, 1974. It was adopted in 1975.

The plan stresses land use proposals and espouses a general philosophy that the emphasis in growth should be on residential development. It states that the "center of the City of Fairfax should be developed primarily to serve the desires and wishes of the residents of the city, and that such commercial development that might occur within that area be focused on local market needs rather than those of a regional nature." This view is repeated several times. The plan mentions proposed growth centers in adjacent areas of Fairfax County.

The plan also incorporates several new zoning classifications. A townhouse category for 6 units an acre would augment the single classification for 9 units an acre now being used. The maximum number of dwelling units per acre under planned development has been reduced from 15 to 12. Two new zoning categories created under the planned development concept provide for cluster development at four and seven dwelling units per acre, respectively. Two new commercial zones have been created. C1-L allows office buildings with a residential type design in small tracts adjoining residential areas; C-P-D, commercial planned development, provides for either predominantly or totally commercial development under Council review.

The land use and transportation sections acknowledge the traffic generated within the city as a result of its role as a government/educational center. However, the transportation plan stresses attainment of a traffic situation within the city consistent with residential habitation. It seeks to attain a pedestrian orientation in the center city. Of greatest interest to Fairfax County is the emphasis on by pass routes on the east along Pickett Road and on the west on a road to the west of

Jermantown Road along the boundary of the city connecting with Shirley Gate Road. This latter proposal differs from County transportation recommendations.

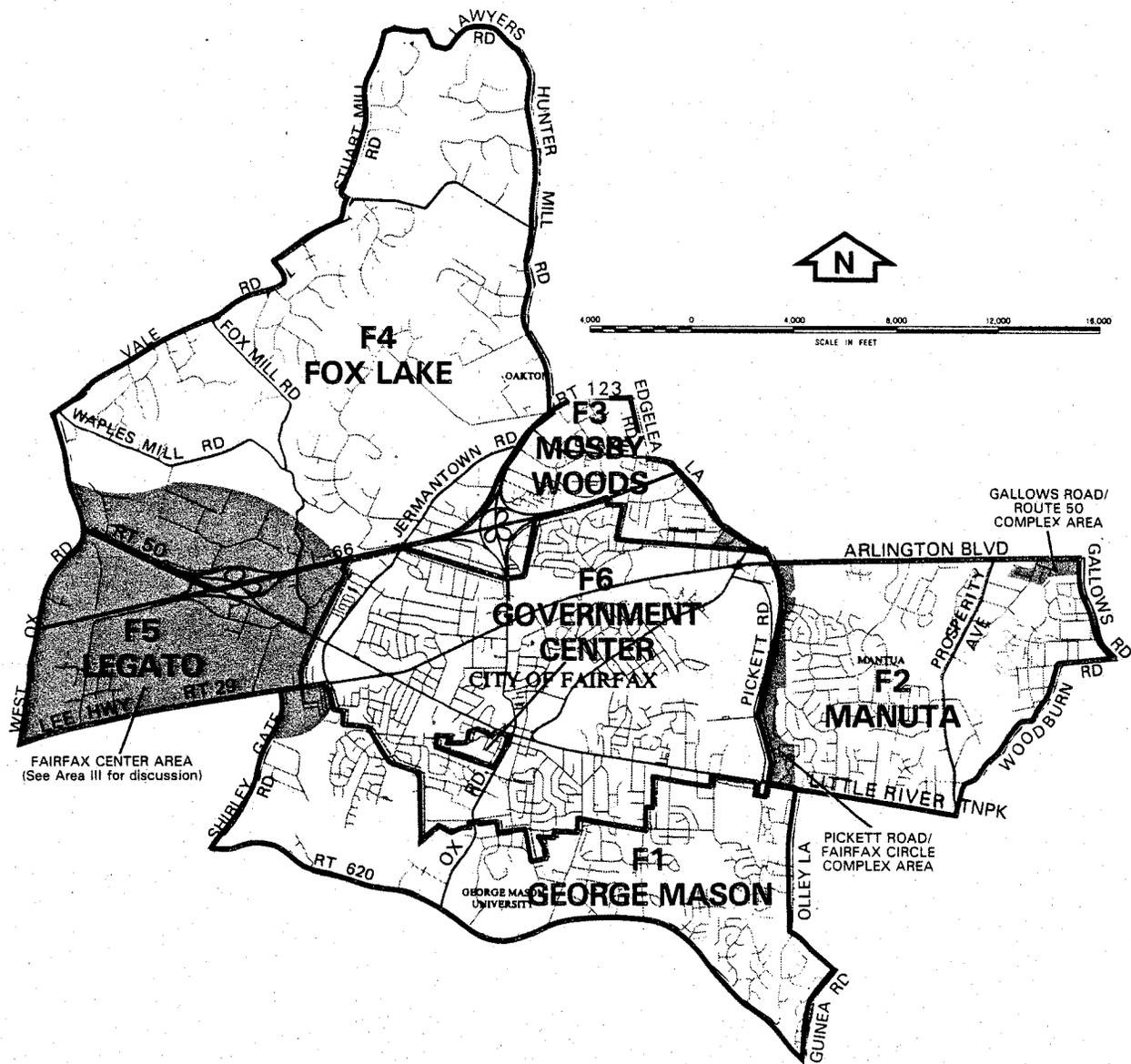
The city plan also includes a 14-mile network of bicycle paths.

PLANNED RESIDENTIAL INFILL—FAIRFAX PLANNING DISTRICT

Unit Type	Existing (1983)		Estimated Additional		At Buildout	
	Number	Percent	Number	Percent	Number	Percent
Single-family	7,040	56.4	3,554	45.6	10,594	52.2
Townhouse	1,911	15.3	1,720	22.1	3,631	17.9
Apartment	3,542	28.3	2,518	32.3	6,060	29.9
Total	12,493	100.0	7,792	100.0	20,285	100.0

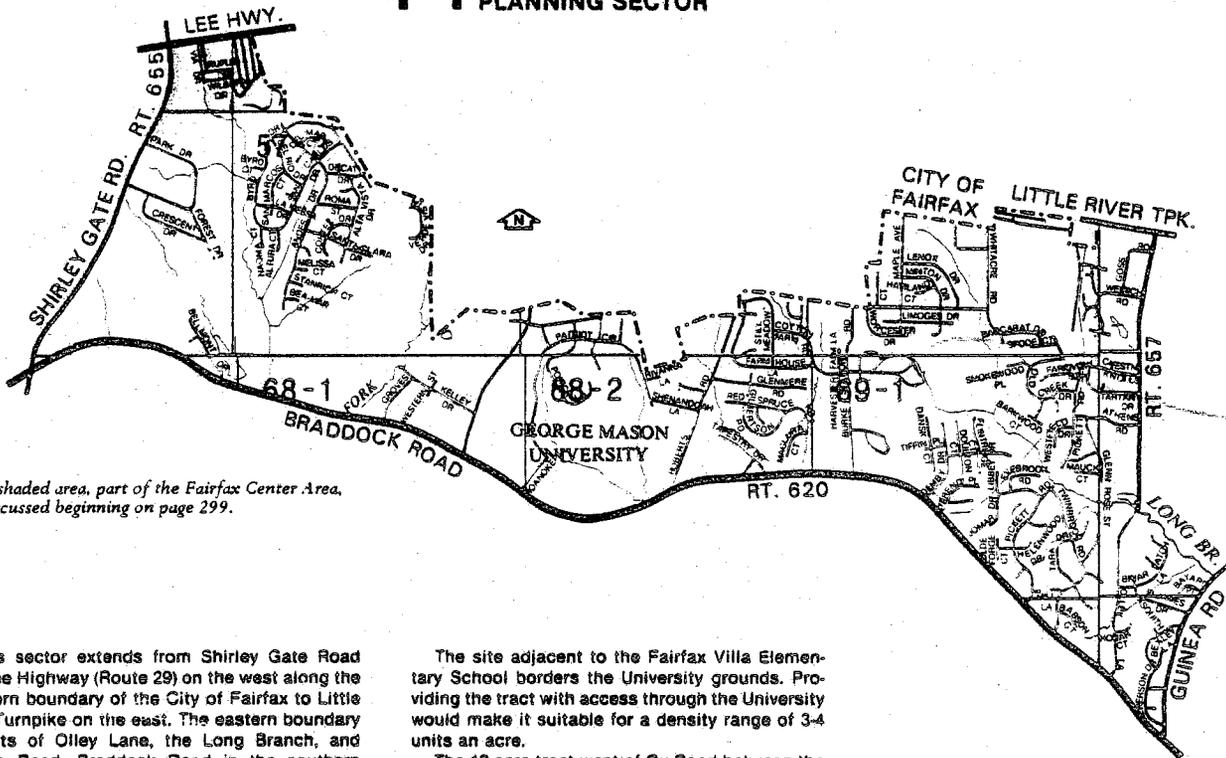
Source: Office of Research and Statistics, January 1983.

AREA II



FAIRFAX PLANNING DISTRICT

F1 GEORGE MASON COMMUNITY PLANNING SECTOR



The shaded area, part of the Fairfax Center Area, is discussed beginning on page 299.

This sector extends from Shirley Gate Road and Lee Highway (Route 29) on the west along the southern boundary of the City of Fairfax to Little River Turnpike on the east. The eastern boundary consists of Olley Lane, the Long Branch, and Guinea Road. Braddock Road is the southern limit. The area west of Ox Road (Route 123) is in Springfield Magisterial District, and the area to the east is in Annandale Magisterial District. Shirley Gate Road on the west and Olley Lane/Long Branch on the east are boundary changes from the previous Fairfax Planning District.

The sector is classified as stable except for the southeast quadrant of the Route 29/Shirley Gate Road intersection which is included in the Fairfax Center Area.

Land Use

The sector is essentially a stable residential area consisting of numerous developments of quite new, well-kept upper-middle-income homes. Scattered, older and often rural style homes remain on some tracts. These homes are generally in at least fair condition and are occupied, but there are no active farms. Waples Mobile Home Park is located east of Shirley Gate Road, west of the Fairfax city boundary and south of Route 29.

George Mason University comprises approximately one quarter of the sector on an attractive, large tract astride Ox Road. Planning liaison is maintained with the University. There are several other vacant areas.

As of September, 1983 the George Mason University had an enrollment of 14,545. It is projected this number will increase to over 16,000 by 1985. This will entail a concurrent expansion of faculty. The building program is dependent on state approval and state funds will provide some on-campus housing for students and/or faculty. This situation will create a demand for some moderately priced faculty housing, and if costs permit, student housing in the area.

Land use on adjacent tracts within the City of Fairfax are generally residential and compatible. Exceptions are commercial uses mostly in strip development along Little River Turnpike (Route 236) to the east adjacent to Woodson High School and along Lee Highway (Route 29) to the west.

There are presently no commercial activities within the sector. Convenience shopping, however, is plentiful in nearby centers within the City of Fairfax.

The site adjacent to the Fairfax Villa Elementary School borders the University grounds. Providing the tract with access through the University would make it suitable for a density range of 3-4 units an acre.

The 10-acre tract west of Ox Road between the University and Fairfax will be affected by the eventual widening of Ox Road to four lanes, which will split the tract. The tract is also adjacent to an established single-family residential area and will, therefore, be best developed in 3-4 units an acre.

The site further south along Ox Road and surrounded on three sides by the large-lot Braddock subdivision should develop at no more than 3-4 units an acre in order to be compatible with that subdivision.

The largest site adjacent to the University lies immediately east. The area is divided in several sizeable tracts. Ridge Manor Subdivision off Roberts Road juts into the tract about halfway between Braddock Road and the Fairfax city line. The area contains the headwaters of two small streams and the slopes thereto are quite pronounced.

To achieve compatibility with existing homes, 2-3 units an acre would be appropriate. A PDH development would permit landscaping and siting to meld housing units with the undulating terrain and stream valleys and is encouraged.

At the eastern boundary of the sector, a vacant site lies at the intersection of Braddock and Guinea Roads—an area containing single-family detached houses and townhouses. Development at low-density, up to 4 dwelling units per acre average, would be compatible.

The land located in the Occoquan Basin, generally between Popes Head Creek, Braddock Road and Shirley Gate Road, is for the most part vacant. There is only scattered development, some of it in the Shirley Gate Park, Belmont and Lake Fairfax Estates subdivisions.

Transportation

Braddock Road and Little River Turnpike are the two principal commuter radials serving residents of this sector. Traffic volume on these routes continues to grow. The ability of the routes to handle future traffic volumes will be affected by continued population growth in the sector, in the City of Fairfax, and particularly in areas to the west, continuing growth and housing availability for George Mason University, improvements or

lack thereof in other parallel routes (29, 50, 1-66), Metro-rail completion to Nutley Street, and success of Metro buses.

Cross-County transportation will be affected by the programmed widening of Route 123 to four lanes in the County, the Fairfax City Council decision not to widen Route 123 through the city, and the decision which will be made regarding handling north-south traffic through or around the City of Fairfax.

Among the major thoroughfares in the sector, traffic congestion is greatest on Braddock Road east of Burke Station Road and on Olley Lane. During peak hours traffic is characterized by low speeds, unstable flow, and intermittent stoppages.

In addition to the widening of Ox Road, VDH&T projects the widening of Braddock Road to four lanes between Guinea Road and Burke Station Road. This project should be extended to Ox Road. Widening of Braddock Road should be extended further westward to link with the realigned intersection of Shirley Gate Road and Braddock Road, when that improvement is made.

Coordinated planning with the City of Fairfax and VDH&T is vital to resolve problems associated with eastern and western bypasses of the city and travel to the County complex within the city.

As it nears Braddock Road, Shirley Gate Road should be realigned to the east to provide a more attractive western bypass route.

Traffic to and from the County Government Center is discussed in Sector F6.

Public Facilities

Schools

The Fairfax Villa and Olde Creek Elementary, Frost Intermediate and Woodson High Schools are located in the sector.

The former Eleven Oaks School, which is located partially in this sector, serves as an annex for school administrative functions. The Woodson-Frost school complex contains a school support center used for maintenance and storage purposes. No further uses beyond the 16 acres currently enclosed in the fences area for the sup-

port center will be developed for other than schools use. Within the 16 acres of support services no permanent or temporary uses should be established without review and approval by the Planning Commission.

Parks, Recreation and Open Space

There are six community parks within the sector as follows: Fairfax Villa, George Mason, Olde Forge, Surrey Square, University and Long Branch Stream Valley (located partially in Annandale Planning District).

Parkland in the sector is adequate for the existing population; however, a need exists for park development and acquisition of strategically located new parks in areas to be developed. Also, Long Branch Stream Valley Park should be expanded to connect existing sections to facilitate completion of a trails system extending to Accotink Creek stream valley.

Stream valleys in many of the vacant tracts offer the potential for additional parkland as development occurs. The open space owned by George Mason University is projected to remain for many years.

Shopping

Convenience and community shopping is readily available and more is planned in the City of Fairfax. Commercial facilities are also located along Route 236 and Braddock Road east of the sector. Residents are nearly equidistant from regional shopping centers at Springfield Mall, Landmark and Tysons Corner with Fair Oaks the nearest regional shopping center. Planning additional commercial in the sector is not warranted.

Housing

Housing within developed residential areas is predominantly single-family detached in an upper-middle income price range. The numerous homes on larger tracts vary across a range from older farm homes to new middle-income homes. There are no townhouse developments in the sector, but there are three townhouse developments immediately adjacent, one of which stands on the south side of Braddock Road.

Forty-six units of the Robinson Square residential community are in use as public housing.

Environment

Sector F1 lies at the headwaters of three major watersheds—Popes Head Creek for the sector west of Ox Road, Pohick Creek between Ox and Burke Station Roads and Accotink Creek for the remainder of the sector east of Burke Station Road. Lands draining into Popes Head Creek and its tributaries are located in the Occoquan Reservoir watershed.

Long Branch is the dominant ecological feature in the largely developed eastern portion of the sector. Rabbit Branch in the Pohick and upper Popes Head Creek are important features in the generally undeveloped tracts west of Ox Road. Watershed protection is a factor because of the sector's location in headwater regions, highly erodible soils and occasional sites where slopes exceed 15 percent in the upper Popes Head Creek. Lands draining into Popes Head Creek and its tributaries are located in the Occoquan Reservoir watershed.

Use of septic tanks is limited by unsuitable soils in three north-south corridors—one at the sector's western boundary near Shirley Gate Road, the second generally west of Ox Road and the third between Pickett and Guinea Roads.

Air quality maintenance is a matter of concern particularly along the main east-west commuter routes through the City of Fairfax and Braddock Road east of Pickett Road. Highway noise is also a concern along all major roads, and especially the commuter routes, in this sector.

History

Aspen Grove, a stately, privately-owned home probably built in the early nineteenth century, is located on Roberts Road.

RECOMMENDATIONS

Part of this sector is within the watershed of the Occoquan Reservoir. Special recommendations, resulting from the *Occoquan Basin Study*, are presented at the beginning of the Area III section of the Plan. These apply to affected lands in this sector in addition to the sector recommendations listed below.

Land Use

To preserve the stable residential character of the sector, infill residential construction should be primarily single-family residential.

A. Develop the site east of Fairfax Villa Elementary School in the 3-4 units per acre range, with primary access through the University, preferably in the PDH category.

B. The Braddock subdivision and the large acreage parcel surrounded by the subdivision are recommended for residential use at 1-2 units per acre. An extension of Western Avenue through the acreage parcel, together with some minor replating, would permit development of this area with reverse frontage near the Route 123/Braddock Road intersection and would eliminate the need for an additional access road near the intersection into the development.

C. Develop at 3-4 units per acre the tract west of Ox Road between the University and the City of Fairfax.

D. Encourage PDH development on the tract east of Roberts Road, north of Braddock Road and south of the Fairfax city line in the 2-3 unit per acre range, suitably buffered from adjacent residential areas and landscaped and sited to preserve the small streams within the area.

E. Plan single-family residential at an average not to exceed 4 units per acre for the site in the northwest quadrant of Braddock Road and Guinea Road to permit development compatible with the existing residential mix.

F. No additional commercial uses should be permitted in this sector since substantial commercial resources exist in the southeast quadrant of Braddock Road and Route 123 (Area III, Sector BR7) and the City of Fairfax. In addition, provision for new commercial uses has been made in the Fairfax Center Area.

G. The parcel of land south of Route 236 between Woodson High School and the Calvary Hill Baptist Church should be planned for single-family residential use at 4-5 dwelling units per acre, provided the following conditions are met:

1. the preservation of environmental amenities;
2. the provision of a substantial landscaped buffer along Route 236;
3. the design of a vehicular access that would not exacerbate traffic flow along Route 236; and
4. the provision of noise attenuation measures that may be necessary due to the noise impact from Route 236.

Institutional uses that are permitted in the residential zoning categories appropriate for the planned residential 4-5 dwelling units per acre density range and which are compatible with the adjacent Woodson High School and Calvary Hill Baptist Church would also be a suitable type of development. Institutional uses, such as church facilities, should be permitted only if certain conditions are met, including the provision of substantial landscaped buffers where the subject property is adjacent to residential development and along the boundary adjacent to Route 236, sign and lighting control, the preservation of environmental amenities, the elimination of traffic movement and parking impacts, and the design of the main structure and ancillary buildings in such a way as to ensure compatibility with the residential communities to the south and east in terms of building height, scale and building components.

H. The area west of the City of Fairfax, Waples Mobile Home Park and George Mason University property should be planned for residential development commensurate with existing development in the upper Popes Head Creek watershed and with water quality protection objectives for the Occoquan watershed.

Residential land use at a maximum density of .2 dwelling units per acre should be planned for the area in the Occoquan Basin generally located between Popes Head Creek, Braddock Road and Shirley Gate Road to help protect the environmentally sensitive headwaters of the Popes Head Creek watershed. (See Plan map.)

I. If the 43.4 acres west of the stream valley and presently part of the 120-acre Fairfax Memorial Park ceases to be used for a cemetery, an appropriate alternative use would be residential development at 1-2 dwelling units per acre. To be compatible with Somerset, Somerset South, and other nearby subdivisions, the property should develop at a density no greater than permitted in the R-2 zoning district. In addition, the siting of buildings, the internal road layout, and the preservation of environmental features should be such that any adverse visual impact on adjacent communities is eliminated. The public access to such development should not be through Long Branch Stream Valley Park.

Public Facilities

- A. Develop Fairfax Villa and Olde Forge Parks.
- B. Acquire and develop community parks in areas of major residential development.
- C. Develop University Park and George Mason Park.
- D. Determine the best means of correcting the problems arising from the failing septic systems along Shirley Gate Road and then aid, as appropriate, in the correction of the problems.
- E. Consider acquisition and development of Aspen Grove historic site north of George Mason University.

Environment

- A. Protect the Popes Head Creek and Rabbit Branch headwaters by requiring any development to be sensitive to water quality issues.
- B. Acquire connecting segments of Long Branch stream valley for park use and incorporation into a trail system. This stream valley is part of the EQC network.
- C. Protect vegetated open spaces which serve as wildlife habitats.
- D. Apply water quality recommendations presented at the beginning of the Area III section of the Plan to those lands within the Occoquan Basin.
- E. Provide highway mitigation for noise sensitive land uses so as to ensure a healthful living and working environment in which speech and activity interference is minimized in both interior and exterior areas.
- F. Preserve the environmental quality corridor system as described at the beginning of the Area III section of the Plan, including those EQC lands along Popes Head Creek and its tributaries, through a variety of implementation methods.

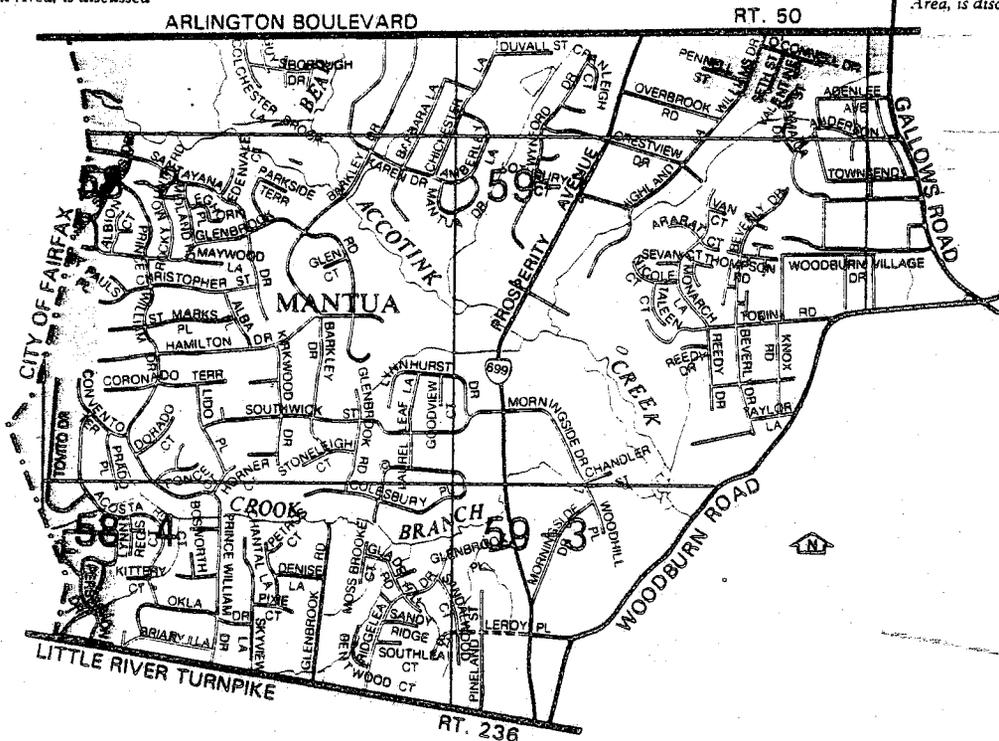
Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

F2 MANTUA COMMUNITY PLANNING SECTOR

The shaded area, part of the Pickett Road-Fairfax Circle Complex Area, is discussed on page 228.

The shaded area, part of the Gallows Road-Route 50 Complex Area, is discussed on page 227.



This sector lies east of the City of Fairfax between Arlington Boulevard (Route 50) and Little River Turnpike (Route 236). Its eastern boundary consists of Gallows and Woodburn Roads.

The northeastern corner of the sector, lying adjacent to the Chiles tract in the Jefferson Planning District is part of the Route 50/1-495 Area the major portion of which is in Area I. It is designated as the Gallows Road—Route 50 Complex Area and is discussed separately. A strip of land 500-1000 feet in depth immediately east of the Fairfax city line between Arlington Boulevard (Route 50) and Little River Turnpike (Route 236) is part of the Pickett Road-Fairfax Circle Complex Area.

Land Use

The remainder of the sector is classified as stable. It is largely single-family residential with most of the homes quite new and falling in a high middle-income range. Townhouse and garden apartments have been built on three sites: one immediately west of the Fairfax Hospital and Woodburn Center, another just east of Fairfax at Pickett Road and Little River Turnpike and a third south of Route 50 and adjacent to Accotink Creek.

Commercial facilities within the sector are limited to auto service stations, fast food service, and some office space. As on the north side of Route 50, other than low-density residential development should not extend west of Prosperity Avenue.

Sites available for consideration of further development are limited. The three most significant vacant tracts are: one immediately west of the townhouses near Fairfax Hospital, a second immediately east of the garden apartments in Little River Turnpike, and a third between the Fairfax city boundary and Mantua Hills. The environs of each of these sites justify low-density residential development.

The first of these sites is adjacent to existing townhouse and garden apartment developments and employment activities in Fairfax Hospital, Woodburn Center, and the various commercial activities along Route 50 and 1-acre residential to the west. Low-density residential development (3-4 units an acre) would be compatible. It has adequate space for a PDH development and PDH should be encouraged in order to preserve open space and provide some housing mix. Special consideration must be given to coordinating development with that within the remainder of the Route 50/1-495 Area.

The second site along Little River Turnpike is presently zoned for low-density residential. The characteristics of the location on a major thoroughfare and adjacent to garden apartments suggest that this site would be well suited for medium-density residential. However, traffic conditions and erosion problems related to medium-density make retention of this area at low-density in the 2-3 unit an acre range appropriate.

The third site east of Pickett Road is surrounded on three sides by low-density residential and is recommended for infill at comparable densities.

Transportation

This sector is bounded by the major commuter arterials to the metropolitan core. Transportation concerns are related directly to the ability of these two arterials to handle commuter volume and of collector streets to accommodate simultaneously access to the arterials and a lesser volume of cross-County traffic. This will be complicated in the future by the need for easy access to proposed Metro stations.

Specific problem areas lie in the vicinity of the Arlington Boulevard-Gallows Road-Capital Beltway complex at and beyond the eastern extremity of the sector, and the high volume of com-

mercial, school, and commuter traffic on Pickett Road in Fairfax which impacts both arterials. Prosperity Avenue and Woodburn Road also serve as collectors and have limited cross-County commuting. Within the sector, the existing road net is able to handle present traffic flows without undue congestion.

Current plans of VDH&T do not include projects in this sector. However, transportation improvements will be an integral part of development plans for the Chiles tract, and the realignment of the northern end of Pickett Road is a matter of discussion with the City of Fairfax and VDH&T.

County transportation recommendations include the widening of Prosperity Avenue to two 12-foot lanes in the sector and to four lanes between Arlington Boulevard and Lee Highway. Other suggested improvements for improved access to Metro stations and for fringe parking will also contribute to improved traffic conditions in the sector. Programmed widening of Braddock Road should eventually divert some traffic now using Little River Turnpike. Because this sector is largely stable single-family residential, it would be difficult and inappropriate to improve access by adding traffic on existing roads because stable area policy calls for diverting through-traffic from neighborhoods. Other means, such as car pooling to service Metro or bus service, must be found.

Construction of sidewalks along major thoroughfares would encourage commuters walking to local bus stops. This may require installation of "walk" signals at some intersections.

Public Facilities

Schools

Mantua Elementary School is located within the sector.

Parks, Recreation and Open Space

Parkland in Mantua Sector lies primarily along the Accotink Creek. Parks include Eakin (Mantua section), Eakin Community, Karen and Accotink Creek Stream Valley.

The Board of Supervisors also owns an additional 11.7 acres of undeveloped land along Accotink Creek adjacent to the City of Fairfax, just south of Arlington Boulevard.

Other Public Facilities

The following other public facilities are located within the sector: Fairfax Hospital, Fairfax House, Woodburn Mental Health, and Annandale West Fire Station. The State of Virginia-owned and -operated Northern Virginia Mental Health Institute is located adjacent to the Fairfax Hospital.

Shopping

Convenience and commercial shopping are readily available in the City of Fairfax and in smaller commercial areas along Route 50 and 236.

Housing

Housing has been provided mostly in single-family detached residential developments for upper middle income families. Developments on half-acre or one-acre lots are common. Townhouses and garden apartments are luxury units constructed for middle income families. Most units are comparatively new, reflecting westward urban growth during the past decade. Smaller or older housing units in a suitable state of maintenance for occupancy by low- or moderate-income families are limited and scattered throughout the sector. Additional residential development of any of the above types on the relatively few remaining tracts would be compatible with existing housing.

Sixty units of the proposed Flint Hill residential community, 46 units of the Oak Creek Place residential community, and 243 units in the Yorkville residential community have been proffered to the County for use as below-market housing.

Environment

Mantua Sector lies entirely within the Accotink Creek watershed. Accotink Creek and its tributaries—Long Branch, Bear Branch, and Crook Branch—are the dominant environmental features here. Extensive floodplains impose a significant development constraint as does watershed protection because of generally highly erodible soils and slopes exceeding 15 percent along the stream valleys.

The floodplains of each of these branches of the Accotink form a link in the environmental quality corridor network. Much of this land has already been acquired as stream valleys.

Air quality maintenance is a planning consideration throughout the sector along major arterials and collector streets, e.g., Routes 50 and 236.

RECOMMENDATIONS

Land Use

A. To provide compatible infill in the essentially developed stable portion of this sector, plan infill as single-family detached housing at existing densities.

B. The area bounded by Route 50, the Fairfax city line, Accotink Creek, Eakin Park and Bear Branch is recommended for development in the 3-4 unit per acre density range. The portion east of Hunters Branch is already zoned for townhouse usage at 5 units per acre but covenanted for 3.7 units per acre. Planned unit development is encouraged for the portion west of Hunters Branch.

C. To provide a transition between townhouse development to the east and a large lot subdivision to the west, the land area north of Accotink stream valley park between Strathmede Square and Pine Ridge is recommended for single-family detached housing at 2-3 units per acre. The undeveloped Strathmede Springs subdivision, adjacent to the Bedford Village apartments, would be appropriate for the same type of housing in the 3-4 unit per acre density range.

D. The vacant tract in the southeast quadrant of the intersection of Prosperity Avenue and Route 50 should be permitted to develop for office uses and should be heavily buffered from adjoining single-family uses.

Public Facilities

A. Insure the provision of parks and open space amenities in large new residential developments.

B. Complete the development of Eakin Park in accord with the adopted park master plan.

C. Acquire and develop community parks in the areas of high deficiency near Bedford Village and in the southwestern portion of the sector near Crook Branch stream valley.

D. Construct two detention ponds southwest of the Route 50/Gallows Road intersection. One is to be located on parcel 49-4 ((1)) 57A and the other located near the intersection of Meade Place and Jamaica Drive.

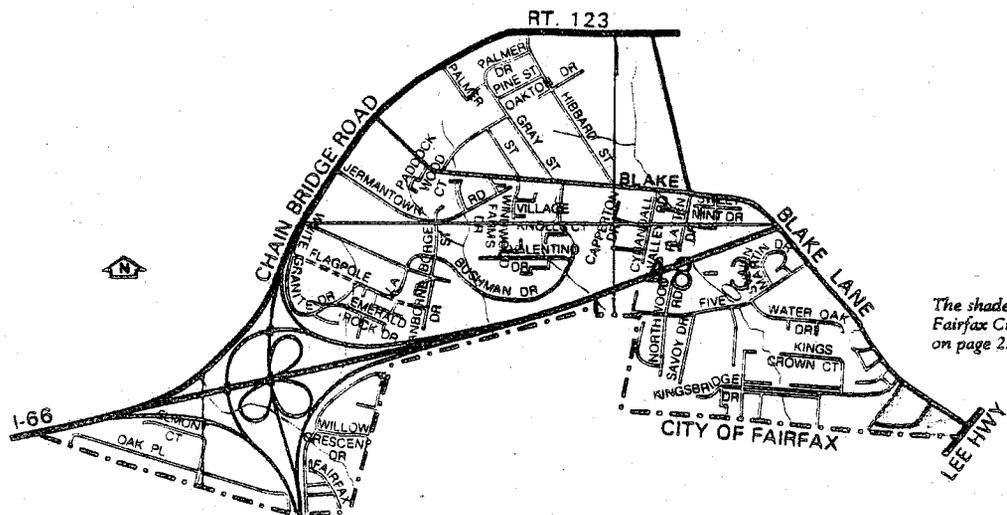
Environment

A. Acquire connecting segments of the Accotink Creek stream valley to permit incorporation within the EQC system and development of a trails network.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

F3 MOSBY WOODS COMMUNITY PLANNING SECTOR



The shaded area, part of the Pickett Road-Fairfax Circle Complex Area, is discussed on page 228.

This is a small pie-shaped sector lying across the north boundary of the City of Fairfax, bounded on the west by Chain Bridge Road, and on the east by a combination of Old Court House Road, Edgelea Road, and Blake Lane. The sector thus is bisected by Interstate 66. Six land parcels bounded by Spring Street, Blake Lane, Lee Highway and the Fairfax city line are included in the Pickett Road/Fairfax Circle Complex Area. The remainder of the sector is stable.

Land Use

This sector contains a mix of low-, medium- and high-density residential and limited commercial uses. It is an actively developing area containing considerable space for infill of each of the residential densities.

The area west of Blake Lane near Fairfax is predominantly residential and contains single-family detached, townhouses, and tracts committed to garden apartments. Additional townhouses are located in the Cyrandall Valley development just north of I-66, and in Treebrooke, now under construction between I-66 and Chain Bridge Road. Other garden apartment developments are Oakton Park and Fairfax Village in the southeast quadrant of I-66 and Chain Bridge Road.

Commercial development is largely strip commercial along Chain Bridge Road in Oakton.

Vacant tracts of land are located principally along the east side of Chain Bridge Road from I-66 to approximately Hibbard Street, and several lots between I-66 and Five Oaks Road west of Blake Lane. Numerous tracts north of Blake Lane between Edgelea Road and Oakton Drive are vacant and offer a potential for extensive residential infill.

The tract in the southwest quadrant of Blake Lane and I-66 lies in an area largely committed to higher density residential uses. It has easy access to the proposed Vienna Metro Station. Recommended improvements in bus service and widening of Blake Lane will aid vehicular access. A small single-family residential development borders the south side of the tract. Medium-density residential development seems appropriate.

The area east of Route 123 at the Hunter Mill Road intersection presently contains a mix of residential and commercial uses. This is a potential site for expanded local-serving shopping needed in this sector and Sector F4. Space limitations here make the sites in the western quadrants of the intersection more likely for expanded shop-

ping; however, that site would require a sewer pumpover. An alternative use of the site in the sector would be medium-density residential.

The area north of Blake Lane, which is now single-family detached residential can be retained for compatible residential infill. Many of the homes in this area are older structures. While still serviceable today, the area is a logical choice for redevelopment in the future. Meanwhile, it provides moderate-income housing.

Transportation

Sector development is influenced by its location on I-66, a major east-west commuter radial to the Capital Beltway, and Chain Bridge Road, a high volume cross-County commuting link. Blake Lane also gives access to Lee Highway and Arlington Boulevard, two additional commuter radials. The service provided by the existing network of major thoroughfares is adequate for present traffic levels.

A local problem is the difficulty experienced by Blake Lane commuters making a left turn onto Lee Highway in the morning. Travelers on Chain Bridge Road also face obstacles in transiting Vienna to the north or Fairfax to the south. And all of the major thoroughfares leading to the metropolitan core from this sector suffer from currently unacceptable levels of service. Without remedial action all of these difficulties will worsen as the presently committed high-density residential development is completed and occupied. Completion of the Metro-rail system to the Vienna Station site would offer some relief to this sector. Additional measures are essential particularly in view of the density of projected development.

VDH&T programs will not affect this directly. However, County transportation recommendations would improve transportation conditions in the sector. Recommendations include establishment of a feeder bus system to transport residents to the Metro, and cross-County bus service along Route 123.

Other improvements recommended which will have beneficial impact in the Mosby Woods Sector include the widening of Blake Lane to four lanes and its extension across Arlington Boulevard to connect east of Fairfax Circle with a Pickett Road extension now planned by the City of Fairfax, the establishment of fringe parking at the Metro station, and the improvement of Five Oaks Road connection to the Metro access road.

To facilitate traffic flow within the southern half of the sector, a connection should be planned

in conjunction with new development between either Five Oaks Road and Plantation Parkway or Ranger Road and Beach Drive. With the other improvements planned, this connection should now be possible without attracting commuter bypass traffic.

Public Facilities

Schools

Mosby Woods Elementary School is located within the sector.

The School Board owns a 10.0 acre site on the south side of Blake Lane north of I-66 for a future elementary school.

Parks, Recreation, and Open Space

Mosby Woods Sector is crossed by many small tributaries of the headwaters of Accotink Creek. It contains three community parks as follows: Borge Street, Villa D'Este, and Mosby Woods. Two are too narrow to be well suited for development. Villa D'Este Park, however, has one 3.0-acre site suitable for active recreation.

When the above resources are considered with Nottoway Park and development of Oak Marr Park to the north, the sector appears to be adequately served. However, because of the barrier created by I-66, further development of parks north of the interstate will be limited in serving existing population and anticipated growth in the southern half of the sector. Therefore, provision of facilities in the southern portion would substantially enhance services to the area. Since considerable growth is expected throughout the sector, recreation amenities provided by new residential developments should be used to complement public facilities.

The situation is also compensated in part by the proximity of Oakton High School and the Eakin and Nottoway Parks.

Shopping

Local-serving shopping is readily available in Oakton, Vienna and Fairfax for the existing population. Additional economic demand will be generated by the medium- and high-density growth projected in this sector and in residential areas west of Route 123. This demand can be met by an expansion of shopping facilities in the Oakton area on land already zoned for commercial use. A site in Sector F4 at the Hunter Mill Road intersection has adequate size but would require a sewer pumpover. A site in the sector opposite that intersection can be sewerred more easily but is

more constrained in size. The Tysons Corner and Fair Oaks regional shopping centers serve the area.

Housing

The wide mix in housing types has been described. The most recent construction features townhouses and garden apartments. West of Chain Bridge Road is a development of single-family detached homes. Available sites here are exhausted.

An area containing considerable vacant lots is found along Blake Lane, primarily to the north. Existing homes here are mostly older homes in a modest price range. The generally large lot size and ideal location however make purchase costs high.

There are 237 Section 8 housing units in the Yorkville residential community.

Environment

Mosby Woods Sector lies almost exclusively at the headwaters of the Accotink Creek watershed. A narrow strip along Route 123 at the northern sector boundary is within the Difficult Run watershed. The streams are intermittent and the land gently rolling; steep slopes are uncommon. Soils are generally resistant to erosion but unsuitable for septic tank development.

Air quality is a concern along I-66 and Chain Bridge Road, along the northern boundary of the City of Fairfax.

RECOMMENDATIONS

Land Use

A. To capitalize on the multitude of transportation options available and planned, the mix of single-family detached infill and medium- and high-density residential development should be continued.

B. The appropriate use for the land originally designated for a shopping facility in the Treebrooke planned apartment development (PDH) is 8-12 units per acre.

C. The vacant site in the southwest quadrant of Blake Lane and I-66 should be planned for houses in the range of 3-4 units per acre.

D. Neighborhoods containing older, serviceable, moderately priced single-family homes should be retained through 1990 to provide housing for low- and moderate-income families. In the long run, these areas will provide logical sites for redevelopment. In the intervening years, low-density residential infill can be allowed.

E. Office use is recommended for the 34 acres in the southeast quadrant of Route 123/Jermantown Road intersection subject to a proffered development plan which should provide for:

1. an integrated overall development of not less than 23 acres within a campus-like setting with buildings and parking set well back from Route 123 and substantial landscaped open space;
2. Building height should not exceed six stories unless structured parking is provided and in no case exceed eight stories.
3. Floor area in office buildings should not exceed a gross floor area ratio (FAR) of 0.35 to 0.4 for the development site.
4. No retail uses, except those permitted in office zones, should be allowed.
5. Primary access to the site should be from Jermantown Road.
6. Primary access to and from Route 123 should be discouraged in view of its function as a major arterial highway and the proximity to I-66.
7. Development of the site should provide for coordinated internal circulation for the general area in the northeast quadrant of the I-66/Route 123 interchange. In particular, a public street connection on the periphery of the

site should be provided between Jermantown Road or Borge Street and the properties to the south. Such a design would relieve traffic loads at other critical locations and distribute traffic more evenly. The internal circulation scheme and access to Route 123 shall be designed so as to minimize if not eliminate the use of the existing median break at the Rosehaven/Route 123 intersection for left turns to and from the site.

8. Office parking areas shall be well-buffered and screened from nearby residential areas.

9. All the applicable environmental considerations listed below in relation to the residential uses and neighborhood shopping center recommendations should be met.

10. Other necessary supporting facilities shall be provided in the office buildings.

Several environmental and transportation factors are relevant to the development of this tract. These include the presence of an adjacent high-volume noise impact roadway, extremely scarce and hence more valuable vegetation resources, a predominance of open, gently sloping fields which demand an imaginative, well-landscaped development plan, the presence of high infiltration capacity soils well suited to on-site stormwater management systems and downstream channel erosion in the Accotink Creek Stream Valley Park. These concerns and related circulation issues should be addressed as follows:

1. Circulation. Appropriately sized deceleration/acceleration lanes should be incorporated along Route 123 and the two access points to the tract along Jermantown Road. Entrances to the commercial portion of the site should occur sufficiently distant from Jermantown Road to preclude congestion. Public streets should be constructed to access the commercial use. South of it, private roads would be appropriate. The primary north/south through road between Jermantown Road and the Arrowood subdivision should align with existing curb cuts to Jermantown. A 60-foot right-of-way will be required. Internal roads in the southeast portion of the site should align with the topography and focus on a subtle site amenity in the southwest corner of the parcel.

2. Structure Type, Siting, and Density. Assuming proper treatment of the highway noise impact, townhouses, garden apartments, or mid-rise units could easily fit anywhere on the site. However, because of the scarce site amenity (monarch American beeches and white pine grove) near the southwest corner, more vertical structures, for example, garden or mid-rise apartments, should be sited there parallel to the slope (amphitheatre concept) so that the maximum number of residents can take advantage of the view. Townhouses can easily fit the front portion of the site without conflict with similar structures across Jermantown Road. Residential uses near Route 123 will have to be protected with a noise berm or barrier of sufficient size to buffer the ground level and the first floor of the structure.

3. Landscaping Requirements. Substantial buffering will be necessary along the perimeter of the commercial area. Additional tree islands within the parking will be necessary. The noise berm must also be well planted on both sides.

4. Amenities. Scarce woodland resources in the southwest corner of the tract should be used as a design focus. Stormwater retention facilities (retention pond) should and can be incorporated into this portion of the site, and thereby add to its amenity value from both a visual and possible recreation standpoint.

5. Drainage. Progressive stormwater management techniques should be incorporated. Local groundwater recharge and qua-

lity improvement measures for runoff from commercial property must be incorporated. Downstream channel erosion damage dictates that development here should not further aggravate the existing problem.

F. The land area north of Flagpole Lane and south of the office use described in Recommendation E above is recommended for motel use or office use not to exceed six stories. The land area abutting the south side of Flagpole Lane is recommended for residential use at 16-20 units per acre. Flagpole Lane or a similar connector street should be completed between Route 123 and Borge Street. If the connector street between Route 123 and Borge Street is realigned northward to a location adjacent to the AT&T site, connecting to Flagpole Lane and an extension of White Granite Drive, the land west of White Granite Drive extension could be considered for townhouse office use.

G. Expanded local-serving shopping facilities in the Oakton area in this sector should be limited to the land already zoned for commercial use. Space should not be provided for any type of commercial development within this stable residential sector except on the already zoned land in the Oakton area and as provided in Recommendations E and F.

H. The business area of Oakton should be encouraged to continue to develop under a village concept and no further commercial rezoning in the area should be considered. This area, which also includes portions of sectors V4 and F4, should be designated as a special study area requiring continued monitoring and restudy especially with respect to issues of achieving plan objectives in implementation and the phasing of public facilities.

I. The parcel of land on the south side of Kingsbridge Drive west of Fairfax Circle Villa apartments is appropriate for residential use at a density of 12-16 units per acre, heavily buffered from the industrial uses to the west and south.

Public Facilities

- A. Develop Villa D'Este Park.
- B. Develop Mosby Woods Park.
- C. Develop Borge Street Park.

Environment

A. Develop a trails system to facilitate pedestrian access to local parks and shopping centers and to connect with the proposed City of Fairfax trails network.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.

F4 FOX LAKE COMMUNITY PLANNING SECTOR

Boundaries of this sector are: I-66 and Route 50 on the south, a combination of West Ox Road, Vale Road, Stuart Mill Road on the west to Difficult Run, the stream line and Lawyers Road on the north, and Hunter Mill Road and Chain Bridge Road on the east.

The sector is almost exclusively residential in character and is classified stable except for the area along the north side of Route 50 which has been included in the Fairfax Center Area.

Land Use

Fox Lake Sector is a suburbanizing rural area. It is presently zoned mostly R-1 or R-E. Residential development is single-family detached on one acre or larger lots. There are still some scattered, older rural homes, but there is little farming. Horse raising is common. Lots, vacant or developed, are frequently wooded. For these reasons, homes are priced for upper middle- and high-income families.

Existing commercial uses are found only at the intersection of Hunter Mill Road and Chain Bridge Road. Several commercial and industrial rezoning applications have been submitted along Route 50 as part of the Fairfax Center Area development.

A large part of the remainder of the sector is planned for development for large lot residential uses. These uses should generally be continued to aid preservation of the Difficult Run Environmental Quality Corridor.

A planned apartment development (PDH) zoning covers a large tract in the northwest quadrant of Route 123 and I-66. Medium residential densities between that site and the Hunter Mill Road/Chain Bridge Road intersection would be reasonable. Development will require special provision for sewers in this unsewered sector.

Except for the proposed expansion of shopping facilities at the Oakton intersection, on land already zoned for commercial use, no allocation of commercial space seems warranted in the stable part of the sector.

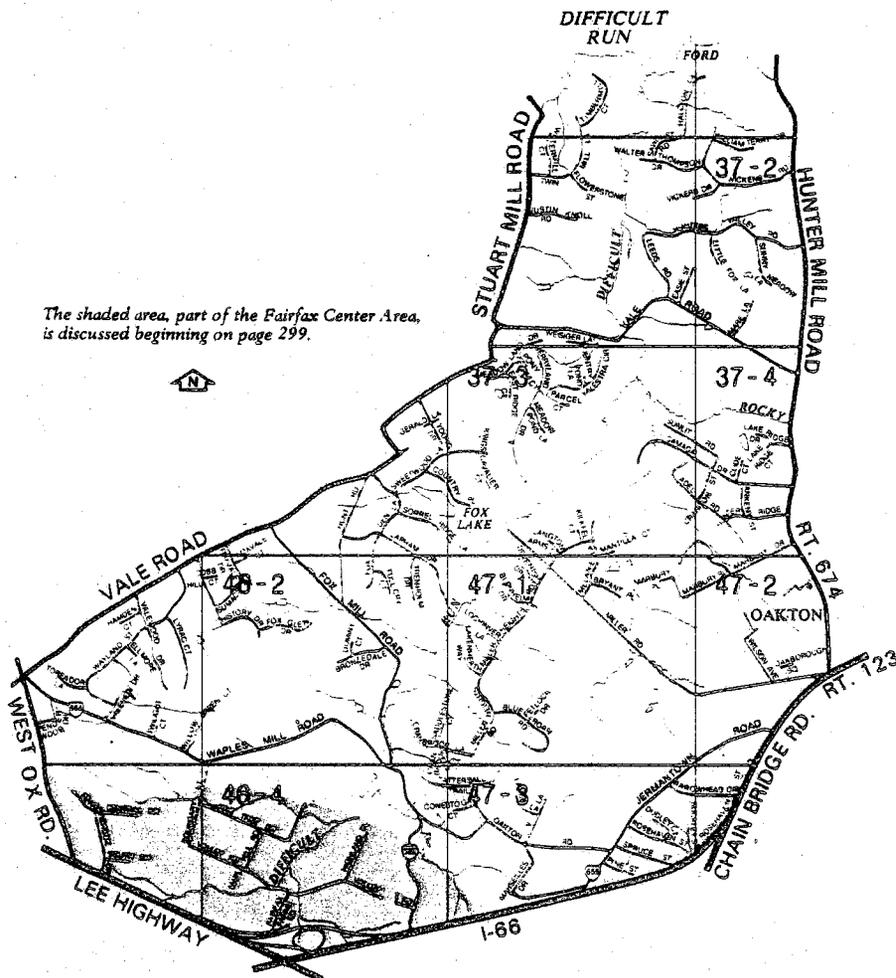
Transportation

Population growth is increasing the traffic volume on a network of narrow, two-lane rural roads. Increasing pressure for road improvements to enhance safety and convenience must be weighed against the desire of citizens to retain the rustic setting in which they live and to keep from attracting through commuter traffic from the Reston area. Thus local access traffic problems are coupled with the commuting difficulties on major arterials experienced by residents throughout the district. At this time, the existing sector network of major thoroughfares is fulfilling present transportation requirements at acceptable levels with the exception of Hunter Mill Road, Fox Mill Road, and West Ox Road.

Widen Jermantown Road to four lanes with turning lanes between Chain Bridge Road and Lee Highway. Other transportation recommendations which will benefit local traffic are the emphasis on bus service to adjacent, more densely populated sectors, improvements along access routes to the Vienna Metro Station, and construction of fringe parking lots at the station.

An integrated plan for a trails system to enhance pedestrian bicycle access to parks, local shopping centers, and a trail along Difficult Run needs to be completed.

The shaded area, part of the Fairfax Center Area, is discussed beginning on page 299.



Public Facilities

Schools

Oakton Elementary School is located within the sector:

Parks, Recreation, and Open Space

Difficult Run with its numerous tributaries is the dominant environmental feature and provides the focus for most of the parklands in the sector. They are Foxvale, Oak Borough Square, Oak Marr, Tattersall, and Wayland Street.

Given that the inherent nature of large lot development reduces the dependence on parks, total parkland is adequate for the present population. However, the population growth projected for the sector will create a need for conveniently located community parks and development of recreation facilities on existing parks such as Fox Vale which contains several sites suitable for active recreation.

Other Public Facilities

Oakton Fire Station is located within the sector.

The area north of Jermantown, Oakton, and Waples Mill Road is not presently sewered nor programmed for sewer construction. Most of the sector is suitable for septic fields.

Shopping

There are no shopping facilities within the sector. Shopping available and anticipated in the Oakton area. Vienna and the City of Fairfax provide adequate local-serving shopping for the

existing population. Population growth will create demand for additional facilities. Lack of sewer in the sector suggests that new facilities should be provided in one or more of the above three locations. Adequate commercially-zoned but undeveloped land exists at the intersection of Hunter Mill Road and Route 123 for any expansion of retail uses to serve future population growth in Sector F4.

Regional shopping needs are nearest in the Tysons Corner area. One or more of the new regional centers being proposed by developers in the Fairfax Center Area, in Reston, and in Centreville may ultimately serve sector residents.

Housing

All housing is single-family detached. Most is relatively new, sited on one acre or larger lots, and priced to attract middle- and upper-income families.

Environment

The sector lies almost entirely in the head-quarters and upper reaches of the Difficult Run watershed. Difficult Run and its many tributaries are the dominant ecological assets; in fact, the entire Difficult Run valley is a state-designated critical environmental area. Highly erodible soils throughout most of the sector and steep slopes along major stream valleys make watershed preservation an essential concern. Floodplains also impose a natural constraint on development along the stream and its major tributaries. Poor soils for septic tanks occur in the southern third of the sector.

Difficult Run is a major component within the proposed system of environmental quality corridors. Densely vegetated areas, steep slopes, floodplains, and public parks that are adjacent to Difficult Run and its tributaries are part of the corridors and should be protected.

Present levels of development do not create a significant impact on air quality.

A portion of the stream valley and adjacent land within this Planning District/Planning Sector is within the dam failure impact area for a proposed or existing dam. The extent of development within these impact areas should be minimized in the interest of public welfare and safety. For details on the extent of this area, refer to the section on potential dam failure impact areas, in the Environmental Chapter.

History

Squirrel Hill, a clapboard log house built around 1706, is located on private property on Waples Mill Road.

RECOMMENDATIONS

Land Use

To preserve the Difficult Run and establish the environmental quality corridor within the stable residential portion of the sector:

A. A special study has been completed that details a land use plan for the headwaters region of the Difficult Run watershed. The results of this study, consider such factors as existing safety, health and environmental constraints and committed development in the area and site and road design controls, shown on the land use map for this area which designates the recommended land uses and densities.

The study area was analyzed for its ability to accept various density categories and simultaneously maintain high quality environmental standards. The primary environmental objectives concerning this area relate directly to the impacts created by urbanization such as: increased percentages of impervious surfaces, increased stormwater runoff values, increased nonpoint source pollution loadings, stream channel enlargement, loss of high quality forested vegetation, loss of high quality wildlife habitats increased number of septic fields, and possible soil, overburden and groundwater contamination from septic effluent. The study area was reviewed for its sensitivity to these impacts.

A detailed environmental inventory was compiled that identified geologic, topographic, hydrologic, vegetative, soil, wildlife, air quality, noise and open space factors. This information was then used to prepare an overall land use design that would minimize the impacts from development in a region that is not planned for sanitary sewer service. The result is an environmentally sensitive plan that takes topographic forms for boundaries.

An environmental quality corridor (EQC) was outlined using a U.S. Forest Services water quality filter strip equation, areas of steep slopes, U.S. Geological Survey designated 100-year floodplain and existing parkland. Plant nutrient uptake capabilities of the filter strip will slow the filter overland stormwater runoff prior to its introduction to the streams.

Long narrow ridge lines with thin overburden, highly erosive soils, steep topography, high quality vegetation and poor access are proposed for low-density (5 acre or larger) uses. Two to five acre lots (.2-.5 units per acre) are proposed for areas adjacent to streams where topography is relatively steep, overburden moderately thick (10-50 feet) and soils moderately erosive. Areas on plateaus or ridge lines where thick overburden (50 feet +), gently sloping topography, good septic suitability soils, mixed vegetation and varied access points are present combine to form areas capable of ac-

commodating somewhat higher density development (.5-1 units per acre).

Factors other than environmental considerations were also evaluated before arriving at the land use recommendations shown on the Plan map. Since adoption of the Plan recommendations for Sector F4, there has been substantial development, primarily 1-2 units per acre cluster subdivision, which limit the options for planning totally this sensitive headwaters area only for very low densities. Existing and committed development is used in Plan recommendations in many areas of the Difficult Run headwaters in terms of compatible density. New development should also be compatible with the established development pattern in its vicinity with similar lot sizes, provided such would not be detrimental to environmental amenities and constraints.

The remaining area of the sector outside the Oakton community and the Fairfax Center Area is recommended for residential use at .5-1 unit per acre, except for the portion bounded by Route 50, West Ox Road, Waples Mill Road and Boundary Street where residential uses at 1-2 units an acre or private recreational uses would be appropriate.

B. If gravity public sewer is available on at least a portion of any building site, the area along Hunter Mill Road and Miller Road northwest of Oakton should be permitted to develop in the 4-5 unit per acre density range, except parcels 47-2 ((1)) 16, 17, 23 which should be limited to 2-3 units per acre. On any site where gravity public sewer can be made available to only a portion, the development pattern may be arranged to take maximum advantage of sewer availability at densities up to and including townhouse development provided that any portion of the site which cannot be sewered by gravity or any portion of the site which abuts land which cannot be sewered by gravity shall either be retained in open space or developed in single-family detached housing of no more than two units per acre. The specific residential density is to be determined by the same criteria used for the headwater areas of the gravity or any portion of the site which abuts land which cannot be sewered by gravity shall either be retained in open space or developed in single-family detached housing of no more than two units per acre. The specific residential density is to be determined by the same criteria used for the headwater areas of the Difficult Run, which are not planned for public sewer by gravity.

Retail commercial is an option for a depth of approximately 300 feet north of Miller Road on the southern portion of parcels 24, 24A and 24B provided the following conditions are met:

1. the appropriate consolidation of parcels to ensure the desirable siting of buildings, coordinated vehicular access and internal circulation and the minimum number of access points on Miller Road;
2. the provision of a substantial landscaped open space buffer to assure the elimination of any adverse impact upon nearby existing and planned residences; and
3. the provision of lighting and signs in a manner which renders them unobtrusive to any nearby existing or planned residences.

Townhouse office is an option for parcels 20, 21, 25 and 26 which front on Hunter Mill Road opposite the shopping center. Townhouse office would serve as a transitional use between the retail commercial and the residential use of 4-5 units per acre. However, the following conditions need to be satisfied by the developer(s):

1. the appropriate consolidation of parcels to ensure: the desirable siting and clustering of units, coordinated vehicular access and internal circulation for the townhouse office development;
2. the provision of a substantial landscaped open space buffer which would assure the elimination of any adverse impact from

commercial activity upon nearby existing or planned residences;

3. the limitation in the height of townhouse office units to a maximum of three stories;
4. the provision of signs, whose size, character, and location shall be compatible with, and result in no adverse visual impact upon, adjacent existing and planned residential units; and
5. the provision of appropriate transportation improvements to relieve and prevent further traffic congestion in the vicinity of Hunter Mill Road, Miller Road and Route 123.

C. The area north of Jermantown Road between Oakton Elementary School on the east and Oak Marr Park on the west is planned for residential development at 3-4 units per acre except for the northern portion of the tract with frontage along the south side of Miller Road. This northern portion is planned for residential development at .5-1 dwelling unit per acre, compatible with the existing large-lot, single-family houses along Miller Road. The area planned for residential development at .5-1 dwelling units per acre should extend to a minimum depth of 300 feet south of Miller Road. Lots should, at a minimum, be one acre in size, with no provision for clustering in view of the existing pattern of residential development along Miller Road. In addition, these lots should be served by individual septic systems and have access only to Miller Road. To achieve the upper end of the .5-1 dwelling unit per acre density range, maximum advantage should be taken of the existing vegetation and topography and the development should result in minimal disruption to the environmental features. If the area should develop as a part of a PDH proposal, the density restrictions for this northern part, as described above, shall still be maintained.

The remainder of the area, which is planned for 3-4 dwelling units per acre, should have access to Jermantown Road only. To achieve a density greater than three units per acre, the following conditions must be met:

1. The provision of a substantial landscaped open space buffer between the areas planned for 3-4 dwelling units per acre and .5-1 dwelling unit per acre to eliminate any adverse impact on the large-lot, single-family residences on the northern portion of the area.
2. Sufficient consolidation of parcels to ensure the appropriate siting of residential units, coordinated vehicular access, and internal circulation.

3. The preservation of the stream valleys, retention of hardwoods and evergreens, and minimal disruption of existing topography.

If gravity public sewer is unavailable and a sanitary sewage pumping station is necessary to serve the area planned for 3-4 dwelling units per acre, such a facility should be located within and designed to serve only that area planned for 3-4 dwelling units per acre north of Jermantown Road and west of the Oakton Elementary School.

D. The business area of Oakton should be encouraged to continue to develop under a village concept and no further commercial rezoning in the area should be considered. This area, which also includes portions of Sectors F3 and V4, should be designated as a special study area requiring continual monitoring and restudy especially with respect to issues achieving plan objectives in implementation and the phasing of public facilities.

E. Allocate no space for additional commercial facilities in the sector, except that already zoned for commercial use.

F. The seventy-one (71) acre area bounded by Route 123, Fairfax Acres subdivision (including those acreage parcels east of Dudley Court) and Jermantown Road presents a variety of opportunities. Because of the site's high visibility, good access to I-66 and potential for office or research and development use of economic benefit to the

County, the possibility of development of substantial portions of the property for these nonresidential uses should be recognized. This need must be balanced, however, against the need to provide an inventory of suitable areas planned for multifamily residential uses.

The site is appropriately planned for development in garden apartment uses at 16-20 units an acre with an alternative of office/research and development uses as described below, one not to the exclusion of the other, but preferably in a combination thereof. Office/research and development uses should not exceed 50 acres. Land not used for office/research and development uses shall be used for garden apartment uses. Conditions which must be met in a proffered development plan in any zoning application requesting office/research and development use are as follows:

1. The various ownerships of the 71-acre area should be consolidated or coordinated in a manner so that the allocation between office/research and development and residential uses will be established before any land is rezoned.
2. An integrated overall development within a campus-like setting with substantial landscaped open space (especially as a buffer to Fairfax Acres if the site abuts any portion of that subdivision). The intensity of office/research and development use should be similar to and compatible with that occurring on the southeast side of Route 123.
3. The remaining land area which is to be utilized for garden apartments can be accessed either from Jermantown Road or through the office or research and development site and should be of a suitable configuration to provide a viable residential site.
4. The general atmosphere of the development should be open and campus-like. Building heights of office/research and development uses should not exceed eight (8) stories with six (6) stories or less being preferable to reduce the visual impact of the development upon single-family residential neighborhoods to the north and west.
5. No retail uses except those permitted in office zones should be allowed.
6. The provision of site access and design of traffic circulation in this area should be consistent with the principles of highway functional classification. The location of the site requires that access be provided such that traffic impacts on I-66 and Route 123 will be minimized. Thus, primary site access should be from minor arterial and collector roads, with minimal disruption to major arterials and freeways. It should be emphasized that the provision of access in this fashion is consistent with the adopted plan for providing access to parcels on the east side of Route 123, which is currently being implemented.

To accomplish the objectives set forth above, two possible access and circulation schemes have been developed. These alternatives are:

1. Alternative A. The site should be accessed exclusively from Jermantown Road. No access should be provided from either Route 123 or Rosehaven Street in view of the potential disruption on Route 123 caused by additional intersections between Jermantown Road and I-66.
2. Alternative B. Primary access to the site should be from Jermantown Road. Entrances on Jermantown Road should be no closer than 600 feet from the Route 123 intersection.
 - Primary access to and from Route 123 should be discouraged in view of its function as a major arterial highway and the proximity of I-66. In particular, left turns into and out of the site from Route 123 should not be allowed in view of the

potential congestion created on Route 123. However, right turn only may be allowed.

- To effectuate the above objective, Rosehaven Street should be realigned to intersect Jermantown Road and to eliminate its intersection with Route 123 as shown on the accompanying map.

It is recommended that both Alternative A and Alternative B be shown on the plan, with a determination of the preferred access scheme dependent upon further examination of traffic volumes and flows associated with specific development proposals during the rezoning process. It is further recommended that a three-acre site for fringe parking be sought for this general area.

Public Facilities

- A. Develop the Fox Vale and Oak Marr Parks.
- B. Acquire additional parkland within areas of new development unless adequate private facilities are provided.
- C. Relocate the Navy-Vale Fire Station (Sector UPB) to the general vicinity of West Ox Road and Route 50.

Environment

A. Require that any development in the headwaters of Difficult Run valley be sensitive to water quality issues. Such sensitivity includes minimal impervious surface, stringent sediment control during construction, and stormwater management designed to protect water quality.

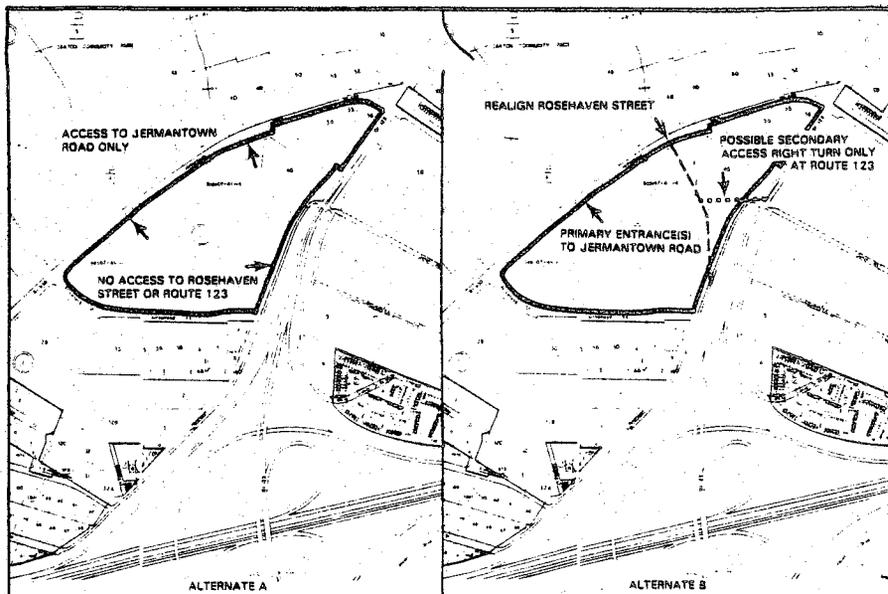
Design controls for the Difficult Run headwaters include the following:

1. All major collector and subdivision roads should be oriented to uplands and ridge lines.
2. Small subdivision streets or access roads should not cross streams or major swales as this interrupts and disregards the EQC network, promotes nonpoint source pollution loadings and excessive cut and fill.
3. The Difficult Run Environmental Quality Corridor should be protected by dedication or acquisition.
4. Tract consolidation may be appropriate prior to development.
5. Developers are encouraged to design with varying lot sizes corresponding to the planned land use densities, even if the area to be developed involves more than one land use density category.

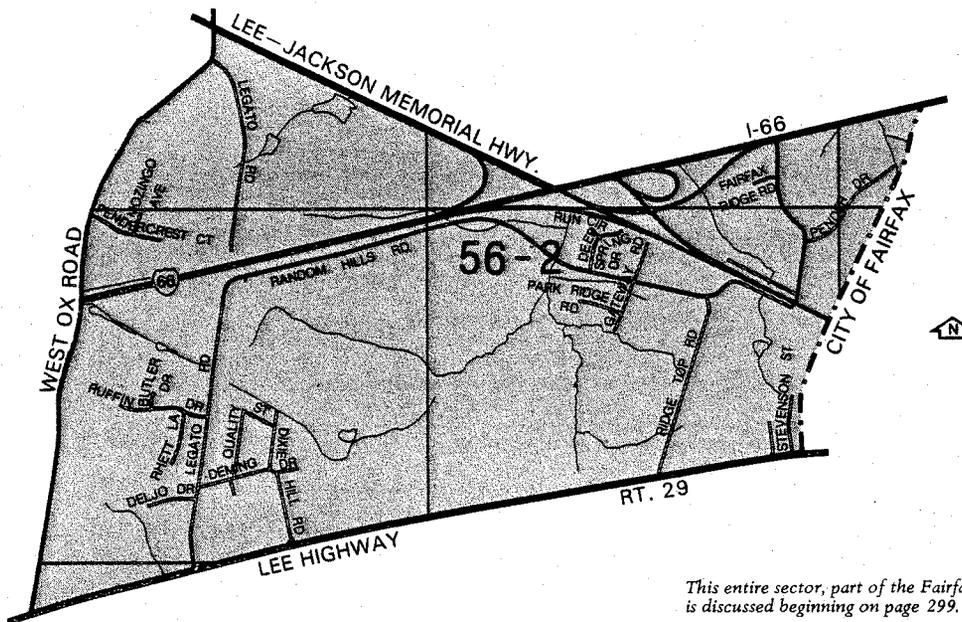
6. The use of adequate buffers, landscaping and substantial building setbacks should be provided to preserve the present character of this area when viewed from collector and minor arterial roads.

Transportation

A. The transportation recommendations for this sector are included in the Transportation section of the Plan.



F5 LEGATO COMMUNITY PLANNING SECTOR



This entire sector, part of the Fairfax Center Area, is discussed beginning on page 299.

This sector is bounded by Route 50 and I-66 on the north, the Fairfax city boundary on the east, Route 29 on the south and West Ox Road on the west.

The entire sector is located in the Fairfax Center Area. The southwest portion of this sector is located in the Occoquan Basin and drains into the Occoquan Reservoir.

Land Use

There are several stable, single-family residential subdivisions located within the sector. Commercial uses are concentrated within the Fair Oaks shopping center, located west of the intersection of Route 50 and I-66 and the High Ridge and Pender Business parks located in the eastern portion of the sector. The planned County Government Center is to be located on approximately 183 acres of county owned land between I-66 and Route 29 in the central portion of the sector.

The land in the Occoquan Basin should be planned with consideration for the protection of water quality in the reservoir.

Transportation

The sector is bounded by several key commuter routes to urban areas to the east. Access to I-66 is restricted to traffic on Route 50 which can be reached only with difficulty via West Ox Road. To the east, commuters must face the same difficulties encountered by other residents of the district.

Intense development of the Fairfax Center Area will greatly impact local traffic which is not presently a problem. In view of increased traffic volume within the Fairfax Center Area, transportation must be given primary emphasis in the review of development proposals. Ultimately, the provision of express bus or rapid rail to this area may provide improved transportation options to serve existing and planned residential and commercial developments.

Public Facilities

Parks, Recreation, and Open Space

The southwestern portion of the sector is served by the Dixie Hill Park. Population growth resulting from the proposals for intensive development within the area will require additional recreation facilities.

Other Public Facilities

Located north of Lee Highway within this sector is the site that was purchased for the future relocation of the Fairfax County Governmental Center.

Shopping

The Fair Oaks regional shopping center is located within this sector. Convenience and community shopping is available in Fairfax and Greenbriar.

Environment

The Legato Sector is located primarily at the uppermost headwaters of Difficult Run; two small segments drain into the upper Occoquan and Popes Head Creek. This factor plus highly erodible soils in the western two-thirds of the sector make watershed protection an essential planning consideration. The fact that all of Difficult Run valley is a state-designated critical environmental area adds to this concern. The environmental quality corridor in this sector is discussed in the Fairfax Center Area.

Air quality maintenance is a concern within the sector because of the convergence of high-volume commuter routes.

RECOMMENDATIONS

Recommendations for this sector are presented as part of the Fairfax Center Area which is located in the Area III section of the Plan text. In addition, since part of this sector is within the watershed of the Occoquan Reservoir, additional recommendations for special areas (resulting from the Occoquan Basin Study) are presented at the beginning of the Area III section of the Plan. These special area recommendations apply to affected lands in this sector in addition to the Fairfax Center Area recommendations.

F6 COUNTY GOVERNMENT CENTER

This sector comprises the County land contained in the Fairfax County Government Center within the City of Fairfax. It is bounded on the north by Little River Turnpike (Main Street), on the east by Chain Bridge Road, on the south by Jones Street, and on the west by a line which circles the school administration building to Page Avenue, follows Page Avenue to the police headquarters then jogs north to the rear property lines of commercial establishments along Little River Turnpike, then jogs again to the turnpike around the Texaco Station.

Land Use

Since this sector has no residential population and future development is restricted to governmental uses, it is not discussed in detail here. Existing government activities and planned construction ensure its future as an employment center.

Consideration should be given to limiting the further development and use of facilities in the Courthouse/Massey Building complex in the City of Fairfax for Fairfax County governmental activities. Specifically to meet the critical needs of the Circuit and General District Court and of the Juvenile and Domestic Relations Court, the concept of using existing County buildings in the Courthouse area, including the Massey Building, for such purposes is urged. This will centralize such activities in this area, with the many attendant advantages occurring therefrom. It will also lend impetus to formulation of plans to decrease the amount of leased space used by County agencies by consolidation into facilities to be constructed on a phased basis.

Transportation

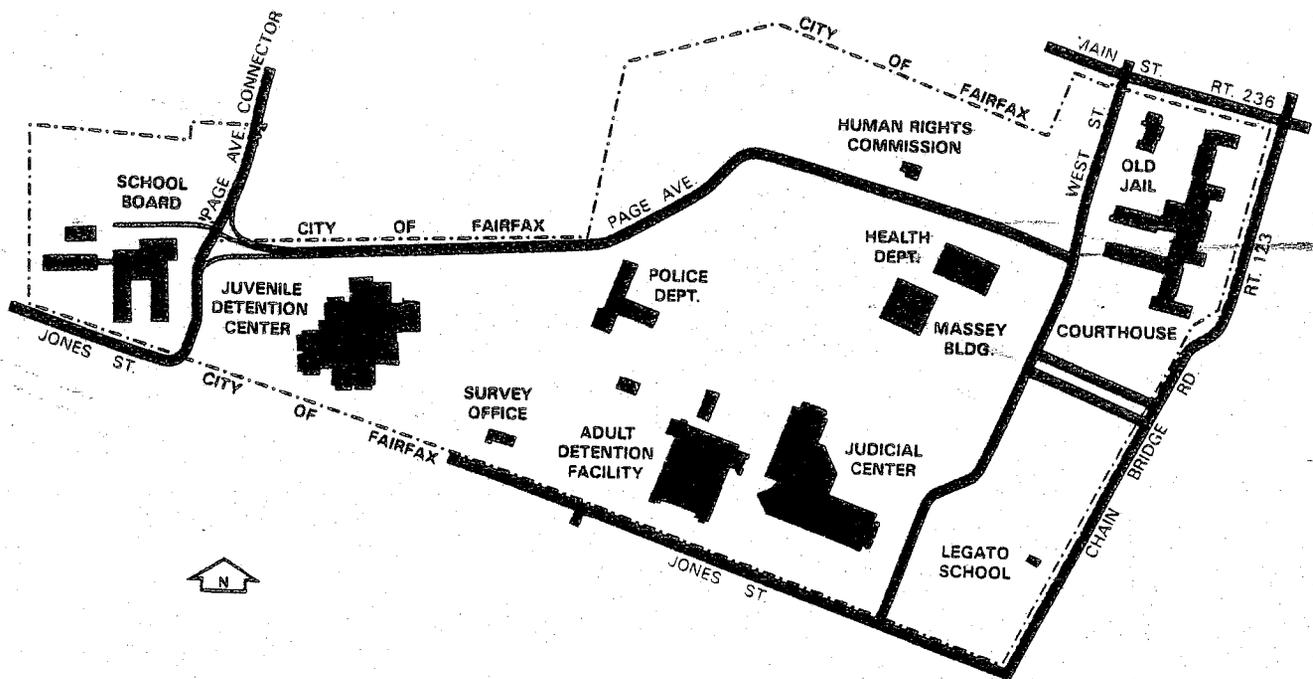
Primary transportation problems associated with the Government Center are those related to employee rush-hour commuting and adequate parking for visitors. Continued growth by city and county government and George Mason University coupled with projected residential construction can only produce a worsened transportation situation unless effective remedial action is inaugurated in the near future.

Alternatives include public transit, increased highway capacity, staggered work hours and shorter work weeks.

There are numerous alternatives for enhancing vehicular traffic flow. Alternatives include the possibility of constructing a Route 123 bypass along Railroad Avenue and through the Government Center to link with Jones Street back to Route 123 and designation of parallel north-south streets for one-way traffic through the city. The local bypass may serve to limit commuter use of Joyce Drive, a residential street west of the School Administration Building. This subject is a matter for intergovernment negotiations involving VDH&T and the two local jurisdictions.

Public Facilities

Fairfax County currently provides certain public services to the City of Fairfax under contractual agreement.



COMPLEX AREAS

Area II contains seven locations which have development problems of a magnitude and complexity that warrant intensive analysis: Gallows-Road-Route 50, Pickett Road-Fairfax Circle, three Metro station sites, the Fairfax Center Area and the Tysons Corner Area. Their evaluation in this section results in recommendations for uses to the year 1990.

What is a Complex Area?

In the three-part land classification system selected for Area Plan analysis, the distinction between complex, option, and stable areas was intended to be one of intensity and immediacy; that is, even stable areas have some problems which planning can address, but other categories have more of them, requiring a greater degree of public policy guidance and, in some cases, a more immediate input of that guidance. Examination of land use and related problems indicates that, in many instances, the problems describe not a complex but a complexity of issues in need of resolution.

Many complex areas tend to have in common a range of problems involving transportation, type and intensity of land use, lack of land use order or organization, and strong but conflicting pressures for change. The designated complex areas in Area II, Gallows Road-Route 50, Pickett Road-Fairfax Circle, and the proposed Metro station sites, together with the Fairfax Center Area and the Tysons Corner Area—all have these points in common, and some others.

Transportation

Conflict exists or could exist between internal circulation, local access, and through-traffic. Where substantial new development in a complex area requires major public facilities, transportation is usually involved.

Complete consideration of transportation capital improvements and recommendations therefore are deferred for consideration in the countywide transportation plan. Notwithstanding this deferral, the necessity to consider the adequacy of, and needs for, transportation facilities in this review of land use planning is recognized.

Planned land densities are important considerations in this regard. It is appropriate to herein note that, while planning for long-range transportation requirements should proceed, the identified needs are much greater than that which can realistically be funded in the foreseeable future.

Recognizing the above restraints and considerations, but in a constructive effort to herein address the more immediate needs, the following Metro-related projects are identified as those being of the highest priority in this plan:

- Haycock Road (Route 703) between Leesburg Pike (Route 7) and Great Falls Street (Route 694);
- flyover from Leesburg Pike (Route 7) to the West Falls Church Metro Station;
- provision of an exclusive bus lane along Route 7 between the Dulles Airport Access Road and the West Falls Church Metro Station;
- construction of an exclusive busway on the DAAR right-of-way from Dolley Madison Boulevard (Route 123) to the West Falls Church Metro Station;
- Shreve Road (Route 703) between Leesburg Pike (Route 7) and Fairwood Lane (Route 3260);
- Great Falls Street (Route 694) between Balls Hill Road (Route 686) and the Falls Church city line;

- Gallows Road (Route 650) from Old Courthouse Road (Route 677) to Lee Highway (Route 29);
- Old Courthouse Road (Route 677) from Gallows Road (Route 640) to Aline Avenue;
- International Drive from Old Courthouse Road (Route 677) at Aline Avenue to Leesburg Pike (Route 7);
- Blake Lane (Route 655) from Arlington Boulevard (Route 50) to Interstate 66;
- Five Oaks Road from Blake Lane (Route 655) to the Vienna Metro Station;
- Leesburg Pike (Route 7) from DAAR to I-495.
- Wolf Trap Farm Park area Metro express parking lot from Beulah Road (Route 675) to Trap Road (Route 676);
- parking lot at Hunter Mill Road (Route 674) and DAAR;
- Hunter Mill Road (Route 674) between Blake Lane (Route 655) and Tamarack Drive;
- Blake Lane (Route 655) between Chain Bridge Road (Route 123) and I-66; and
- Sutton Road (Route 701) between Blake Lane (Route 655) and the Vienna Metro Station.

Land Uses

A substantial amount of commercial space is involved, although multiple-unit residential and some single-family residential properties may be mixed in. Internal and external incompatibilities among these land uses are part of the problem. Altogether, the intensity of land use is relatively high, or it could be under existing proposals.

Disorganization

Where there is existing development, complex areas are generally not well organized or integrated. Interaction between different properties and uses is mostly negative, thus reducing the overall value of the area below what the level of previous investment would imply.

Complexity and Urgency

Problems in complex areas are not only interrelated; they are layered as well. Solving one layer of problems uncovers the next. Overall solutions will involve both public and private actions in the near future. If planned, joint actions are not undertaken beforehand, decisions will, of necessity, be ad hoc with options precluded within the next five to ten years.

Policy Approaches for Complex Areas

Dealing effectively with complex areas will involve a long-term, continuous process, although decisions should be made in the near future regarding each of these areas (early decisions are mandated by some current rezoning applications); there should be no pretense about single-shot solutions. Unresolved problems will remain in each complex area for some time, even under optimum conditions. The most important task is to gradually reduce the range of options to be evaluated and focus on increasingly detailed alternatives.

Wherever possible, all transitions between complex areas and stable areas should be accomplished within the complex area.

Impact Evaluations

Any project proposed for a complex area should receive a comprehensive evaluation of its fiscal, transportation, environmental, housing, social, and economic impacts; with regard to transportation facilities, air pollution, storm runoff, and other off-site impacts, both downstream and upstream effects must be considered.

Integrated Solutions

Integrated solutions should be sought for all major problems. For example, transportation improvements should be coordinated with private redevelopment.

Performance Standards

Activities which generate negative impacts on their neighbors should be controlled. Required buffering should be the responsibility of the higher intensity activities.

In the analysis which follows, those issues which are common to all or most of the complex areas are described and general recommendations proposed to the extent they can be supported by available information.

Complex Areas in Area II

The complex areas, together with the Fairfax Center Area and Tysons Corner Area, represent a variety of types of conflict. Three are planned rapid transit sites; one is an existing commercial-industrial concentration where four major roadways converge and which still has substantial underdeveloped land; one is a proposed planned development center at the intersection of two major roadways; one is a strip of land immediately east of the Fairfax city line where future development cannot be fully planned by the County because of its proximity to another jurisdiction; one is an extension of the Route 50/I-495 area in the Area I plan.

The division of the County into four planning areas creates an occasional line of demarcation between areas which subdivides into two or more complex areas a portion of the County which should be considered as a single study area for planning purposes. The Route 50/I-495 Area in Area I and the Dunn Loring Metro and Gallows Road-Route 50 Complex Areas in Area II constitute such an area which is discussed briefly in a subsection at the end of this section.

Rapid Transit Stations

Seven of the Metro stations in the adopted regional system are located in (or have primary impact area in) Fairfax County. Three of these are in Area II—West Falls Church Station, Dunn Loring Station, and Vienna Station.

The connection of areas of Fairfax County to the metropolitan core (and to other centers along Metro lines) is an important means of solving part of the transportation problem. The use of Metro by County residents will reduce reliance upon the auto, and is an important factor in reducing vehicle miles travelled and, therefore, the air quality problem.

The major use of Metro will be the home-to-work trip for County residents. Some reverse commuting may occur to employment centers near County stations, such as at Dunn Loring, but this use is not expected to be very large. Metro should be convenient to use on weekends for cultural-recreational purposes since many of the cultural centers of the region are convenient to Metro.

Within the context of the Area II Plan, the Metro station areas have been classified as complex areas because of problems of access to the stations and especially because of the potential pressures for intensive land development near the stations. These two factors—access and adjacent development—can potentially conflict with one another and with existing development in the areas surrounding the stations. In studying and evaluating the area around each station, the County retained a consultant to define and analyze three land use alternatives at each station site. The results of that analysis are contained in a

report entitled *Vienna Corridor Metro Impact Study: Recommendation of Station Area Plans*.

As the construction of Metro in the Vienna corridor proceeds, the recommendations of the Area II Plan should be re-evaluated periodically to ensure the County's objectives for the Metro area are maximized.

Commercial-Industrial Area Conflicts

Two of the areas—Tysons Corner and the Fairfax Center Area—may be classified as commercial-industrial area conflicts. Tysons Corner is a classic example of an area planned as a high-intensity node where development activity has outstripped expectations and supporting public facilities—especially transportation improvements—have failed to keep pace. Traffic congestion would increase if the substantial amount of presently undeveloped land were permitted to be developed without accompanying transportation improvements.

The Fairfax Center Area, comprising approximately 5300 acres, is located west of the intersection of Route 50 and I-66. The Fairfax Center Area is located in both Areas II and III. The plan for this area provides for a mix of commercial, industrial and residential uses. Specific recommendations for the entire Fairfax Center Area are contained in the Area III section of the Plan. Both of the above areas are located at interstate highway interchanges and where two or more major roadways intersect. Consequently, there is a problem in providing the needed intersection/interchange area. This capacity must also allow for the interchanging movements between two or more roads. These problems are further compounded by the need to allow local traffic to circulate within and through the area.

To plan for these conflicting movements, a detailed circulation plan for each area should be prepared or refined. This circulation plan needs to address several different levels of circulation. An adequate scheme for providing through-movements or a bypass must be a top priority item. Without it, the complex area will literally be choked and no circulation will occur. The local traffic also needs to be provided with adequate facilities for movement within the area. This may be in the form of roads that bypass the major intersection yet give access to the land uses. A third level of circulation which should be addressed is pedestrian and transit system. Finally, the environmental impact of exhaust emissions must be continually monitored.

The suitability of these areas for a combination of commercial, industrial, and high-density residential uses is dependent upon solution being found to the environmental and transportation problems which such development generates. Economic demand must be balanced with environmental impact and overall costs and benefits. A major problem lies in determining the economic demand for alternative land use mixes, their configuration on the available land and the timing of development in relation to the provision of public facilities, especially those which are transportation related. The pattern of development that has occurred in Tysons Corner (excluding the regional shopping center and industrial research parks) and in other commercial centers in the County has too often been the response of single firms on independent parcels, operating independently and wholly oriented toward automobile access. This highly fragmented private sector decision process has resulted in a competition for visual impact on the main thoroughfare and a site planning that minimizes the average distance from a parked car to the office or store. Although the result is rational from the marginal viewpoint of the individual property owner, it is far from efficient when taken collectively. The advantage of a regional shopping center or an industrial research

park lies not in its site but in its overcoming the following list of conflict symptoms:

- Little or no provision for pedestrians, even between adjacent properties. Any amount of walking is discouraged because there is no assurance that a viable pedestrian way exists.
- Poor organization of stores by type. Competition between like products (possible in regional or larger community shopping centers) leads to market reinforcement because customers can compare quality and price on such items at several closely located stores (comparison shopping) or because a variety of items can be purchased on a single trip (one-stop shopping).
- Excessive and inefficient parking space. Since each property must provide adequate parking for its own customers, most of this capacity is underutilized most of the time. Pooling of parking capacity would, of course, require some clustering of development.
- Lack of amenities. Improvements such as covered walkways, planting, rest rooms, benches, etc., that would benefit the area as a whole.
- Incompatibility with adjacent and surrounding residential uses.
- Inadequate transportation facilities occur as the area develops because the return to the individual property owner does not justify expenditure for these facilities if none of the others follow suit.

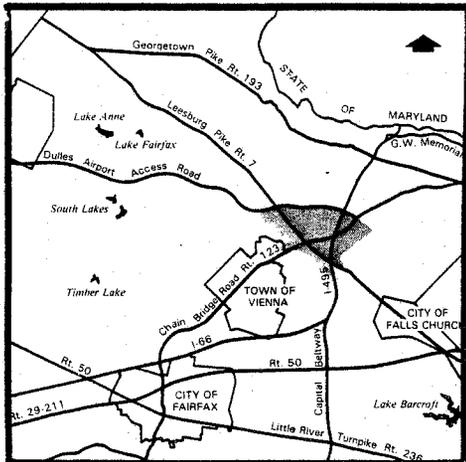
Other Complex Areas

The Pickett Road-Fairfax Circle Complex Area has a unique set of complexities related to its proximity to the Fairfax city boundary line. The County cannot fully plan this area because the impact of development in the city seems likely to affect significantly the character of adjacent County neighborhoods.

The remaining complex area has as its major element of conflict its proximity to another complex area. The Gallows Road-Route 50 Complex Area is adjacent to the Chiles tract, designated as part of the Route 50/I-495 Area and discussed in the Area I section of the Plan. Development of the Gallows Road-Route 50 Area is dependent in large measure on the land use decisions made for the Chiles tract. Other factors which cannot be presently assessed are the impact of transportation improvements to serve any Chiles tract development and the possibility of redevelopment of the Williamstown subdivision.

The complex areas which have been designated in Area II are discussed individually below.

TYSONS CORNER AREA



TYSONS CORNER AREA

The 1700-acre Tysons Corner Area is located in northeastern Fairfax County, centered around the intersections of Interstate 495 (Capital Beltway) with Route 7 (Leesburg Pike) and I23 (Dolley Madison Boulevard/Chain Bridge Road). (Map 1) During the past fifteen years, a substantial amount of commercial, industrial and multifamily residential development has been concentrated in the Tysons Corner Area in accordance with the Comprehensive Plan. Because of the area's outstanding regional access from freeways and arterial roads, the existing nucleus of high-intensity development and the amount of remaining vacant land, Tysons Corner has become one of the most strategic locations in the Washington metropolitan area for the expansion of industry, commerce and supporting high-density housing.

The area is generally bounded by the Dulles Airport Access Road (DAAR) and the right-of-way of its extension to Route I-66, Magarity Road, the Capital Beltway, Old Court House Road and the Old Courthouse Spring Branch of Difficult Run. (See Map 2 for precise boundaries.) Much of the area is vacant, while a substantial amount of acres are in single-family use, mostly in locations which suggest the land is being held speculatively for nonresidential redevelopment. This large amount of vacant and marginally utilized land at Tysons Corner presents a significant opportunity for the realization of a well-planned and designed urban center of positive economic and social value to the County and its residents.

Yet the dynamic attraction and potential of the area alone do not assure that Tysons will fulfill its promise. In the past decade, the development pace in the Tysons area has outstripped even the most optimistic predictions of planners and developers. New and improved transportation facilities have failed to keep up with need, resulting in massive traffic congestion especially at peak travel hours. At the same time, the environmental limitations of the area have been highlighted by a sharpened awareness of ecological concerns now buttressed by a substantial and increasing body of federal and state laws. The dispersion of interacting uses in Tysons—an industry here, a restaurant there—continues to force people into their autos to move even within the area and has failed to give Tysons Corner a coordinated focus.

The powerful economic demand for new high-intensity uses foreseen for the Tysons Corner Area is a positive force which must be reconciled continually with limited traffic capacities, environmental features need to assure that the total

area provides the focus, variety of uses, functional coordination and balance befitting the business center of northeast Fairfax County.

The major goal for the Tysons Corner Area supported by this study is the creation of a Planned Development Center which 1) is attractive, well-designed and functionally efficient, 2) includes a wide range of relatively high-intensity uses beneficial to the quality of life and economic well-being of the County and 3) has a minimum of substantial adverse impacts on the surrounding area.

Area Opportunities and Constraints

Major opportunities and constraints identified and explored are summarized as follows:

Opportunities

- The projected demand for office, commercial, and research and development land uses in the Tysons Corner Area, if realized, will provide a significant increase in employment and shopping opportunities in the County and will broaden the County's tax base with uses offering very favorable cost-revenue relationships.
- Innovative and imaginative development plans can preserve and capitalize on environmental features in a manner which might prove too costly for less intensive development.
- The Tysons Corner Area offers an attractive opportunity for employment locations and supporting housing facilities to be developed in close proximity to one another with the resulting potential for reducing job related auto usage, reduced commuting times, energy conservation, and the creation of an around-the-clock community in the area.
- The planned relatively intense development of Tysons Corner will produce the positive side effect of reducing the pressure for such high-intensity development in other less appropriate locations around the County.
- The Tysons Corner Area already has most of the necessary community facilities (with the significant exception of transportation facilities) already in place or programmed.

Constraints

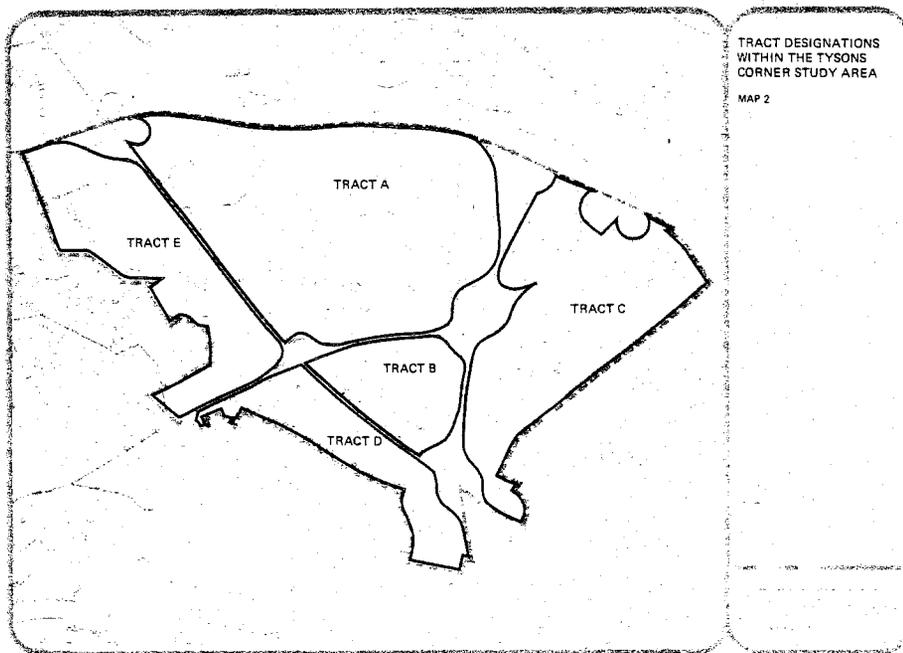
- Traffic congestion, already a problem, must be alleviated through extensive and potentially expensive improvements to the transportation network if Tysons Corner is to continue to develop to the realization of its full potential.
- Potential adverse downstream effects on the three watersheds with headwaters in the Tysons Corner Area must be minimized.
- Environmental assets such as high quality vegetation, natural landforms, and unique geologic features should be preserved.
- The existing land use pattern, current development activity and recent rezonings limit the practical consideration of a full range of land use options for many of the remaining parcels of vacant land.
- Protection against damaging intrusions of high-intensity uses into surrounding neighborhoods, either physically or visually, is important to maintaining the stability of these areas and to insure the harmonious development of the total community.

Background of the Tysons Corner Area Study and Task Force

In its adoption of the Area II portion of the Comprehensive Plan on August 25, 1975, the Board of Supervisors included the following statement for incorporation into the Plan:

"The Tysons Corner Complex Area is designated as a special study area requiring continual monitoring and restudy, especially with respect to issues of achieving plan objectives in the implementation and phasing of public facilities."

On September 8, 1975, the Board of Supervisors adopted a staff proposal for a special study including the provision for the creation of a broad-based task force with representation from large and small businesses in the area, landowners of major undeveloped tracts, residents of the area as well as knowledgeable and interested citizen leaders from the surrounding McLean and Vienna communities. At the same time, the Board requested that several blocks abutting the complex area be included in the study area.



Based on the adopted countywide and area policies, goals and objectives, an extensive analysis of existing conditions and the identification of development opportunities and constraints, the staff and task force considered various development options with particular emphasis on the available tools for implementation of the ultimate recommendations.

A somewhat unique feature of the study was planning and execution of an urban design charrette for Tysons Corner, jointly conceived by the task force and staff and sponsored by the task force and the Northern Virginia Chapter of the American Institute of Architects. In June 1976, four architects, two landscape architects representing the Potomac Chapter of the American Society of Landscape Architects, an economist and a transportation expert provided their time as a community service for an intensive four-day study of the Tysons Corner Area. Although the eight professionals were Washington area residents, all were independent of the staff and the task force. They brought to their analysis and recommendations a fresh perspective, limited preconceived biases and many new approaches to longstanding problems. Many of the concepts developed in the charrette were used in the planning process and are reflected in the recommendations.

Adoption of the Tysons Corner Area Study

In taking their action on the *Tysons Corner Area Study* on June 19 and 26, 1978, the Board of Supervisors made modifications to the Study and adopted by reference the key concepts, land use, transportation, environmental, economic and public facility recommendations of the study as an amendment to the Comprehensive Plan. The *Tysons Corner Area Study* plan amendment replaces the Tysons Corner Complex Area portion of the Area II Plan; all of Sector M1 (Tysons Corner Community Planning Sector); and three small segments of Sector V3 (Spring Lake Community Planning Sector)—the block bounded by Old Court House Road, Kidwell Drive and Gallows Road, eleven parcels along the southwest side of Old Court House Road and the southeast side of Route 123 immediately to the southwest of the Tysons Corner Area near or along Route 123, and the block bounded by Route 123, the Vienna town line and Old Court House Road.

The *Tysons Corner Area Study* document (published in November, 1977) includes an examination of land use, environmental, transportation, economic and public facility characteristics of the designated 1700-acre study area as well as review of the tools available for implementation. The opportunities and constraints were considered by the staff and the Tysons Corner Area task force in the formulation of the recommendations. The voluminous background document, while incorporated in the plan by reference, is not printed directly in the text of the Comprehensive Plan. The material is available for reference by obtaining a copy of the *Tysons Corner Area Study* as modified by the Board of Supervisors.

RECOMMENDATIONS

Based upon review of the goals and objectives for the planning of a development center, taking into account the previous plans, existing conditions, opportunities and the constraints affecting the Tysons Corner Area, after extensive consultation with the Board-appointed task force of area citizens, businessmen and developers, and after the assistance of the intensive professional assessment of the area in the urban design charrette, the following recommendations have been developed to set the framework and to guide the appropriate development of the Tysons Corner Area.

The plan recommendations which follow are organized to begin with the general concepts

which guide and apply to all the plan's specific recommendations, then to address more specific functional planning concerns in the areas of environment, transportation, economic development, and public facilities, to spell out specific land use recommendations for the Study Area on a tract-by-tract basis, and finally to present an impact evaluation of proposed plan recommendations.

Key Concepts for Guiding Development at Tysons Corner

The Tysons Corner Area presents significant opportunities for the realization of a planned development center which might be described as the "downtown" of Fairfax County. The outstanding regional access to the Tysons Corner Area, the prestige enjoyed by its existing nucleus of high-intensity development, its location within the high quality living and working environment of Fairfax County, and the amount of remaining vacant land have combined to provide the County and the area with this unique opportunity to create a development center of national significance.

The optimally desirable development at Tysons Corner is attainable only with innovative and imaginative development approaches which go far beyond typical and traditional land use, transportation, environmental protection and public facility concepts and solutions. Reaching and implementing these solutions will be facilitated if planning and development decisions by the public and private sectors are guided by these key plan concepts.

- Business, Landowner, Citizen and Government Cooperation
- Plan Flexibility
- Mixed Use or Multiuse Development
- Reduced Auto Dependence in the Land Use Pattern
- Improved Public Transportation
- Pedestrian Ways and Sidewalks
- Improved Urban Design and Environmental Sensitivity

Business, Landowner, Citizen and Government Cooperation

Neither government nor private business alone can make Tysons realize its potential. Continuing public and private cooperation is vital. A cooperative effort among the area businessmen and landowners with the citizens and governmental agencies is a keystone to the successful attainment of the goals for Tysons Corner since the creation of many of the urban design and other features important to the overall success of the area require joint actions. As a step to increasing focus and direction of communication among all decision-making groups, it is recommended that a Tysons Corner chamber of commerce or Tysons Corner business association be formed. Such an organization should include in its membership representatives from existing area businesses, landowners and developers. Such a group could direct its attention to the creation of urban design standards and projects for Tysons which will insure that new development is harmonious, functional, and supportive to the total area. It could further provide a forum for discussion of common opportunities and problems and provide a point of contact with the wide variety of public bodies and agencies whose decisions and actions affect Tysons Corner.

The plan recommendations which follow are organized to begin with the general concepts which guide and apply to all the plan's specific recommendations, then to address more specific functional planning concerns in the areas of environment, transportation, economic development, and public facilities, to spell out specific land use recommendations for the Study Area on a tract-by-tract basis, and finally to present an impact evaluation of proposed plan recommendations.

Key Concepts for Guiding Development at Tysons Corner

There are a number of private actions which could provide immediate relief to traffic congestion problems. Staggered work hours, or flexitime, spreads work trips over a longer time period reducing peak-hour traffic congestion. The 3-M Company instituted a van pooling program in 1963 where the company purchased 12-passenger vans and made them available on a nonprofit rental basis to employee groups who were interested in pooling work trips. The success of the 3-M program has encouraged other companies to adopt similar arrangements. The van pooling concept could be used by individual companies and groups of companies in the Tysons Corner Area.

In addition, a citizens association should be established with representatives from both the McLean and Vienna communities providing a forum where goals and objectives for the Tysons Corner Area can be continually evaluated.

The County could assist by formation of an administrative Tysons Corner Development Committee which would keep track of the status of all development activity, weigh its implications on transportation and public facility needs and be a central informational source to the business and citizens committees.

Plan Flexibility

In its planned and developing role as a major regional center, Tysons Corner has attracted and will continue to attract a variety of mix of uses and development concepts which cannot possibly be fully foreseen. The plan should permit some land use flexibility in order to insure that generally acceptable uses that would be beneficial to the area's development and functioning as well as to the County's tax base and employment needs will not be lost because of procedural delays.

"In accordance with the policies adopted by the Board of Supervisors that growth should be held at a level consistent with available, accessible and adequate public facilities and that land uses should be consistent with the need to preserve natural resources and meet water and ambient air quality standards, the further development of Tysons Corner must be made contingent upon the provision of adequate facilities, especially transportation and must not be permitted to adversely impact the water and air quality in the area. Wherever new ordinances or policies are necessary to implementation, these should be undertaken by the County."

There are some land use configurations which appear to have more functional efficiency than others, or to provide better compatibility or transitional uses, to be more consistent with the need to preserve natural resources, to meet water and ambient air quality standards and to best use the capacity of the existing road network. These land use patterns are set forth in the tract-by-tract land use recommendations in a subsequent section of this chapter.

While plan flexibility is necessary and appropriate, several limitations should be particularly noted:

1. When a change from the specific plan recommendations is proposed, it is the responsibility of the developer or other applicants to demonstrate how the proposal satisfies or better fulfills the policies, goals and objectives of the adopted Plan for Tysons Corner. Such a proposal, for instance, must include public benefits which had not been fully provided within the adopted Plan because of tradeoffs and might include improvement of traffic flow, inclusion of housing for low and moderate income families, unusual features of environmental protection, developer contributions for the alleviation of traffic congestion, the contribution of desired open space, and

imaginative and high quality urban design and site development features.

2. It is important that the concept of plan flexibility be balanced by the continued inclusion of a reasonable amount of housing, including housing for low- and moderate-income families and individuals, within the land use mix at Tysons. It is desirable to encourage continued development of residential uses in the area to complement the economic development activity taking place and that proposed, and to offer greater opportunities for people to both live and work in the same vicinity.

The provision of low- and moderate-income residential units in new developments is an important County concern. Provision of low- and moderate-income housing units is one of the nine criteria currently used by the Board of Supervisors in determining whether rezoning applications should be granted above the low end of the density range. Given the employment opportunities and shopping facilities, existing and planned, at Tysons Corner, the area is an appropriate location for housing opportunities for low- and moderate-income families in the labor force age group as well as the elderly.

The Tysons Corner Area is already experiencing conflicts between market forces which could encourage continued multifamily housing development and those forces generating nonresidential development which tend to put land prices out of reach for even multifamily residential use.

3. Height of buildings in the quadrangle of Tysons Corner Area should basically be limited to 12 stories or 590 feet above sea level, whichever is the lesser.

However, since some existing development exceeds this limit and some vacant land is zoned for districts which permit a greater height, it may not be realistic to keep all building on land rezoned in the future to this limit. Therefore, the Board of Supervisors, using the 12 stories or 590 feet as a guideline should make case-by-case height decisions in the interest of urban design considerations. Exceptions might be appropriate when several existing buildings adjacent to the site were higher than the limit or where the developer could prove in his elevation drawings that the building would not be significantly visible from subdivisions just outside the Tysons Corner Area by reason of topography and tree cover. The major objective of the height limit is to prevent visual intrusion of high-intensity uses into low-density residential areas. However, too rigid a standard can mute the quality of the approaches and diminish internal aesthetics.

4. The uses along the northeast side of Gosnell and Old Court House Roads should be of such modest intensity as to provide a good transition in use and intensity between the high-intensity uses along Route 7 and the residential neighborhoods to the southwest. A major problem of the Tysons Corner area is the need to contain higher intensity land uses within an acceptable geographic boundary. The DAAR, the Beltway, the Pimmit Hills subdivision and the Old Courthouse Spring Branch Environmental Quality Corridor provide strong barriers to encroachment into surrounding low-density residential neighborhoods. This advantage is not shared along the southwest perimeter of the Tysons Corner Area between Gosnell Road and the Beltway.

Mixed Use or Multiuse Development

The term mixed use development refers to a relatively large-scale real estate development characterized by:

- 1. three or more significant revenue pro-

ducing uses—such as retail, office, residential, motel/hotel and recreation—which are mutually supporting;

2. significant functional and physical integration of project components including uninterrupted pedestrian connections; and

3. development in conformance with a coherent plan.

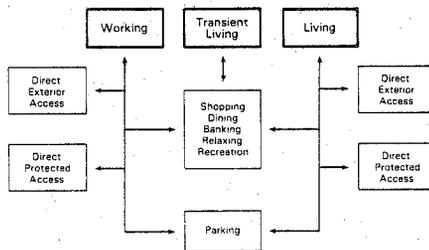
A multiuse project has more than one use but lacks some or all of the three functions characteristic of mixed use developments.

The first and third criteria for mixed use development are more or less self-explanatory. The criterion of significant physical and functional integration perhaps needs further expansion. All project components should be interconnected by pedestrian ways although physically this integration can take many forms:

- a vertical mixing of project components into a single megastructure, often occupying only one city block;
- careful positioning of key project components around centrally-located focal points (e.g., a shopping gallery or hotel containing a large central court);
- interconnection of project components through an elaborate pedestrian circulation network (e.g., subterranean concourses, walkways and plazas at grade, and aerial bridges between buildings, or "skyways"); and
- extensive use of escalators, elevators, moving sidewalks, and other mechanical means of facilitating horizontal and vertical movement by pedestrians."

Figure 10 is a schematic diagram of the mixed use Westmount Square project in Montreal depicting its physical and functional integration.**

FIGURE 10



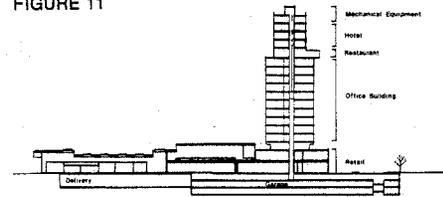
There are several tracts in the Tysons Corner Area where mixed use or multi-use development could be appropriate. These include all or a portion of the Lerner property in the quadrangle, a portion of the vacant Westpark land holdings, the Hollinswood subdivision upon redevelopment and a portion of the Leasco tract in the northeast quadrant of the Route 123-Route 7 intersection. Under certain circumstances and at an intensity of use the same or less than other typical commercial office developments, the Old Courthouse site could be appropriately developed as a multi-use project. (See Map 25.)

A mixed use project on any of these properties would permit a combination of uses, improved internal circulation, a 24-hour environment, pedestrian orientation, market synergy, outstanding urban design features, improved mass transit possibilities and economies of scale in construction.

Figure 11 shows an illustrative example of a mixed use development combining hotel office and retail uses. This illustration was taken from a recent study of mixed use development published by the Urban Land Institute which explored the emerging role of this urban development form.

**Mixed-Use Developments: New Ways of Land Use, Technical Bulletin 71, 1976
Urban Land Institute.

FIGURE 11



12. Section showing multi-story office building with integrated mechanical equipment, hotel, restaurant, office building, and retail uses. The diagram illustrates the vertical integration of different functions within a single structure.

Mixed use development in the case of the Tysons quadrangle could not only produce the advantages outlined above but also provide linkages and pedestrian interconnections among the five use areas that ring the periphery of the quadrangle.

Within its current and new zoning ordinances, Fairfax County already has a category which would permit development of such a mixed use project—namely the planned development commercial (PDC) zoning district.

Given the large size of the tracts being considered and the limitations presently foreseeable in the transportation system, it is recommended that intensities for mixed use be limited to floor area ratios of 1.0 to 1.5, with the higher end of this intensity range being permissible only where the project can justify the additional intensity. On small parcels and in special circumstances where sufficient public benefits in terms of transportation improvements, a high-quality design and use mix, open space, and environmental features were provided, higher intensities could be considered.

Reduced Auto Dependence in the Land Use Pattern

Both the growing need for energy conservation and the practical limits of the vehicular transportation network within the Tysons Corner are suggest that serious consideration be given to methods of reducing auto dependence.

The location and arrangement of land uses to reduce the distance between interacting uses has been used as an important criteria in the development of specific land use recommendations set forth in a later section of this chapter. While the ideal in some urban planning situations is an auto free environment, the realistic goal for a suburban center such as Tysons is recognition of the auto but the provision of reduced need for and alternatives to its use within the center overall and especially within its sub-areas.

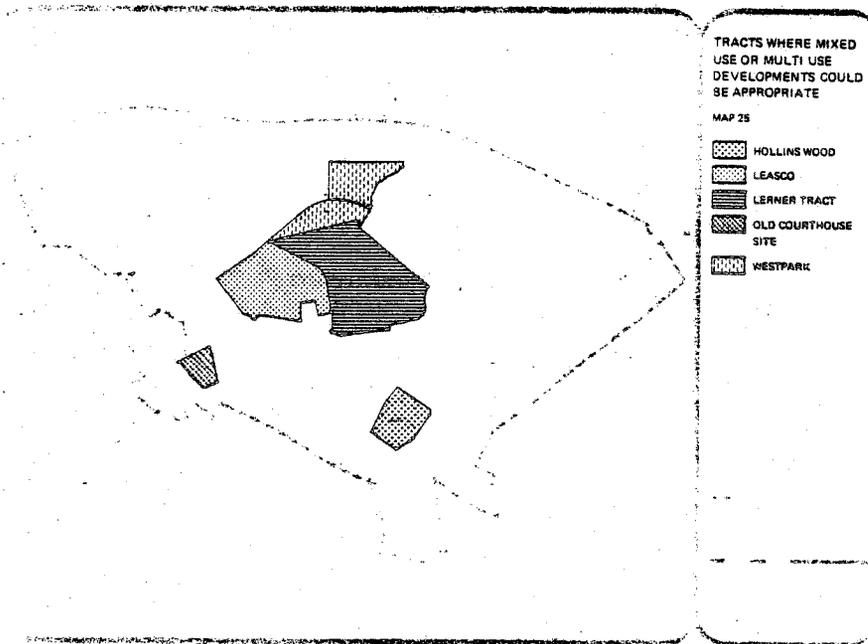
Interacting and complementary uses should be grouped to reduce the necessity of intra-area auto trips having to use Routes 123 and 7 and to encourage pedestrian movement in lieu of auto trips. In finite terms, land use arrangements should allow restaurants and business service establishments near office buildings, convenience shopping near residential uses and general retail shopping close the employment centers.

Improved Public Transportation

Another means of reducing auto dependency is through improved public transit. Although rail rapid transit is a future possibility for Tysons Corner, several actions can be taken or investigated which might make bus public transportation more viable in the Tysons Corner Area.

1. At such time as the contract for the extension of the DAAR is awarded, negotiations to permit commuter bus use of the new road link should be instituted by the Washington Metropolitan Area Transit Authority.

2. Consideration should be given to providing bus service along Westpark Drive and Magarity Road by a minor rerouting of existing lines.



Tysons Corner regional shopping center which was adopted by the Board of Supervisors as part of the 1973 Tysons Corner circulation plan should be built. Any vehicular overpass of Route 123 should include a sidewalk.

Improved Urban Design and Environmental Sensitivity

In the book *Language of Cities*, author Charles Abrams defines urban design as "The discipline concerned with and the process of giving form to ensembles of structure, to whole neighborhoods, or to the city at large. Urban designers blend the skills of the architect and city planner in an effort to make an urban area comprehensibly, functionally and aesthetically pleasing through articulation of its parts." Many of the land use, transportation, environmental recommendations of this plan for Tysons are based at least in part on urban design considerations.

Any new development proposals for Tysons Corner should reflect and contribute to the realization of high quality urban design. Because they are not discussed elsewhere, mention should be made of the need for an area focal point and visual integration.

Tysons Corner is a place where employment opportunities, shopping, housing and recreational facilities are combined into a total urban living environment. Yet as one approaches and passes through the area there is little to indicate its boundaries or give definition to its interacting forces. Devices which may be used to attain visual integration include gateway signs along major arterial approaches, pedestrian ways, lighting, street furniture, and landscaping to provide variety and relief from the dominance of buildings, streets and parking area. While Tysons currently has some attractive individual buildings the overall effect lacks a strong positive urban design aspect.

The Tysons Corner Area also lacks a satisfactory focal point—an identifiable place near the geographic center where people can gather, where pedestrian ways converge, where there are a variety of uses and where there is day, evening and weekend activity. At present the mall crossing at Hecht's in the regional shopping center most nearly fulfills the focal function but this location is too far from the geographic center of the Tysons Corner Area to continue except as a sub-focal point at the time of full development. A logical candidate for the focal point is in the Lerner tract in the quadrangle.

To create a positive total urban design for the area will require greatly increased cooperation among the various developers and owners. Such cooperation will directly benefit the whole community, workers, shoppers, residents and developer with a more attractive and functional environment.

Transportation Recommendations

Fundamentally, a circulation plan for an area such as the Tysons Corner Area should address three basic types of travel, to which the functional classification system described previously readily lends itself. These travel needs are:

- o provision for through-traffic;
- o provision for internal circulation; and
- o provision for access to developed property.

The rationale for the recognition of these discrete travel needs is discussed below.

A major component of traffic volumes in most of the business and commercial districts in Fairfax County and other suburban areas is through-traffic. This obviously results from the historic growth of these districts at major intersections where regional accessibility is provided. A limited amount of such development can usually be accommodated on the arterials without a significant change in their operation. However,

3. As a convenience to bus riders and to encourage further bus use, appropriate street furniture including an attractive well-lit route and schedule board be installed along the outside plaza next to the Hecht Company at Tysons Corner regional shopping center.

4. See-through bus shelters with route and schedule information should be installed at all key points throughout the Tysons Corner Area.

5. The County should immediately survey the Tysons Corner Area to determine the location of all sidewalk deficiencies along arterial and collector streets which constrain the use of busses by those living or working approximately one-half mile from the bus stops. Correction of these deficiencies should be planned and programmed in the next Capital Improvement Program.

6. The possibility for intra-area bus service should be explored especially as additional growth and development takes place in the Tysons Corner Area.

7. In conjunction with the implementation of improved public transit service and routing, commuter parking lots in appropriate and convenient locations should be designated in the near future.

8. The van pooling program discussed in a previous section could augment public bus service between locations where demand is insufficient to justify bus routes.

9. Improved airport bus and limousine services should be encouraged to serve the area. Such services may evolve naturally as more motels and national headquarters firms locate in the area.

Pedestrian Ways and Sidewalks

A substantial factor adding to the traffic congestion at Tysons Corner is the movement of cars from one location to another within the Tysons Corner Area. Given the distances in the area, the intra-area vehicular movement cannot be totally eliminated but could be reduced by providing good pedestrian facilities.

The tendency of people to walk between two locations is dependent on necessity, safety, weather or climate, time availability, ease of walking and the interesting character of the route. The practice of people walking 750 feet to their cars, driving to another lot, and parking 750 feet from

their destination to avoid a 1000-foot walk is not unusual. Yet the distance between the front entrance of Bloomingdales and the southeast wall of Woodward and Lothrop in the existing Tysons Corner regional shopping center is over 2000 feet. This commonly-walked distance is only slightly less than the distance between Route 123 and Westpark Drive along the proposed International Drive right-of-way. People will walk reasonable distances if the route is attractive and safe.

A mixed use development at the core of the quadrangle or in several other locations within the Tysons Corner Area could provide the nucleus of a good pedestrian system. Pedestrian features found in most mixed use developments are some protection from the weather, few, if any, streets to cross and visual attractions which tend to reduce the perception of distance. However, a good pedestrian system can be constructed without the aid of a mixed use development.

As a first step, sidewalks should be required along all public road frontages in all site plans in the Tysons Corner Area unless the developer provides an internal pedestrian circulation system which serves the same need or unless the developer can prove the link would have no useful purpose. Trails shown on the countywide trails plan must be built by developers.

1. Owners of existing developments should be encouraged to build links in the sidewalk system where they are lacking, or interconnect existing developments with pedestrian ways. For instance, there is presently no walkway between Tysons Plaza Shopping Center (Dart Drug and Zayre) and the former Giant department store building.

2. New major developments should be linked by pedestrian paths which may be more direct than street connections to nearby uses.

3. All sidewalks and pedestrian ways should be well lighted. Intra-site walkways should be landscaped, especially at crossing points, and have benches and other street furniture. Marquees along building frontages could serve as a protection from rain. Whenever feasible, boutique shops, enclosed exhibits or sculpture could be used to reduce the perception of distance and give the pedestrian way a sense of urban environment.

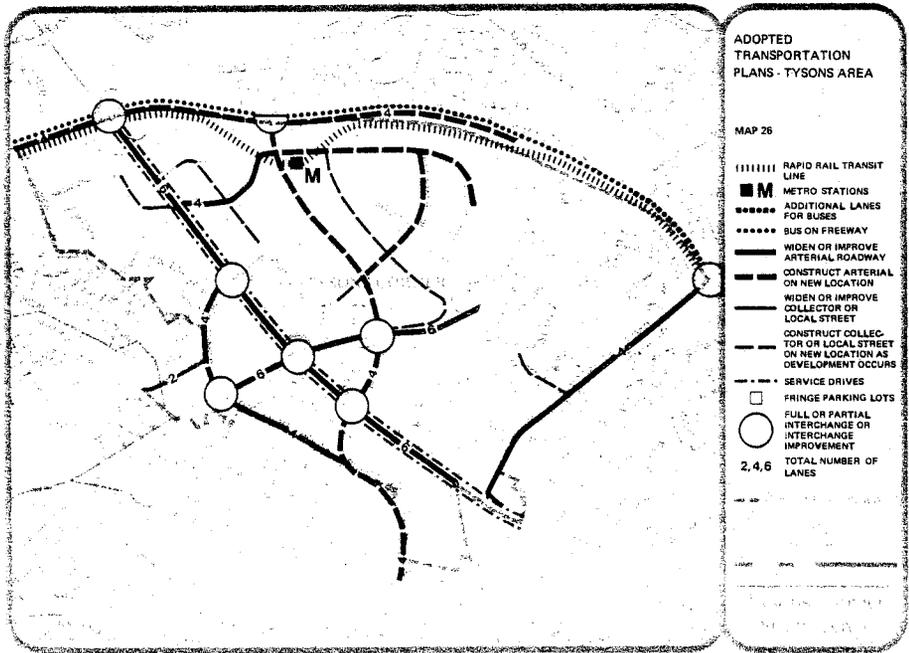
4. The Beltway pedestrian overpass linking the apartment area east of the Beltway and the

the continued spread of these districts, accompanied by a continuation in their reliance on the arterials for access, invariably causes increased congestion. As greater volumes of local traffic are generated, turning movements to and from the arterials increase, along with the associated delays, and the level of service is invariably reduced. An incidental result of this deterioration of traffic service is a corresponding reduction in the regional accessibility of the area, which of course is one of the factors which contributes to its initial development. One of the major attractions of the Tysons Corner Area for development is the excellent accessibility to the remainder of the region afforded by the Beltway, Route 7, Route 123, and the planned Dulles road/I-66 connection. However, these facilities are intended to provide for travel mobility, not property access. A principal objective in developing a circulation plan for the area is therefore the promotion of the ability of these roads to carry through-traffic.

Whereas the existence of and need to provide for through-traffic in the Tysons Corner area may be easily recognized, the need to provide for internal circulation may not be as obvious. However, intensively-developed areas generate a substantial number of internal trips, particularly if a mix of land uses is present. For example, office workers may travel to shop at lunch time, and shoppers may desire to visit stores located in different centers. Given the type and magnitude of existing and anticipated development at the triangle and quadrangle, a substantial amount of internal trips may be expected. In general, the concentration of a mix of land uses is highly desirable from a transportation perspective, since opportunities are provided to accommodate many diverse travel needs without reliance on the arterial street network. In some areas such as Rosslyn and Crystal City where densities are sufficiently high, most if not all of this internal travel can reasonably be made by walking. However, the large distances present in the quadrangle and triangle and the obvious dominance of automobile access to the area in general and to individual sites in particular, will effectively limit internal travel by walking. Therefore, it is essential to develop a street network which provides for this internal circulation by automobile. Appropriate facilities to provide for this internal circulation are collector and minor arterial streets. As the area continues to develop, the provision of some internal circulation by vehicular modes of travel other than the private automobile should be vigorously explored in an effort to reduce anticipated congestion on the internal street network. In any case, improved pedestrian facilities should be implemented throughout the Tysons Corner Area.

A final need of a circulation plan for the Tysons Corner Area is the provision of access to specific developments. As noted elsewhere in this report, the access function of the street network is contradictory to the mobility function, and care must be exercised in locating points of access. Obviously, local streets are designed for this purpose, and collectors and minor arterials can also be used to some extent for property access. In the latter cases, more attention to site design such as the location and spacing of entrances becomes increasingly important.

The adopted transportation plan for the Tysons Corner Area has been reviewed with respect to its capability to serve the three travel needs identified above and its consistency with the principles of functional classification. As a result of this review, it is recommended that the plan be changed only slightly in order to enhance access to the area south of Route 7 and reduce and reorganize the access points onto this highway. This modification, shown on Map 26, provides for an internal collector road to serve the parcels in Tract E near the Dulles Airport Access Road which have frontage on Route 7, and provides for the



major access to these parcels at the Spring Hill Road/Route 7 intersection. By locating the access in this fashion, better spacing can be provided between the major access to this area and the Route 7/Dulles road interchange.

The following is a narrative summary of the road network transportation recommendations (public transit and pedestrian recommendations have been highlighted at the beginning of this section under the heading of Key Plan Concepts for Guiding Development at Tysons Corner).

To improve the flow of through-traffic:

- extend the Dulles Airport Access Road (DAAR) to meet I-66;
- construct parallel lanes to the DAAR between Routes 7 and I-495 with a partial interchange at Spring Hill Road to permit access to and egress from the quadrangle;
- widen Routes 7 and 123 to six travel lanes with turning lanes and provide service roads where appropriate to reduce or eliminate curb cuts onto the major roadways;
- construct grade-separated intersections at International Drive and Route 123 and at Westpark Drive and Route 123 with necessary ramps and cloverleaves to eliminate left turn movements from Route 123;
- realign and widen Gallows Road to four lanes to connect with International Drive at Route 7 and extend International Drive to Spring Hill Road's intersection with the Dulles Airport Access Road parallel lanes, reducing the amount of local traffic which must use Routes 7 and 123 to cross the Tysons Corner Area; and
- improve the Route 7/123 intersection to eliminate left turn movements from one road to the other.

To improve internal circulation and provide access to developed property:

- extend Gosnell Road from Old Court House Road to Route 7;
- upgrade and widen Old Court House Road and Magarity Road;
- provide new or improved interchanges at:
 - Route 123-Old Court House-Gosnell;
 - Route 7-Gallows realigned-International;
 - Route 7-Gallows realigned-International; and
 - Route 7-Gosnell-Westpark Drive;

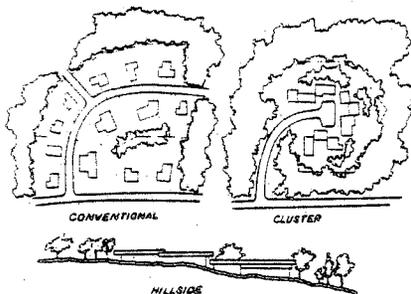
- extend Jones Branch Drive to the International Drive-Spring Hill Road intersection;
- complete unbuilt portions of Greensboro Drive from Spring Hill Road to International Drive;
- complete Westbranch Drive from Westpark Drive to International Drive and Park Run Drive from Jones Branch Drive to the southern end of Westpark Drive. If the developer of the land over which these road segments cross wishes to change their alignment, he should satisfactorily accommodate the same traffic demand movements that would have been met by these two streets;
- upgrade and widen Spring Hill Road between Route 7 and International Drive;
- build a new road into the Sherman-Dardin property (Sub-Tract E3) opposite Spring Hill Road; and
- reserve land on site plans for any development south of Greensboro and Pinnacle Drives on Sub-Tract A3 in order to provide access to Sub-Tract A4 in the event that the service drive between Route 7 and 123 which now serves as access to Sub-Tract A4 is closed off as a result of road or interchange improvements at Route 123 and International Drive or at Routes 7 and 123.

Environmental Recommendations

Overall

A unique opportunity exists within the Tysons Corner Area to enhance the overall environment. It can be accomplished, but will require the cooperation of the business interests, landowners, residents, and governmental agencies. Individual property owners and developers, particularly the larger ones, will have the greatest opportunities. It is hoped that as development occurs, innovative and sensitive site design and architecture will be accomplished. Also, the coordination of projects that are adjacent or in groups is important. For example, buildings can be clustered to preserve open space. This will benefit developers, property owners and the involved governmental agencies. Less utility costs will be required in the initial outlay of coordinated projects and less maintenance costs will accrue over the years. The following sketches show a comparison of conventional office development and cluster development.

FIGURE 12



The visual character and outline of Tysons Corner will be rapidly changing in the decade ahead. Suggested below are means and mechanisms for controlling and guiding this change:

- Building height restrictions (590 feet above sea level or 12 stories, whichever is lower) in the quadrangle as recommended in the Plan should be utilized in site design to sensitively reflect the existing landforms and vegetation patterns of Tysons Corner.
- The existing vegetation south of the Dulles Airport Access Road must be analyzed (in subsequent rezoning applications) not only with respect to retaining vegetative cover in steep slopes and floodplains but also relative to the role it plays in screening and view direction...and it should be preserved accordingly.
- The outward views and vistas offered by the Tysons Corner location should be utilized. However, they should be selected (when they involve vegetative clearing) on the basis of sensitivity to those residential areas which surround and must view Tysons Corner.
- Concerning especially the micro scale, some form of architectural review (e.g., architectural district, Architectural Review Board) should be required to review site plans for sensitivity to building relationship, i.e., to each other (building massing) and to the natural landscape.

Within the Tysons Corner Area boundaries, areas are designated on the Plan map for private recreation or open space. These include primarily floodplain, existing and planned detention/retention ponds, buffering of streams and minor drainage systems, and highly erodible soils with high quality woodlands on slopes in excess of 15

percent. These areas should be retained in open space unless development plans satisfactorily solve inherent stormwater management and erosion control problems resulting from such development.

Further environmentally sensitive areas have been identified in the Tysons Corner Area, based on:

- slopes in excess of 15 percent;
- an allocation of space for detention/retention ponds to serve future development;
- avoidance of high water table and highly erodible soils;
- retention of high quality woodland;
- avoidance of potential noise impact area;
- preservation of unique geologic features; and
- retention of visual and aesthetic features.

These areas are identified on Map 27.

The designation of this latter group of environmentally sensitive areas should not unduly restrict or limit development densities or solutions for the tract provided that general respect for the indigenous landscape is shown.

The indiscriminate leveling and stripping of sites will not be permitted in either category. Their delineations are intended to encourage innovative and sensitive treatment of an important land resource in Fairfax County.

Specific

Specific environmental recommendations fall into six general categories: preservation, storm drainage, air pollution, noise abatement, beautification, and conservation.

Preservation

Historic Area. There are three locations—Ash Grove, Freedom Hill and the probable first Fairfax County Courthouse site—which should be zealously protected. The development that surrounds them should be sensitive to their historic character and their value to future generations.

Natural Zone. The geologic formation along Route 123 between International Drive and Westpark Drive should be protected as a matter of interest as long as practicable. Records, photos, etc., should be made by interested agencies now as the formation is encompassed by an area needed for future road improvements and cannot be preserved indefinitely. As new bank cuts are made for road improvements, the facings should be sculptured to again display the geologic formation.

The developers should notify the USGS at Reston and the Smithsonian Institution of Washington at the time of excavations on the site and if any fossil finds are unearthed. Although unearthed finds belong to the property owners, the USGS and Smithsonian would like to examine all materials found in order to further their research.

Storm Drainage

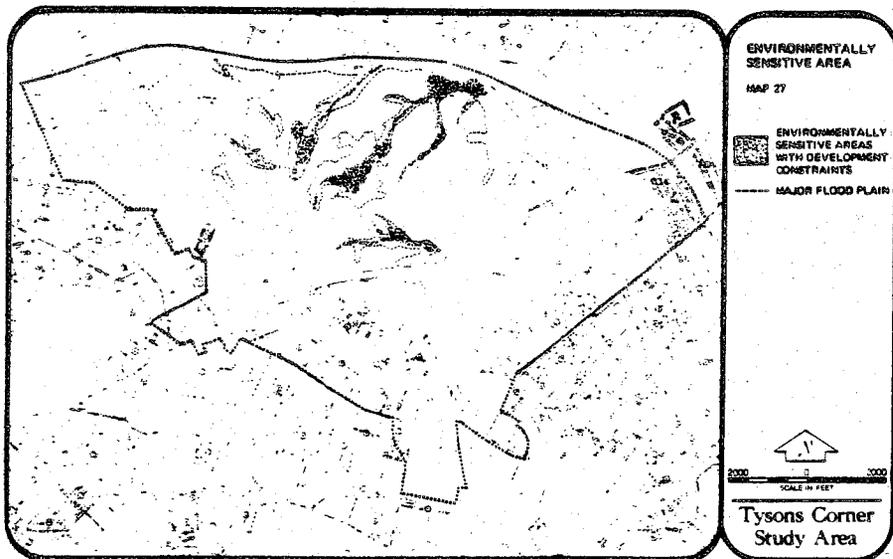
The natural drainage ways—Scott Run, Rocky Run, Pimmit Run, Old Courthouse Spring Branch and Wolf Trap Run—should be respected to the greatest extent possible. The existing tree cover, while not spectacular in size, is significant and would take years to replace in quality should unnecessary clearing be permitted or encouraged. The existing vegetation, supplemented by drainage structures where absolutely essential, will be infinitely more desirable and effective than pipes or concrete ditches. Design objectives should include the assurance of flood protection for downstream property, respect for the 100-year floodplain and the preservation of natural stream bank characteristics where they exist.

The use of porous parking lot surfaces, rooftop reservoirs, cisterns and innovative retention and siltation ponds should be explored and encouraged. Every effort possible should be made to retain stormwater for other use or encourage its return to the ground.

Air Pollution

Current air quality at Tysons Corner can be classified as generally poor. The air pollution monitoring station at the McLean Governmental Center regularly registers levels of photochemical oxidants exceeding standards and levels of carbon monoxide approaching standards. New development with attendant removal of vegetative cover inducing an increase in suspended particulates and increased local traffic inducing increased emissions of carbon monoxide could precipitate contributions to both short range and long range air quality problems. The management of this potential problem requires careful coordination between the County, Virginia Air Pollution Control Board, and prospective developers to:

- limit the amount of clearing of trees and other vegetation;
- assure that cleared land is stabilized as soon as possible to reduce the amount of wind-borne dust; and
- assure that heating facilities and other combustion sources of air pollution comply with applicable pollution control standards as promulgated by the Virginia Air Pollution Control Board.
- Prior to receiving County permits to commence construction, development which is expected to generate a significant amount of motor vehicle traffic should receive an indirect source permit from the Virginia Air Pollution Control Board. Any site design feature which could result in air quality standards being exceeded should be modified or eliminated.
- Improvements to roadways should be made concurrent with development to reduce the development's impact on queuing at overloaded intersections. This action could have a major effect in reducing localized carbon monoxide levels.
- Provisions for inducing public transit usage, such as bus shelters and priority bus lanes could help to reduce auto dependency and the area's incremental contribution to the Washington metropolitan region's photochemical oxidant problem.



Noise

Crossed by several major limited access and arterial highways, the Tysons Corner Area is subjected to a great deal of motor vehicle traffic noise. This can have a significant and deleterious impact on noise-sensitive land uses, particularly residential development.

- Adequate setbacks for residential developments should be maintained in order that occupants are not exposed to unacceptably high levels of noise.
- Where setbacks are not feasible or desirable, a combination of site design, noise attenuation via berms or other appropriate barriers and acoustical insulation of structures should be used.
- Trees and other vegetative cover should be retained and augmented in order to maintain the small margin of noise attenuation benefit which may accrue.

Beautification

In addition to the physical benefits, the beautification value of trees and landscaping is obvious. Since the Tysons Corner Area is to involve the interrelated development of residential, commercial and industrial uses, conscious efforts to beautify the area are essential. Different uses can be defined, screened, separated or connected as is most appropriate, by landscaping. The area as a totality can be separated visually and physically from adjacent established single-family communities and major arterial rights-of-way by concentrated belts of vegetation around the perimeter. The gateways to the area provide a particular opportunity to improve the image of the whole complex through landscaping. Roadside and median strip planting can soften and beautify the entire area. A joint effort by the Virginia Department of Highway and Transportation, the County, the coming developers and the present owners and occupants will be required to exploit the full potential of effective landscaping. It behooves the County to encourage the cooperation of all the parties involved to realize an effective result.

- Limit the amount of bulldozer activity, grading and clearing when installing the retention ponds. Set and mark, with the assistance of the County arborist, specific limits of clearing boundaries.
- Retain the existing natural vegetation on the steep slope areas (15 percent or greater) within the private open space area and adjacent swales.
- Preserve woodland areas in locations other than above where practical and particularly in locations where relief will be afforded in large parking areas.

Conservation

- Development is encouraged to cluster in order to preserve the maximum amount of open space and to reduce the costs of providing roadways and utilities.
- Connecting trails, walkways and bicycle paths between various uses should be used to reduce the need for internal automobile traffic.
- Buildings should be sited to take best advantage of the terrain and to provide an interesting and varied skyline. Due to the geologic irregularity of the area location, specific borings should be taken before construction of all foundations and tests made to determine the support volume in any areas of high water table soils.
- All new construction should use the most energy efficient innovations available.
- Remove or repack areas where loose overburden or fill exist.

Economic Development Recommendations

Based on the previous analyses which defines the potential for more economic development and housing activities in the Tysons Corner Area, the following recommendations are made:

- The County should continue to recognize and capitalize on the great opportunity which exists in the Tysons Corner Area to attract tax-surplus nonresidential uses. Such uses should include continued development of office/industrial activities such as are characterized by Westgate/Westpark and the office development occurring along Route 7.
- Additional regional shopping opportunities should be provided at Tysons Corner, especially if major stores in such a development complement rather than compete with the existing Tysons regional center.
- Additional housing should be encouraged in locations where it can be appropriately closely related to or mixed with nonresidential uses for the purpose of alleviating transportation problems, or when such uses are necessary to provide a buffer for development surrounding the Tysons Corner Area. If more housing is desired, consideration should be given to increasing the feasibility of housing uses in the Tysons Corner Area by adding options for higher urban density categories in the planned development residential (PDH) zones and to increasing incentives for housing in the planned development commercial (PDC) zones in the zoning ordinance.
- Consideration should be given to broadening the scope of retail uses allowable in the PDC zone to include regional scale, especially department store, retail uses to increase the attractiveness of this development option for use in the Tysons Corner Area.

Public Facilities Recommendations

The following recommendations are made regarding public facilities:

- A McLean post office substation should be provided in the quadrangle to serve the residents and businesses in the Tysons Corner Area and to help relieve the congestion caused by the intensive use of the postal facility on Elm Street in the McLean CBD.
- The use-capacity ratio of the Old Courthouse Spring Branch sanitary sewer trunk should be continually monitored to permit advance programming for replacement before capacity is exceeded.
- Develop the Scott Run Park near Westgate Elementary School.
- Acquire and develop a community park in the Tysons/Spring Hill Road area.
- Most recreational facilities should be included as part of any new townhouse or apartment developments in the area. Open space should be provided through environmental protection measures, dedications and proffers along Old Courthouse Spring Branch, Rocky Run, and Scott Run. In addition, consideration should be given to acquisition of a small community park in the Magarity Road area. A continuous park strip, including trail facilities and incorporating Freedom Hill Park, should be acquired between the Old Courthouse stream valley and Route 123 to provide a buffer between the high-intensity uses at Tysons Corner and the low-density residential uses to the west.

Land Use Recommendations

This section of the Study specifies guideline recommendations for land use activities. The recommendations are organized by the five major tracts within the area and test recommendations

are listed in some detail for a sub-tract where there is vacant land or land with foreseeable redevelopment potential. Existing development is summarized at the end of each tract section and is not discussed except as it relates to proposals for adjacent areas.

- Tract A Tysons Quadrangle
- Tract B Tysons Triangle
- Tract C Westgate-Magarity Block
- Tract D Gallows Road-Route 7
- Tract E Route 7-Old Courthouse Spring

Although closely linked in relation to transportation and economic considerations, each of the tracts vary widely with respect to land use and environmental opportunities and constraints.

In most cases where the plan recommendation discusses a possible alternative use, the plan map which accompanies the Plan text will indicate only the primary use. The graphic presentation should in no way restrict the alternative use if the conditions under which it would be permitted are met. Offices are a permitted use in the research and development industry zone and in all commercial retail zones. Therefore, an office use should be considered as being in conformance with the plan in all locations where research and development industry or retail commercial are specified, provided the space and bulk or floor area ratio (FAR) requirements of the zone which would implement the specified use are met.

Tract A—Tysons Quadrangle (Map 28)

The 685-acre Tysons quadrangle has a considerable amount of vacant land plus some minor land area with redevelopment potential is the keystone of a planned development center at Tysons. It is in this tract that the need for plan flexibility is greatest in order for the County to best realize unique development opportunities.

Sub-Tract A1: Mixed Use Development Incorporating Retail, Office, Motel and Apartment Uses

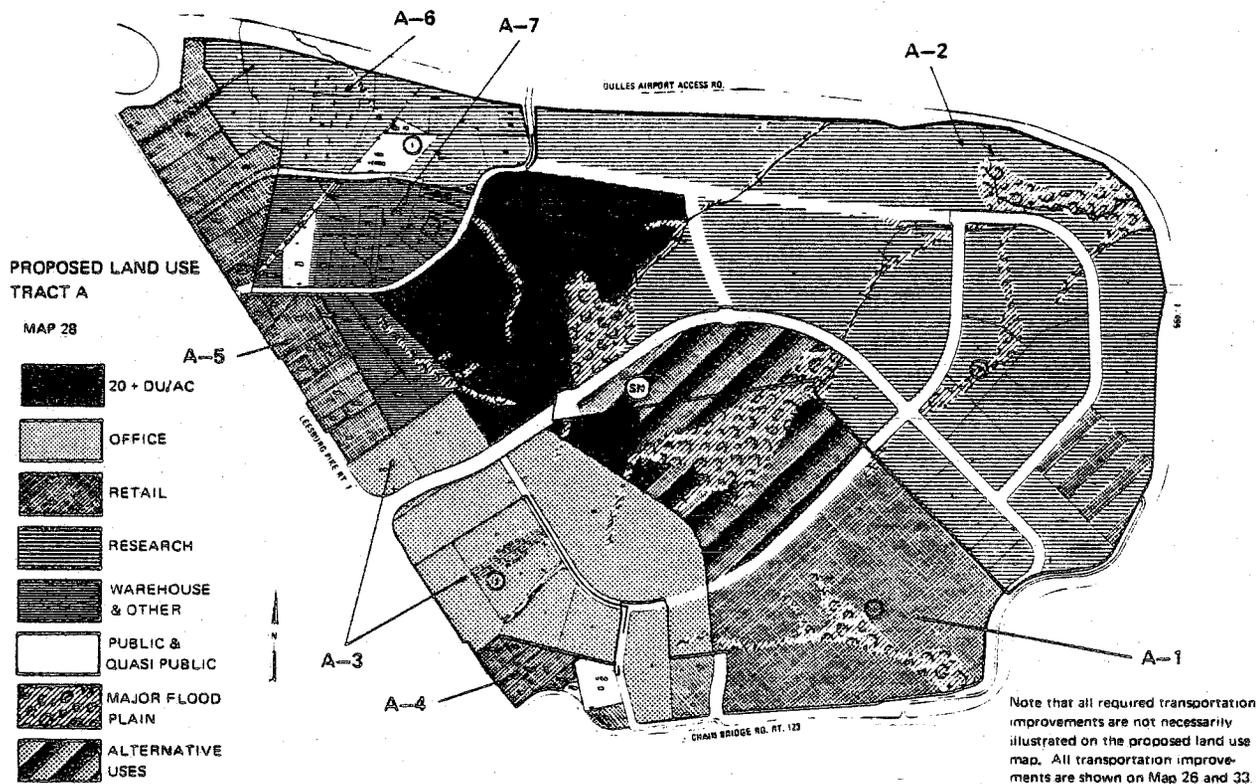
The 117-acre tract, known as the Lerner tract, is zoned C-7 and R-30. The tract is recommended for a mixed use development incorporating regional scale retail shopping facilities, office, motel and apartments. If a mixed use development package cannot be put together a multi-use development would be appropriate provided the development were designed:

- to create a coherent and high-quality focal point for the area;
- to include internal pedestrian ways as well as pedestrian linkages to all adjacent areas, particularly the Westpark industrial park, the Rotunda Apartments, the Holiday Inn, the Clarendon Bank and the office complex on the Leasco tract;
- to provide all needed environmental protection features including respect for the natural landforms and vegetation within the environmentally sensitive area; and
- to provide adequately for the needed transportation improvements to serve the area.

Although the intensity of development recommended for Sub-Tract A1 would create traffic congestion unless substantial improvements were made to the road network, the traffic which would be generated by development under existing zoning would probably not be significantly lower. The potential for realizing the functional and urban design objectives of the plan for Tysons Corner with the recommended well-designed mix of uses on this tract is greater than if the area were to develop under the existing zoning pattern.

There are several factors which underlie the recommended uses for Sub-Tract A1:

- Economic analysis indicated a demand for up to an additional 1.4 million square feet of department store space by 1995 in the Tysons area.
- Traffic between the existing Tysons Corner



regional shopping center and new regional shopping facilities in this location could be carried on a bridge over Route 123 with less impact on Routes 123 and 7 than would be the case if regional shopping facilities were developed in another location within the Tysons Corner Area.

- The C-7 zoned land abutting Route 123 was previously zoned I-L when plans for an automobile sales park were envisioned. The automobile agencies have since located along Route 7 northwest of Westpark Drive. General light industrial use is not appropriate for this site in the context of current area development patterns.
- A hotel/motel near the intersection of International Drive and Route 123 when combined with the existing Holiday Inn would provide a nucleus of a hotel/motel-conference center, a desirable amenity in an area where many national and international firms have facilities.
- The projected demand for office space and apartments within the Tysons Corner Area indicates the desirability of incorporating office uses on this tract and the need to retain a portion of Sub-Tract A1 for residential use. The projected employment within the Tysons Corner Area suggests a continuing and increasing demand for apartments near these employment opportunities, a concept which is an objective of the Comprehensive Plan as well as for the Tysons Corner Area. If a mixed use development package including residential use cannot be put together for this tract, the approximately ten acres in the northwest corner of the tract (zoned R-30) is planned for residential use in a range of 30 to 50 units per acre. Use of the R-30, or the PDH-30 or PDH-40 zoning districts with density bonuses would be appropriate.

Sub-Tract A2: Research and Development Industry, Multifamily Residential and Motel

The 289-acre Westpark tract has existing research and development and office uses con-

centrated primarily in the eastern portion. The remaining vacant acreage is zoned for industrial park and commercial designed shopping center and motels.

It is recommended that approximately 150 acres of land, all the vacant land north of Jones Branch Drive and east of the proposed right-of-way for Park Run Drive except the parcel zoned C-7, type industry. The land north of Jones Branch Drive, visible from the Dulles Airport Access Road, should be limited to uses permitted under the I-2 zoning district in order to assure the high-quality development image of this area as a gateway to the Nation's capital. Such uses should also be designed to provide an appropriate landscaped transition to the planned residential area south of Jones Branch Drive.

At the eastern perimeter of the Westpark tract is a 13-acre parcel zoned C-7. Because of the site's excellent visibility from the Beltway and because of the desirable transient, meeting, and restaurant facilities which could be made available to the many firms in the industrial park, this parcel is recommended for hotel/motel use. However, general retail uses unassociated with the hotel would not be appropriate in this location, and if the hotel use does not materialize, the parcel should be used for an office of R&D industry.

The remaining 47-acre portion of Sub-Tract A2, south of Jones Branch Drive, east of International Drive and north of Westpark Drive, is recommended for multifamily use at 30 to 50 units per acre on the 32 +/- acres west of the stream valley using either the R-30 conventional zoning district or planned development housing districts, PDH-3C or PDH-40 with bonus densities, to take maximum advantage of the proximity to employment opportunities, available public transportation, and accessibility to the metropolitan core via the proposed Dulles Airport Access Road parallel lanes rather than through the Route 123/International Drive intersection. Research and development industry is recommended for the 15 +/- acres east of the stream valley. The residential section should incorporate recreational facilities and the entire 47-acre portion should include open space, a

pedestrian system and other urban design and environmental features emphasized in this plan. The topography in this location would lend itself to a molding of development to the land forms as well as permitting some of the steep slopes to be retained in open space. Nothing in the foregoing should be interpreted to preclude a mixed or multi-use development on the entire 47 acres provided at least 1150 residential units are included in the land use mix at this location or elsewhere within Sub-Tract A2. A multi-use development on the eastern 15 +/- acres including industry, office, motel, housing or limited retail commercial could also be appropriate.

A location in the quadrangle at the intersection of International Drive and the Dulles Airport Access Road parallel lanes would also be a logical terminus for an express bus service to Washington although the cost of land would probably necessitate a decked parking facility rather than open parking. Although no public agency is currently empowered to acquire land in the quadrangle for any future public transportation facilities, it is recommended that Westpark include the possibility for such facilities in its long range plans.

The 20-acre piece of land between Westpark Drive and the northern boundary of the Lerner tract is recommended for mixed use development (possibly related to the mixed use or multi-use development on Sub-Tract A1) in order to provide a transition and pedestrian link between the predominantly nonresidential uses on Sub-Tract A1 and the residential uses to the north. A mix of office and residential uses with small retail shops at ground level and possibly a motel is suggested. A similar combination of uses is recommended if a mixed use development package cannot be put together. It is extremely important that development on this site provide pedestrian linkage between the Lerner tract and the residential and industrial development to the north.

Neighborhood shopping facilities should be provided near the intersection of Westpark and International Drive outside of the environmentally sensitive area to serve the 3000-4000 apartments

proposed for that area. These may be constructed as part of a mixed or multi-use development or within a small neighborhood commercial district.

Sub-Tract A3: Office and Hotel

The 72-acre Leasco tract which has been subdivided and sold to individual prospective developers as well as the 4-acre vacant parcel on Route 7 north of Westpark Drive are entirely zoned for high-rise office. Office is still recommended for the major portion of the tract with research and development industry, without incidental manufacturing or storage, being allowable.

A hotel or hotels with conference facilities connected to the Holiday Inn by a pedestrian way would be appropriate on approximately 5-15 acres. Such a hotel when combined with the existing Holiday Inn and a proposed hotel on Sub-Tract A1 could constitute a convenient conference center for the businesses located at Tysons as well as for other regional or national business and professional organizations, close to a wide variety of restaurants, shopping, and other leisure-time entertainment.

Sub-Tract A4: Integrated Retail or Office Redevelopment

This tract is composed of several parcels of land abutting the ramp from Route 123 to Route 7. The current uses include a tire store, frozen food locker, a restaurant, federal radio tower and Falls Church water tank. Eventual reorientation of these uses to an access road off Pinnacle Drive and possible redevelopment to result in a more integrated small retail business conglomeration and/or office uses would be appropriate and is recommended.

Sub-Tract A5: Automobile Sales

Sub-Tract A5 encompasses all the land along the northeast side of Route 7 between the NADA Building and the Dulles Airport Access Road to a depth of approximately 600 feet and is the location of "Tysons Auto Corner." Although the auto agencies are extensive users of the land, their presence and future economic viability must be acknowledged. The creation of a closely-knit assembly of dealerships fosters comparative shopping and can benefit the auto dealers, the public, and the County by attracting auto sales. Therefore, this tract should be used primarily for auto dealerships and such other compatible establishments as are listed in the new zoning ordinance for commercial highway districts. Care should be taken to maintain sign controls, lighting, and landscaping to afford through travellers and shoppers an attractive and less confusing roadside environment.

Sub-Tract A6: Research and Development Industry

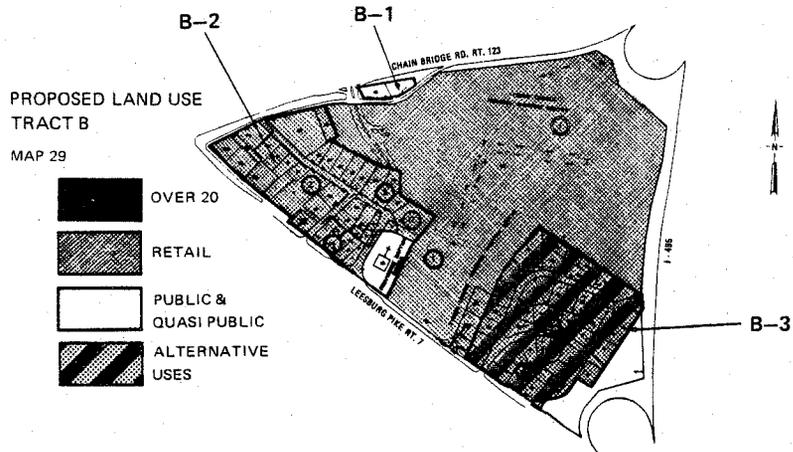
The tract of land north of Tyco Road between Spring Hill Road and Route 7 has high visibility from the Dulles Airport Access Road, and should develop in the high-quality research and development industry also recommended for Sub-Tract A2 north of Jones Branch Road.

Sub-Tract A7: Light Industry or Warehouse

The land along Spring Hill Road between Tyco Road and the National Automobile Dealers' Association office building, heavily buffered from the Rotunda condominium and the research and development industry to the north, should continue to develop in the combination of light industry and warehousing which presently characterizes the area.

Remainder of Tract A:

The land use plan map reflects existing uses for the land related to the NADA office building, the Rotunda apartments, the Clarendon Bank, Holiday Inn and the building housing Tysons Realty and other shops.



Tract B—Tysons Quadrangle (Map 29)

The 131-acre triangle is the site of the Tysons Corner regional shopping center which covers approximately 80 acres of the triangle. (The exact size is dependent on how some vacant land, owned by the center interests and used for parking, is classified.) The tract also has several newer free-standing office and highway-oriented retail uses as well as several commercially used properties with less intense use and obsolete structures that can be viewed as transitional or marginally economic.

Sub-Tract B1: Road Improvements

The land area will almost certainly be needed for road and intersection improvements related to International Drive. The Tysons circulation plan includes the realignment of Gallows Road through Tract D to intersect with Route 7 opposite International Drive. This right-of-way which cuts across the triangle is not a public road between Fletcher Street and Route 123 and must be dedicated when the circulation plan is implemented. Present plans call for an eventual vehicular bridge across Route 123 in the approximate location of the gasoline station. The bridge and other intersection improvements may also require a minor amount of shopping center land now used for parking which will probably be replaced with a decked parking facility which is already needed to meet existing parking demand.

Any bridge over Route 123 should include a sidewalk for pedestrian traffic across Route 123.

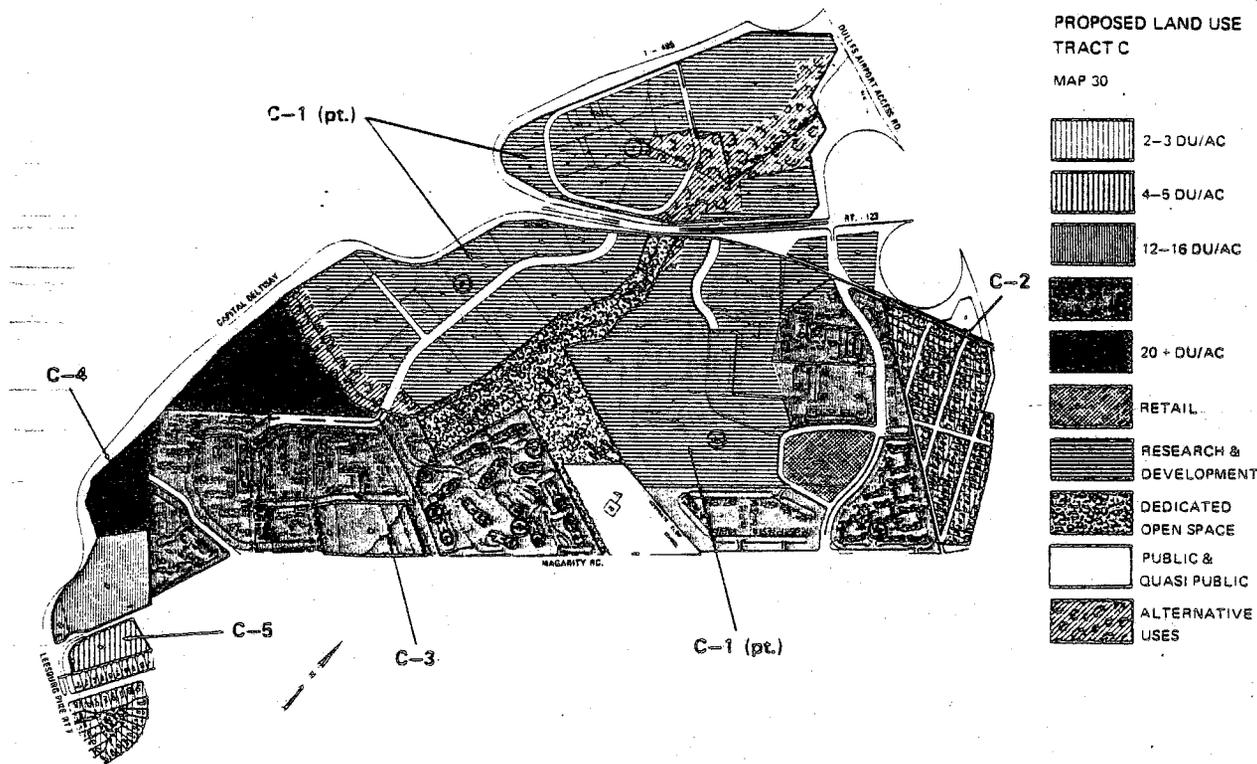
Sub-Tract B2: Retail

The land in the northwest corner of the triangle contains a church, a high-rise office building plus retail establishments, restaurants, gasoline stations, several houses converted to office space and an undeveloped parcel owned by the shopping center interests and used for Metro express bus fringe parking. While some of these uses are in new and high quality structures, other uses are of a marginal economic nature; and some are in deteriorating buildings. It is recommended that this area continue to be planned for commercial retail use to provide land for small retail and office establishments within walking distance of the center. If the site of the Providence Baptist Church ceases to be used for religious purposes, it should be permitted to develop as retail or office uses to be compatible with adjacent properties. Any retail or office development on the site should be coordinated with the existing regional shopping facilities to the north and east. The access should be from International Drive and should be located as far away from Route 7 as possible. The fringe parking should be retained until the future of Metro-

bus/rail lines is more clearly defined or until more suitable sites are found near the periphery of the study area. Land should be reserved near the northwestern point for a cloverleaf which will be part of the ultimate Routes 7/123 intersection improvement.

Sub-Tract B3: Integrated Redevelopment, Mixed Use or Retail, Office or Multifamily Residential

This tract is the Hollinswood subdivision together with two parcels on the Route 7 frontage which are the sites of a gasoline station and a restaurant. There are approximately 36 single-family detached homes on half-acre parcels in the subdivision. Residents recognize that their location and economic pressures made it unrealistic to assume that their subdivision would remain in low-density residential use. Redevelopment of the tract has been inhibited by the problems of land assembly and the difficulty of providing satisfactory access because of the proximity of the Beltway exit ramp and Dogwood Lane. Unless a major portion of this tract can be assembled, it should be retained in its present low-density residential use (2-plus units per acre) as long as possible and not allowed to drift into nonresidential use through a series of spot rezonings and special use permits for low-intensity commercial enterprises which would probably be in converted houses. Upon assembly, the tract could be suitable for retail, office or possibly high-density residential use, the intensity to be dependent upon the access arrangements which the developer can make.



Tract C—Westgate-Magarity Block (Map 30)

Approximately one-quarter of the 398-acre tract is vacant land. The land use pattern has been firmly established and most of the vacant land has limited development options because of existing and committed development, high-intensity zoning or the desirability of compatible infill. However, development of the vacant land and redevelopment of about six acres of marginally-used residential land in this section will meet part of the estimated economic demand for industrial, office and high-density residential uses in the Tysons area and its impact on the area transportation network must be considered.

Sub-Tract C1: Research and Development Industry

The parcels of remaining vacant industrially-zoned Westgate land along Anderson Road, Colshire Drive, Old Springhouse Road and Old Meadow Road should be developed in research and development industry. Several parcels are almost totally in floodplain and should be preserved as open space. The land owned by the Regency Club and zoned for high-rise apartments should be developed as zoned.

Sub-Tract C2: Residential, 2-3 Units Per Acre

Hunting Ridge subdivision was bisected when the right-of-way for the Dulles Airport Access Road (DAAR) extension to I-495 was acquired by the Federal Aviation Administration about 1960. The portion within Tract C has approximately 130 parcels of land. These have been assembled into approximately 39 ownerships and the subdivision has approximately 32 single-family detached dwellings almost equally divided between land zoned R-1 and R-3. Taking into account the parcel shapes, siting of existing housing, and need for yard space, the subdivision has vacant land to accommodate up to 21 new units at 2-3 units per acre and this use and density are recommended.

Sub-Tract C3: Garden Apartments or Park

As compatible infill, 16-20 units an acre is recommended as appropriate for this land. However, this tract is the only land within Tract C which is suited for additional park area. Although each of the seven existing apartment and condominium developments along Magarity and Old Meadow Roads has a swimming pool and other amenities, the approximately 2500 units in these developments have only 24 acres of public open space in Scott Run Park. Therefore, public park is recommended as an alternative use for this property.

Sub-Tract C4: Multifamily Residential or Office

This tract contains 15.6 acres in three adjoining parcels. All three parcels are zoned PDC and abut I-495. The desirability of setting any structures back from the Beltway and the necessity of incorporating noise attenuation measures in the development combine to suggest high-rise apartments on this tract. Compatibility with Dolley Madison and Magarity Woods garden apartments and the limitations of the Magarity/Lisle/Route 7 intersection, even as improved, would indicate a residential density not to exceed 16 units an acre to be appropriate. In order to reconcile the realities of the situation and the conflicting development objectives, it is recommended that the northern parcel be planned for 20-plus units per acre and the other two parcels be planned for 12-16 dwelling units per acre. However, if the two major parcels or all three parcels are developed as a unit, up to 30 dwelling units an acre should be permitted on the combined tract. Appropriate noise attenuation measures should be provided for any residential development on this tract. Transportation improvements should be provided to the Magarity Road/Lisle Avenue/Route 7 intersection to ensure that the intersection operates at an acceptable level of service as prescribed by the Virginia Department of Highways and Transportation (VDH&T).

Office use may be considered as an option if the following conditions are met:

- Consolidation and coordinated development of the three subject parcels.
- Transportation improvements to the Magarity Road/Lisle Avenue/Route 7 intersection are provided to ensure that the intersection operates at an acceptable level of service, as prescribed by VDH&T.
- The height of all structures should be limited so as not to be obtrusive to the existing residential communities to the north and east.
- Provision of a substantial open space buffer of at least 50 feet consisting of existing tree cover and additional landscaping along the northern and eastern boundaries to minimize the visual impact on the adjacent residential communities.
- Sensitive siting of all office and ancillary buildings, parking garages, surface parking areas and roadways to preserve the stream valleys and associated slopes.

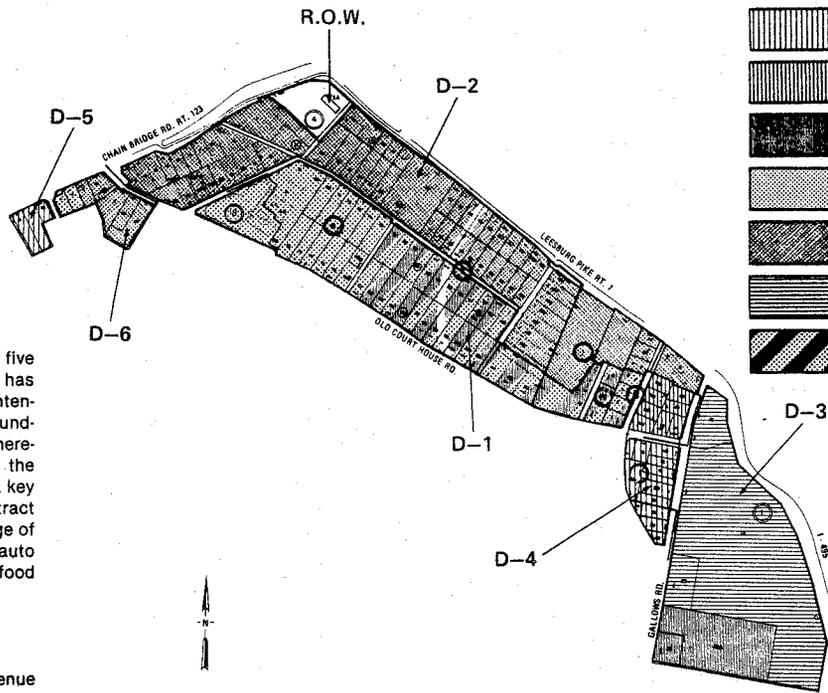
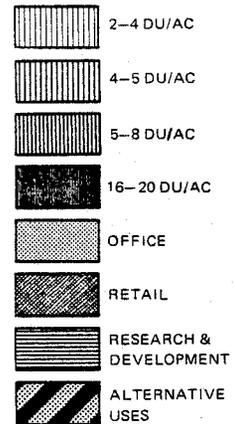
Sub-Tract C5: Residential 4-5 Units per Acre

Development of a 3.45-acre parcel between Magarity Road and Lisle Avenue should be limited to 4-5 units an acre to be basically compatible with the Pimmit Hills development, permit clustering to accommodate the access and topography of the parcel, and limit the impact on the Magarity-Lisle intersection.

Remainder of Tract C

There are one multiplex, six garden apartments and one high-rise apartment development in Tract C, all shown on the plan map at their developed density.

PROPOSED LAND USE
TRACT D
MAP 31



Tract D—Gallows Road-Route 7 (Map 31)

The 162-acre section is unique among the five sub-tracts in the Tysons Corner Area in that it has no substantial barrier to the expansion of intensive uses outside the Tysons Corner Area boundaries, in this case Old Court House Road. Therefore, the provision of transition uses along the northwest side of Old Court House Road is a key element in the planning of this section. The tract is characterized along Route 7 by a wide range of commercial uses including retail stores, an auto sales establishment, gasoline stations, fast food restaurants and offices.

Sub-Tract D1: Low-Rise Office or Multifamily Residential

The 45-acre tract bounded by Howard Avenue and Boone Boulevard, the rear lot line of the K-Mart, Gallows Road and Old Court House Road, is partially developed with offices. Much of the area has been developed as mid-rise offices or townhouse offices. The portion of this tract west of Kendall Avenue should be developed in low-rise office, not to exceed five stories to provide a relatively low-intensity transitional use as a buffer between the retail uses along Route 7 and the planned medium- and low-density residential uses on the south side of Old Court House Road in Sector V3.

The portion east of Kendall Avenue is recommended as suitable for garden apartments at 16-20 units an acre with low-rise office uses, not to exceed five stories, as an alternative use.

Sub-Tract D2: Retail or Mid-Rise Office

The frontage along Route 123 and Route 7 as far east as Kidwell Drive for a one-block depth is presently developed in a mixture of retail commercial uses (including an auto dealership, gas station, fast food restaurants) and mid-rise offices. This tract is recommended for commercial retail infill on both vacant and redeveloped land. Additional mid-rise offices would also be appropriate, generally not to exceed 90 feet and a floor area ratio of 1.00. However, height limitations could be slightly modified for land below average grade and the significant reduction of surface parking by provision of some type of structured parking facility. The automobile dealership would be more appropriately located in Tracts A or E where automobile dealerships are concentrated and land is still available for expansion of this use.

Sub-Tract D3: Multifamily, Residential and Research and Development Industry

This 47-acre tract includes all the land in the Tysons Corner Area between Kidwell Drive-Gallows Road and the Beltway. The 10 acres abutting the Nordam subdivision, most of which is already zoned for garden apartments, is recommended for 16-20 units an acre residential use.

The remainder of the tract is recommended for research and development type industry heavily buffered from the adjoining residential neighborhood and the Beltway. The developer should phase construction with the widening of Gallows Road, and necessary turning lanes should be provided. Industries whose peak-hour and predominant flow patterns complement rather than add to those created by existing and other planned development should be encouraged. Site plan and architectural review by the Board of Supervisors would be desirable.

The 3-acre I-3 zoned parcel abutting Route 7 which is part of this tract is also recommended for research and development type industry because its entire Route 7 frontage is within the Beltway entrance ramp approach area. Therefore, access to the parcel must be via Gallows and Old Court House Roads where retail or motel traffic is not appropriate.

Sub-Tract D4: Townhouses at 5-8 Units per Acre and Office

The 10-acre tract is located between Gallows Road and Kidwell Drive. The planned widening and realignment of Gallows Road and the development of the industrial site to the east will isolate the tract from the nearby residential neighborhood and bring it under pressure for redevelopment. Transitional residential uses to protect the nearby low-density residential development from commercial encroachment are desirable. A density of 5-8 units per acre is recommended for the portion north of Old Court House Road and office use not to exceed 5 stories south of the road.

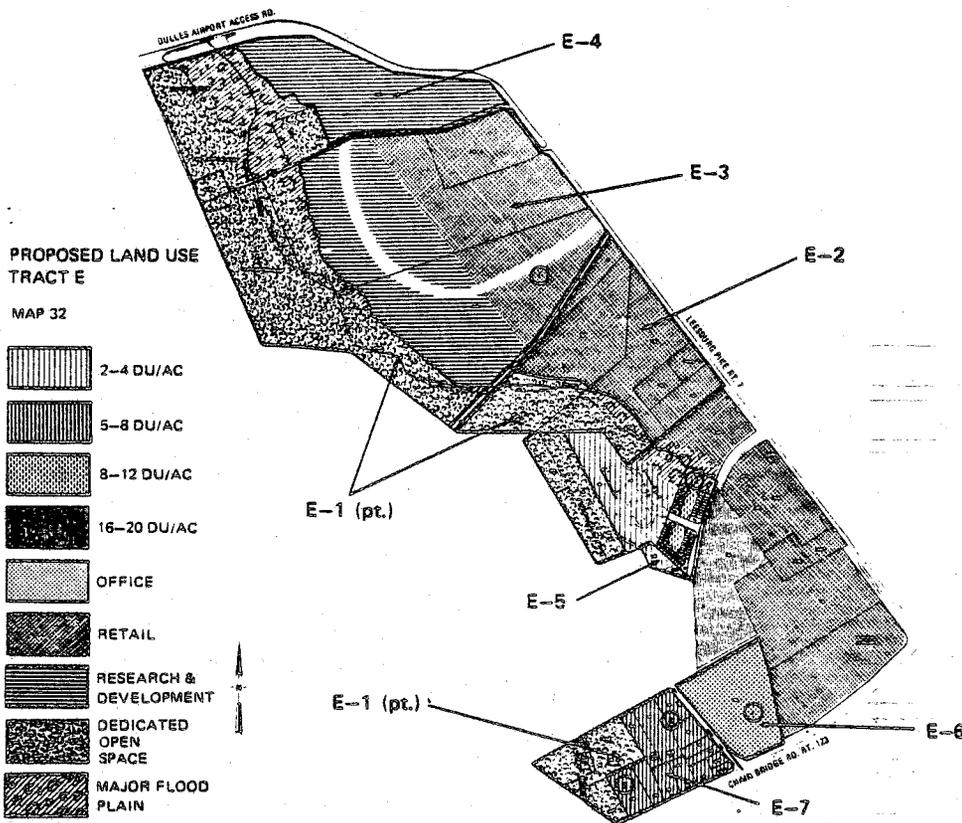
Sub-Tract D5: Residential 2-3 Units per Acre

This is a 3-parcel 2-acre tract located on Route 123 just southwest of the easterly end of Horseshoe Drive. Ideally, the nonresidential uses in Tysons Corner should not extend southwest of Old Court House Road. However, there is already

commercial zoned and developed land between Old Court House Road and Horseshoe Drive. Therefore, the eastern end of Horseshoe Drive has become the best available boundary for nonresidential uses on the southeast side of Route 123. This line must be firmly held with no exceptions or special use permits if Tysons Corner is to be contained with no strip commercial development along Route 123 toward Vienna. A density of 2-3 units an acre, the same use and density as that planned for the rest of the Horseshoe Drive area, is recommended for this area.

Sub-Tract D6: Retail and Office

Sub-Tract D6 is 5 acres of land located along Route 123 and Old Court House Road in the southwest quadrant of the intersection of those two streets. Six of the eight parcels are zoned for commercial retail use and two for low-rise office near Horseshoe Drive. Given the existing situation, the plan realistically must accept the zoning while emphasizing that no further nonresidential uses either through zoning or special use permit should be allowed in this quadrant. Further, in the unlikely event that redevelopment of this tract occurs, any residential use up to 16-20 units an acre is recommended.



Tract E--Route 7-Old Courthouse Spring Branch (Map 32)

The 313-acre Route 7-Old Courthouse Spring Branch tract is the second least intensely developed portion of the Tysons Corner Area. Much of the low-density residential land is zoned and programmed for higher intensity development. Major uses include automobile dealerships, a free-standing discount store, a community shopping center where discount stores predominate, a plant nursery, a high-rise for the elderly, a 47-unit townhouse development and a garden apartment development.

A key factor in the planning of this tract is the Old Courthouse Spring Branch stream valley and environmental quality corridor. In order to protect this sensitive feature and provide a buffer to the low-density neighborhoods to the west, a park buffer strip of approximately 90 acres (11 acres of which are located outside the Tysons Corner Area) has been developed along the Old Courthouse Spring Branch stream valley. The title to this land has been taken by the Fairfax County Park Authority primarily through covenants and dedications made at the time of previous rezonings. These commitments and pending near-term construction activity effectively reduce the land area where a full range of planning alternatives can be realistically considered.

Sub-Tract E1: Park Buffer Strip

The 79-acre portion of the recommended park buffer strip along the Old Courthouse Spring Branch stream valley and the western perimeter of the Tysons Corner Area is in five segments.

- The Old Courthouse Spring Branch floodplain bisects parcel 29-1 ((1)) 10C. The floodplain isolates about 10 acres of parcel 10C and one acre of parcel 28-2 ((1)) 23A on the west side of the stream. It is recommended that all of the land west of the eastern floodplain limit be included in the park buffer. However, the land area west of the flood-

plain might alternatively be developed in a residential use at 1-2 units an acre if its access were through Irvin Street or Teets Lane in the Spring Lake community.

- As part of an agreement made at the time the portion of the Sherman-Dardin tract abutting Route 7 was rezoned to commercial and industrial uses, a 19.4-acre section along the stream valley was covenanted for dedication to the Fairfax County Park Authority when the front portion is developed.
- An 11.1-acre strip along the stream valley was conveyed to the County as part of a recent commercial and industrial rezoning of the Capper tract immediately to the south-east of the Sherman tract.
- A 7.7-acre segment of the buffer is to be located along the west boundary of the Tysons Towers apartments.
- On the south side of Old Court House Road is the 6.8-acre Freedom Hill Fort Park. An 11-acre buffer strip outside the Tysons Corner Area is to connect the northern portion of the buffer to the park. By acquiring an adjoining 1.9-acre parcel with frontage on Route 123 it will eventually be possible to have a trail along the stream from the DAAR to Route 123.

Sub-Tract E2: Retail and Automotive Sales

Known as the Capper property, this 37-plus acre tract was rezoned to commercial retail and light industry to permit a plant nursery, which is no longer there, to become a garden center with a 4.5-acre automobile dealership at the northeast corner. As part of the rezoning, over 11 acres of stream valley at the rear of the property were proffered for parkland to which the Board of Supervisors has already taken title (Sub-Tract E1). A 1.7-acre sliver of land under separate ownership between the light-industry zoned portion of the Capper property and the Vepco right-of-way is recommended for a similar use. (The requirements

of the previous zoning ordinance have resulted in most automobile dealerships locating on land zoned for light industry. The current zoning ordinance would provide a highway commercial district for this use.)

Sub-Tract E3: Retail, Automobile Sales and Research and Development Industry

This 110-acre property, known as the Sherman-Dardin tract is zoned for commercial use on approximately 40 acres immediately adjacent to Route 7 and for industrial use on approximately 40 acres toward the rear of the property. As part of the rezoning agreement, 19.4 acres of the remaining 29 acres are covenanted to parkland use (part of Sub-Tract E1). A 7-acre segment of the commercial land has been sold and developed as an automobile dealership. Because automobile dealerships and other highway-oriented uses predominate on the northeast side of Route 7 and have a substantial foothold on the southwest side, similar uses on the commercially-zoned portion of this tract are logical.

The industrially-zoned portion is recommended for research and development type industry. A recommended amendment to the Tysons Corner circulation plan would continue Spring Hill Road into Sub-Tract E3, swinging to the northwest to provide an access to Sub-Tract E4 outside the DAAR exit ramp area on Route 7. Garden apartments at densities up to 16-20 units an acre could be recommended as an alternative use for the portion of the industrially-zoned land south and west of the Spring Hill Road extension.

The remaining 9 acres zoned RE-1 at such time as it passes out of private residential use should be added to the industrially-zoned portion or reserved for private open space.

Sub-Tract E4: Research and Development Industry

The 21-acre tract east of the Old Courthouse Spring Branch stream valley should be accessed only from the Spring Hill Road extension to eliminate vehicular turning movements in the DAAR ramp exit area on Route 7. Therefore, the timing of development and the appropriate land use on this tract are largely dependent on the timing and character of development on the adjoining Sub-Tract E3. Research and development industry is recommended since this use seems the most likely development alternative for abutting industrially-zoned portion of Sub-Tract E3. The research and development use would also be consistent with the recommendations along the DAAR in Tract A. However, if the garden apartment alternative were exercised on Sub-Tract E3, extension of the residential use into Sub-Tract E4 could be suitable. Any development on this tract should both protect the Ash Grove house, an historic site, and should provide extensive buffering and vegetative screening for an attractive vista from the DAAR.

Sub-Tract E5: Residential 4-5 Units per Acre.

Two small parcels totalling less than two acres are located on the northeast side of Raglan Road off Gosnell Road. These parcels are recommended for development at 4-5 units an acre, a density compatible with that recommended for the adjacent parcel to the west in Sector V3.

Sub-Tract E6: Office

The 10-acre vacant parcel of land, located in the northeast quadrant of the Old Courthouse Road-Route 123 intersection, is the traditionally identified site of the original Fairfax County Courthouse and as such has some historical significance. An office building(s) limited to 40 feet in height and so designed as to give focus and identification to the historic site and/or townhouses in the 5-8 units per acre density range would provide a use in keeping with the historic nature of the site and provide a transition between the large auto dealership to the northeast and the low- and proposed medium-density residential uses to the southwest.

Sub-Tract E7: Residential 5-8 Units per Acre.

The 12-acre tract is composed of 13 land parcels, 3 of which are vacant, 2 are in commercial retail use including a service station, and 8 on which are located 9 dwelling units. A basic objective of the Comprehensive Plan is to contain high-intensity development in such areas as Tysons Corner within certain prescribed boundaries and prevent fingers of strip commercial development from reaching out along major arterials in the area. Based on this planning objective, Sub-Tract E7 is an area which should not have strip commercial uses. However, the low market value of the existing housing on this tract makes it a prime candidate for redevelopment. New housing on half-acre parcels does not appear to be a viable

option in this location because of the costs involved in redevelopment and the size of the tract in a location which would require a service drive along Route 123 or reverse frontage development. Therefore, a residential density of 5-8 units per acre is recommended both to end any commercial uses and to be a transition between the office use proposed for Sub-Tract E6 and the low-density development to the north and west.

Remainder of Tract E

The remaining portions of Tract E are already developed or under construction with commercial uses along the Route 7 frontage and a townhouse and garden apartment development on Gosnell Road. These should be shown on the plan map in their current use. Tysons Towers apartments for the elderly were built on a parcel of single-family zoned land under a special exception for senior citizen apartment permitted by the *Zoning Ordinance*. This parcel should be shown on the Plan map for residential use at 3-4 units an acre to emphasize the fact that the high-density development is a special use and should not be used as justification for extension of higher than currently planned densities in adjacent Sector V3.

METRO STATION COMPLEX AREAS

Three rapid rail (Metro) stations are proposed in the I-66 right-of-way within Area II. The three are the West Falls Church, Dunn Loring, and Vienna Metro Stations. All of the station areas have been classified as complex areas in part because there are a variety of ways, having differing trade-offs, of satisfying the need to make it easier for Metro riders to reach the stations. Complex areas have also been established around each station because of the pressures for development resulting from the slated arrival of Metro.

All of the subsequent discussion assumes that a rapid rail line will be built in the I-66 right-of-way, with the terminal station at Vienna.

The Need for Metro

Existing travel demand within the I-66 corridor is almost as high as within the Shirley Highway corridor, and the Shirley Highway corridor has three significant means of travel: I-95/I-395, express bus on exclusive right-of-way, and a planned Metro route. Within the I-66 corridor, the only adopted transportation improvement that would continue all the way to the regional core is the Metro line. Existing transit service is very poor, due primarily to very high travel times via buses which must travel on congested arterials inside I-495. The Metro line is definitely a necessity, and along the route as it is currently planned and adopted by the Washington Metropolitan Area Transit Authority and the County.

Planning Decisions and Timing Issues

The land use planning decisions for the Metro station complex areas are being made at the same time that private development planning decisions are also being made. The DeLuca rezoning occurred on land adjacent to the Vienna Metro Station Complex Area.

It must be noted that a degree of uncertainty exists regarding the construction schedule, and private planning decisions regarding Metro-related development should take this schedule uncertainty into account to the extent possible. The line is currently scheduled to be in operation to the Vienna Metro Station in 1986. Private development schedules should also take cognizance of any major delays in the Metro construction schedule as it is currently set.

Relationship Between Land Use and Transportation

Countywide transportation analyses have shown that few transportation problems can be alleviated with transportation solutions alone. Besides inabilities to solve the problems with transportation improvements, the enormous cost of potential transportation facility improvements, particularly major improvements in the radial direction, is practically prohibitive. Less costly and more adequate solutions are feasible and practical by means of properly relating land use and transportation, particularly mass transit.

A major problem in Fairfax County is the existing pattern and density of residential development, the location of employment, and the difficulties in providing adequate transportation service between the two. Appropriate location of density with respect to transportation can reduce requirements for highway improvements, improve transit service, reduce air pollution and sustain the rationale for low-density in other sections of the County where it is obviously desirable. This is a generalization only, and does not mean that high-density should necessarily be recommended for any rapid transit station. Each station area has to be evaluated in terms of how the best transit service can be provided and how efficient inter-relationships between land uses can be provided. In some cases, new development at higher densities may be appropriate, while at other stations there may be little land use change at all.

The foregoing general statements should not be construed as justification for higher density at transit stations in general, for land use recommendations at each station must take into account site-specific factors. In addition, market conditions may be a constraint on demand for this type of development. And in some cases, the negative impacts could outweigh the potential benefits. One factor that must carefully be studied is the potential conflict between new development at the stations and access into the stations. This conflict should be kept to a minimum.

Existing development in the County will likely produce considerable demand for parking spaces at the stations. For the system as a whole, projections indicate that demand for parking will exceed planned supply by almost three to one (COG, 1974). Therefore, feeder bus routes should be carefully planned to minimize this demand as much as possible. The West Falls Church and Vienna Metro Stations have significant population in higher density developments within 2-3 miles which could be conveniently served with feeder bus. New medium- and high-density developments in the general vicinity should be located such that they can also be conveniently served by feeder bus.

Implementation and Development Coordination

Land use control tools will be needed at all three of the stations in the Vienna corridor, as well as at the other transit stations in the County. The primary purpose of these tools would be coordination of development and access with operations of the station.

Tools for the County's use in coordinating development at the stations are somewhat limited. Yet benefits to the County, to private developers, and to neighboring areas will be maximized where the design and timing of development occur in a coordinated manner. This is particularly true at the Vienna Metro Station where a coordinated development for the entire area would significantly enhance and increase the benefits and would assist in minimizing the impact. In the absence of coordination, higher density would be undesirable in portions of the site and minimally beneficial in others.

A planned transit district should be incorporated into the new zoning ordinance. Although the County has a number of well-conceived planned development zones, none of them was designed for use around a transit station. Indeed, because they are automobile oriented, some of their provisions actually obstruct the achievement of integrated, transit-oriented development in Metro station areas. At least one, and possibly two or three, planned transit station (PTS) zoning categories would be helpful to secure development tailored to the individual characteristics of Metro station areas. If developers near such a station wished to justify higher density on land because of its proximity to the station, they would have to fulfill requirements established to guarantee a strong relationship between the development and the Metro station.

Some of the potential provisions of such an ordinance are listed below.

- The provisions of the PTS zone would take effect several years prior to the scheduled opening of a particular Metro station so as to encourage transit-oriented development exclusively.
- Transit-related development would have to be timed so that completion would take place after the actual opening date of the Metro station. Staging requirements could be imposed if they would be helpful in controlling local impacts.
- Development would have to comply with either the adopted station area plan or a revised station area plan adopted after new public hearings.
- The use of parking lots might be subject to a fee sufficient to cover the costs of designing, constructing, and maintaining the parking lots. (The cost of automobile storage would thus be obvious and unsubsidized, and rental rates on housing units and commercial space could be proportionately lower.)
- Only one parking space per housing unit might be allowed in addition to visitor parking. Joint use of parking spaces by residen-

tial and commercial uses could be allowed. Commercial parking could be decreased to reflect a lower need for it.

- A formula to provide for the sharing of the costs of expensive facilities or of services, such as shuttle buses, benefiting all the station area development might be included.
- Because an important objective would be to encourage biking and walking rather than automotive travel, the placement of interior shopping and other uses would be very important. Consequently, consolidation where possible, and coordinated development where consolidation is not possible, would be encouraged by the ordinance.
- The PTS zone could reflect the policies of the Washington Metropolitan Area Transit Authority (WMATA) where applicable, and desired developer/WMATA/County cooperation would be encouraged. Although WMATA might wish to retain sole control over primary access roads on its property to the stations, it might be desirable to have secondary points of access to the station for feeder buses to permit some buses to serve the interior of the station area on their way to and from the station. It might also be possible to have covered, all-weather walks to the station from the surrounding area.
- Standards regarding design and height, since both are of great concern to the surrounding neighborhoods, might be incorporated.

Consideration of Possible Future Use of Air Rights

Development which might make use of air rights over station facilities is not recommended at any of the Vienna corridor stations. However, if plans are developed in the future which recommend usage of air rights at any of the stations, such usage would, in effect, change the site design of the station. Such a change should be reviewed by the County under Section 15.1-456 of the Code of Virginia, as amended, and as provided for in the master agreement, paragraph 62.

Environmental Considerations

The following general environmental recommendations are made for each Metro station area:

- Development should reflect maximum feasible watershed stormwater management goals, both quantitative and qualitative, due to the locations of the Metro sites in important areas of watersheds. Feasibility is defined for this and other County designated growth centers as that amount of stormwater, on-site retention and treatment which can be achieved without loss of project design population. The demonstration of the feasibility of on-site retention and project population accommodation will be satisfied by submission of a detailed development plan indicating required densities, unit distribution, circulation, etc.
- Recognizing the County policy toward stormwater management and growth centers, development should respect the environmental quality corridor (EQC) system to the extent that:
 - it encourages where feasible the retention of flood-plain acreage in a natural state except that portion used for on-site stormwater management purposes;
 - steep slopes adjoining all floodplains and stream influence zones (delineation of which depend on the actual geologic, topographic, vegetative and soil conditions present) are to be maintained to the maximum extent possible in their existing vegetative cover; and
 - nearby park acreage is related to the proposed development.

WEST FALLS CHURCH METRO COMPLEX AREA

The West Falls Church Metro Station will be located near the interchanges of I-66 with the Dulles Airport Access Road and Route 7. A center platform station in the I-66 right of way is to be constructed, with parking for 1,000 cars provided adjacent to the station. In addition, a service and inspection facility for the Rosslyn-to-Vienna Metro line is planned in the northeast quadrant of the same interchange, between the I-66 right of way and Idylwood Road. The line is currently scheduled to be in operation to the West Falls Church Metro Station in 1986.

Existing Conditions

The West Falls Church Metro Complex Area, bounded by Idylwood Road to the north, Route 7 to the southwest, Great Falls Street to the northeast, and Haycock Road to the southeast, is surrounded by predominantly single-family residential stable neighborhoods except to the east where it abuts the Route 7 commercial strip.

The station impact area itself, a mixture of sloping, terraced land, is split by a large vacant swath of land dedicated to the I-66 Metro right-of-way. Sixty acres of land are owned by Metro, and approximately 43 acres of land remain undeveloped. This figure includes 10 acres (Tract A) on Haycock Road, which have existing R-30 zoning allowing 30 dwelling units an acre, 25 acres (Tracts B and C) at the intersection of Idylwood Road and Route 7. Tract D has public parkland, an area planned for Metro station uses and a small amount of vacant land. George Mason High School and a Falls Church city park are located at the southernmost portion of the tract.

Primary access to the West Falls Church Metro Station is currently planned to be from the northwest, along Leesburg Pike to a flyover into the station. Great Falls Street, Westmoreland Street, Old Dominion Drive, and Kirby Road will also carry significant volumes of Metro-oriented traffic. In addition to the flyover, the station will have two points of access to and from Haycock Road, one point of ingress for traffic moving north on Route 7.

The headwaters of Pimmit Run watershed are located in this complex area. There are also erodible soils in the northern tip. A lateral stream flowing into the Pimmit Run Environmental Quality Corridor passes through this transit site. Consideration should be given to providing access from the site to the Pimmit Run EQC and to the alternate transportation system contained in the McLean trails plan.

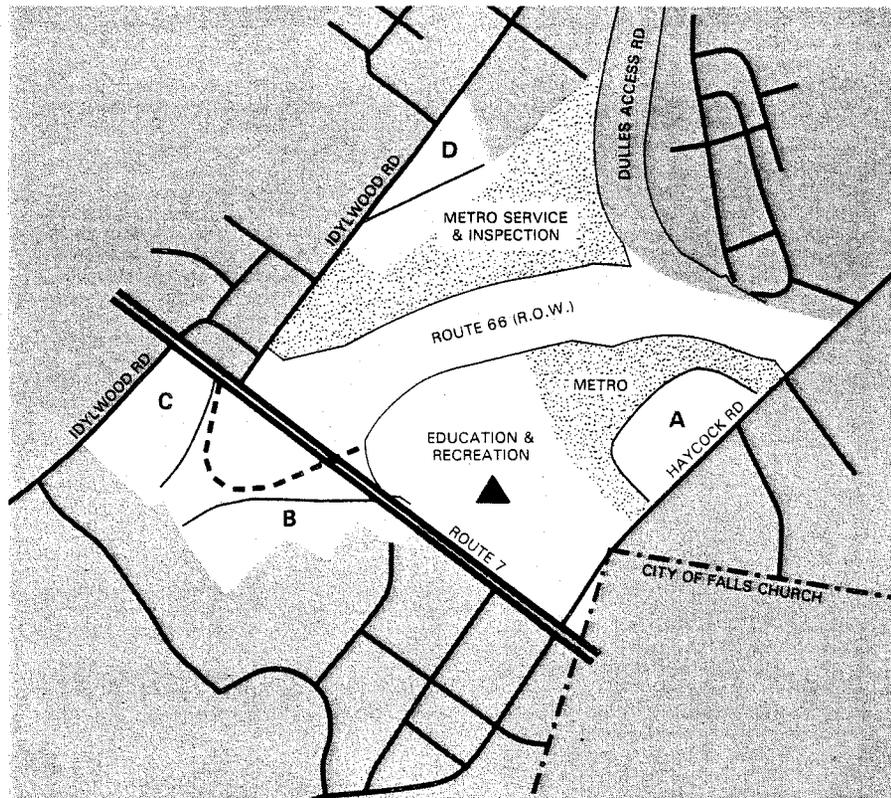
RECOMMENDATIONS**Land Use**

Consultants to the County have provided a range of market projections which indicate a large demand for residential, office and commercial uses in the station area. Because the market demand cannot be satisfied near the station, some of it could be transferred to other Metro station areas and some of it could be placed along major arterials and feeder bus lines. A substantial portion of it could also be transferred to Tysons Corner if a better relationship between that area and the West Falls Church Metro Station could be established, which is recommended subsequently.

For the most part, land use at West Falls Church is established; thus the little vacant land remaining which relates directly to Metro must be planned to maximize station usage.

Specific Recommendations

A. Tract A. Residential—20+ units per acre: Development under PDH zoning at 30 or 40 units



an acre would be desirable to assure appropriate treatment for the site and to provide significant housing opportunities within walking distance of the Metro station. Such limited commercial uses as are permitted in the PDH zones would be appropriate on the first floor of the residential buildings. A pedestrian way should be provided between the site and the Metro station. Any site plan filed prior to the firm determination of the exact location of the station should provide alternative pedestrian ways. Because the site faces a single-family neighborhood which may in time face redevelopment pressures, and is the only site immediate to Metro, any development deserves careful planning. A building located at the lower portion of the tract would maximize pedestrian use of Metro while not interfering visually with surrounding dwellings. Underground parking would allow greater open space amenities as well as better air quality standards.

B. Tract B. Residential—2-3 dwelling units per acre: Townhouse structures to conform with average density in this area. The architecturally imposing dwelling on this site should be preserved. Higher density is not recommended primarily because access from the site is via local residential streets only.

C. Tract C. Residential—8-12 dwelling units per acre: This site is not directly Metro-related, but garden apartments or townhouses would be consistent with other planned uses in this area. These uses should be heavily buffered from the adjacent single-family development. Higher density on this site serves as a transition to Idylwood Towers, west of this tract.

D. Tract D. This tract is even less related to Metro than Tracts B or C. In order to get to the station from this tract, one would have to travel south on Idylwood, turn left onto Route 7, and then into the station via Haycock Road. This parcel should

be acquired for park use. A park would serve to buffer Metro's service and inspection yard from adjacent single-family dwellings. If the land cannot be acquired for park use, residential development at a density of 2-3 units an acre would conform with existing land patterns. Any development would still require buffering from the service and inspection yard.

Transportation

Transportation service into the West Falls Church Metro Station is needed for two purposes: to provide convenient transit for the Route 7 corridor and to provide convenient access into the station from existing and future development in the general area.

Route 7 Corridor Service

Transit service for the Route 7 corridor is needed and could be served by a busway on the Dulles Airport Access Road extended. Commuters along Route 7 in Fairfax and into Loudoun, if provided a fast and convenient means of getting to Metro, could use transit and thereby keep future highway needs for auto travel to a minimum.

There are a number of methods by which the Route 7 corridor could be provided with rapid transit. For example, the West Falls Church Metro Station could be connected with Tysons Corner (but preferably Dulles as well) by either a busway or rapid rail, with resultant benefits:

- Dulles, Reston, Wolftrap and Tysons Corner would be connected by rapid transit to Washington, D.C.
- Many Loudoun County commuters traveling through Fairfax would be encouraged to travel by rapid transit.
- Traffic volumes would rise less rapidly in the Tysons Corner area.

- Reverse and off-peak ridership from the West Falls Church Metro Station to Tysons Corner would be increased.
- There would be a greater possibility that the high bus rider figures projected for the station would be realized.
- There would be less congestion around the West Falls Church Metro Station.

With respect to rapid rail versus a busway to serve the Route 7 corridor, the following points should be considered:

- Splitting the Vienna rapid rail line at West Falls Church would not add to the capacity of rapid rail transit facilities. Consequently adding a line heading toward Tysons Corner would require a greater time spacing between trains on the Vienna line, thus reducing the level of service.
- Given the existence of the adopted regional system plan under the interstate compact, the costs of a rapid rail line to Tysons might need to be borne entirely by the County unless federal financial assistance could be obtained because of a federal interest in extending the line toward Dulles. A busway would cost considerably less to construct than a rapid rail line; and a busway could be designed and built so as to allow eventual conversion to a rapid rail line if warranted. At such time that WMATA officially studies Metro extensions, consideration should be given to this route.
- A busway running from the West Falls Church Metro Station toward Dulles would be more compatible with the densities and configuration of land uses currently being planned for the Dulles corridor. For example, a rapid rail station in the median of DAAF at Spring Hill Road or Route 7 would not be compatible with the very low densities which citizens desire for that area.
- Although a rapid rail line could terminate in the center of the Tysons quadrangle, this also would have disadvantages. Large numbers of feeder buses would either have to enter the Tysons quadrangle to reach the Tysons Metro Station, or the buses would have to bypass the station and use special ramps to reach the West Falls Church Metro Station. Also, a Tysons Metro Station would still need bus collection from those portions of the quadrangle beyond easy access; however, once persons boarded buses, it would only take a matter of a few minutes to drive them to the West Falls Church Metro Station.
- A rapid rail line ending at the Vienna Metro Station would extend far enough to facilitate full utilization of its capacity and would serve the north central portion of the County. A busway serving the Route 7 corridor extending into Loudoun County could efficiently serve the northern portion of the County.
- In conclusion, any detailed study of the possibility of extending a rapid rail line to Tysons Corner or all the way to Dulles, either to supplement or replace the Vienna line, would need to be made by the Washington Metropolitan Area Transit Authority. The study should consider the economic, fiscal, environmental, transportation, land use, and policy implications of the various alternatives. In order to provide WMATA with adequate guidance, the County would need to decide, for example, whether rapid rail transit was meant primarily to provide peak-hour commutation to the metropolitan core or to promote the development of major employment/high density residential areas in the County such as at Tysons Corner.

Since such a study by WMATA has not been done, it is recommended that, at least on an interim basis, the Dulles Airport Access Road be extended as a busway to the West Falls Church Metro Station. It should be constructed in such a manner that a possible future extension of Metro-rail could be built in the right of way to serve Tysons Corner and eventually Dulles Airport. The line would be built if a study showed it to be feasible and if funds would be available.

Local Transportation Needs

Several roads need to be improved in the vicinity of the station to improve access to the station. These improvements are needed in order to solve existing traffic problems as well as provide for increased traffic when Metro is built. The improvements will be particularly needed for feeder bus service to the station, as some of the existing roads are not adequate to handle bus traffic.

In addition to roadway access, attention should be given to the provision of access via bike paths from surrounding neighborhoods.

Specific Recommendations

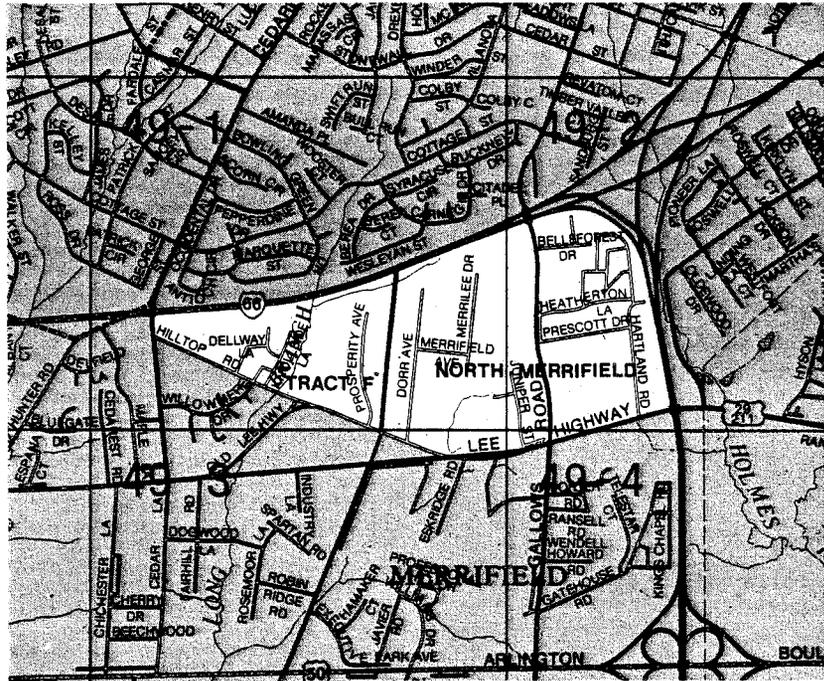
A. Haycock Road. Widen to four-lane roadway with turning lanes between Leesburg Pike and Great Falls Street. Major access to the station is via this street.

B. Shreve Road (Route 703). Widen to an improved two-lane roadway (12 foot lanes). This road will be the principal means of approaching the West Falls Church Metro Station from the southwest.

C. Route 7 Ramp. Provide a ramp from Route 7 to allow eastbound traffic to leave Route 7 by making a right turn and going directly into the station facilities.

DUNN LORING METRO COMPLEX AREA

This entire complex area, part of the Route 50/I-495 Area, is discussed beginning on page 140.



This station will be located in the I-66 right-of-way at Gallows Road, with platform access to the south only and with a planned entrance on the tract now containing the Northern Virginia Racquet Club. Station plans call for a platform station served by a 1,000 car parking lot. The station, which is scheduled to be in operation in 1986, will link the regional rapid transit system to the Merrifield area.

Existing Conditions

The Metro complex area is bordered on the north by I-66, on the east by I-495, on the south by Lee Highway and on the west by Hilltop Road and Cedar Lane. It is divided by Gallows Road running north to south.

Much of the 189 acres in the Dunn Loring Complex Area is vacant and under numerous ownerships. With the exception of the 80-acre wedge-shaped tract on the west, land assembly for coordinated large developments may be extremely difficult and is not considered likely in the near future.

Existing land use within the area includes substantial industrial development on Dorr Avenue to Merrilee Drive, some commercial development fronting Route 29, and multifamily dwellings east of Gallows Road.

The site lies in the upper reaches of the Accotink watershed with the Long Branch on the western portion included in the environmental quality corridor network.

The Metro area is surrounded by stable, single-family homes to the north of I-66 and commercial and industrial uses south of I-66 to Route 50. However, much of the land along Route 29 is in a state of transition, with the thrust of development leaning increasingly toward industrial uses. In fact, with the existing Lee-Hi Park, Yorktowne Square, AAA complex, Melpar and the Merrifield post office, the Merrifield area is rapidly becoming a viable economic resource to the County.

The community development of some 600 acres south of Metro on Route 50 and 495 (Route 50/I-495 Area) will undoubtedly further impact this area.

At present, the road network throughout the area is heavily congested, with considerable truck traffic on Route 29, hospital and commuter-related traffic impacting the Gallows/Route 50 intersection. Any development will only magnify this problem unless significant measures are taken to improve traffic operations.

RECOMMENDATIONS

Land Use and Transportation

The planned land uses and transportation improvements for the Dunn Loring Metro Complex Area are contained in the Route 50/I-495 Area section of the Plan.

Other

A community park should be acquired and developed in the Belle Forest area.

VIENNA METRO STATION COMPLEX AREA

The Vienna Metro Station is unique among the stations in this corridor in the considerable amount of vacant land adjacent to the station. This station site poses potential problems and potential opportunities.

The station itself will be located in the median of I-66 approximately 1,500 feet west of Nutley Street. The station will be at the same elevation as the highway and connected to parking/feeder bus service north and south of I-66 via enclosed pedestrian bridges above the highway. The station is planned to have very good double-ended access on both sides of I-66. Access roads are to extend both to the north and south of I-66 from Nutley Street to Blake Lane. Station design also allows for vehicles proceeding east on I-66 to take an off ramp to the station, use the station, and then proceed to the westbound lanes of I-66 without having to use the interchange at I-66 and Nutley Street.

Existing Conditions

The area is bounded by Lee Highway on the south, the Blake Lane stable area and Sutton Road on the west, Nottoway Park and the Moorefield tract to the north, and Nutley Street on the east. The 45-acre DeLuca tract in the northeast quadrant has been rezoned PDH-20 and the large tract (Tract A) at the intersection of Nutley Street and Route 29 has been rezoned PDC. The Country Creek townhouse development is located north of I-66 and east of Sutton Road.

Of the 250 undeveloped acres, approximately 70 percent is densely wooded. Almost all of the area south of I-66 is tree-covered, with scattered cover in the northern half of the study area. An environmental quality corridor along an Accotink tributary runs north-south within the complex area paralleling Nutley Street at 300-500 feet west of Nutley Street. Both this EQC and the wooded area at the western edge of the Tracts B and C are valuable wildlife habitat areas. The physical and environmental features of this complex area are very similar to the Route 50/I-495 Area except that here the topography is perhaps more varied and major roads bound the area rather than bisect it (except for I-66).

RECOMMENDATIONS

Land Use

Access into the southern tracts from Lee Highway will minimize conflict with Metro-oriented traffic. However, every effort must be made to encourage residents on the tracts who use Metro to reach the station without using their car. Only minimum parking requirements should be provided, with as much of it being underground parking as possible (particularly on the heavily wooded tracts). Pedestrian/bike paths, with separation, should be installed to allow easy access to the stations south of new development, and it would be desirable for the paths to be covered to encourage the use of Metro even with poor weather conditions. In addition, it may be necessary for the developer to provide (or at least participate financially in) an internal shuttle bus system.

The wealth of environmental resources of this station area, particularly on the south side of I-66, must be preserved as much as possible. This preservation would be maximized only if the site were designated as a park, which is unrealistic. And a park would be inconsistent with air quality objectives. A means of preserving the environmental resources of the southern area is less dense development.

Development on the site should take into account the map of building locations contained in the consultants' report on the Vienna corridor stations, and should provide for the protection of the EQC, the wildlife habitats, and buffers to maintain the high quality environment as much as possible.

Densities north of I-66 are not recommended to be as high as those south of I-66, but this should not preclude the owners of Tracts D, E, F, and G from getting together among themselves, with WMATA, and with the County to develop a coordinated development design that would allow higher density and mixed uses. Adequate design would be difficult to obtain and significant cooperation, particularly between the owners of Tracts E and G, and WMATA, would be necessary.

Specific Recommendations

A. Tract A. The primary recommendation for Tract A is townhouse and garden apartments, 8-12 units per acre. Building should be sited on the hillside with building heights, in general, not to exceed ten feet above the existing ridge line vegetation; the EQC/floodplain should be preserved, covered paths to the Metro station and a minimum 50-foot buffer to the residences on Fairlee Drive should be provided.

Because of the location of this tract in relation to I-66 and the Metro station and because of its topography which would lend itself to a molding of development to the land forms thus reducing external impacts, Tract A would be suitable for a mix of townhouse/apartments and office uses if approximately 350 housing units were included in the mixture.

B. Tract B. Townhouses—4-5 dwelling units per acre (34 acres).

C. Tract C. Townhouses—4-5 dwelling units per acre (35 acres). Townhouses at 4-5 units per acre are recommended for Tracts B and C unless access to the Metro station is determined to be appropriate through these tracts; in such a case a density of 5-8 units per acre might be appropriate.)

D. Tract D. Residential—5-8 units per acre with noise buffering from I-66.

E. Tract E. Residential—townhouses at 5-8 units per acre (55 acres).

F. Tract F. Residential—4-5 units per acre.

G. Tract G. Apartments and mixed uses at 16-20 units per acre (45 acres DeLuca tract).

H. Tract H Parcel 48-1 ((1)) 86 located along the north side of Marywood Road approximately 600 feet east of Sutton Road is planned for residential development at 4-5 dwelling units per acre. Consideration may be given to development at a density of 5-8 dwelling units per acre if the following conditions are satisfied:

1. Access from Sutton Road to the property should be through the existing road system of the Country Creek townhouse community to the south and east, with no provision for vehicular access to the west.

2. A substantial landscaped open space buffer should be provided along the western boundary of the property.

3. Existing mature trees on parcel 86 should be preserved, especially on the perimeter of the property. Where necessary to provide appropriate buffers and screening, additional tree planting should supplement existing vegetation.

4. A pedestrian trail should be provided on parcel 86, which would connect with the existing trails system in Nottoway Park and in the Country Creek townhouse community.

Transportation

As indicated, current proposals would allow five entrances into the station for vehicular traffic from outside the study area.

Potential traffic problems will result on Nutley Street unless adequate ingress and egress are provided to abutting land, particularly north of I-66.

Access directly from I-66 is a necessity as is the internal crossover road. Entrances onto Nutley



must be carefully arranged into Tract G. Lee Highway is recommended for widening to four lanes, which will provide better service for the development recommended on the southern tracts.

Blake Lane and Sutton Road are recommended for improvement, with widening of Blake Lane to four (4) lanes. Sutton Road is only recommended for improvement, but this recommendation should be reevaluated later since Sutton may also need to be widened to four lanes.

As the terminal station for the Vienna line, feeder bus service should be provided from Vienna to the north and Fairfax to the south. Perhaps more importantly, good feeder bus service should be provided to developments along I-66 to the west where interchanges would allow efficient delivery to/from the station, and would substantially reduce vehicle miles travelled and, therefore, air pollution.

Considerations

Alternative routes for the right-of-way of the proposed extension of Pickett Road across Route 50 and across Route 29 and northwest to connect with Jermantown Road must be carefully studied. Pickett Road is expected to serve as a main route

to the Vienna Metro Station from the south and east; thus, the interrelationships, alignment, and feasibility of combining these right-of-way requirements northward from Route 50 should be explored. Also, the impact of these rights-of-way on areas to be developed south of I-66 must be studied.

Specific Transportation Recommendations

A. Blake Lane (Route 655). In consonance with other alternatives, study realignment to connect with Jermantown Road. Study desirability of widening to four lanes, with turning lanes between connection with Jermantown Road and Lee Highway.

B. Sutton Road (Route 701). Improve 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. Sutton Road should be reevaluated later to determine if four lanes are needed.

C. Five Oaks Road (Route 4949). Among other alternatives, study the desirability of improving this road to two 12-foot lanes between Blake Lane and the WMATA access road into the Vienna Metro Station.

D. Hunter Mill Road (Route 674). Widen to two 12-foot lanes between Chain Bridge Road (Route 123) 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 the City of Fairfax and enhance the accessibility to the Vienna Metro Station from the north.

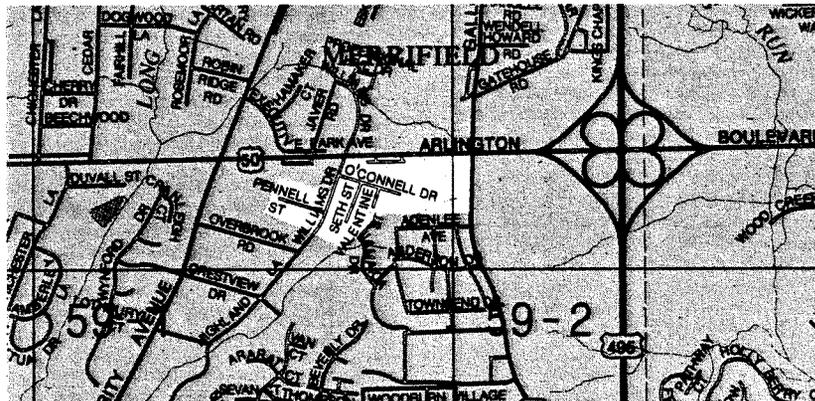
E. Lee Highway (Route 29). Widen to a four-lane divided roadway with turning lanes between Fairfax Circle and Falls Church, and complete the service drives.

Special Study Area

The Vienna Metro Complex Area is designated as a special study area requiring continual monitoring and restudy especially with respect to issues of achieving plan objectives in implementation and the phasing of public facilities.

GALLOWS ROAD-ROUTE 50 COMPLEX AREA

This entire complex area, part of the Route 50/I-495 Area, is discussed beginning on page 140.



The Gallows Road-Route 50 Complex Area is composed of a 21-acre parcel zoned for office use and the Seth Williams subdivision. The subdivision is a mixture of some substantial homes, several dilapidated houses, and a number of vacant lots. The majority of lots fronting Route 50 are currently zoned for commercial office uses.

Although the portion of the Williamstown community which fronts on Route 50 is obviously suitable for office uses, there are a number of issues involved in determining the appropriate use of the rest of the area.

Environmental Considerations

The entire area has soils that are subject to erosion. It would be desirable for the area to have access to the Holmes Run and Accotink Creek Environmental Quality Corridors, particularly in the Route 50/I-495 Area.

ISSUES

The Williamstown community has significant storm drainage problems which have aggravated its citizens for some time. Storm runoff from office and shopping facilities on the north side of Route

50 are funneled under the highway through a large drainage pipe, which ends upon reaching the Williamstown community. A considerable volume of storm water, consequently, courses in an uncontrolled manner through the subdivision, causing flooding problems for affected residents. As a result of recent events, however, much of this problem may be on the way to solution.

Half of the land is vacant in Williamstown and absentee landowners of most of this land appear unlikely to develop these lots at current zoned or planned densities. Poor maintenance of these vacant lots is a big problem contributing to neighborhood deterioration and health problems.

Currently, roads in the community are not paved. The County has funds for this purpose but requires the roads meet state width standards; and some residents are unwilling to have their land taken for this purpose.

The complex area will have a traffic access problem to both Route 50 and Gallows Road if more intensive uses occur in this area. Present access to Route 50 for the Williamstown community is from Williams Drive. The Virginia Department of Highways and Transportation has installed a signal at the intersection of Route 50 and Javier. This does permit the expanding office complex on

both sides of Route 50 to have access to Route 50 at a signalized intersection. The intersection does not currently serve the complex area, however, because Williams Drive is not connected with a service drive running west. With the construction of the present Dewberry and Davis office building and the construction of a service drive, some area traffic from the south is able to use the signalized intersection. However, only with an improved signalized intersection and a service drive connecting Williams Drive to Gallows Road and Prosperity Avenue would the complex area provide good access for the existing and planned office uses.

Fairfax Planning District comprehensive plans have for some time recommended that parcels along the north side of O'Connell Drive be developed in commercial use. Because a number of these parcels have access only to O'Connell Drive, the plans have established the street as appropriate for some commercial traffic.

RECOMMENDATIONS

The planned land uses and transportation improvements for the Gallows Road—Route 50 Complex Area are contained in the Route 50/I-495 Area section of the Plan.

PICKETT ROAD—FAIRFAX CIRCLE COMPLEX AREA

The Pickett Road—Fairfax Circle Complex Area is bordered on the west by the City of Fairfax with its southwest corner anchored in the Pickett Road/Little River Turnpike (Route 236) intersection and the northwest corner at Fairfax Circle. It might be alternately described as a strip of land 500-1,000 feet in depth abutting the City of Fairfax line from Spring Street at Blake Lane on the north to Little River Turnpike on the south.

Designation of this border as a complex area is due to its proximity to the City of Fairfax where future development cannot be planned by the County and where impact of development in the city seems likely to affect significantly the character of County neighborhoods.

ISSUES

In order to improve access to the Vienna Metro Station from the south and to provide a circumferential bypass to the center of City of Fairfax it has been planned by the city that Pickett Road, which in this area lies entirely within the city, be widened to four lanes north of Route 236. Further, the Plan recommends that Blake Lane be extended southerly as a four-lane facility from Lee Highway, across Arlington Boulevard to a realigned segment of Pickett Road east of Fairfax Circle. The improved and realigned road would increase the traffic volume on Pickett Road.

The existing and planned land-uses along both sides of the southern part of the Pickett Road frontage in the city are commercial and industrial while the existing and planned land use on the abutting land in the County is low-density residential except in a depth of approximately 1,600 feet from Route 236. The industrial land in the city has been substantially developed and includes an oil storage depot and several warehousing operations.

The situation is further complicated by the fact that the portion of the Mantua Hills subdivision which was platted but not built within the city has been vacated and the city has approved zoning on this land for planned commercial development.

There is only one substantial parcel of vacant land in the County in the complex area—the 25-acre site just south of Christopher Street. This parcel and the land immediately adjacent to this parcel within the city are planned and zoned for low-density residential use.

In the Fairfax Circle area an unresolved question is exactly where the connector between Blake Lane and the existing Pickett Road right of way would be built.

Preliminary thinking indicates that the portion between Lee Highway and Arlington Boulevard would be built in the County while the realignment of Pickett Road south of Arlington Boulevard would lie within the city. Other alternatives should, however, be studied.

RECOMMENDATIONS

In order that the traffic circulation objectives be met while still protecting the stable residential neighborhoods to the east, the following recommendations are made:

A. All vacant parcels in the complex area between Route 50 and Mathy Drive should be developed in residential use at 2-3 units per acre.

B. The parcel south of Mathy Drive should be developed in townhouse residential use at 8-12 units per acre or in townhouse office use provided adequate buffering and architectural requirements are established to protect the residential community to the east and provide for a transition between the industrial and residential land uses. Access to the parcel, if developed in townhouse office use, should be from Pickett Road through the commonly owned adjacent parcel located in City of Fairfax.

C. Any vacant or redeveloped parcels between Lee Highway, Circle Towers, Arlington Boulevard and the City of Fairfax line should be developed for commercial retail use.

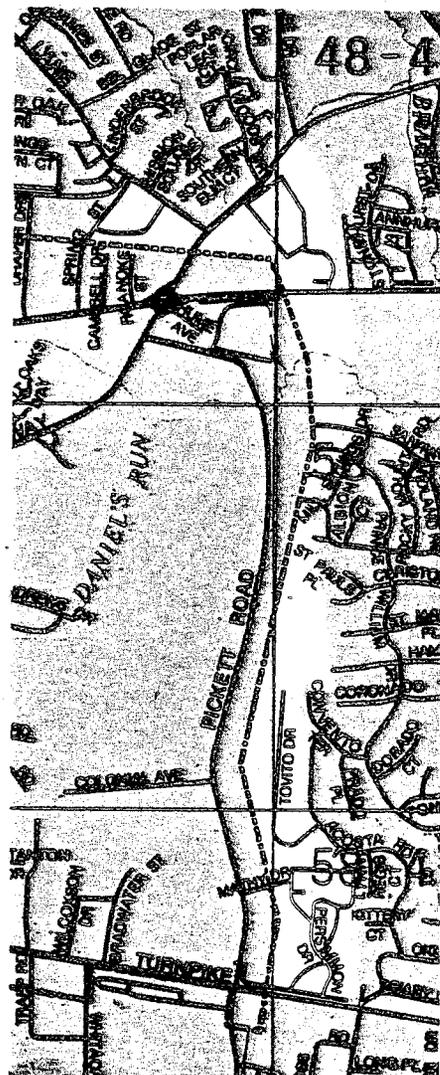
D. None of the streets in the Mantua Hills or Stockbridge subdivisions should be extended to Pickett Road.

E. In constructing the Blake Lane and Pickett Road extensions the Accotink Creek stream valley should be protected.

F. Fairfax County should work cooperatively with the city to attain compatible uses along the jurisdictional boundary. Also, adequate buffering should be provided between different types of uses.

G. Alternative routes for the right of way of the proposed extension of Pickett Road across Route 50 and across Route 29 and northwest to connect with Jermantown Road must yet be carefully studied. Pickett Road is expected to serve as a main route to the Vienna Metro station from the south and east. Thus, the interrelationships, alignment, and feasibility of combining these right-of-way requirements northward from Route 50 should be explored. Also, the impact of this (these) right(s)-of-way on areas to be developed south of I-66 must be studied.

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.



RESIDENTIAL INFILL*

The Plan recommendations for and estimates of residential development in the stable communities of the area are discussed in the section. Criteria, methods, density definitions, and areawide estimates of development to 1990 are noted.

Criteria for Residential Infill

The Plan emphasizes the appropriate utilization of vacant land in the northeast portion of the County to meet the following objectives:

- reduce the rate at which auto traffic grows;
- increase the use of public transportation;
- decrease the impact of through-traffic on Area II;
- preserve open space in ecologically sensitive areas;
- permit desired areas to remain unsewered;
- retard the rising cost of housing; and
- provide a range of choice in housing.

Stable Area Residential Infill Method

The methodology for estimating infill housing and population growth and supportive land uses to 1990 is designed to meet the following needs for information:

- general land use recommendations by map location for the plan; and
- dwelling units by type and population estimates for functional area impact analysis and feedback to land use recommendations.

The development estimates are based primarily on land availability, not demographic factors, and are subject to some iteration as a result of County-wide Plan decisions.

This methodology, which first estimates the appropriate development on all vacant undeveloped land, and then steps this back to 1990 development levels, is as follows.

Development of All Vacant Undeveloped Land

The estimation of development on all existing vacant land is achieved by reducing the available land supply for anticipated nonresidential uses such as:

- flood Plains and easements;
- land reserve to provide for basic employment;
- commercial land area needed to support residential development;
- land necessary to support public facility recommendations; and
- estimates of private recreational and institutional/semipublic acreages based upon an estimate of the future ratio of land in these uses to population levels.

The resulting net amount of land available for residential development is divided into three categories:

- land committed to projects in the County's pipeline that have reached the site plan submission stage or beyond and are likely to be built as programmed;
- fixed infill development similar to its surroundings within neighborhoods where the developed character is set and the policy of preservation and enhancement of stable neighborhoods implies a simple completion of the pattern already existing; and
- infill development considered variable because it occurs on larger tracts of vacant land with an apparent range of appropriate uses and densities. The potentials for achieving compatible development depend upon access, transportation, adjacent land uses, location of shopping, and trends in housing and the possibilities for adequate buffer treatment.

For instance, a recommendation for medium-density use would be appropriate if a given site had:

- direct access onto a major transportation artery, thus reducing or eliminating potential traffic impacts on local streets;
- a trend toward multifamily housing in the surrounding area;
- enough commercial development nearby for walk-to shopping;
- land uses on two opposing sides of strip commercial and single-family homes, such that the multifamily housing created a transition zone, stabilizing the single-family community, yet not creating its own major destabilizing force; and
- a tract large enough for effective buffers, thus not negatively impacting the new or existing communities. In this regard, multifamily housing may be particularly appropriate where borders with single-family communities are limited, such as is the case with development adjacent to flood plains, parks, etc.

Not all of the above criteria have to be met, but it is important to minimize impact on stable neighborhoods and to ensure adequate access to major arteries.

Step Back to 1990 Development Levels

Having estimated development on all available vacant land, a level of development to 1990 was estimated based on the likely effects of short-range transportation constraints, probable average of planned single-family detached housing relative to market potential, sites with less than ideal development possibilities, and other similar localized considerations.

The methodology just outlined provides an estimate of anticipated stable area infill and housing growth in Area II through 1990.

Residential Densities

Residential density ranges recommended in the plan and shown on the maps are defined in terms of units per acre. These density ranges are related in the table to both the 1958 Zoning Ordinance as amended and the Zoning Ordinance adopted in principle in 1974.

Only the lower end of the range is planned as a presumptive appropriate density. Densities in the upper end of the range may be consistent with the

land use map, but such densities may be approved only with the usage of necessary and desirable development criteria and controls as a part of the rezoning process.

Necessary and desirable development criteria may include, but are not limited to, attention to the following:

- sensitivity of design to the natural features of the land;
- progressive conservation techniques;
- provision of open space for active and passive recreational purposes;
- provision of amenities and special features;
- provision of low- and moderate-income housing;
- provision of supportive public facilities;
- innovative design;
- preservation and/or restoration of buildings, structures, or other features of architectural, historic, or environmental significance; and
- phasing of development to most nearly coincide with the provision of public facilities.

Controls to insure compliance with these criteria include, but are not limited to, the submission of development plans for categories consistent with the plan and the proffering of reasonable conditions effectuating such development plans, or through the use of planned unit category districts consistent with the plan.

Exceptions to the use of density ranges may occur under two circumstances. At densities of one unit per acre or less most environmental impacts have already been taken into account; therefore, a single density has frequently been specified. In cases where planned unit development at 20 units per acre or more is considered appropriate, density may have been specified at 20 units per acre rather than the 16-20 unit range.

Summary of Residential Development Estimates for Area II

The tables given summarize the estimated residential development for the planning period (15 years) expected under the plan recommendations. These estimates reflect the methodology described above and should be understood to represent likely approximate magnitudes of development; some fluctuations of magnitude and timing of development are to be expected as further plan

*The methodology described in this section was used for population and housing projections during preparation of the Plan in 1974.

RESIDENTIAL DENSITY RANGES				
Plan Density Ranges	1958 Zoning Ordinance		1974 Zoning Ordinance	
	Base Density	Possible Under Criteria With Development Controls	Base Density	Possible With Development Controls
1-2	RA	RA	RP	RA or RC
2-5	RA	RE-2	RA or RC	RE
5-1	RE-2	RE-1	RE	R-1
1-2	RE-1	RE-0.5	R-1	R-2
2-3	R-17	R-12.5	R-2	R-3
3-4	R-12.5	R-10	R-3	R-4
4-5	R-10	RTC-5 or R-5	R-4	R-5
5-8	RTC-5	RTC-10*	R-5	R-8
8-12	RTC-5 or RTC-10**	RTC-10 or RM-2G*	R-8	R-12
12-16	RTC-10	RM-2G*	R-12	R-16
16-20	RTC-10	RM-2G	R-16	R-20

* Conditions must include density limitation to high-range plan density.

**RTC-5 or RTC-10 may be appropriate without additional development controls depending on complexity of parcel.

refinement implementing actions are undertaken. The following table gives estimates of development by planning district, unit type, and stable and complex areas.

ESTIMATED ADDITIONAL HOUSING UNITS BY 1990 Based on Plan Recommendations ¹									
PLANNING DISTRICT & UNIT TYPE	STABLE AREAS			COMPLEX AREAS			TOTAL		
	Committed & Anticipated Units	Addl. Units	Total Units	Committed & Anticipated Units	Addl. Units	Total Units	Committed & Anticipated Units	Addl. Units	Total Units
McLean									
S.F. ²	1,380	2,270	3,650		20	20	1,380	2,290	3,670
T.H. ³	100	650	750		60	60	100	710	810
Apt. ⁴	2,150	140	2,290		2,020	2,020	2,150	2,160	4,310
Total	3,630	3,060	6,690		2,100	2,100	3,630	5,160	8,790
Vienna									
S.F.	880	2,170	3,050		60	60	880	2,230	3,110
T.H.	630	420	1,050	50	1,570	1,620	680	1,990	2,670
Apt.	100	60	160	1,470	1,200	2,670	1,570	1,260	2,830
Total	1,610	2,650	4,260	1,520	2,830	4,350	3,130	5,480	8,610
Fairfax									
S.F.	1,000	1,940	2,940	50	560	610	1,050	2,500	3,550
T.H.	370	130	500		1,190	1,190	370	1,320	1,690
Mobile	0	30	30		0	0	0	30	30
Apt.	1,850	90	1,940	120	430	550	1,970	520	2,490
Total	3,220	2,190	5,410	170	2,180	2,350	3,390	4,370	7,760
Area II									
S.F.	3,260	6,380	9,640	50	640	690	3,310	7,020	10,330
T.H.	1,100	1,200	2,300	50	2,820	2,870	1,150	4,020	5,170
Mobile	0	30	30	0	0	0	0	30	30
Apt.	4,700	290	4,990	1,590	3,650	5,240	5,690	3,940	9,630
Total	8,460	7,900	16,360	1,690	7,110	8,800	10,150	15,010	25,160

- ¹ Rounded to nearest 10.
- ² Single-family detached.
- ³ Townhouse or similar type.
- ⁴ Apartment including garden and elevator.

Estimates of Residential Population Growth

Future population added to Area II by 1990 as a result of residential infill development in stable areas and ranges of development in complex areas can be estimated using household size factors for various types of units. In Fairfax County current household size factors have been determined using a 1974-1983 survey of County households. Changing social norms and economic factors affect the household composition in complex ways so that any future population estimates based on household sizes are tentative. The current 1983 average household sizes for different types of housing indicated in the following table, nonetheless, provide the best available information for estimating the population to be attracted to Area II by the estimated residential development.

Using these factors, in conjunction with estimates of stable area infill development and complex area growth by unit type, the population to be added in each of the planning districts in Area II is estimated to be as shown in the population table.

Overall Area II is expected to grow by approximately 71,000 persons in the decade to 1990.

1974 AVERAGE HOUSEHOLD SIZE BY HOUSING TYPE			
Household Size (Person)			
Housing Type	McLean	Vienna	Fairfax
Single-Family			
Detached	3.59	3.66	3.64
Townhouse	2.74	2.74	2.53
Garden			
Apartments	2.50	2.50	2.48
Elevator			
Apartments	1.52		1.52

Source: Office of Research and Statistics

ESTIMATED POPULATION ADDED IN STABLE AND COMPLEX AREAS Based on Plan Recommendations ¹					
PLANNING DISTRICT	Estimated 1974 Pop.	Stable Area Added	Complex Area Added	Total Added	Total Estimated Population
McLean	52,800	19,400	4,100	23,500	76,300
Vienna	44,700	14,400	10,100	24,500	69,200
Fairfax	29,400	16,700	6,400	23,100	52,500
TOTAL	126,900	50,500	20,600	71,100	198,000

¹ Figures rounded to nearest hundred.