



U.S. Department of
Transportation

Metrorail Station Area Planning

A Metrorail Before-and-After Study Report

August 1983

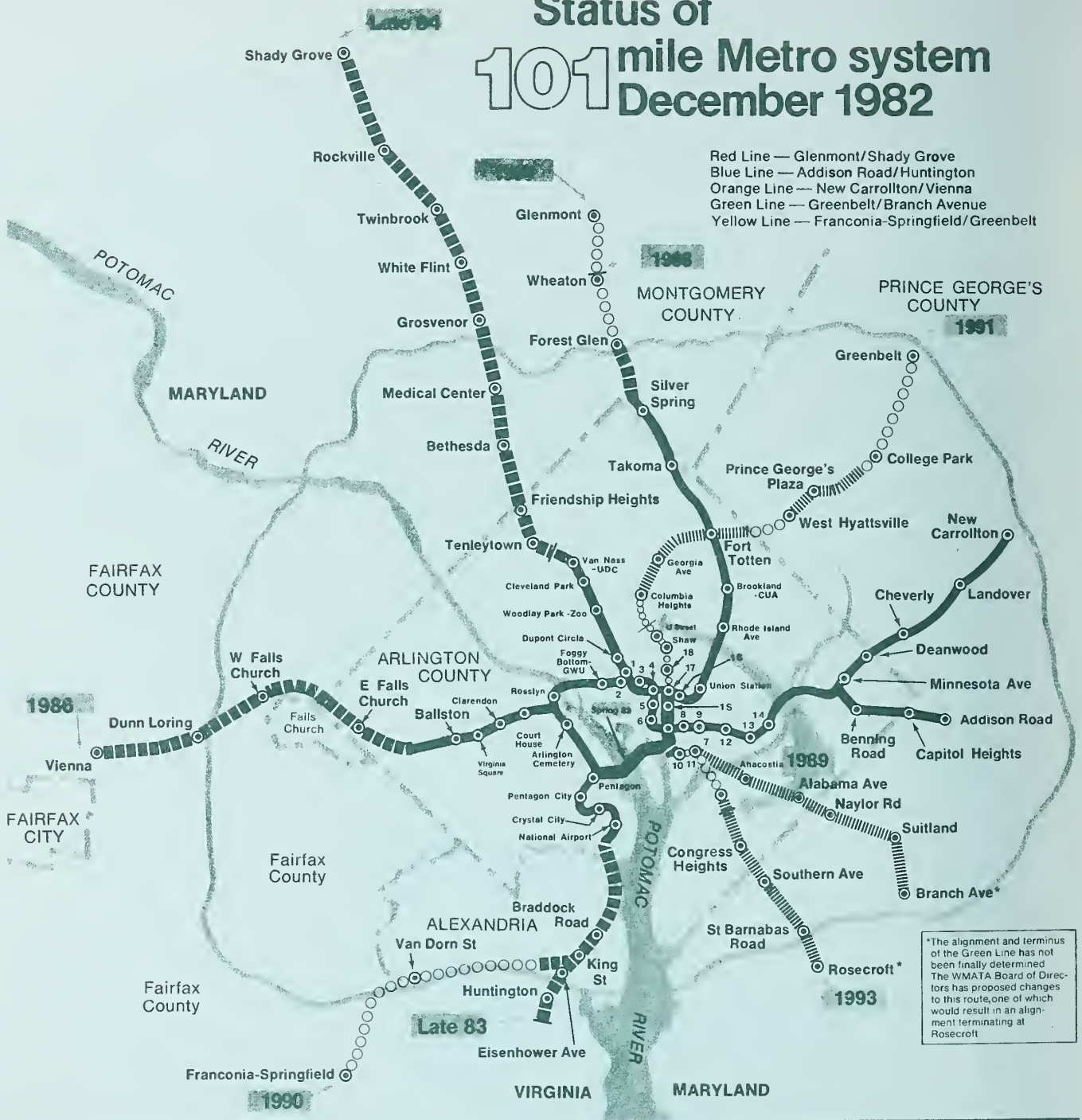
DEPARTMENT OF
TRANSPORTATION

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Status of 101 mile Metro system December 1982



LEGEND

Total mileage—101.18

Total stations—86

- Farragut North
- Farragut West
- McPherson Square
- Metro Center
- Federal Triangle
- Smithsonian
- L'Enfant Plaza
- Federal Center SW
- Capitol South
- Waterfront
- Navy Yard
- Eastern Market
- Potomac Ave
- Stadium-Armory
- Archives
- Judiciary Square
- Gallery Place
- Mt Vernon Sq-UDC



Washington Metropolitan Area Transit Authority
600 Fifth Street, N.W., Washington, D.C. 20001

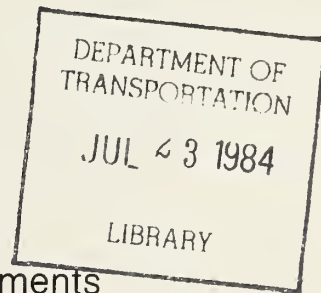
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Metrorail Station Area Planning,

A Metrorail Before-and-After Study Report

Final Report
August 1983



Prepared by
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Office of Planning Assistance
Urban Mass Transportation Administration
Washington, D.C. 20590

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SUMMARY

As described in Section 1, the Washington area Metrorail transit system was planned to improve travel and to reduce dependence on the automobile. In addition, the proposed transit system was seen as an opportunity to channel growth and development in a rapidly growing metropolitan region. The long-range policies plan for the Washington region developed during the 1950s by the Federal Government called for future growth to take place in suburban corridor cities and new towns linked to Washington by freeways and rapid transit lines.

Various subway proposals during the 1960s preceded adoption of a 98-mile rail transit system in 1968 by Metro, a transit authority of local and state government officials created by interstate compact in 1966. The 98-mile system plan was extended to 101 miles in 1978, and several changes in route alignments and station locations have taken place since the system was first adopted. The official schedule calls for completion of 101 miles of rail and 86 stations by 1996, although funding uncertainties could change the schedule.

Section 2 of this report describes responsibilities for station area planning and highlights the varying planning responsibilities of Federal, state and local governments. Section 3 describes the Washington Metropolitan Area Transit Authority (WMATA) which operates the Metrorail and bus systems. The WMATA development program was established to promote more intensive development at appropriate transit stations. The development program encourages joint development of transit properties and adjacent real estate, direct connections between transit stations and adjoining development, and coordination of Metro station planning with comprehensive planning performed by local governments. Section 4 contains descriptions of 18 Metrorail station areas studied during 1980 and 1981, with an emphasis on land use planning affecting the various stations. Each station area description concludes with a list of issues which affect the site. Section 4 is a summary of each jurisdiction's station areas studied.

The following findings are based on the case studies.

1. Within the areas selected for the case studies, there has been considerable planning in anticipation of Metro. The location of most stations was mutually determined with local planners to support local land use policies. Since the regional rail system was adopted in 1967, there have been specific plans prepared by local governments for each station studied. In many cases, these called for increasing the allowable density.

2. By 1980, the base year for most of the case study data, relatively few Metro related projects had actually been initiated. By 1983, there were more projects under construction. The time required for development to actually begin was much longer than many people expected, because:
 - The implementation of rail service had been slower than expected, with only 39 miles and 43 stations operating by early 1983;
 - The time required for the development process at many of the Metro stations is even longer than usual, because of the more complex issues and problems; and
 - The high interest rates since 1979 have made real estate development a much higher-risk business, especially in combination with the recession of 1981-1983 and the deterioration of the rental apartment market.
3. The importance of the market was cited by many of those interviewed, both in the public and private sectors. Availability of Metro is conceded to make nearby properties more attractive for development. However, an understanding of the importance of Metro in this process requires:
 - A recognition that there must be sufficient market demand to sustain additional development. Some stations are located in areas which are not currently attractive to developers; and
 - A good understanding of what the market can support, even in a strong market area. Developers report that in certain Metro station areas, the development outlook is so strong that local planners try to obtain developer concessions which would make the project financially unfeasible.
4. Uncertainty over the future of a particular station, such as the disputed alignment to Rosecroft raceway, is a strong deterrent to development.
5. Projects actually being implemented around Metro stations are primarily office complexes, generally with other commercial uses. High-density residential development has not been significant in most case study areas. Moreover, recent trends suggest that more suburban jurisdictions would prefer to develop their station areas with commercial and office complexes, which are more profitable than housing. Indications are that the labor market for jobs in such places would be beyond the stations, and that most employees would drive to work. Such development would be unlikely to generate many additional transit users.

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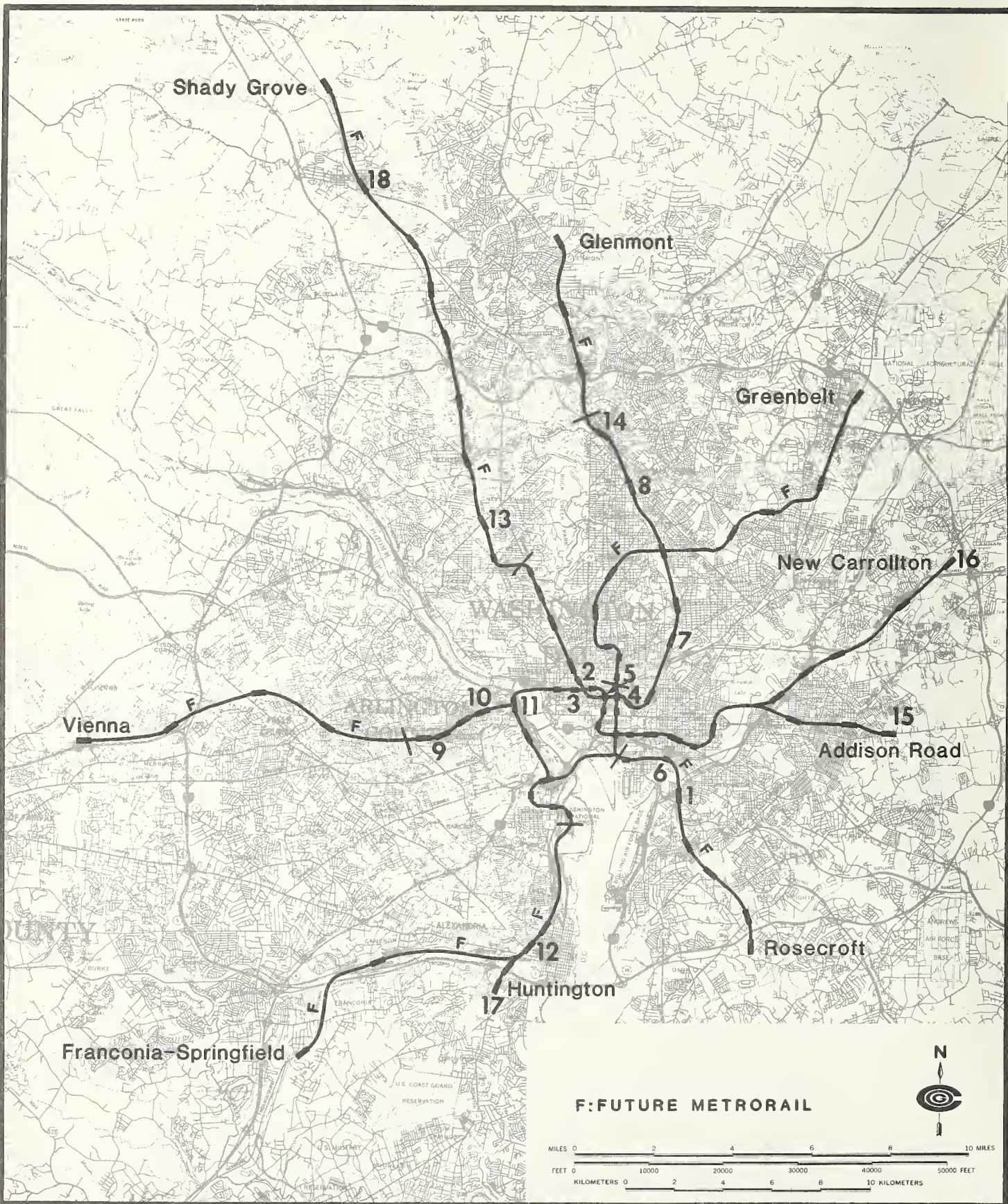
CHAPTER I

INTRODUCTION

**Historical Growth of the Region
Transportation Background
Regional Plan Background
A Regional Comparison**

FIGURE 1

METRORAIL STATIONS STUDIED



METRO RAIL AREA PLANNING

1. INTRODUCTION

The purpose of the Metrorail Before and After Study is to measure changes caused by the Metrorail transit system in the Washington region. It presents a rare opportunity to study the effects of a major transportation improvement on travel behavior and the related effects of these travel changes on land use and economic activity. A major aspect of this study is to analyze the differing impacts of different segments of the Metrorail system as it is phased into full operation. The study has been supported by funding from the Urban Mass Transportation Administration of the United States Department of Transportation.

The first report of the Metro Before-and-After Study describes some of the major decisions that culminated in the regional Metrorail system, with special emphasis on the goals of the system's planners. The second report describes travel changes which occurred during the first four years of Metrorail operations.

The third report describes trends in housing development during the 1970s as well as trends in employment location patterns and retail sales before Metrorail. The report titles are listed on page ii.

This report highlights information on local planning activities for 18 Metrorail stations and surrounding areas selected for study during 1980. The stations by jurisdiction are:

District of Columbia

1. Anacostia
2. Farragut North
3. Farragut West
4. Gallery Place
5. Metro Center
6. Navy Yard
7. Rhode Island Avenue
8. Takoma

Arlington County

9. Ballston
10. Court House
11. Rosslyn

City of Alexandria

12. King Street

Montgomery County

13. Friendship Heights
14. Silver Spring

Prince George's County

15. Addison Road
16. New Carrollton

Fairfax County

17. Huntington

City of Rockville

18. Rockville

Figure 1 shows the 18 stations selected for study. Criteria for selecting stations included:

- At least one station per jurisdiction;
- Stations for each type of land use;
- Stations in various stages of current and future operation;
- Stations in distressed communities;
- Stations with joint development potential or existing joint development;
- Stations in residential conservation areas;
- Stations with an associated redevelopment project;
- Stations with innovative planning and zoning techniques;
- Stations in areas already "built out" as well as in areas with development potential;
- Stations with multijurisdictional effects; and
- Stations for which data were available.

It is important to keep in mind that information herein was collected during 1980 in order to record the status of each station area at a given time point. The research provides an important historical record despite the fact that some information is now dated.

A second survey of the 18 stations will take place in order to gather information on changes which have occurred. The results of the later survey will be used to evaluate findings of this report.

Historical Growth of the Region

The Washington Metropolitan Region has evolved around the nucleus of the original City of Washington in the District of Columbia established in 1791. The city grew slowly and did not attain the high expectations of the original plan. The Civil War served to swell the city's population with war workers who stayed on in Washington, job-seekers, freed slaves and others who migrated to the city. The wartime boost to the city's economy and population set a pattern which has continued through the World Wars, the Korean, and Vietnam wars.

Figure 2 is a graph of the region's growth from 1900 through 1980. During the 1960s--when Metro was created--the region was the fastest-growing of the nation's 12 largest metropolitan areas, with a 38 percent growth in population over the decade. The rate of growth

slowed significantly during the 1970s when only slightly more people were added during the decade than in the average one-year period of the 1960s, although declining population in the central jurisdictions was matched by continued strong growth in some of the large suburban counties.

Transportation Background

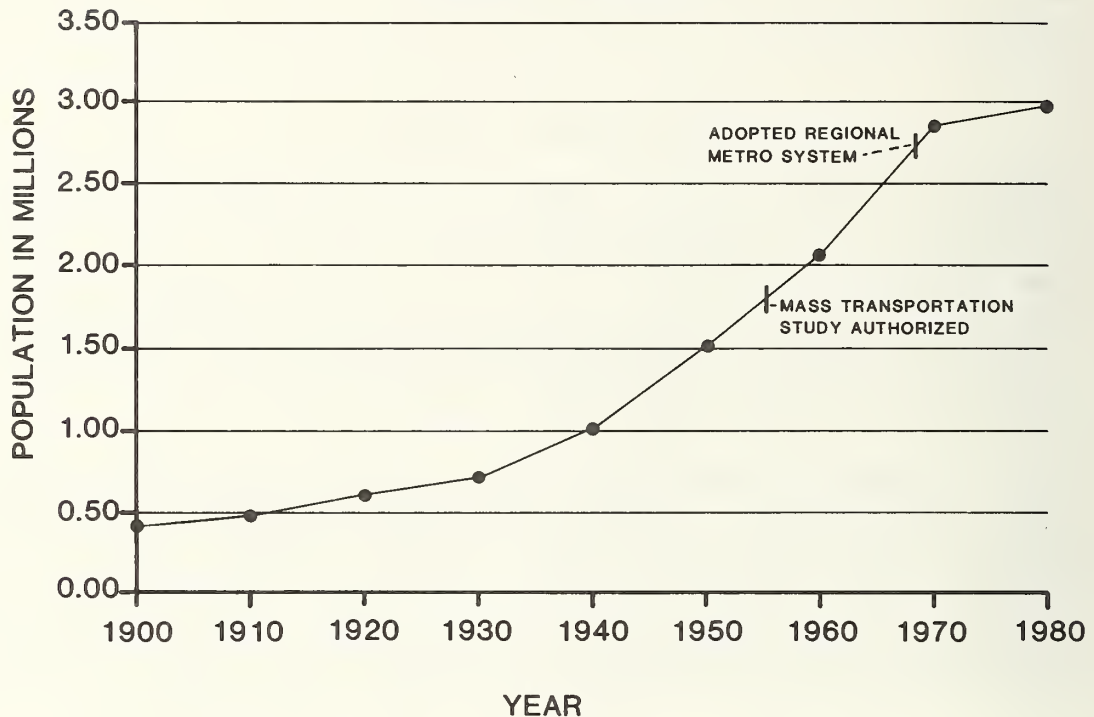
Washington's grand avenues remained unpaved until the 1870s when civic improvements including water and sewer lines were developed in the District. Horsecars were replaced by electric streetcars in the late 1800s and the city and suburbs became more closely linked by interurban electric trolleys. The railroad suburbs of Silver Spring, Hyattsville, Arlington, and many others became bedroom suburbs for Washington workers who traded the commute for the perceived suburban advantages of more space, parks and clean air.

Highways were constructed between most suburban points and the District of Columbia. A system of express highways and parkways was developed beginning in the 1930s with congressional action to establish the Baltimore-Washington Parkway. Various mass transit proposals were advanced as early as 1909 when the Washington Post called for a subway system. Washington and its suburbs were served in the first half of the century by an extensive streetcar network dismantled and replaced by buses in the 1950s and 1960s.

Congress authorized the Mass Transportation Survey in 1957 to consider the region's future mass transportation needs. Conducted by the National Capital Planning Commission and the National Capital Regional Planning Council, the resulting transportation plan called for a 33-mile rail transit system and hundreds of miles of new freeways.

The National Capital Transportation Agency was a temporary federal agency established in 1960 to plan the transportation system, secure rights-of-ways, and begin negotiations for an interstate transit compact. During its seven-year existence, NCTA made many of the decisions that would determine the characteristics of the regional transportation system. The proposed rapid rail transit system was expanded from 33 to 83 miles during the NCTA planning era.

FIGURE 2
WASHINGTON REGIONAL POPULATION
1900 - 1980



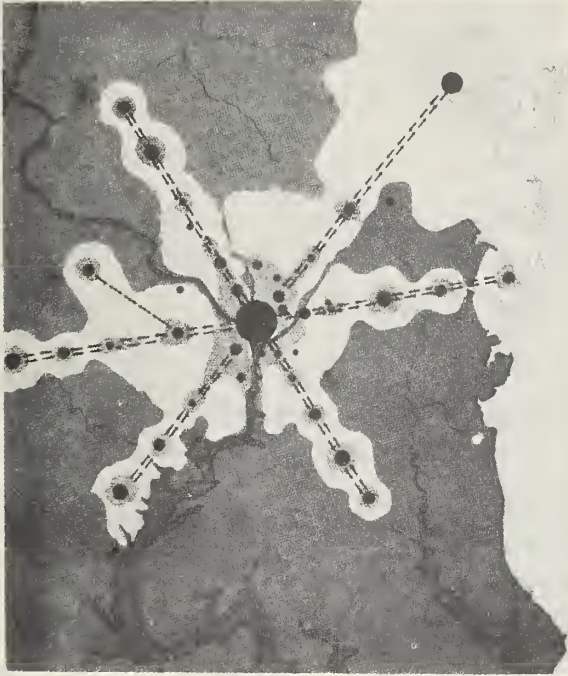
Regional Plan Background

The National Capital Planning Commission and the National Capital Regional Planning Council in 1961 issued a long-range policies plan for Washington and its suburbs. The "Year 2000 Plan" examined various alternative policies dealing with regional growth and presented a radial corridor plan which concentrated growth within six corridors radiating from the city and separated by wedges of open space. As on Figure 3, each corridor was to be composed of new communities to be relatively compact, well-planned and situated on a transportation spine of freeways and transit linking each corridor to the region's center in the District of Columbia.

Regional planning responsibilities were changed by Presidential Reorganization Plan No. 5 in 1966 which transferred to the Metropolitan Washington Council of Governments the nonfederal aspects of planning in the region. COG initially endorsed the policies of the radial corridor plan in 1964 and established a Growth Policy Program in 1974 which places greater emphasis on policies necessary to implement development than on the physical form of traditional land use plans. COG then issued a Metropolitan Policy Guide in 1980 as a comprehensive policies plan.

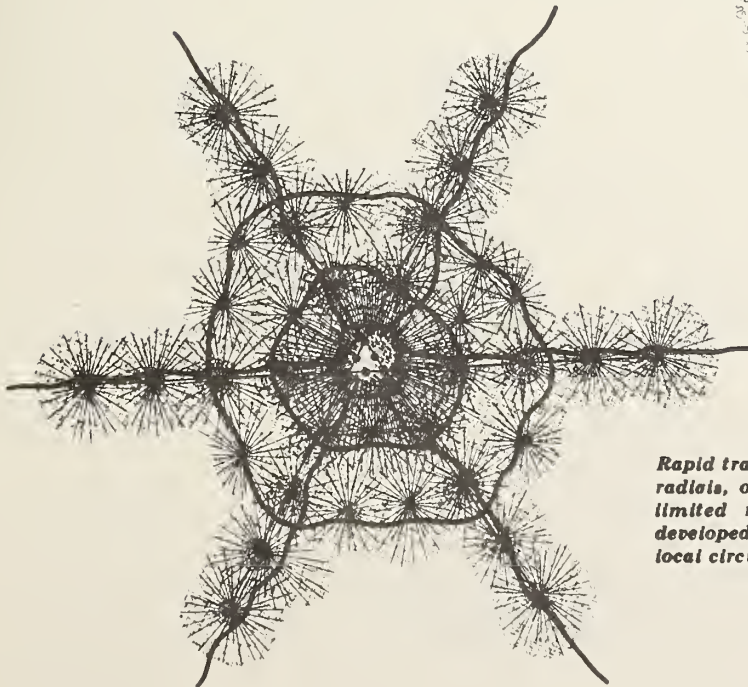
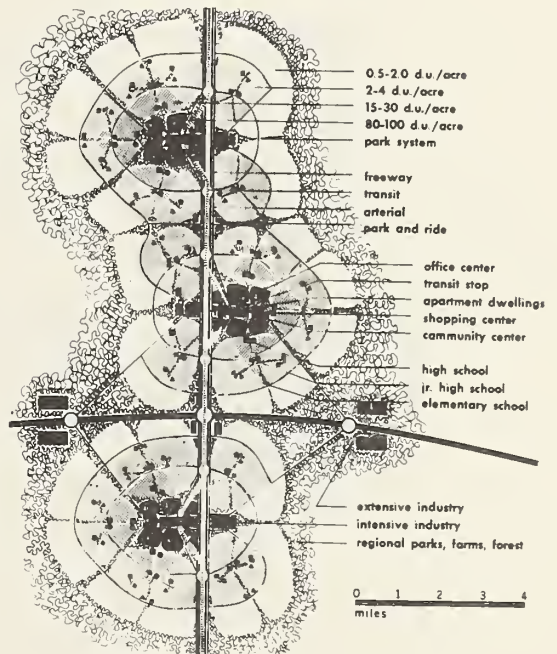
FIGURE 3

YEAR 2000 PLAN



Corridor cities concept for the Washington Metropolitan Region proposed in A Policies Plan for the Year 2000.

A Policies Plan for the Year 2000 published jointly in 1961 by the National Capital Planning Commission and the National Capital Regional Planning Council proposed a series of radial development corridors extending from the central city and separated by wedges of open space.



Rapid transit radials would focus on Metro-Center. Freeway radials, on the other hand, would be supplemented with a limited number of circumferentials serving the highly developed central sections of the metropolis. Patterns of local circulation would focus on transit stations particularly.

A Regional Comparison

Figure 4 shows the Washington and Toronto regions and rapid transit systems at the same scale. The figure shows the operating lines of the Toronto system and the incomplete 101-mile Washington Metrorail system, as well as the area of the two metropolitan regions.

The purpose of the figure is simply to compare two metropolitan regions sometimes described as similar. In addition, the Toronto subway is frequently cited as a model for transit-related development. The figure shows that:

- The Washington region covers a much greater area;
- The 101-mile Metrorail system will greatly exceed the length of the current Toronto system;
- The two systems vary considerably in structure. The spider-like legs of the Metrorail routes were planned to serve the existing and future corridors of the Year 2000 Plan, whereas the Toronto system is much simpler in comparison.

While a more scientific comparison of the two regions would include other factors, the above observations are nevertheless useful for an understanding of some aspects of the Metrorail system and its planning context.

FIGURE 4

WASHINGTON AND TORONTO REGIONS AND RAPID TRANSIT SYSTEMS



CHAPTER 2

RESPONSIBILITIES FOR STATION AREA PLANNING

**The Federal Government
The Government of the District of Columbia
State, County and City Governments
Washington Metropolitan Area Transit Authority**

2. RESPONSIBILITIES FOR STATION AREA PLANNING

The Federal Government

The District of Columbia covers only 67 square miles of the 2,400 square miles of the Washington metropolitan region. The state, county, and city governments which govern the remainder of the region are treated much the same as any other state or local government throughout the nation. The Federal Government strives to coordinate state and local government planning and development activities with federal construction through the National Capital Planning Commission.

The NCPC proposed in 1967 a Comprehensive Plan for the National Capital, and in 1968 adopted elements addressing goals, land use, parklands and transportation in the District of Columbia. These guided plans in the environs of Metrorail stations in the District until 1973, the year of the Home Rule Act.

Before the Home Rule Act, the NCPC reviewed plans for all Metrorail stations in D.C. and prepared area plans for communities around the stations. NCPC is currently responsible for coordinating planning for federal installations such as the Mall, Federal Triangle and the National Institutes of Health which have transit stations on federal land. NCPC's planning jurisdiction for Metro stations is limited to federal land affected by route alignments and station locations.

Federal agencies and other activities traditionally located in the District of Columbia have increasingly dispersed to suburban locations, partly in response to the policies of the radial corridor plan mentioned above. The office leasing policies of the General Services Administration during the 1960s and 1970s, with emphasis on minimizing rental costs, particularly supported office development in Rosslyn, Crystal City and other locations served by Metrorail.

The Government of the District of Columbia

Land use planning responsibilities in the District of Columbia were shifted from the federal National Capital Planning Commission (NCPC) to the Mayor of D.C. under the District of Columbia Self-Government and Governmental Reorganization Act of 1973, also called the Home Rule Act. The Act called for the Mayor to prepare and implement District elements of the comprehensive plan after submitting them to the NCPC which must prepare federal elements of the plan.

The District's Office of Planning has prepared a draft comprehensive plan outlining policies to guide future planning. Separate elements addressing the Downtown, historic preservation and urban design have been prepared as well. NCPC has prepared several federal elements of the plan.

State, County, and City Governments

The State of Maryland and Commonwealth of Virginia have granted planning and zoning powers to subunits of the states. A notable exception is in Virginia where cities are independent of the counties. The cities of Alexandria, Fairfax, and Falls Church regulate their own planning and development much as if they were counties. In Maryland, the planning and zoning functions are performed in the Washington suburban counties by the Maryland-National Capital Park and Planning Commission. The Commission staff in each county is answerable to the elected County Councils. With the exception of Laurel, Gaithersburg, and Rockville, cities in Maryland generally rely on the Park and Planning Commission for planning and zoning services. The Home Rule cities just mentioned operate independently of the MNCPPC and County governing bodies.

Washington Metropolitan Area Transit Authority

The Washington Metropolitan Area Transit Authority (WMATA) was created by an interstate compact among the District of Columbia, Maryland, and Virginia in 1966. WMATA is charged with planning, developing, financing, and providing for the operation of regional transit facilities and is governed by a Board of Directors of state and local officials.

Various subway proposals during the 1960s preceded adoption of a 98-mile rail transit system in 1968 by WMTA. The 98-mile system plan was extended to 101 miles in 1978, and several changes in route alignments and station locations have taken place since the system was first adopted. The official schedule calls for completion of 101 miles of rail and 86 stations by 1996 although funding uncertainties could change the schedule.

WMATA has no taxing powers, and instead allocates costs to member jurisdictions on the basis of an accepted formula based on the level of service provided each jurisdiction. The WMATA compact prevents the agency from acquiring property beyond that required to construct and operate the transit system. WMATA in 1974 acquired four private bus companies which had previously provided the region's only mass transit. The authority has attempted to meld them into the Metrobus system operating in tandem with the rail system.

CHAPTER 3

WMATA AND DEVELOPMENT

**The Metro Development Program
Joint Development
System Interface (Direct Access)
Development Potentials Associated with Metro Stations**

3. WMATA AND DEVELOPMENT

Public Law 89-774, approved November 6, 1966, gives WMATA the authority to acquire real property. Article V, Section 12(d) states WMATA may:

. . . acquire, own, maintain, sell, and convey real and personal property, and any interest therein by contract, purchase, condemnation, lease, license, mortgage or otherwise, but all of said property . . . shall be necessary or useful in rendering transit service or in activities incidental thereto, . . .

Article XVI, Section 82(a) states:

. . . The Authority shall have the power to acquire by condemnation, whenever in its opinion it is necessary or advantageous to the Authority to do so, any real or personal property, or any interest therein, necessary or useful for the transit system authorized herein, except property owned by the United States, by a signatory or any political subdivision thereof, or by a private transit company.

The transit authority is guided by the above requirements which limit its development activities to lands necessary to construct the rapid transit system. In 1981 WMATA established an ambitious Station Area Development Program within a newly organized Office of Planning and Development. A Development Branch within the Office was given primary responsibility for the new program.

The Metro Development Program

As Metro's construction program progressed and more of the rail system became operational, by 1981 it became increasingly evident that substantial advantages could accrue to WMATA's benefit by promoting more intensive development at or near appropriate station areas. These benefits include an increase in ridership and the provision for income to the Authority. The specific goals and objectives of the Authority's development program, which provide benefits not only to WMATA but also to local governments and the Washington region, are:

Goals

- Enhancement of levels of mass transit use;
- Conservation of petroleum-derived energy;
- Allocation of scarce resources in more optimal fashion;
- Reduction of urban sprawl; and
- Encouragement of good quality development.

Objectives

- Reduction of petroleum product use in the transportation sector;
- Substitution of greater numbers of auto trips with rail/bus trips;
- Reduction of travel time;
- Addition of real property to the tax rolls;
- Increase in tax base;
- Improvement of cost/benefit ratios of public goods and services provided by local government; and
- Provision of revenue to WMATA for subsidy offset.

In order to realize the potential benefits which exist, as expressed in these goals and objectives, the development program was instituted in the WMATA Office of Planning and Development. This organizational structure recognizes the close inherent relationship which exists between Metro system planning and development functions. It also provides an improved development mechanism to local area governments, the development community, and to the public.

Policies

1. "It shall be the general policy of WMATA to promote, encourage, and assist in the creation of high-quality, more intensive development at or near appropriate station areas.
2. "It shall be the policy of WMATA to study the development potential which may exist at present or future station areas and to prepare a development program, and in a longer range time frame, with a three to five year work program, and in a longer range time frame, which will identify actions and positions by the Authority to enhance or protect the longer range development potential.
3. "It shall be the policy of the Authority to advocate positions before the public, local government entities, the development community, and others which promote high-quality, more intensive development at or near station areas.

Source: WMATA, Management Memorandum Number 713, October 5, 1981.

Joint Development

Partly in response to meeting financial requirements of transit, the Washington Metropolitan Area Transit Authority (WMATA) instituted a Station Area Development Program. Two of the major elements of this program are joint development and system interface projects. The two program elements are defined by WMATA as follows:

- Joint Development: (1) The close physical integration of transit facilities with real estate development; (2) the disposition, by lease or by sale, of excess WMATA-owned or controlled real property interests including air rights, at or near a station area which, because of their close proximity to station facilities, have significant potential for commercial, residential, or related development, alone or in combination with adjoining real property interests to further the Authority's development-related goals and objectives; and
- System Interface: A project that involves the direct physical tie-in of pedestrian, vehicular or visual access to WMATA facilities from adjoining private or public development. WMATA tie-in facilities could include station mezzanines or entrances, kiss and ride, parking, or bus areas.

Historically, WMATA's joint development projects have typically included the "right" of system interface access to its joint developer. This right has been granted by WMATA as one of the "bundle of rights" conferred to the joint developer via a long-term lease. Additionally, consideration for compensation for system interface rights has been included within these joint development agreements. The distinction between these two concepts is illustrated by 1101 Connecticut Avenue -- A joint development project under long-term lease -- which includes the right of system interface, or direct access, along with a number of other rights, such as the leasing of air rights. On the other hand, the direct physical connection at 11th & G Streets, N.W. between the Metro Center mezzanine (owned by WMATA) and Woodward and Lothrop (an adjoining, privately-owned department store) is a system interface project.

Source: Gladstone Associates, "System Interface: Economic Impact and Implications of Direct Access to Metro." Prepared for WMATA, May 1982.

Synopsis of Joint Development Projects

Bethesda Station

R&K Metro Associates are leasing a 3.59 acre site from WMATA for an initial term of 50 years to develop a package that includes a 17-story office building, a 12-story, 355-room hotel, a 3-level retail arcade, 4 levels of underground parking, and an underground Metrobus and kiss & ride level, all linked together by a large landscaped plaza. Construction commenced in 1983.

Van Ness-UDC Station

Prudential Insurance Company of America in 1983 completed construction of a 7-story office and retail building at WMATA's Van Ness-UDC Station site, where Prudential leases the approximate 1.5 acre site from WMATA for an initial term of 50 years. Development will incorporate an underground level for kiss & ride as well as weather protected bus bays at the rear of the building.

McPherson Square Station

Construction has commenced on a 13-story retail and office building at the southwest entrance of the McPherson Square Metro Station, a 17,710 square foot site. When completed in the Fall of 1983, this development will boast a direct underground connection to Metrorail. The developer, 14th and Eye Streets Associates, a limited partnership headed by Melvin Lenken, leases the ground from WMATA for an initial term of 50 years.

Farragut North Station

The Connecticut Connection, located on the northeast corner of Connecticut Avenue and L Street, N.W., is a 12-story office and retail building which enjoys direct below-grade access to Metrorail at one of the busiest intersections in downtown Washington, D.C. The lessee developer, Miller/Connecticut Associates, was selected in April, 1975 by WMATA to develop the 17,566 square foot site which was completed for occupancy during the Summer of 1978.

Rosslyn Station

Rosslyn Metro Center is a 22-story mixed retail and office development adjacent to and interconnected with the Rosslyn Station mezzanine. Completed for occupancy in the Fall of 1979, this development features elevated pedestrian walkway connections to neighboring office buildings, a through block arcade connecting the second level to Wilson Boulevard and an at-grade pedestrian passageway to the local bus stop on N. Moore Street. The developer, Rosslyn Center Associates, combined 31,286 square feet purchased from WMATA with their own adjacent site to yield a total of 68,225 square feet for development. From this, 11,000 square feet were dedicated to Arlington County for park purposes while the development rights were transferred to the remaining 57,225 square

foot site to yield a building 5 to 6 stories higher than would have otherwise been possible.

Friendship Heights Station

Final site plan approval was granted in 1982 for the development of a 13-story office and retail building adjacent to the north entrance of the Friendship Heights Metro Station. Based on a letter of understanding between WMATA and the Chevy Chase Land Company, WMATA will convey title to the bus terminal site located north of Wisconsin Place in exchange for reserved easements for its station entrance and a new bus facility to be built by the developer and incorporated within the development. Wisconsin Place is to be abandoned and incorporated within the development site area of 59,660 square feet. Construction commenced in late 1982.

Gallery Place Station

WMATA accepted a proposal for joint development at the Gallery Place North Metro site east of Seventh Street, N.W., between G and H Streets. The proposed project, called the "Far East Trade Center," will be a mixed-use project containing a 527-room hotel, 220,000 square feet of office space, at-grade and below-grade retail space, 165 apartments and underground parking. The high-rise structure above the Metrorail station will reflect Washington's adjacent Chinatown through its distinctly Oriental design.

Project Details

Detailed project descriptions on the above are found in Appendix A.

Joint Development Process

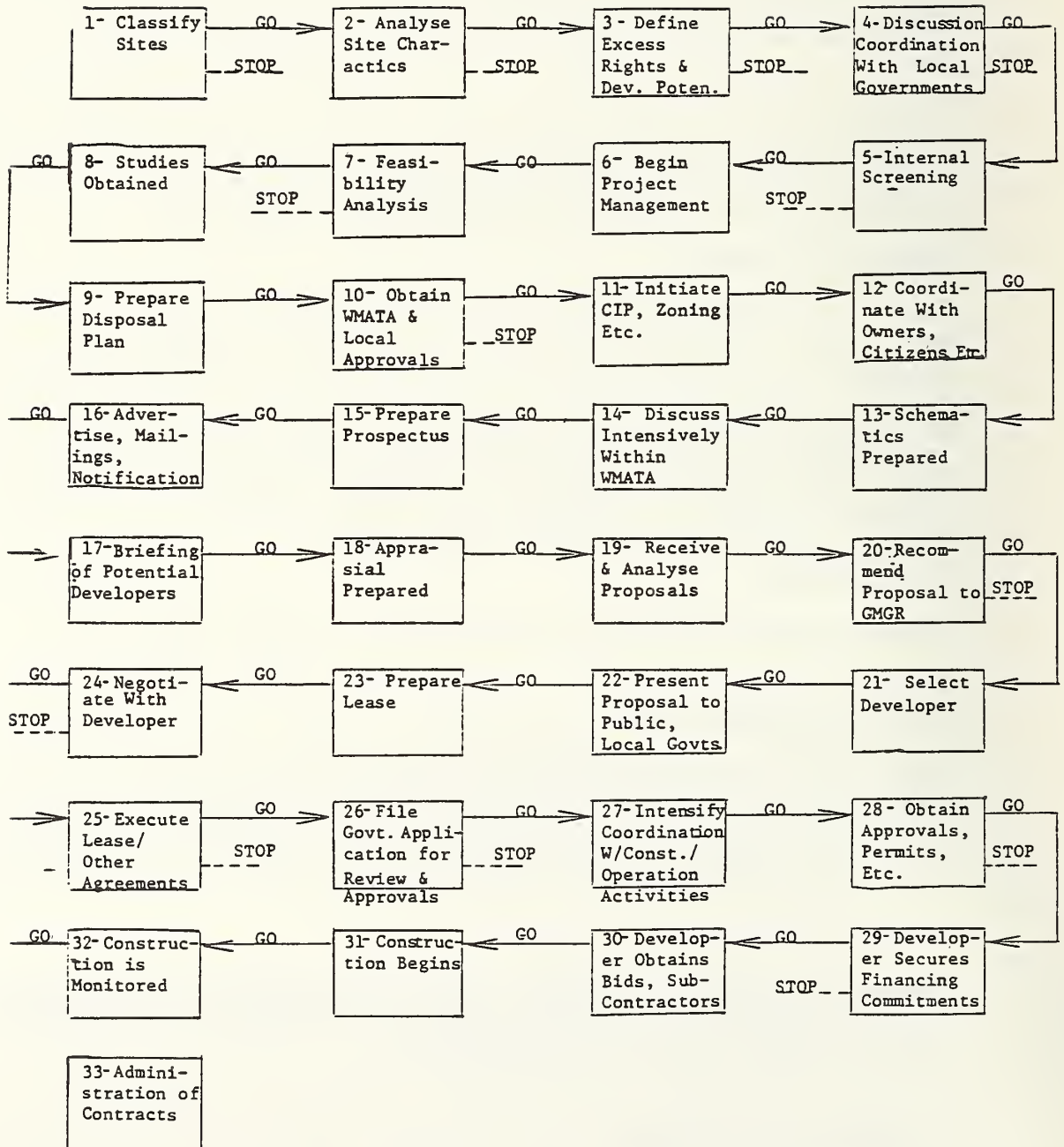
Fostering joint development of a transit property and a real estate project is an extremely complicated process. The complexities are illustrated on the flow chart which shows 33 steps and numerous points where the process may be halted. Each project described above has gone through this process.

Future Joint Development Projects

The Metro Development Program staff has initiated joint development feasibility studies at a number of additional stations. These studies typically include the following elements:

- land use and design;
- transportation/traffic; and
- financial, fiscal, and market considerations.

FLOW CHART OF
WMATA JOINT DEVELOPMENT PROCESS



The studies are intended to forward joint development through its process from planning to implementation (development) by identifying and resolving applicable issues.

The following stations are subjects of current joint development studies:

- New Carrollton
- Huntington
- Rhode Island Avenue
- Glenmont
- Grosvenor
- Dunn Loring
- West Falls Church
- Rockville
- Court House
- Addison Road
- Silver Spring

Costs and Benefits of Joint Development

In a WMATA study, cost/benefit analysis was used to evaluate two joint development projects: the first, at the Bethesda Metro Station Site, began construction in 1983 and is to be completed in 1986; the second, at the New Carrollton Metro Station Site, is in the preliminary planning stage and would most likely not be completed before 1990.

At Bethesda, Maryland, the approved mix will include separate hotel and office structures with related retail uses and a retail arcade structure, all totaling to about 625,000 square feet.

At New Carrollton, Maryland, preliminary indications are that WMATA's site could ultimately support a mixed use project of about 1,200,000 square feet, consisting of hotel, office, and retail uses.

The study attempted to identify the major costs and benefits to WMATA and to the local jurisdiction involved (Montgomery County at Bethesda, Prince George's County at New Carrollton). Where possible (given timing and resources constraints) these costs and benefits were quantified. Where possible, major quantifications were put in monetary terms related to value.

In the case of Bethesda, it was found that the major incremental monetary benefits to WMATA and Montgomery County will exceed costs

by \$130 million over a 50-year period (1985 to 2035) in terms of present value. The respective net benefits accruing to WMATA will exceed \$48 million, and to Montgomery County will exceed \$81 million. The former represents a ratio of benefits to costs of 39:1. The latter represents a ratio of 45:1.

The proposed project at New Carrollton was estimated to generate benefits to WMATA and Prince George's County exceeding \$73 million over a 50 year period (1990 to 2040) in terms of present value. The respective net benefits accruing to WMATA are \$25 million; to Prince George's County \$48 million. The ratio of benefits to costs for WMATA is 3.2:1. For Prince George's County the ratio is 33.4:1.

Cost/benefit analysis was found to be a useful technique in evaluating the two projects. The study recommended that the technique be refined to more closely fit proposed joint development projects at WMATA to enhance rational decision making.

Source: "The Washington Metropolitan Area Transit Authority Joint Development Program: An Illustrative Cost - Benefit Analysis of Two Projects," by Wayne Upshaw and John Green, WMATA Office of Planning and Development, 1981.

System Interface (Direct Access)

Policies

A recent subject of discussion by the WMATA Board related to policies and practices involving fees charged developers desiring to construct projects with direct physical access to subway stations. Such commercial tie-ins to the Metro system have occurred over the brief history of Metro at the following:

1. Woodward and Lothrop at Metro Center Station;
2. International Square at Farragut West Station;
3. Woodward and Lothrop at Friendship Heights Station;
4. Crystal City;
5. L'Enfant Plaza; and
6. Pentagon City.

(Detailed descriptions of these projects are found in Appendix B.)

The WMATA Board decided in March 1983 generally to reaffirm the following policies on direct access agreements:

1. Businesses should construct entrances at their own expense into "free" areas of Metro stations;
2. Negotiations on direct access compensation paid by businesses should occur on a case-by-case basis;
3. Compensation should be paid to WMATA and any revenues realized should be applied to WMATA system revenues to offset operating deficits. The transit system should share the benefits of the enhanced value of the development project due to Metro; and
4. The WMATA Board will decide on requests by staff to negotiate and execute a contract with a developer desiring direct access.

The WMATA Board also established as policy the right of local governments to express written opinions on direct access agreements for the Board's consideration.

Economic Impacts of Direct Access Projects

The following is from a Gladstone Associates study prepared for WMATA.

The main findings are that:

- Potentially significant value can be created by system interface. System interface can positively impact properties adjacent (and in some cases non-adjacent) to Metrorail facilities.
- System interface can be mutually beneficial to WMATA and to property owners.
- Based on preliminary physical planning analyses by WMATA, opportunities exist for some 150 system interface projects over the full planned 86-station system. In order of magnitude terms, these projects could generate \$60 to \$75 million (in 1982 dollars) in economic impacts that could be shared between WMATA and property owners.

An important element of the study was to identify the economic impacts of system interface -- the potential benefits and costs to participating property owners, WMATA and the general public. System interface impacts were categorized in an analytical framework, broken down as between benefits and costs by party affected. These impacts from the perspective of property owners and WMATA are summarized below.

BENEFITS AND COSTS OF DIRECT ACCESS

Party Affected - Participating Property Owners

Type of Impact

Benefits:

- Local government concessions resulting from relaxed zoning or other public requirements granted in recognition of system interface. Concessions could include density bonuses or reduced parking requirements.
- Change in use of portions of affected properties to a "higher" use offering greater economic return (i.e., through higher rents). An example would be the conversion of basement parking space into retail space oriented toward transit users. (See Exhibit, Change In Use)
- More intensive use opportunities created by improved access -- convenience, more direct routing, and shelter -- generating increased rent potentials. (See Exhibit, Upgrade in Use)

Costs:

- Start-up costs incurred in the design and planning of system interface projects.
- Capital costs which might include passageway and entrance construction and finishes, relocation of WMATA equipment, escalators, and landscaping.
- Operating Costs for maintenance, utilities, security costs, insurance.

Source: Gladstone Associates, "Summary of System Interface: Economic Impact and Implications of Direct Access to Metro." Prepared for WMATA, May 1982.

Party Affected - WMATA

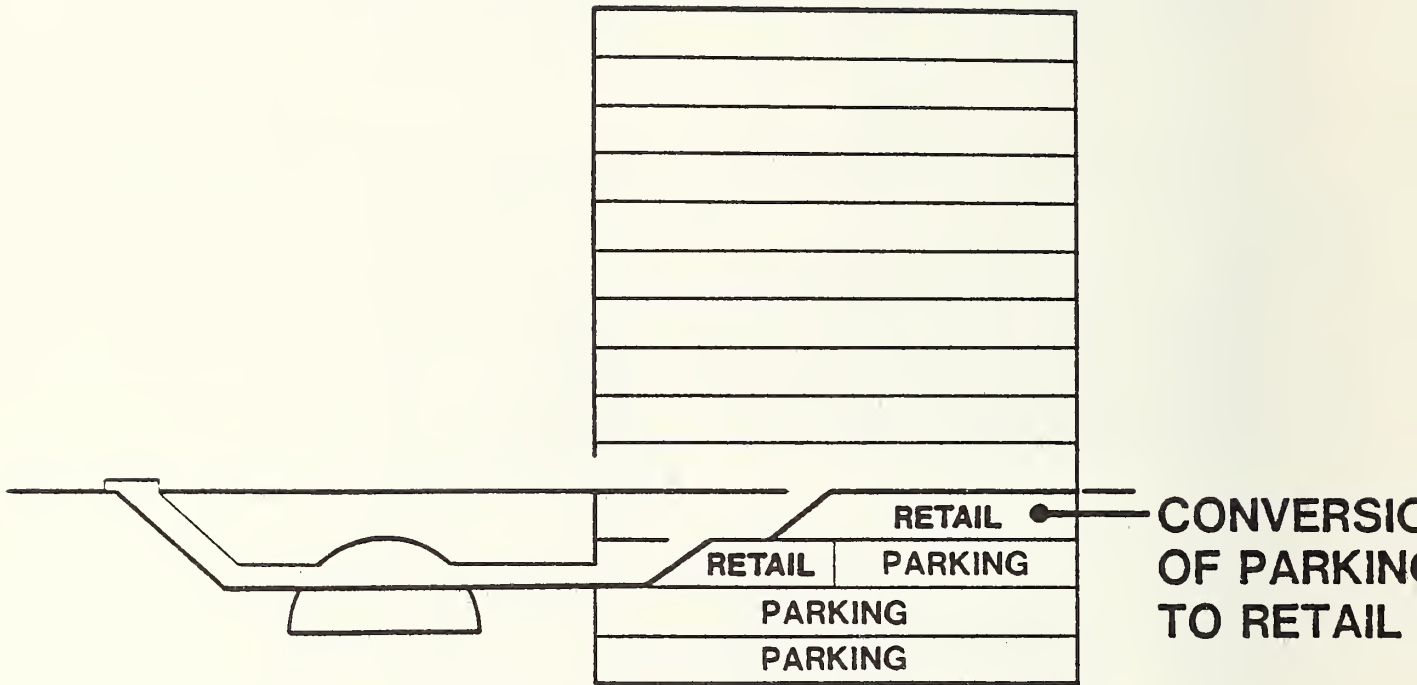
Type of Impact

Benefits:

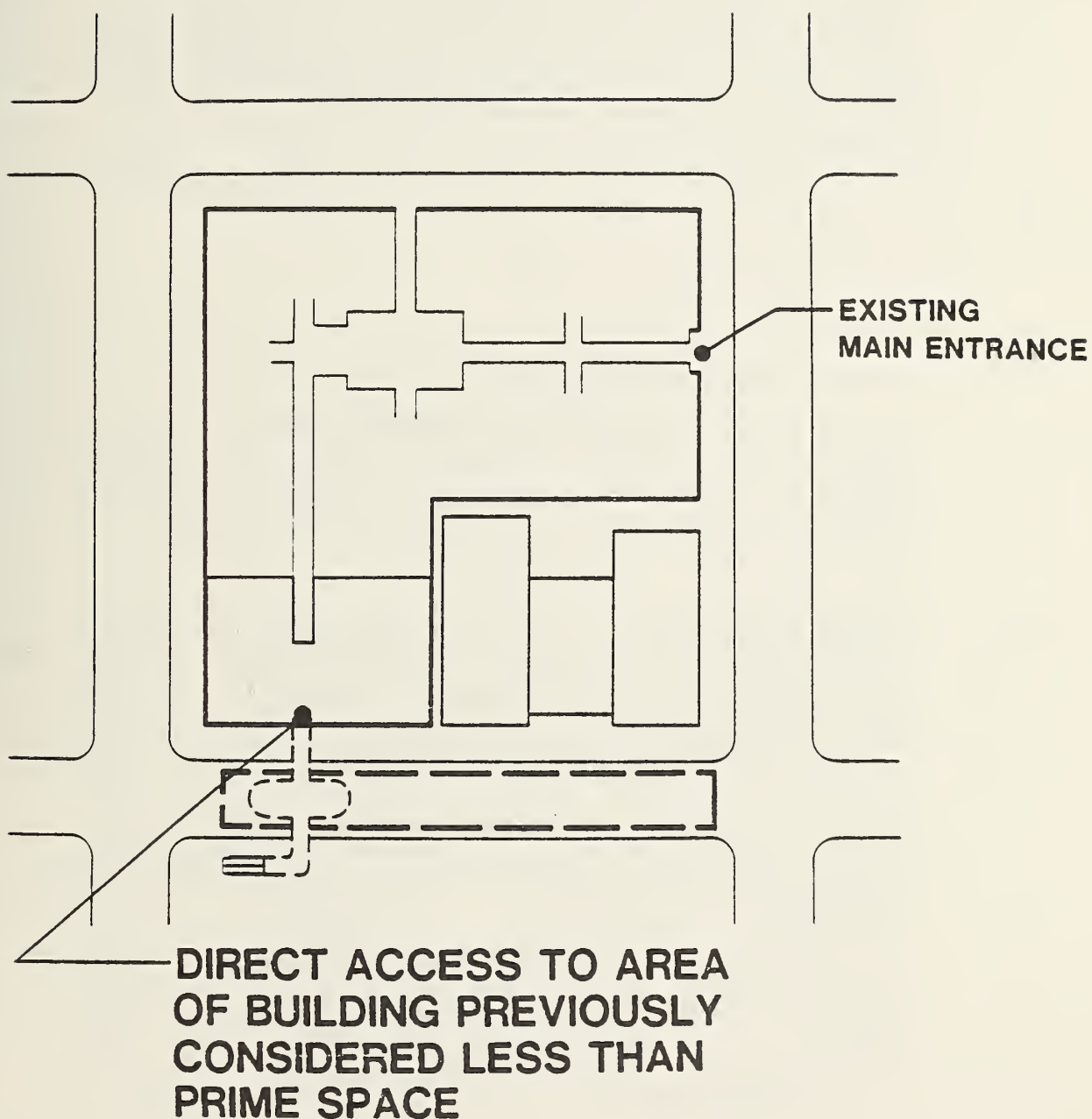
- Ridership amenities from the convenience and shelter provided by system interface. While these benefits will be captured largely by transit users, system interface amenities may help maintain ridership.
- Induced ridership to the extent that system interface projects can generate new travel demand. Generally these benefits will not be significant.
- Potential increased revenues obtained through negotiated agreements based on the benefit sharing concept.

Costs:

- Start-up costs incurred in planning, design, and negotiations.
- Administrative costs of the system interface program.



CHANGE IN USE



UPGRADE IN USE

Estimating System Interface Impacts

Several alternative approaches to estimating system interface impacts were discussed in the Gladstone study and considered for use in specific project case studies developed for WMATA. These approaches include:

- Direct appraisal;
- Formulas for value;
- Economic impact analysis;
- Financial analysis; and
- Econometric analysis.

Among these alternatives, financial analysis was selected for the case studies. This approach analyzes system interface in terms of its impact on the financial return to an affected property owner. Results from this approach are expressed in terms of system interface residual values.

The financial analysis approach for this study offers several advantages. It is generally simple and direct compared to the alternatives. It allows for uniform assumptions about certain project variables, further simplifying the analysis. It also readily permits changes in key assumptions so as to provide sensitivity analyses of the results. This approach does not require expensive, time consuming statistical analysis. Rather, it relies upon information based on direct interviews with persons knowledgeable about these projects and the Washington real estate market, supplemented by our own judgments and research.

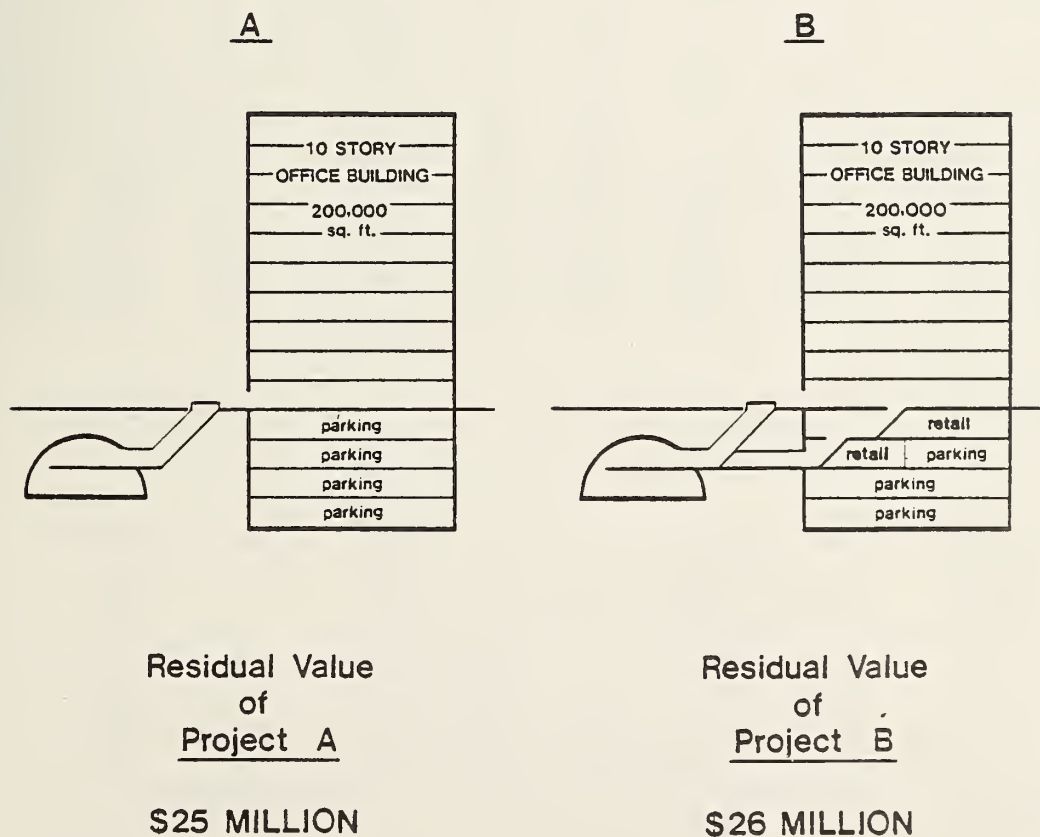
In the case studies, this approach utilized the Land Value Residual Method, which is routinely used by professional appraisers and others in the real estate industry. As applied to any development project, the Land Value Residual Method includes the following steps:

- Calculation of net income from the project (expressed as net operating income);
- Capitalization of net income (in which project income is divided by a predetermined annual interest rate) to determine project value (expressed as supportable development costs);
- Establishment of building cost estimates (expressed as system interface improvement costs in this study); and

- Derivation of residual value (project value, less improvements value yields a residual imputable to the land or other contributing factors such as system interface).

Once a residual value is established for a project's "base case" (without system interface), increases in that value under a "system interface case" can be attributed to direct subway access. This approach is illustrated in the following Exhibit, Illustration of Value Created.

ILLUSTRATION OF VALUE CREATED BY SYSTEM INTERFACE



Value created by System Interface:

\$1 MILLION

Prospective System Interface Projects

<u>Station</u>	<u>System Interface Request</u>	<u>Estimated Development Magnitude</u>	<u>Proposed Connection</u>
1. Bethesda	Clark/Hyman Building	377,900 s.f. (net) office, retail, residential	Below grade connection at Metro level linking retail with Metro facilities.
2. Clarendon	Olmstead Building	226,650 s.f. office and retail	Connection under street between retail level of project and intermediate landing within Metro passageway entrance.
3. Farragut North	Washington Square	715,100 s.f. (net) office and retail	Connections through knock-out panels between Metro mezzanine and two lower levels of Washington Square project.
4. Friendship Heights	Mazza Galleria	272,175 s.f. (net) retail	Connection from Metro concourse level via passageway into Galleria.
5. Gallery Place	Gallery Place	1,200,000 s.f. office, hotel, retail, residential	Below grade connection between intermediate landing and first underground level of project.
6. Huntington	Montebello	1,016 residential units	Vehicular accessway at grade for shuttlebus operations.
7. Metro Center	Downtown Renewal Tracts	1,496,500 s.f. (net) office, retail (possibly hotel)	Three proposed connections: 2 at north mezzanine (Red Line) and below grade retail space; 1 at west entrance and below grade retail.
8. Silver Spring	Metro Plaza	634,000 s.f. office and retail	Connection at north mezzanine (east side).
9. Silver Spring	Loving Tract	360,000 s.f. office and retail	Connection at south mezzanine (west side).
		Gross Floor Area: + 6.4 million s.f.	

DEVELOPMENT POTENTIAL ASSOCIATED WITH METRO STATIONS

Operating Stations	Potential	Development Stage
<u>Metro Center</u>		
North	High	Final
South	High	Dormant
East	High	Planning
West	High	Final Planning
<u>Farragut North</u>		
North	High	Complete
Northwest	High	Construction
South	None	-
<u>Dupont Circle</u>		
North	Medium	Dormant
South	Medium	Dormant
<u>Zoological Park</u>		
	High	Dormant
<u>Cleveland Park</u>		
East	High	Dormant
West	High	Dormant
<u>Van Ness</u>		
	High	Complete
<u>Gallery Place</u>		
East	High	Planning
West	Government	-
North (1983)	High	Dormant
<u>Judiciary Square</u>		
East	Medium	Dormant
West	Government	-
<u>Union Station</u>		
North	-	-
South	-	-
<u>Rhode Island Avenue</u>		
	Low	Dormant
<u>Brookland</u>		
	Low	Dormant
<u>Fort Totten</u>		
	High	Dormant

<u>Takoma</u>	Low	Dormant
<u>Silver Spring</u>		
North	High	Dormant
South	High	Dormant
<u>McPherson Square</u>		
East	High	Final Planning
West	Government	-
<u>Farragut West</u>		
East	None	-
West	High	Complete
<u>Foggy Bottom</u>		
	G.W.U.	Planning
<u>Rosslyn</u>		
	High	Complete
<u>Arlington Cemetery</u>		
	None	-
<u>Pentagon City</u>		
North	High	Planning
South (future)	High	-
<u>Crystal City</u>		
	None	-
<u>National Airport</u>		
	Government	-
<u>Federal Triangle</u>		
	Government	-
<u>Smithsonian</u>		
North & South	Government	-
<u>L'Enfant Plaza</u>		
North	High	Construction
East	Government	-
West	Completed	-
<u>Federal Center SW</u>		
	High	Dormant
<u>Capitol South</u>		
	High	Dormant
<u>Eastern Market</u>		
	Government	-
<u>Potomac Avenue</u>		
	Low	Dormant

<u>Stadium-Armory</u> North & South	Government	-
<u>Minnesota Avenue</u>	Medium	Planning
<u>Deanwood</u>	Low	Dormant
<u>Cheverly</u>	Low	Dormant
<u>Landover</u>	Low	Dormant
<u>New Carrollton</u> North	High	Final Planning
South	High	Final Planning
<u>Benning Road</u>	Low	Dormant
<u>Capitol Heights</u>	Low	Dormant
<u>Addison Road</u>	Low	Dormant
<u>Court House</u>	High	Planning
<u>Clarendon</u>	High	Inquiries
<u>Virginia Square</u>	High	Planning
<u>Ballston</u>	High	Planning
<u>Archives</u>	Government	-

SOURCE: The data in this table was obtained from staff of the
Metro Planning Department

DEVELOPMENT POTENTIAL ASSOCIATED WITH METRO STATIONS:
NON-OPERATING STATIONS

Non-Operating Stations	Operation Year	Potential	Development Stage
<u>Tenleytown</u>	1984	High	Dormant
<u>Friendship Heights</u>	1984		
North		High	Final Design
South		High	Inquiries
<u>Bethesda</u>	1984	High	Construction
<u>Medical Center</u>	1984	Government	-
<u>Grosvenor</u>	1984	High	Dormant
<u>White Flint</u>	1984	High	Final Design
<u>Twinbrook</u>	1984	Low	Dormant
<u>Rockville</u>	1984	Low	Dormant
<u>Shady Grove</u>	1984	Low	Dormant
<u>Forest Glen</u>	1988	High	Dormant
<u>Wheaton</u>	1988		
East		High	Dormant
West		High	Inquiries
<u>Glenmont</u>	1988	High	Dormant
<u>Braddock Road</u>	1983	High	Inquiries

<u>King Street</u>	1983	High	Construction
<u>Eisenhower Avenue</u>	1983	None	Planning
<u>Huntington</u>	1983		
North		Medium	Inquiries
South		High	Inquiries
<u>Mt. Vernon Sq.-UDC</u>	1989	Government	-
<u>Shaw</u>	1989		
North		Medium	Dormant
South		Medium	Dormant
<u>U Street</u>	1989		
East		Government	Dormant
West		High	Dormant
<u>Columbia Heights</u>	1991		
East		High	Planning
West		High	Planning
<u>Georgia Avenue</u>	1991	High	Dormant
<u>West Hyattsville</u>	1991	High	Future
<u>Prince George's Plaza</u>	1991	High	Future
<u>College Park</u>	1991	Medium	Future
<u>Greenbelt</u>	1991	High	Future
<u>Waterfront</u>	1989	High	Complete

<u>Navy Yard</u>	1986		
East		High	Planning
West		High	Planning
<u>Anacostia</u>	1989		
North		Government	-
South		Medium	Dormant
<u>Congress Heights</u>	1993		
		Government	-
<u>Southern Avenue</u>	1993		
		High	Future
<u>St. Barnabas</u>	1993		
		High	Future
<u>Rosecroft</u>	1993		
		High	Planning
<u>Van Dorn</u>	1990		
		High	Dormant
<u>Franc/Springfield</u>	1990		
		High	Dormant
<u>East Falls Church</u>	1986		
		Medium	Dormant
<u>West Falls Church</u>	1986		
		High	Dormant
<u>Dunn Loring</u>	1986		
		Medium	Dormant
<u>Vienna</u>	1986		
		High	Planning

SOURCE: The data in this table was obtained from staff of the Metro Planning Department

CHAPTER 4

EIGHTEEN CASE STUDY STATIONS

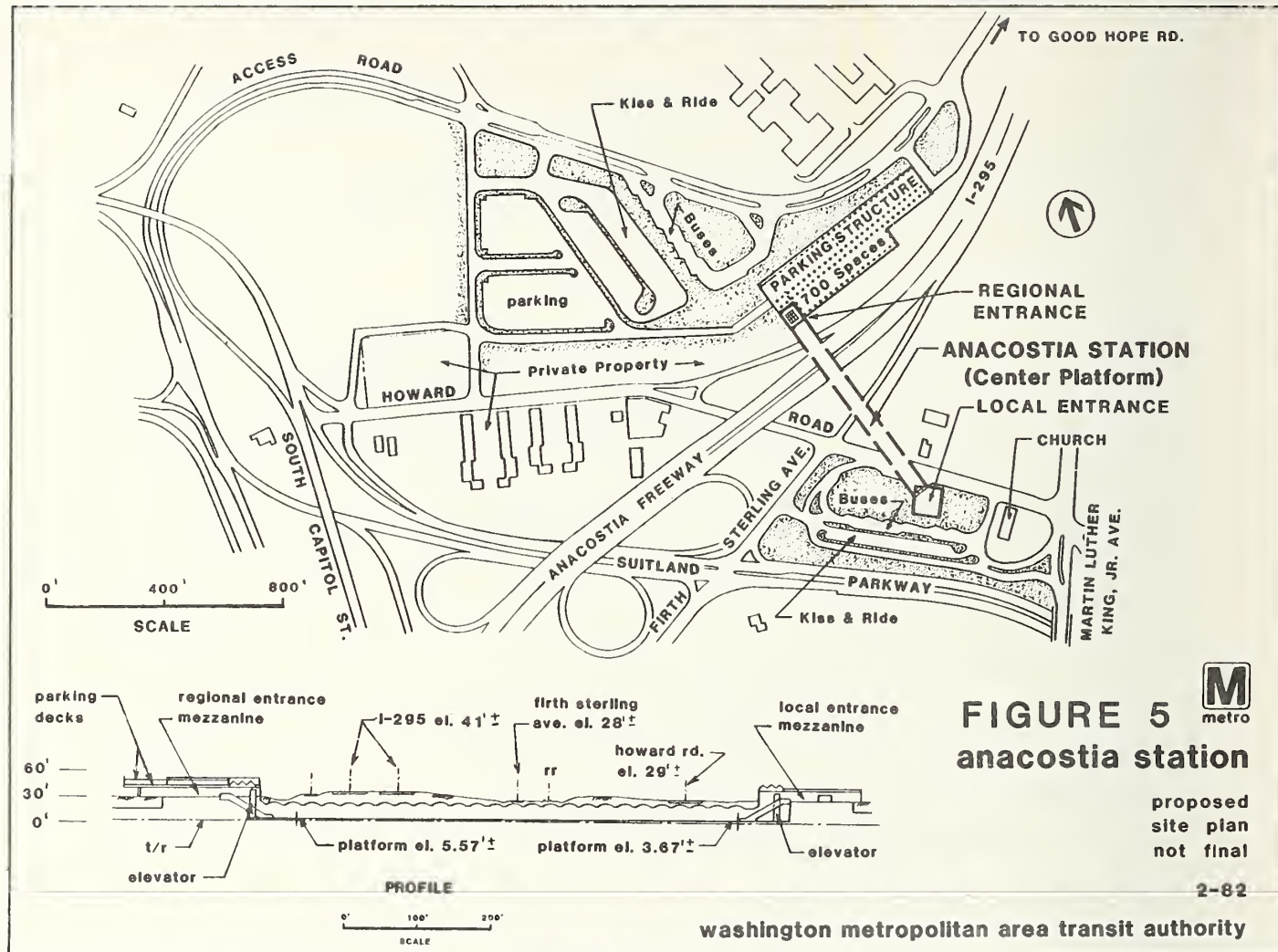
Anacostia Station
Farragut North and West Stations
Metro Center and Gallery Place Stations
Navy Yard Station
Rhode Island Avenue Station
Takoma Station
Rosslyn, Ballston and Court House Stations
King Street Station
Friendship Heights Station
Silver Spring Station
Addison Road Station
New Carrollton Station
Huntington Station
Rockville Metrorail Station

4. EIGHTEEN CASE STUDY STATIONS

This section presents highlights of information collected on each of the 18 case study stations. The information was gathered in 1980 through interviews and review of published studies and reports. The purpose of the section is to orient the reader to the various station areas and to describe planning and development activities at each.

The 18 station descriptions are in alphabetical order by jurisdictions as follows:

1. District of Columbia
2. Arlington County, Virginia
3. City of Alexandria, Virginia
4. Montgomery County, Maryland
5. Prince George's County, Maryland
6. Fairfax County, Virginia
7. City of Rockville, Maryland



Anacostia Station Site, 1981. WMATA photo by Phil Portlock



4.1 Anacostia Station

Location

The Anacostia Station is to be built under the Anacostia Freeway, (I-295) with parking lots and freeway access from the north entrance and pedestrian, bus, and local traffic access from the south entrance along Howard Road near Martin Luther King Jr. Avenue. Much of the station site is on land of the Anacostia Park transferred to Metro by the National Park Service. It is in the far Southeast section of the city where there are large concentrations of public facilities (military bases, hospitals, parkland), as well as concentrations of subsidized and public housing projects.

Station Area Characteristics

Far Southeast D.C. has high percentages of Black and low-income people. Its commercial areas have not completely recovered from damage incurred in the 1968 riots, and employment opportunities in the area are limited. Martin Luther King Jr. Avenue is the principal commercial area near the station. Its strip commercial development and adjoining neighborhoods of single-family homes, rowhouses, and garden apartments are typical of the deteriorated and mixed quality of structures and businesses in the Anacostia area. The large St. Elizabeth's Hospital (the D.C. mental hospital) is near the station site and separates the Anacostia Station and neighborhood from Congress Heights and other neighborhoods to the south.

The location of the Anacostia station, as well as the alignment of the entire transit route, were disputed for many years due to concerns over disruption of existing residences and businesses. In addition, once-proposed alignments did not directly serve the greatest concentration of transit-dependent population. The compromise station location shifted the station about one-half mile west from Anacostia's commercial core on Good Hope Road. Residents were very concerned about the proposed 2,000 parking spaces, eventually reduced to 1,300 spaces, some to be reserved for short-term use to support future commercial development. Most of the parking will be at the north "regional" entrance across I-295 from the Anacostia community.

Studies, Plans and Expectations

Metrorail impact studies were conducted by the D.C. Government in 1976 and 1980, as were specialized studies of the area's businesses, vacant lands, and station parking needs. A sector plan for the area was to have been completed in 1980. The non-profit Anacostia Economic Development Corporation (AEDC) has proposed that existing

businesses within walking distance of the future station be strengthened and that public improvements be made to improve the station area's image. AEDC staff expect the station's presence to be a catalyst for revitalization and new development. They have chosen the following revitalization objectives for Anacostia and the far Southeast, with special attention to be given to Metrorail station areas:

Commercial Objectives:

- Develop several joint-venture office and retail buildings and a shopping center;
- Set up a revolving loan fund to assist local minority businesses;
- Secure needed public improvements, especially in conjunction with commercial revitalization efforts;
- Secure required financial commitments from local lending institutions; and
- Conduct industrial site feasibility studies.

Residential Objectives:

- Acquire, rehabilitate, and sell 180 single-family dwellings;
- Acquire, rehabilitate, and lease 420 multifamily dwelling units;
- Acquire sites, construct, and sell 175 single-family townhouse units; and
- Establish a real estate management subsidiary.

Station Area Issues

The station has been sited to the side of Anacostia's existing concentration of commercial activities along Good Hope Road. Residential areas of Barry Farms and Anacostia surround its south "local" entrance. Institutional properties of St., Elizabeth's Hospital, the D.C. Tree Nursery, and National Park Service lands are nearby and are considered underutilized by District and AEDC planning officials. The area's image and the length of time before the station is scheduled to open appear to dampen short-term development interest. The area lacks a current, adopted public plan for its rejuvenation.

4.2,3 Farragut North and West Stations

Construction of these underground "new downtown" stations began in 1971. The Red Line's Farragut North Station opened in March of 1976 as part of the first operating section of the subway. Farragut West opened in July of 1977 on the Blue Line. These are two of the transit system's busiest stations, with about 70 percent of riders surveyed in 1980 reporting work as their trip purpose.

Location

Figure 6 shows the location of the three entrances to Farragut North and two entrances to Farragut West in the vicinity of Connecticut Avenue and K Street, N.W., Washington, D.C. The stations are within two blocks of each other so a common study area was assumed in D.C. studies and has been used in this case study.

Station Area Characteristics

The area around the Farragut Metro stations is often termed the "new downtown" area of Washington, D.C. for it was extensively redeveloped during the 1960s and 1970s. The land use is generally 8-10 story office buildings with lower level retail shops as well as hotels, restaurants, and a few apartments. Much of the private office development that has taken place in the District in the last 15 years has occurred in this area. The office tenants are typically law firms, trade associations, accounting firms, government offices, research and consulting firms. Figure 7 shows where buildings were built since 1975, the period when Metro service began and patronage grew rapidly.

An important characteristic of this area is that nearly all readily developable parcels have been developed. There remain some large structures that may be demolished for new development and scattered smaller parcels with aging, low-density development. Developers cited the scarcity of remaining, developable sites, high land costs, and currently high interest rates impeding project financing as principal constraints on further development activity.

Studies, Plans and Zoning

The 1967 proposed Comprehensive Plan for the National Capital was produced by the Federal Government's National Capital Planning Commission which subsequently adopted elements addressing goals, land use, parklands and transportation in the District of Columbia. The plan identified the area around the Farragut Square stations, bounded by M Street on the north and 21st Street on the west, as the

northwest portion of the "Central Employment Area." This was compatible with the existing C-4 zoning (high-density commercial) set in 1958 and prevalent for the downtown area.

The D.C. Municipal Planning Office, now the Office of Planning, produced an UMTA-funded 1975 Metro Station Impact Study I and 1980 Metro Impact Study II covering this and other transit impact areas. The 1975 study reported that this area has received relatively little public planning attention, as the City's planning agencies have been preoccupied with problem areas rather than opportunity areas. Continued office development was forecast with the main concern being the monotonous and unimaginative character of the redevelopment done to date.

The 1980 Metro Impact Study II notes that there are few remaining, developable sites in this impact area. The area's land use continues to be guided principally by the C-4 zoning.

The Federal City Council's 1979 survey of Metrorail-related development found 1,200,000 square feet of office development built since 1976 to be directly influenced by the presence of these stations. Staff of the Council said the area was so attractive for office development in the 1960s and 1970s that they attributed Metrorail as a principal factor, but only for those developments above or abutting a transit station.

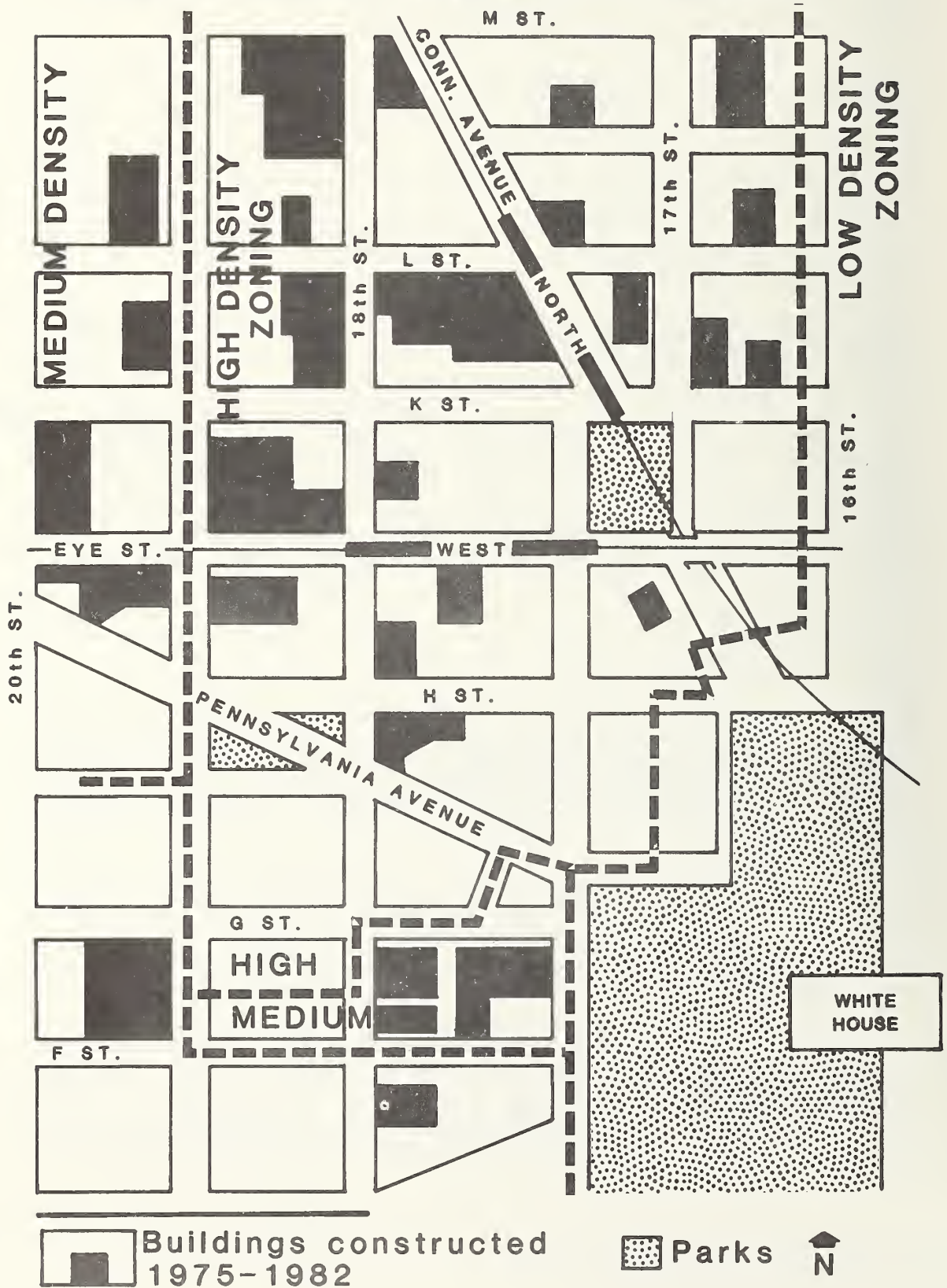
Station Area Issues

The new absence of residential development in this "new downtown" area was taken for granted by city officials and developers interviewed. Just to the west, the Westbridge and other developments contain both residential and office uses, but this has not been proposed in the very high land cost area about the Farragut Square stations.

Officials of the Carr Company referred to their International Square development that occupies three-fourths of the block bounded by 18th, 19th, I, and K Streets as a "landmark structure." It is massive by local standards, with a central atrium and a transverse retail mall with direct access to Farragut West station. The District Government's concern for monotonous and unimaginative development expressed in 1975 is still an issue for the area. The Washington Square development at Connecticut Avenue and L Street is the first large development in the study area to vary significantly from the basic box shape of the area's contemporary buildings.

FIGURE 7

FARRAGUT NORTH AND WEST DEVELOPMENT



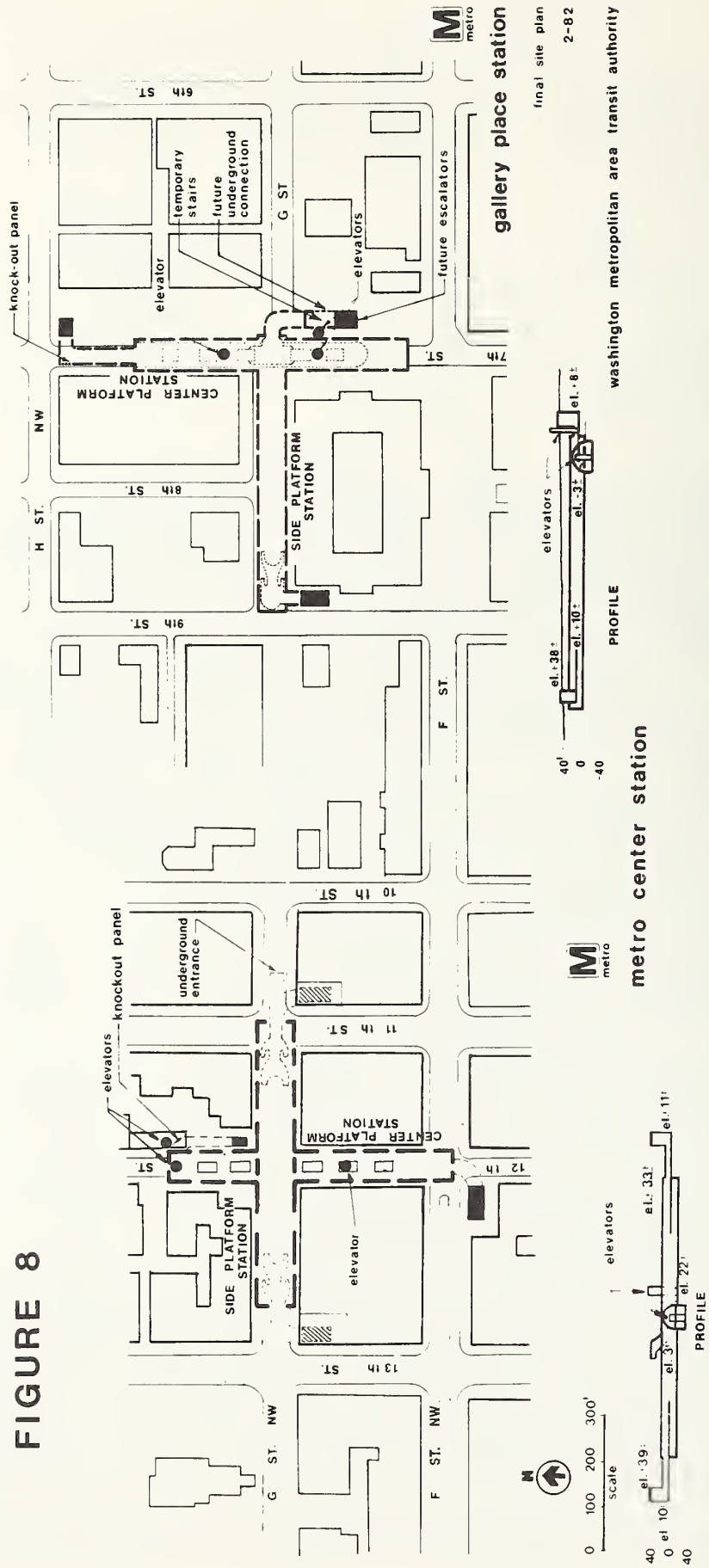
WMATA officials described plans for a direct, underground pedestrian connection between the Farragut North and West stations to permit interline transfers. Knockout panels have been built into the walls of both stations should funds and attention once again focus on this opportunity.

Other potential issues such as limited open space, air quality impacts, significant pedestrian-automobile conflicts, limited nighttime activity, and the dispersion of retail stores in the area were only occasionally mentioned. Most people have come to accept the Farragut Square area as primarily a high-rent office and restaurant district well served by transit as well as by roads.



Connecticut Avenue and L Street, N.W. in 1981 showing the Connecticut Connection joint development diagonally opposite the Washington Square direct access project under construction.

FIGURE 8



4.4,5 Metro Center and Gallery Place Stations

Location

These stations are in the heart of Washington's "old downtown" commercial area. Both are transfer stations with several entrances. Metro Center provides access to both the Red and Blue/Orange Lines with four station entrances in the area of 11th to 13th, F and G Streets, N.W. Gallery Place now provides access to the Red and Yellow Lines with three station entrances in the area of 7th, 9th, G, and H Streets, N.W. Their impact areas were studied together since the stations are within two blocks of each other.

Station Area Characteristics

According to WMATA ridership surveys, Metro Center had the greatest number of transit riders whose destination purpose, in May of 1980, was for shopping or a meal. It also had the second-highest ridership in the system, 10,762 people/day. This is a major new factor in the city's traditional, though somewhat tattered retail core. The area east of 15th Street, south of New York and Massachusetts Avenues, north of Pennsylvania Avenue, and west of 6th Street, N.W. showed signs of a progressive weakening as a retail core during the 1970s though it contains three major department stores and hundreds of smaller retail shops and restaurants. Its buildings typically date from the late 1880s to the early- and mid-1900s with many in poor condition and only 2-5 stories in size. The civil disturbances of the 1960s affected the image of the Downtown area. There was little redevelopment in the 1970s until Metro began to operate on the Red Line in 1976.

The Gallery Place Station is named after the Smithsonian's National Portrait Gallery (now the Museum of American Art) which is located between the transit station entrances. It is on the eastern end of the retail core along with the nearby Hecht Company department store; Martin Luther King, Jr. Public Library; and older church, retail, and office buildings. Chinatown lies northeast of the station, the D.C. Convention Center is two blocks to the north of both stations, city and federal buildings are to the east and several blocks to the south. Several major developments have begun near these stations as confidence in the area's future has returned and building sites in the "new downtown" area around Connecticut and K Streets became scarce.

Studies, Plans and Zoning

This area has been studied by the National Capital Planning Commission, the District's Municipal Planning Office (now the Office of Planning) and the Department of Housing and Community Development (which has absorbed the Redevelopment Land Agency (RLA), the D.C. Zoning Commission, and the Pennsylvania Avenue Development Corporation (a federal corporation with strong planning and development authority) as well as citizens and business groups. There is an Urban Renewal Plan for the area which, along with the 1958 Zoning Act, serve as the guidelines for development in the area.

The D.C. Department of Housing and Community Development has six urban renewal sites in the area. Three of those at the Metro Center Station and one beside the Gallery Place Station have been subjects of much negotiation, but have yet to be redeveloped. The Pennsylvania Avenue Development Corporation has planning responsibility and development powers for a one to two block area north of Pennsylvania Avenue from the White House to the Capitol. Beyond those areas, matter-of-right development may proceed with limited public guidance. WMATA does own one 50,000 square foot parcel at 7th and G Streets, N.W. which it has just awarded lease rights to. It is to be a mixed-use development with hotel, office, residential and retail elements incorporating a Chinese character.

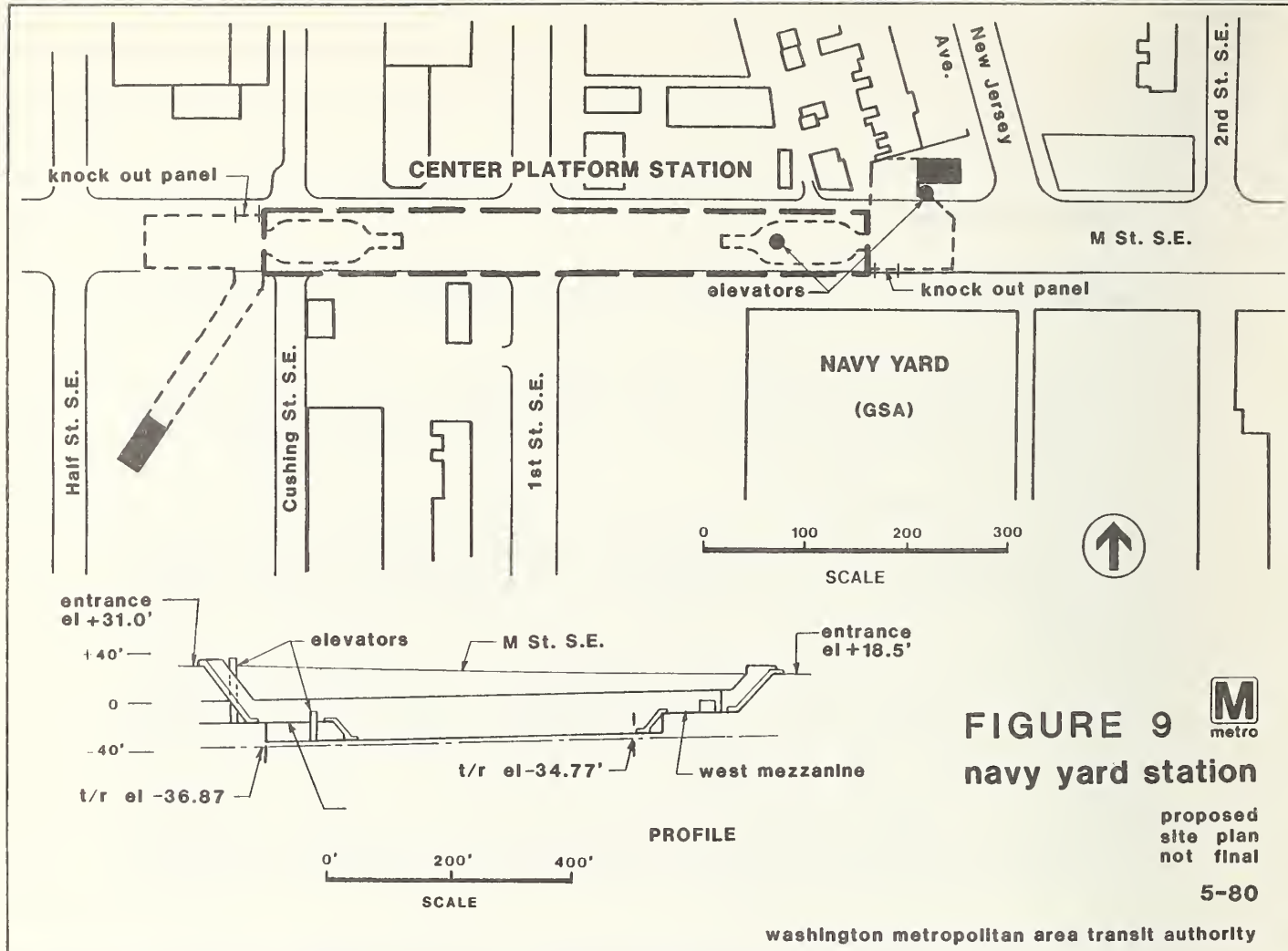
The whole of this area has been extensively influenced by the following public actions, according to area developers, realtors, and land owners:

1. Provision of the Metro system including both intensive bus and rail service (beginning in March of 1976);
2. Development of the Washington Convention Center on the area's north side. Over 300,000 persons per year are projected to use the Center;
3. The PADC has facilitated major new office and hotel developments in the Pennsylvania Avenue corridor, and is developing new parks and streetside amenities. This has considerably strengthened the image along the area's south side; and
4. RLA sites are being developed at the Metro Center and Gallery Place stations.

Station Area Issues

The following issues were expressed by involved public officials and developers:

- Residential development, other than hotel, is not occurring and those scattered apartment units that do exist will be replaced by office development;
- The retail core is generally composed of old, relatively low-density buildings that cannot compete with the value of new, high-density office developments. Thus, much of the traditional retail core area may change over to largely office development; and
- Developers are concerned with rapidly escalating land prices, high interest rates, and the extensive delays involved when anything other than a clear, matter-of-right development is proposed.
- In July, 1982 the Mayor of Washington's Downtown Committee outlined an ambitious plan for Downtown. The major features of the plan are as follows:
 - A concentrated retail core from 9th to 15th streets;
 - A festive retail marketplace around Gallery Place;
 - New hotels around the Convention Center; and
 - Retaining and enhancing Chinatown.



Navy Yard Avenue Station, 1983. COG photo by Pfoutz.

4.6 Navy Yard Station

Location

This underground Green Line station location was first approved in 1973 and reaffirmed in 1979. It is scheduled to open in 1989 with entrances at M and Half Streets, and M and New Jersey Avenue, S.E.

Station Area Characteristics

The station impact area is generally an underutilized area containing vacant parcels, deteriorated industrial structures, old and some newer public housing apartments, and the 66-acre Washington Navy Yard and GSA Southeast Federal Center. Much of the Navy Yard appears to be marginally used including the Anacostia River wharfs and large, former weapons factory buildings. The principal arterial roadway in the area is M Street, while the Southeast Expressway (I-295) to the north, South Capitol Street on the west, and Anacostia River on the south isolate it from nearby Capitol Hill and the "New Southwest" to the west.

Studies, Plans and Zoning

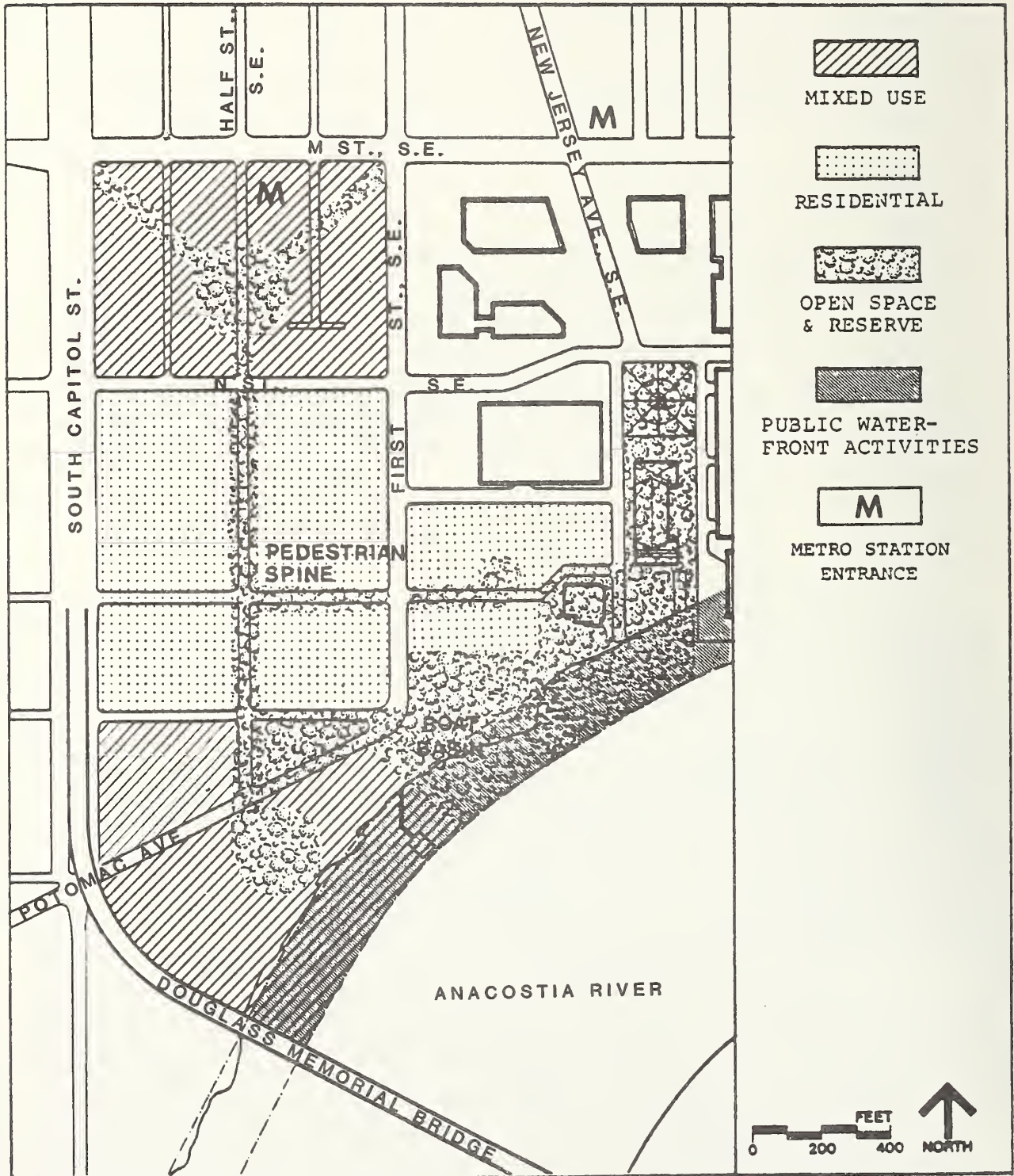
The planned construction of the Metro station resulted in 1976 and 1981 studies of the area by the District of Columbia's Office of Planning and Development using UMTA funds. Two large sites, the Navy Yard and Capitol Gateway Project, have received the most planning attention to date.

The National Capital Planning Commission and Department of the Navy developed a 1968 master plan for the Navy Yard and the GSA site to the east that was reassessed in 1977 and 1979. A new master plan for the Navy Yard recommends that a number of Navy administrative operations be located at the redeveloped Navy Yard/Southeast Federal Center site. Ready access to the anticipated Metrorail station helps to make these relocations feasible and is an important element in the revision of the master plan.

The proposed Capital Gateway Project has been under study since 1973 as a potential 51.6-acre joint development involving the Dravog Corporation, a landowner in the area, and the District of Columbia. The land use plan that has been developed is shown in Figure 10. It proposes 840,000 square feet of office space; 1,800 units for low- and high-rise condominiums, rental and subsidized apartments; and 790 hotel and motor inn units. A pedestrian walkway would link a proposed waterfront recreation area, residential and mixed-use developments to the Metro station on the north end of the complex. Attention to this development proposal has varied in intensity during

FIGURE 10

CAPITOL GATEWAY GENERAL LAND USE PLAN



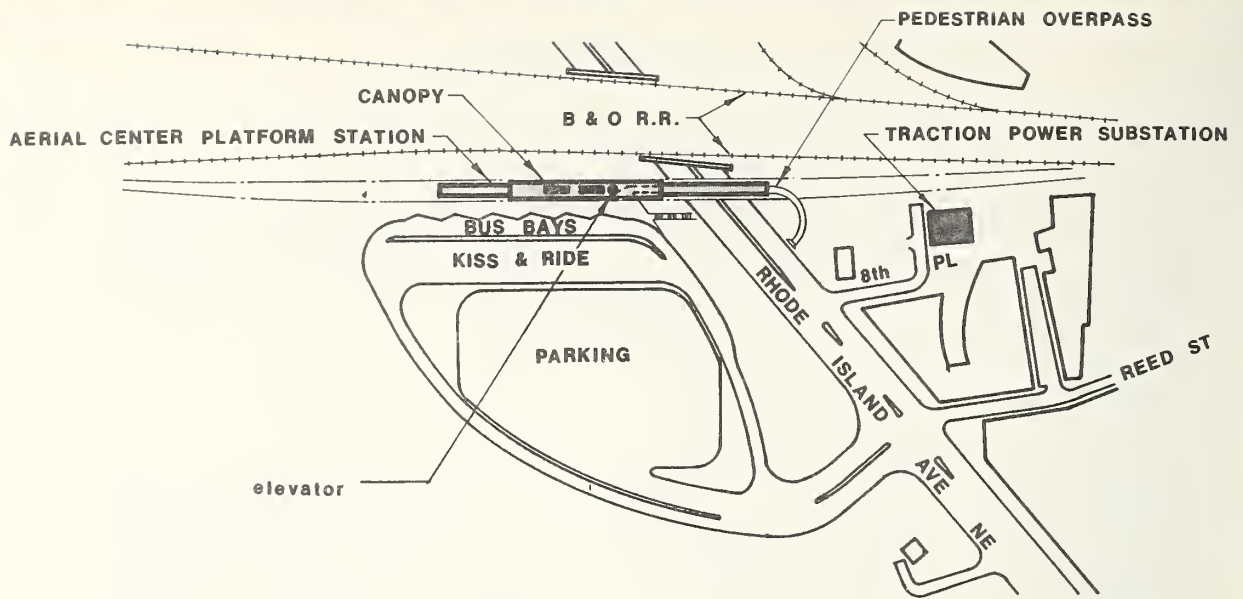
the past 8 years while market demand for office and residential development has increased. During this period a nearby townhouse project on the west side of South Capitol Street was built and reportedly sold well. This has helped sustain interest in what could become one of the City's largest developments.

Station Area Issues

Several realtors active in this area who were interviewed for the case study view the area as having enormous future development potential. In addition to federal redevelopment of the Navy Yard and Southeast Federal Center, there are extensive areas to the north and south of M Street in the western part of the impact area that may be redeveloped. Those realtors attributed the prospect of a Metrorail station and the area's proximity to Capitol Hill and other Washington federal buildings as the major factors in the resurgence of development interest in the area. They also felt that the areas of public housing to the north of M Street and east of 1st Street are strictly a public sector issue unless major housing program changes occur.

Major issues at this time are:

- whether the Capitol Gateway Project will go forward;
- what degree of guidance District officials will give to the area's redevelopment, including guidance from the Comprehensive Plan;
- whether the renovation of the public housing projects on the north side of M Street will continue. Two of the residential towers have been renovated by the Department of Housing and Community Development (DHCD) to this date;
- how rapidly the Navy Yard plan will be implemented and consolidate thousands of Navy workers at the Navy Yard from other locations;
- how well pedestrian flow between the Navy Yard and the Metro station will be managed;
- whether the Metro station will open in 1989, on schedule; and
- whether the recreational and aesthetic amenities offered by the river will be used to make this one of the very few waterfront areas readily accessible from the transit system.



PROFILE

0 300'
scale

FIGURE 11
rhode island avenue station



final site plan

2-80

washington metropolitan area transit authority



Rhode Island Station site, 1981. WMATA photo by Paul Myatt.

4.7 Rhode Island Avenue Station

Location

The raised platform station is located along the south side of Rhode Island Avenue and on the east side of the B&O Railroad alignment at 8th Place, N.E. It opened in 1976 with surface parking for 300 cars, 54 Kiss n' Ride spaces, and 6 bus bays.

Station Area Characteristics

The station area is divided into north and south sections by the broad and busy Rhode Island Avenue, and into east and west sections by the B&O Railroad alignment and associated industrial development. Both the railway and Rhode Island Avenue are barriers to pedestrian access to the transit station.

The vacant land of the 18-acre Harmony Cemetery site adjoins the station site along its eastern edge. The cemetery was bought and cleared of graves by the District of Columbia when planned to become an interchange of the once-proposed North Central Freeway. The site is now used for vehicle and equipment storage by several departments of the District Government.

South of the station is a 33-acre, privately owned site now in scattered light industrial uses. Officials of the U.S. Post Office have been interested in acquiring the site. The Government Printing Office relinquished its claim for the site in 1982.

Warehousing and small shop operations are immediately west of the station on the far side of the railroad embankment. Brick rowhouses of the Eckington neighborhood cover the hillside beyond the industrial strip along the railroad.

Rhode Island Avenue is lined with generally small commercial properties, many of them of a service nature, except in the vicinity of the transit station. Close to the Avenue's underpass of the B&O Railroad, the lots fronting the Avenue contain industrial uses, parking, vacant land, and service and retail establishments further away.

Industrial development continues to line the railway to the north of the transit station. It includes older printing operations, more warehousing, and numerous small shop operations. The stable, generally single-family detached neighborhood of Brookland stretches off to the northeast. The 884 federally assisted units of Edgewood Terrace are within several hundred yards of the station to the northeast, but steep slopes, the railway and Rhode Island Avenue separate it from the station.

The 535 federally assisted Brentwood Village apartments are several hundred yards to the east among the trim, brick rowhouses of Brentwood Village. This and the other residential neighborhoods within one-quarter mile of the station are generally stable. Median prices are relatively low but both Eckington and Brentwood have shown strong increases in sales prices since the transit station opened. There has been some escalation of commercial property sales and prices, though land values are still in the \$4 to \$5/square foot range.

Studies, Plans and Zoning

The 1968 proposed "Comprehensive Plan for the National Capital," developed by the National Capital Planning Commission (NCPC), designated this Metro station area as an "Uptown Center" to receive major, mixed-use, high-intensity development. High-density residential development was recommended for the north side of Rhode Island Avenue, office and retail development to the south beside the transit station.

The 1974 "Home Rule Act" relieved NCPC of planning responsibility for areas of the city outside of what is in the "Federal interest." District of Columbia planners were provided funds from the Urban Mass Transportation Administration to assess the anticipated impacts of the city's Metrorail stations. Impact study reports were prepared in 1976 and 1980 for the Rhode Island Avenue station area. Issues including poor housing mixture, industrial sprawl, poor retail services, and poor pedestrian access to the transit station were described and alternative actions proposed. The Harmony Cemetery site was the subject of a 1979 task force of District officials who studied but did not resolve how the site would be used. Existing city uses on the site must be relocated before it can be leased for mixed-use development as recommended by the Task Force. One corporation has already expressed interest in developing the site. The city staff's draft of the Comprehensive Plan recommends that the station area be developed as a diversified employment and commercial area with improved pedestrian access to Metro. Other recommendations include promoting multi-neighborhood commercial shopping northwest of the station; maintain office and printing functions north of the station; and encourage development of commercial uses over the Metro parking lot.

The 33-acre, privately owned site south of the transit station has been the subject of study by the Government Printing Office (GPO). It meets the needs of the GPO for a large, industrial zoned tract that could hold all their office, publishing, and distribution activities. Metrorail has been recognized as an important factor in providing quick access to downtown and for the public to the GPO sales office. The proposed 1.8 million square foot facility would have an all weather pedestrian connection to the transit station as well as a

railroad siding for freight deliveries. GPO's actions have been stalled since 1980.

The City's zoning is the main public influence on the area's land use with the exception of the two large sites described above that are receiving special attention. Future land use in the station area may be strongly influenced by the eventual development of the cemetery site and the 33-acre parcel south of the station. The City's local element of the "Comprehensive Plan for the National Capital" may also be an influence on the area once that plan element is approved.

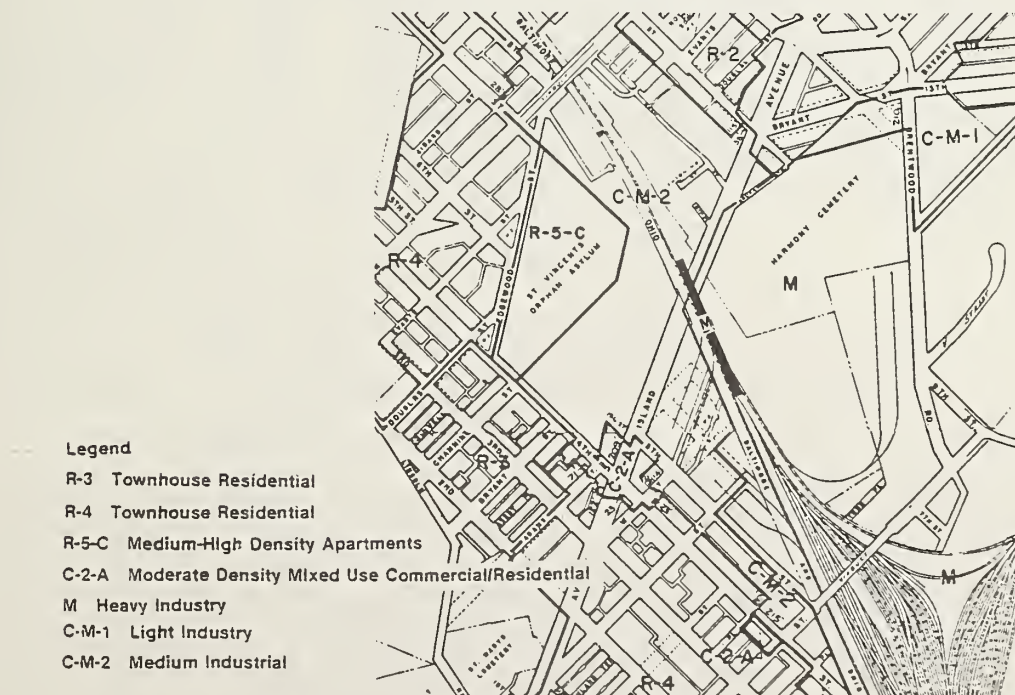
Station Area Issues

These remain much the same as reported in 1976 in the District's "Metro Station Impact Study-I." They are:

- Indecision on matters that have suspended strong momentum to redevelop key station area sites of the Harmony Cemetery tract and 33-acre, privately-owned parcel to the south of the station;
- Poor pedestrian access to the station, thus limiting the transit system's utility to nearby residential neighborhoods; and
- Poor retail services and inefficient industrial sprawl.

FIGURE 12

RHODE ISLAND AVENUE ZONING



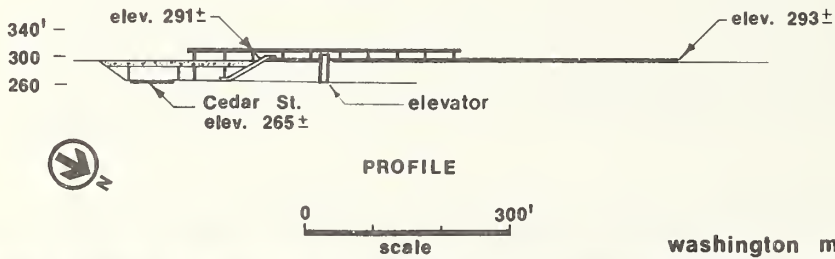
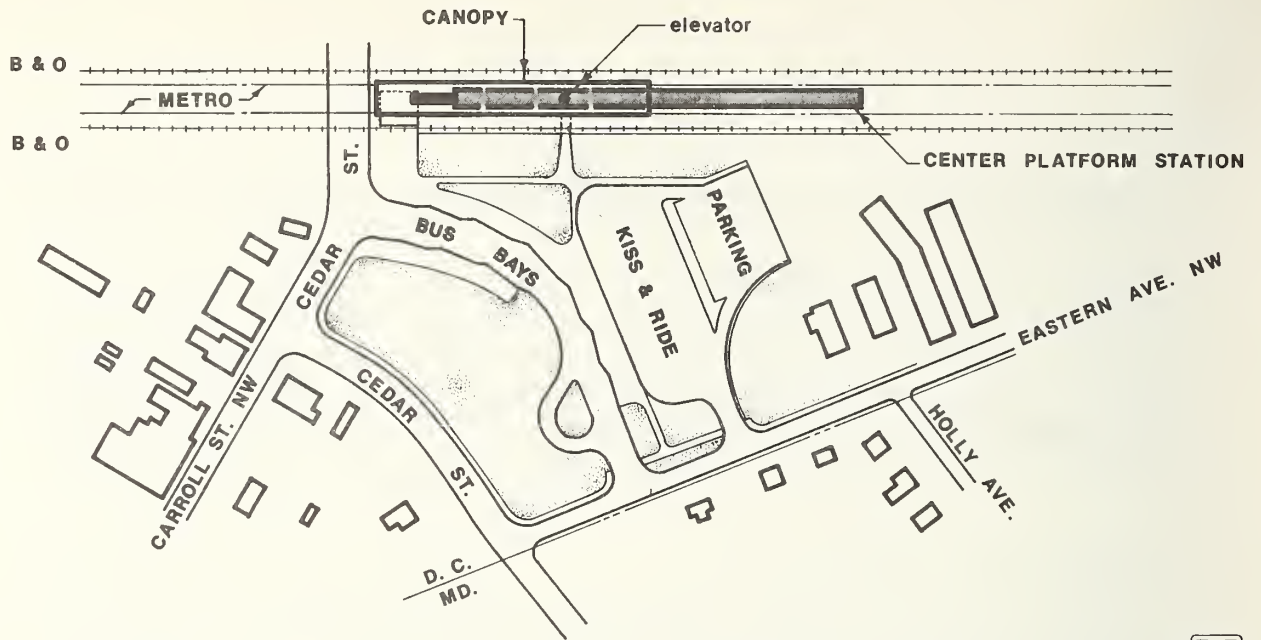



FIGURE 13 
takoma station

final site plan

2-80

washington metropolitan area transit authority



Takoma Station, 1981. WMATA photo by Paul Myatt.

4.8 Takoma Station

Location

The Takoma station, which opened in 1978, is on the Glenmont Route of the Red Line between the Silver Spring and Fort Totten stations. The station is just inside the District of Columbia, and influences District of Columbia neighborhoods and portions of Montgomery and Prince George's Counties in Maryland. The City of Takoma Park, Maryland, one of the first suburbs of D.C., spans the corners of these counties. It, like Silver Spring, was once served by streetcars.

The station is located in the Baltimore and Ohio Railroad right-of-way. Originally the parking for the station was to hold 400 commuter cars. Due to citizen opposition the parking was reduced to about 100 short-term parking and Kiss n' Ride spaces.

Station Area Characteristics

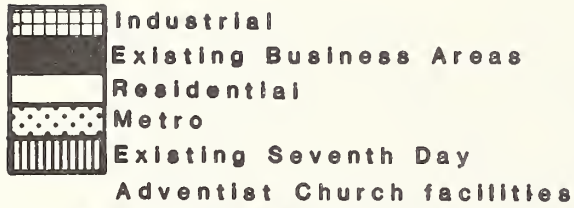
The existing land use around the Takoma Metro station is typical of an older, small city that has been surrounded by an expanding metropolitan area. The residential area is predominantly single-family with a few low-density apartment units, rowhouses, and a new townhouse development. Many homes date back to the 1890s and there is an historic preservation district on both the Maryland and D.C. sides of the station area. Both portions of the station area have some low-density commercial development. There is a limited light industrial area in D.C. along the B&O Railroad alignment. There is very little vacant land in the station area. Figure 14 shows the existing land uses.

Studies, Plans and Zoning

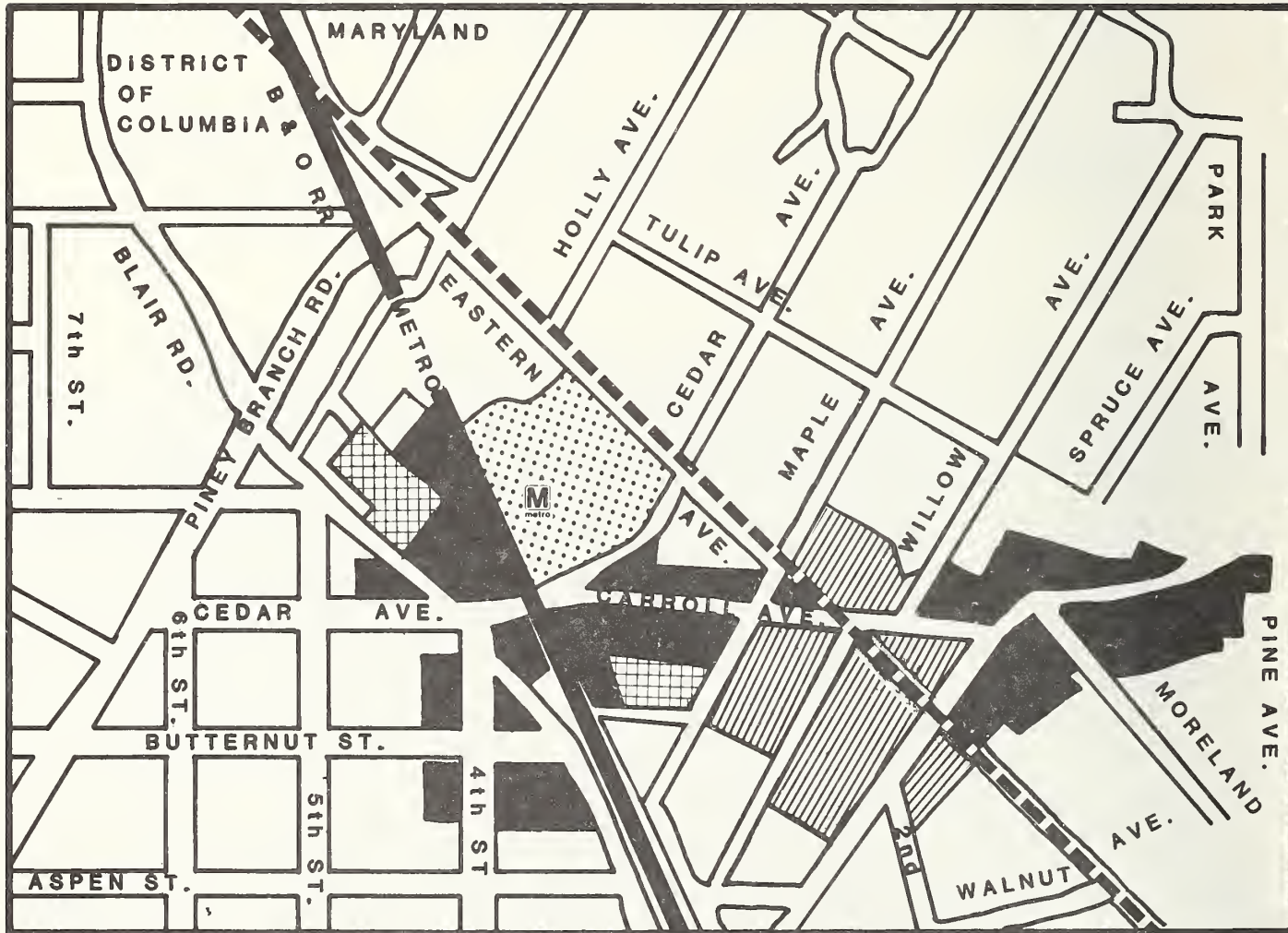
Maintaining the character of the community has continued to be a primary concern of the well-organized, vocal citizens of the station area. They have consistently opposed anticipated Metro impacts of noise, traffic congestion, and dense development. An UMTA-funded transit impact study was done by the District Government in the mid-1970s for Takoma. The study concluded that the road system was a major constraint on additional development. Light industrial and moderate-density commercial zoning was changed through a combined planning effort of the Plan Takoma Citizens Group and the District Government in A Plan for Takoma-D.C. produced in 1977. Medium density mixed-use development and the "4th Street Pedestrian Mall" were agreed upon but have not been implemented. Rezoning did occur in 1979. They changed most of the industrial zones along the B&O Railroad alignment to moderate-density commercial with

FIGURE 14

TAKOMA STATION AREA EXISTING LAND USE



Border



peripheral moderate-density residential zones to serve as buffers between the commercial area and the surrounding low-density residential neighborhood.

The 1974 Sector Plan for Takoma Park amended the 1963 master plan for the Takoma Park and Langley Park area in Maryland. The sector plan was developed by Maryland-National Capital Park and Planning Commission (M-NCPPC) to preserve and enhance neighborhoods around the eastern and northern portions of the Takoma Metrorail station area. The 1971 draft of the sector plan was rejected by the community which then participated in developing an acceptable plan. The plan recommends that high-density residential and moderate-density commercially zoned areas be changed to lower-density zoning. The rezoning was done in 1975 in accord with the plan's goals of minimizing disruptive impacts on the residential areas around the station and stimulating redevelopment in the existing commercial area.

Developers of the area's C-1 and C-2, commercially zoned parcels may apply for the TS-M (Transit Station-Mixed) zone which permits up to FAR 3 mixed-use development near transit stations in return for going through the M-NCPPC site plan review process and providing planned public amenities. Some generally older residential areas zoned R-60 are eligible for the R-T (townhouse) zone. This provision is available to areas where rehabilitation is not expected to occur.

Despite all the planning effort invested and projections of nearly 2,000 residential units and 400,000 square feet of commercial development, only a small portion of that development has occurred.

Station Area Issues

Metro was expected to prompt significant commercial investment in the station area's "marginal" retail complement. A grocery and drug store left the area before the transit station opened. Only a few new stores located there during the 1970s. The expected commercial revitalization has not occurred.

The design of the Takoma Metrorail Station shields neighboring areas from much of the station's activity. Bus bays, parking spaces, a strip of grass called "WMATA Park," and the railroad/Metrorail tracks all separate the station's activity from nearby commercial and residential areas. Vehicular traffic to the station is reported to traverse the residential neighborhood as much as the commercial area. The 13 D.C. businesses that are closest to the station reported in a 1979 survey that only one had been substantially helped by the station's opening--a convenience store with off-street parking, the closest of all businesses to the station. Eight reported some impact, four reported no impact. Thirty-three percent of the 32 nearby Maryland businesses reported being helped substantially by the

station's opening, a higher percentage perhaps because more are of a convenience and general service nature. There was agreement that most consumer trade is not pedestrian-oriented and that poor parking is the greatest disadvantage of the area.

Seventy percent of the businesses did report an increase in business volume since 1977 and 36 percent had recently invested substantially in plant or equipment. Still, 75 percent have the short-term leases characteristic of a neighborhood shopping district. There are some signs of speculative activity but no redevelopment was reported in recent years.

Similarly, little new residential development has taken place in recent years. The only major development has been one 84-unit townhouse development built in the District several blocks from the station. Residential sales prices have shown accelerated appreciation since the station's opening based on a gross comparison of Takoma/D.C. sales prices. Renovation/rehabilitation efforts along with opening of the station have contributed to value increases of existing homes in the station area. Montgomery County has made low interest loan and grants to rehabilitate 29 homes in Takoma Park since 1969. Realtors reported Metro is an influential factor in the area's rejuvenation and increased appeal. Others view these events as part of a "gentrification" process as professionals buy and rehabilitate houses formerly rented by lower-income families, students, and the elderly.

A study of Takoma Park, Maryland, housing prices for the period of 1976 to 1979 by the M-NCPPC concluded Metro has appeared to have little discernable effect on housing prices. However, those who conducted the study expressed reservations about such a sweeping comparison without regard to housing age and the fact that not all the Takoma Park homes are within walking distance of the station.

The portions of Takoma and Takoma Park within walking distance of the Metrorail station have shown limited response to the transit station's presence but much less than expected by those who have planned the station area. Its neighborhood commercial district has survived and strengthened somewhat but not been redeveloped. Nearby residential areas have shown mixed degrees of response to the station's presence. The zoning of the station area has been adjusted to be more acceptable to area residents, though at least one official reported that the resulting low- to moderate-density development opportunities are not economically attractive to developers. The Takoma station area has the most stable pattern of land use and has attracted the least development attention of all 18 station areas studied in these case studies.

4.9,10,11 Rosslyn, Ballston and Court House Stations

There are five Metrorail stations in the Rosslyn-Ballston corridor in the north-central area of Arlington County. Three of those -- Ballston, Court House and Rosslyn -- were studied in the Metro Before-and-After land use case studies task. The Corridor's Metrorail alignment was recommended in 1962, confirmed in 1968, and station locations finalized in 1971 (Rosslyn) and 1972 (Court House and Ballston). The Rosslyn station opened in July of 1977. Court House and Ballston stations opened in December, 1979.

Station Locations and Impact Areas

Figure 15 shows the locations of the three stations studied and approximate impact areas used by Arlington County planners. Stations within the corridor are so close together that there is effectively a continuous strip of primary impact area along Wilson Boulevard for the length of the corridor.

Station Area Characteristics

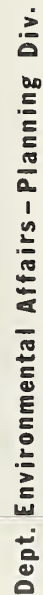
Ballston Station Area

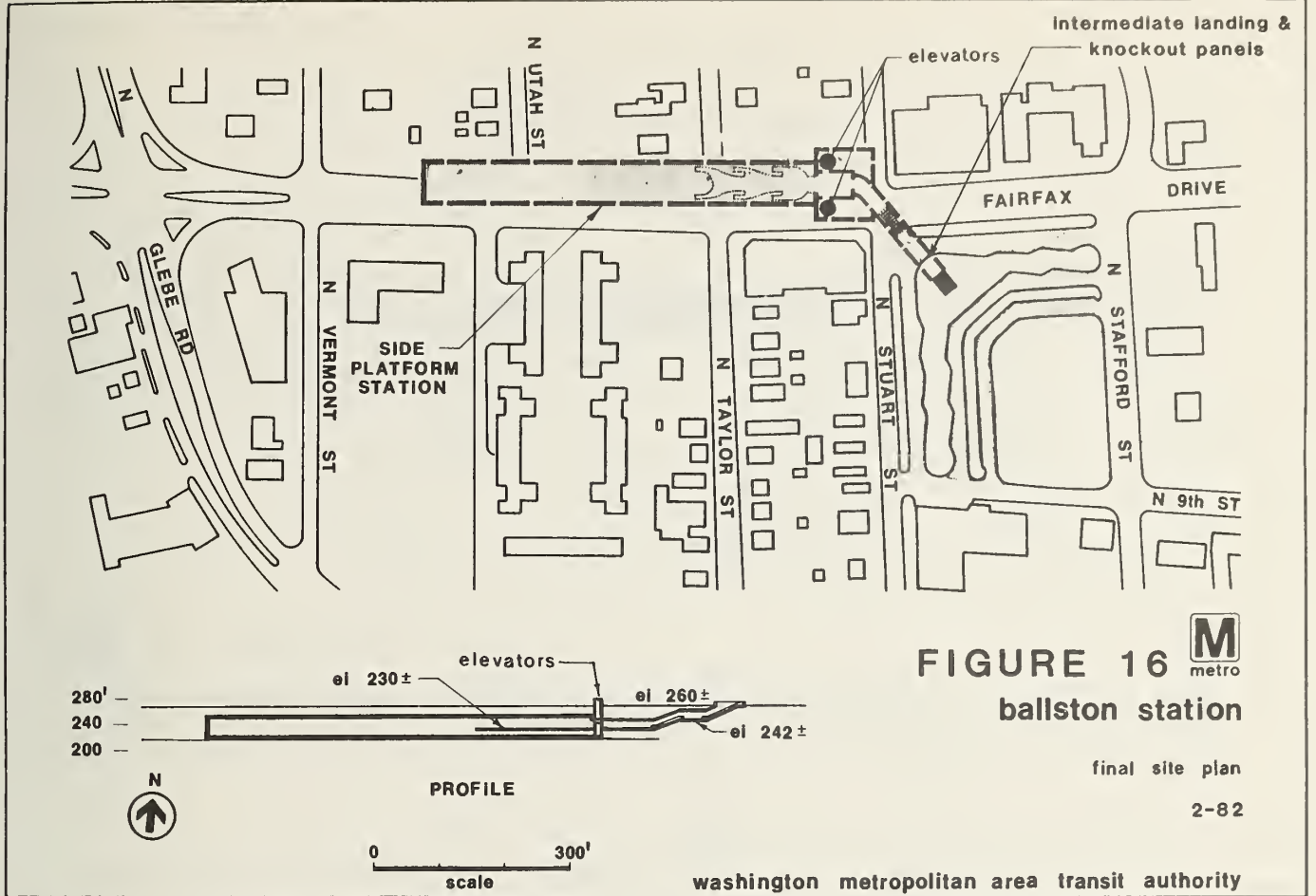
This area of mixed land uses is on the Western end of the Rosslyn/Ballston (R/B) corridor. Wilson Boulevard, Fairfax Drive, and Glebe Road converge three blocks from the transit station. Access to Interstate 66 is west of the station area. Route 50 is several blocks to the south and east.

Central Ballston contains the Metrorail station, about 50 acres of generally low-density commercial uses and 20 acres of office uses. The underground Metrorail station has one major entrance, two knockout panels, and 19 bus bays. The Parkington Shopping Center, one block to the south of the station, was built in 1951 and has recently been connected to the transit station by a County-built pedestrian mall. More than one million square feet of Ballston office development was built in Central Ballston in the 1960s with FARs ranging from 0.3 to 4.6.

North Ballston contains low-density commercial uses, vacant lots, and older single-family and apartment developments. The majority of the area is in a neighborhood conservation area as are other areas on the periphery of central Ballston.

ROSSLYN-BALLSTON CORRIDOR





Ballston Station, 1981. WMATA photo by Paul Myatt.

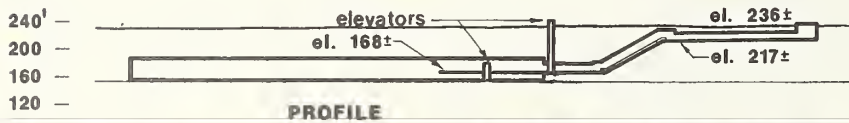
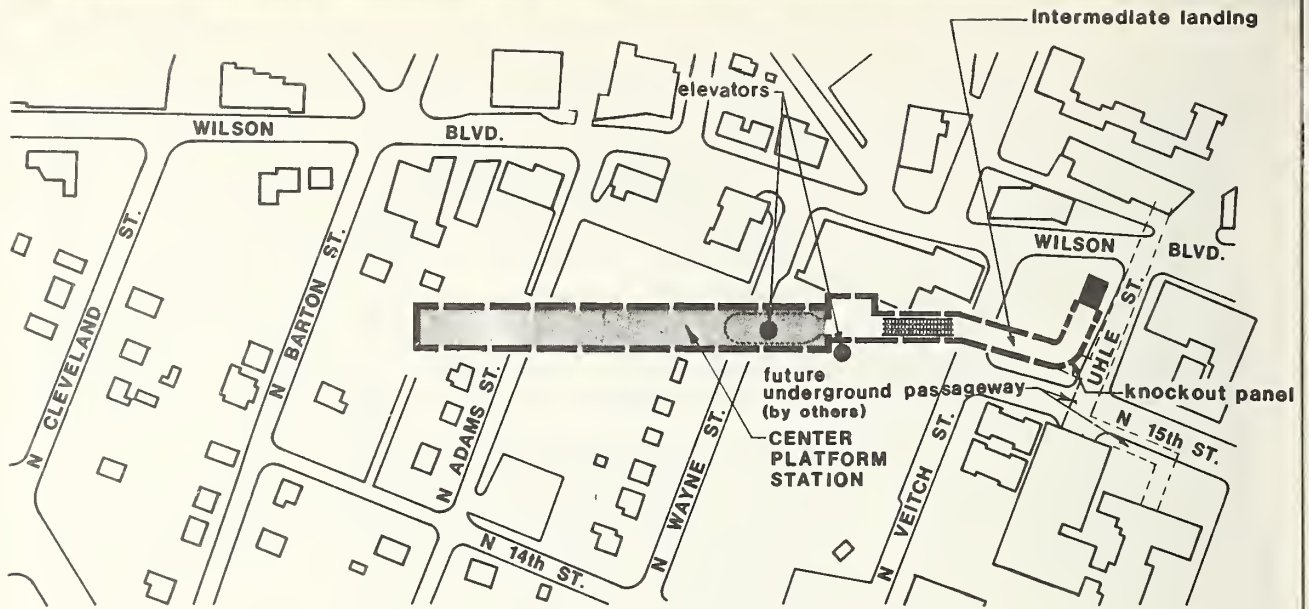


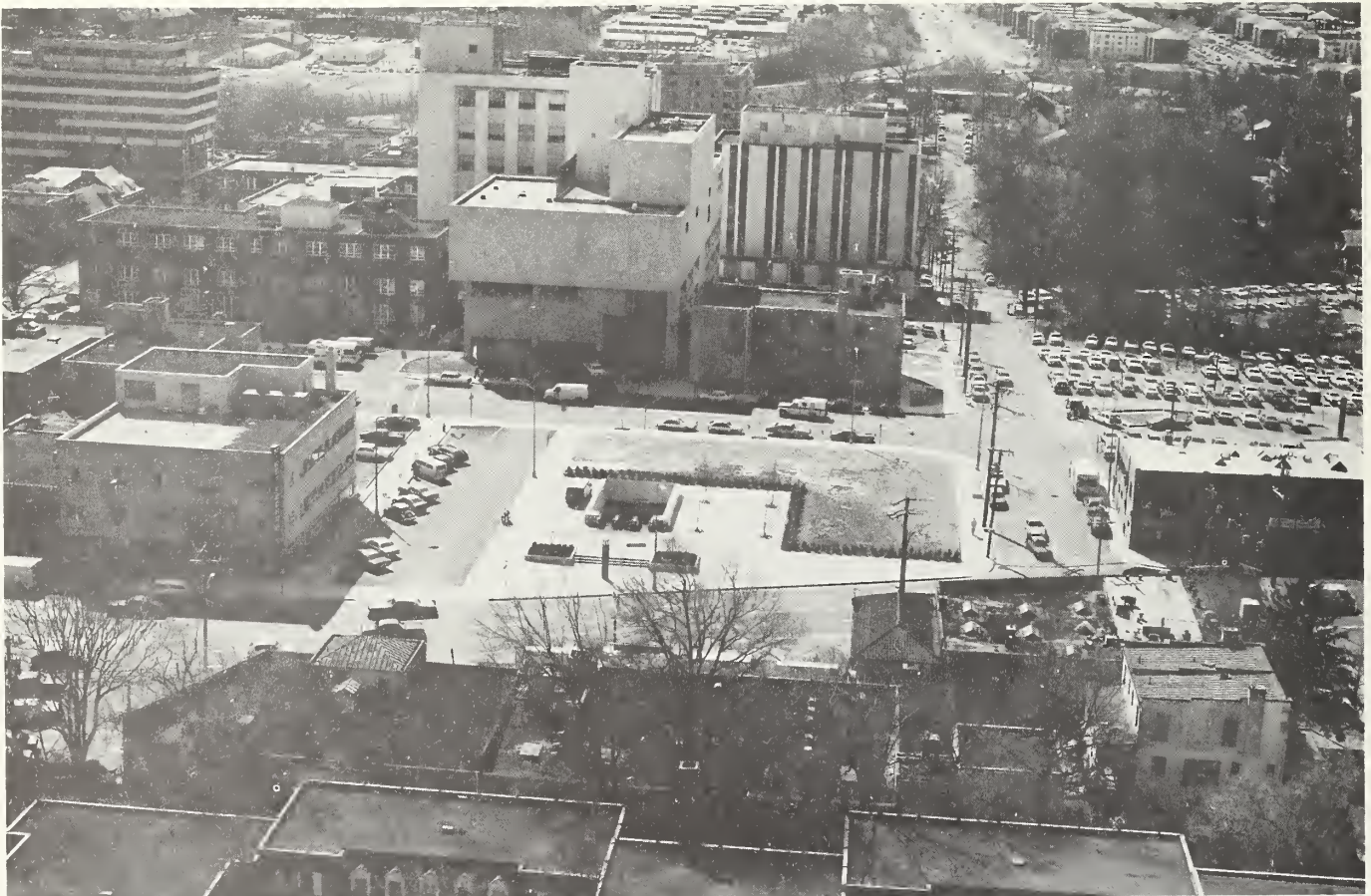
FIGURE 17 
court house station

final site plan

2-82



washington metropolitan area transit authority



Court House Station in a view to south, 1981. WMATA photo by Paul Myatt.

Court House Station Area

Like Ballston with the addition of the County Government Center, the Court House station area is a mixture of land uses and vintages. A majority of the office and commercial buildings were built prior to 1965 and many were built in the 1940s. There are 600,000 square feet of office development (primarily around the Court House and along Wilson Boulevard) and 320,000 square feet of commercial space (primarily in 1- and 2-story structures along Wilson Boulevard). The office development FARs range from 0.7 to 5.1. The 2,900 dwelling units in the station area are 71 percent garden apartments. The County is committed to preserving this moderate income housing stock. The underground station at Wilson Boulevard and Court House Road has one major entranceway, one knockout panel, no auto parking, and no bus bays.

The County Court House and five other government buildings are to the immediate south of the station entrance on 10-1/2 acres of land. Over 6 of the 10 acres are now used only for surface parking spaces.

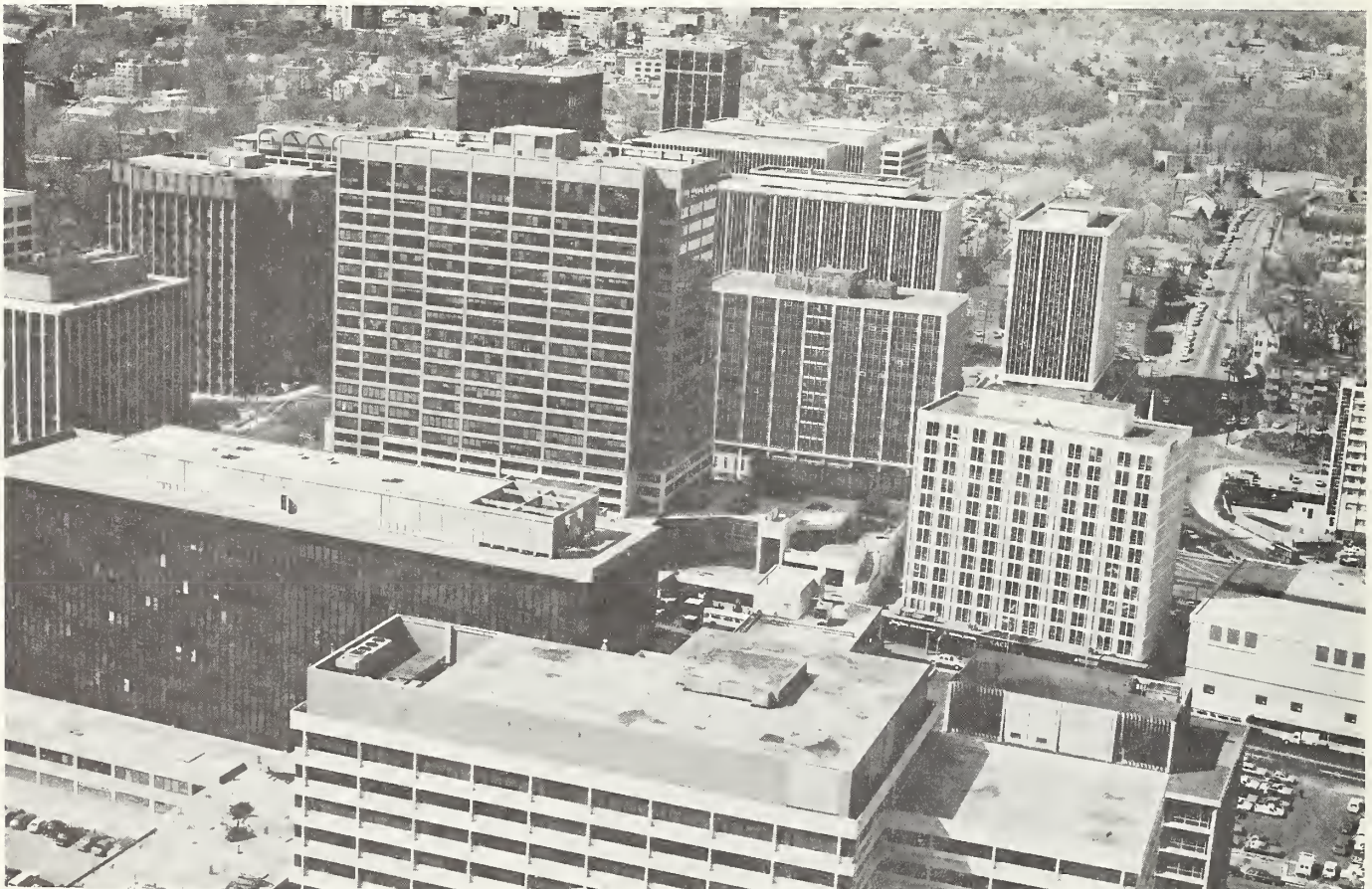
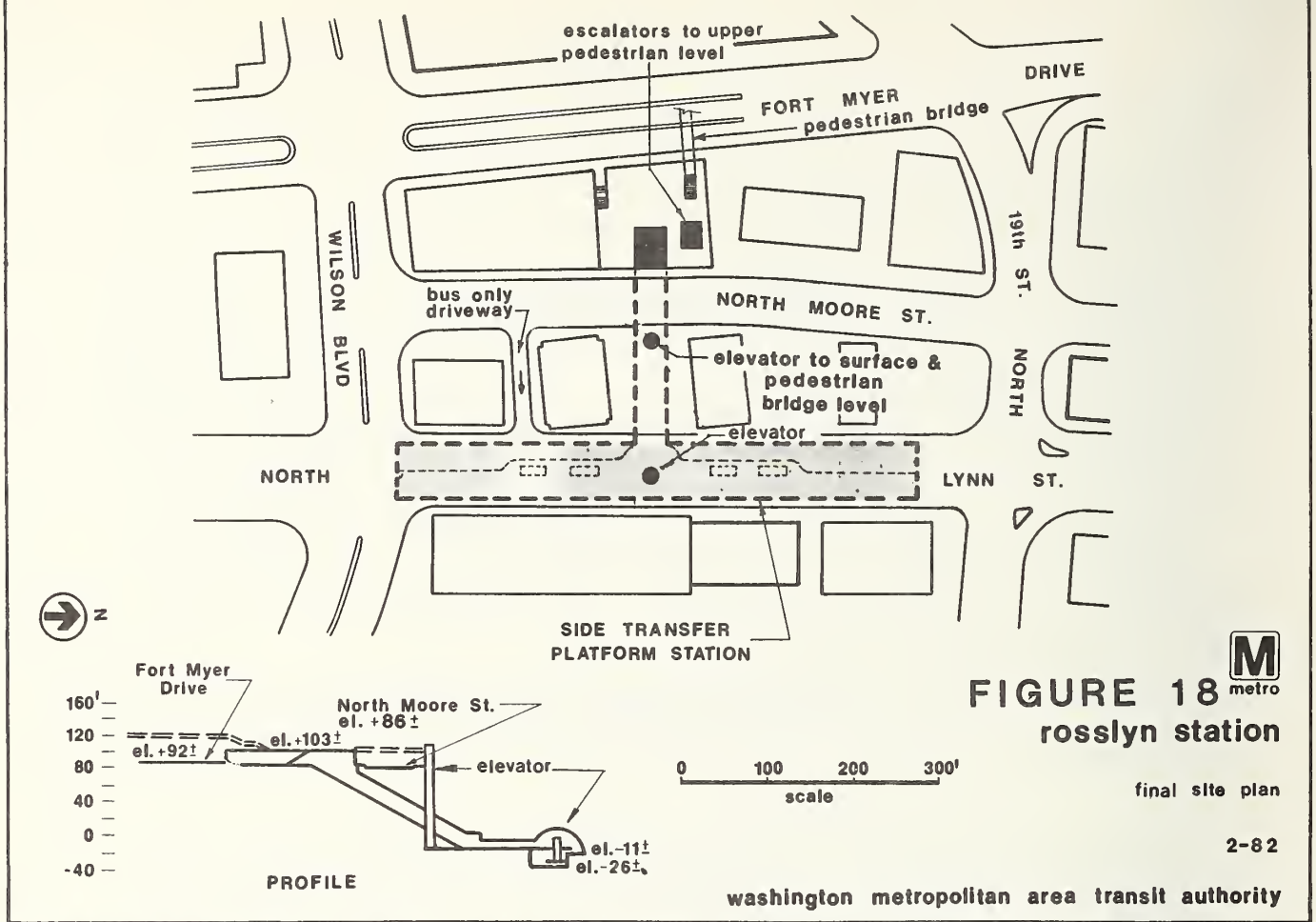
Five residential neighborhoods surround the station/government center/ commercial core. The neighborhoods vary from single-family to garden apartment and mid-rise apartments. As with Ballston, the County has committed to protecting a majority of this housing stock while allowing infill housing development.

Rosslyn Station Area

Most of Rosslyn was developed in the 1960s when a Rosslyn Metrorail station was being discussed but no construction had begun. The County's 1961 General Land Use Plan recommended that Rosslyn be redeveloped for office and apartment uses. Almost 4,000,000 square feet of Rosslyn office space was built in the next 10 years along with 1,300 hotel units. The FARs ranged from 2.0 to 5.1.

Since 1971, five additional high-rise office buildings have been completed adding an additional 1,400,000 square feet. The largest of these is Rosslyn Center with 22 stories, 422,000 square feet of gross floor area, and an FAR of 6.19. Rosslyn Center is beside and connected to the one major entrance to the underground Metrorail station. Three other Rosslyn office developments are now under construction in the core area. There remain only a few vacant or under-utilized sites in the core area.

The Rosslyn core area contains four hotel structures with a total of 1,189 units, two apartment houses (totaling 184 units) built in the mid-1960s, and the older Arlington Towers apartment complex containing 1,729 units. No residential units have been built in the core area during the 1970s.



Rosslyn, 1981. Station entrance at center by bus. WMATA photo by Paul Myatt.

The Rosslyn station area also includes primarily residential areas to the immediate west that are being largely protected by the County with limited residential infill and redevelopment being encouraged.

Studies

A fairly detailed description of the County's analysis of the Corridor is given in the following paragraphs. It has been an effective land use planning approach for a new transit corridor imposed onto existing development.

Arlington County has had a General Land Use Plan since 1961. Repeated amendments to the plan in the 1960s plus anticipation of Metrorail stations being built caused it to be restudied in the early 1970s. County staff reviewed existing conditions and proposed hypothetical density/land use patterns for the Wilson Boulevard Metrorail Corridor in 1970 and 1971. Staff projected 13 million square feet of additional office space and 42,000 additional dwelling units in the Corridor. A five-phased Growth Policy Program was begun to revise the General Land Use Plan, to develop long range plans for the County's two transit corridors, and to develop detailed plans for each station area.

Phase I of the Growth Policy Program began with the following assumptions:

- R/B Corridor single-family neighborhoods are to be preserved;
- The highest densities and percentages of office space should be nearest to Metrorail station entrances;
- Development densities should not be significantly greater than 3.5 FAR (office) or 135 units/acre (apartments); and
- The Corridor's commercially zoned land should be nearest to Metrorail station entrances.

County staff recommended that the General Land Use Plan be amended to conform to past rezonings which permitted areas once planned to be general commercial or low- to moderate-density residential to become high-density office. This was particularly true for Rosslyn. Ballston had more than one million square feet of office development in the 1960s on such rezoned sites.

Phase II continued the assessment of long-range County development plans including the following alternatives:

- slow growth;
- growth by existing zoning;
- moderate growth;
- emphasis on housing development; and
- emphasis on office development.

Phase III included extensive citizen and elected officials involvement in detailing the corridor's growth objectives. A long-range county improvement program was approved by the County Board that recommended new development and redevelopment be focused in Metrorail station areas. Sentiment of many citizens in the County is reported to have changed from "no growth" to "controlled growth" about this time as concentrated development at transit stations would broaden and strengthen the County tax base. The following County objectives for the next 5 to 25 years were recommended in the improvement program report.

1. Restrict high-density development to within a quarter mile (convenient walking distance) of transit stations;
2. Balance jobs and housing in station areas to avoid nighttime office canyon "ghost towns," encourage commuter use of transit, and provide walk-to-work opportunities; and
3. Increase County housing stock with high-density residential near transit stations.

Implementation was to occur through development of a 6 to 10 year horizon sector plan for each station area. Major rezonings of Court House and Ballston station areas were recommended. Special benefit districts and voter approval of County parking garages were proposed as well as auto-free zones (for Court House and Ballston station areas). The Board summarized its policy by stating in the Long Range Capital Improvement Program:

The construction of the Metrorail transit system through Arlington creates intensified pressures for land development but offers important opportunities to deal with the complex problems facing our community. . . most new high density development should be confined to the immediate vicinity of Metrorail transit stations.

Phase III also included a detailed review of the Rosslyn-Ballston Corridor by a committee of County citizens and business interests. The Rosslyn/ Ballston corridor committee recognized the need to strengthen the County's tax base and the corridor's commercial health, protect adjacent single-family neighborhoods, and provide adequate parkland in station areas. They identified about 100 acres of developable or redevelopable land in each of the corridor's station areas except Rosslyn.

Given that Rosslyn development occupies about 50 acres, they concluded controlling the magnitude of corridor office development would be the County's greatest problem. In contrast to earlier County staff projections, they recommended 12,000 - 15,000 new residential units (100 - 120 percent increase), 1.9 - 3.2 million square feet of office (30 - 30 percent increase), and 0.9 - 1.7 million square feet of commercial development (30 - 60 percent increase) by the year 2000.

The committee recommended that new office development be largely concentrated in the Rosslyn and Court House station areas. They suggested the overlapping Clarendon, Virginia Square, and Ballston station areas to be planned as a pedestrian-oriented community that would receive the greatest share of new commercial development. New residential development should average 60 - 70 dwelling units/acre in station "bull's eye" areas and office and commercial development not exceed an FAR of 2.0. The Planning Commission adopted the committee's report and sent it on to the County Board.

The County adopted a revised General Land Use Plan for the R/B corridor in 1977 as part of Phase IV of the Growth Policy Program. The revised plan recommended the densest development about the corridor's transit stations. It also provided more detailed guidance to County planners as they developed detailed station area plans in Phase V of the program.

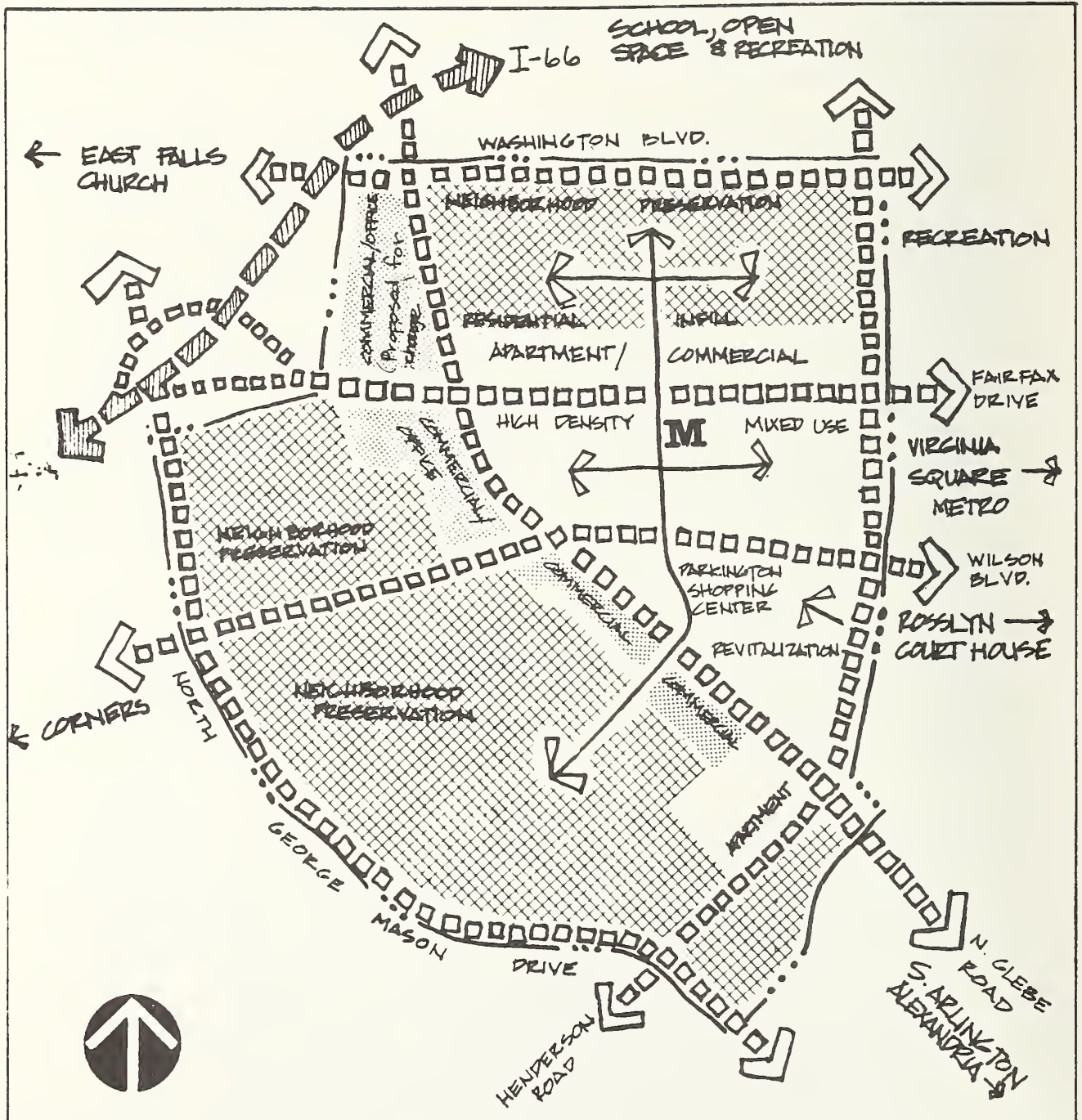
Plans and Zoning

A sector plan has been produced for Ballston and is in the final draft stages for Court House; and a Transit Station Area Study and proposed Action Plan have been done for Rosslyn. Each of these have either contributed to (Rosslyn) or built upon (Court House and Ballston) the 1977 revised County General Land Use Plan. Studies and plans for these stations have consistently identified the area within a quarter mile of the Metrorail stations as opportune for most new development, the "bulls eye" concept. One-quarter mile was selected as being a maximum convenient walking distance.

The sector plans typically cover the following areas: capital improvements, zoning, utilities, community facilities, urban design, and implementation. The level of detail generally goes to a

FIGURE 19

BALLSTON PLAN CONCEPT



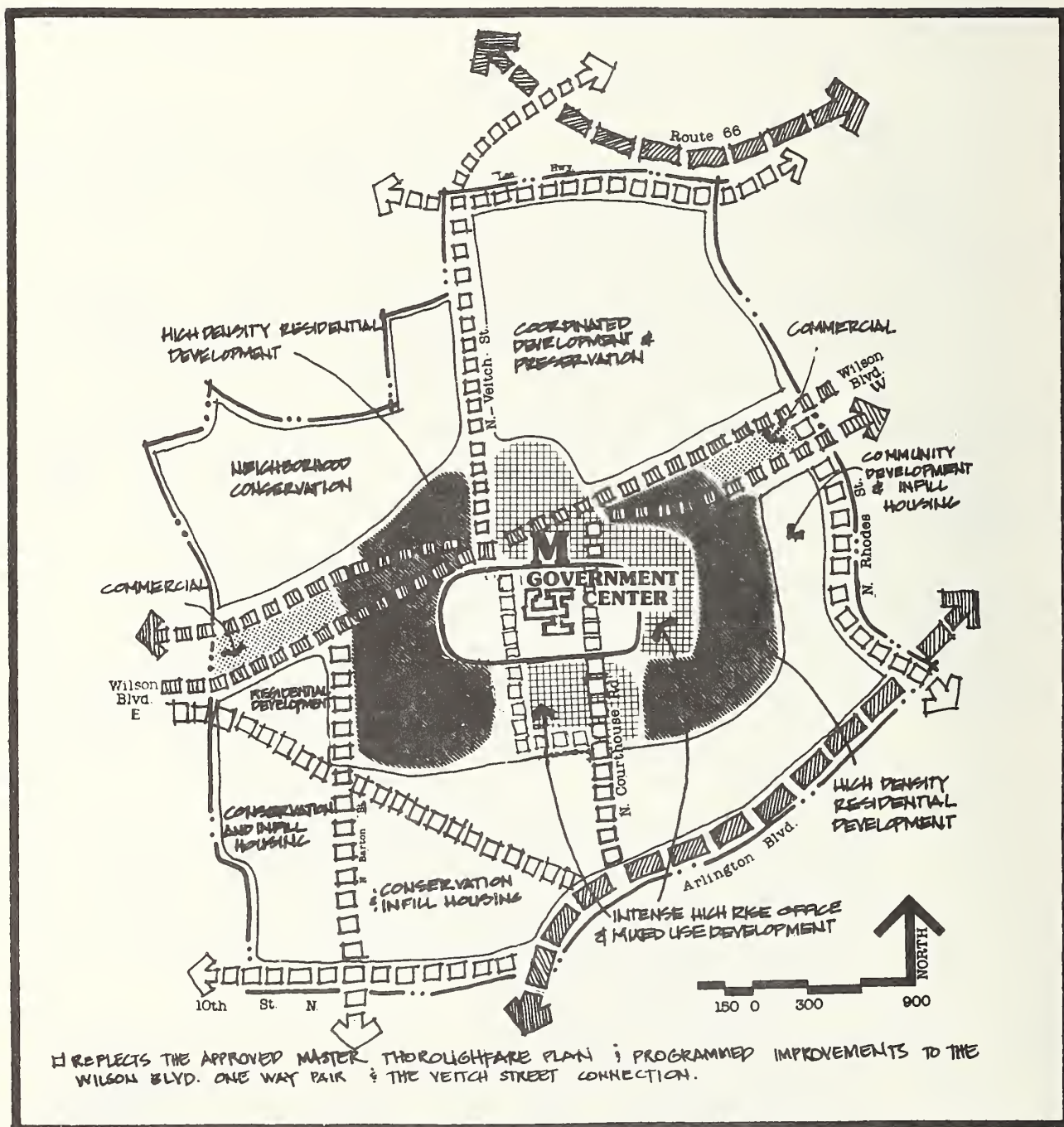
parcel-by-parcel level. Detailed discussion of the sector and action plans for these stations is provided in the respective case study reports. Highlights of those plans are as follows:

Ballston Sector Plan

- The area around the Ballston Metrorail Station is anticipated to become a new downtown for Arlington with a high-density commercial, residential, and office core, a revitalized Parkington Shopping Center, infill residential, and protection of surrounding neighborhoods.
- A County cost/revenue analysis of the recommended developments and County improvements in the Ballston station area was prepared for the 1980-2000 period. By the year 2000, net County revenues of about \$46 million are expected to have accrued, based on the planned development of
 - 720,000 square feet of retail space
 - 2,264,500 square feet of office space, and
 - 2,900 residential units.
- A coordinated mixed-use development district has been designated for the six-block area immediately about the Metrorail station:
 - A "COA" (Commercial/Office/Apartments) zoning classification was adopted in 1980 to strongly encourage apartment as well as office and commercial development in this district by providing density bonuses for large, mixed-use developments.
 - The "R-C" (Apartment Dwelling Commercial District) zoning classification was created and its use is being encouraged in the Ballston and Court House areas to develop commercial space (up to 1.24 FAR) with residential units (up to 90 DU/acre) above or adjoining the commercial to provide for transition land uses between dense commercial and lower-density residential areas.
 - The "R-15-30T" (residential townhouse dwelling district) zoning classification has successfully encouraged up to 30 townhouse units per acre in North Ballston. The County has created sector plan urban design recommendations and built the Stuart Street pedestrian mall connecting the Metrorail station and the to-be-redeveloped Parkington Shopping Mall. Such capital improvements are expected to express the County's commitment to quality development in Ballston.

FIGURE 20

COURT HOUSE PLAN CONCEPT



Court House Sector Plan

- County policies for the Court House station area and the Sector Plan call for major office and apartment development, limited commercial revitalization, neighborhood preservation, and expansion of the government facilities to focus dense development on the Metrorail station. The Sector Plan recommends ten changes to the County General Land Use Plan including several parcels near the station to be mixed-use instead of solely residential or government facilities uses. Other parcels further from the station would be changed from planned public, commercial, and office uses to planned residential uses.
- Peripheral neighborhoods would continue to be protected from all but infill residential development with the exception of the Colonial Village garden apartment complex. The 1,100 unit Colonial Village complex was designated in 1977 as a Coordinated Preservation and Development District. A combination renovation and redevelopment plan has been negotiated in accord with County policies of dense development near Metrorail stations and protection of peripheral residential areas.
- Six acres of the 10-acre Government Center complex beside the Metrorail station are recommended for redevelopment into a pedestrian-oriented, high-rise office and mixed-use development. The County Board has approved a development proposal to implement this recommendation. Urban design guidelines in the Sector Plan deal with pedestrian and vehicular circulation, plazas and open space, public facilities, street level amenities, and parking.

Rosslyn Action Plan

The May 1978 Action Plan presents the recommended \$6.5 million FY1978-1984 capital improvement program for Rosslyn. Those conclusions on required public improvements are based on earlier planning and several years of mid-1970s reassessment leading to the following recommendations:

- The 1962 Rosslyn Master Plan recommended 6 million square feet of office and commercial development, a circumferential loop road, and developer-funded grade-separated pedestrianways. By 1974, 4-1/2 million square feet of development had occurred and major pedestrianways had been built. Also, the Blue Line to Rosslyn was under construction.
- The 1975 Long Range County Improvement Program recommended more residential development, completing the pedestrian bridges

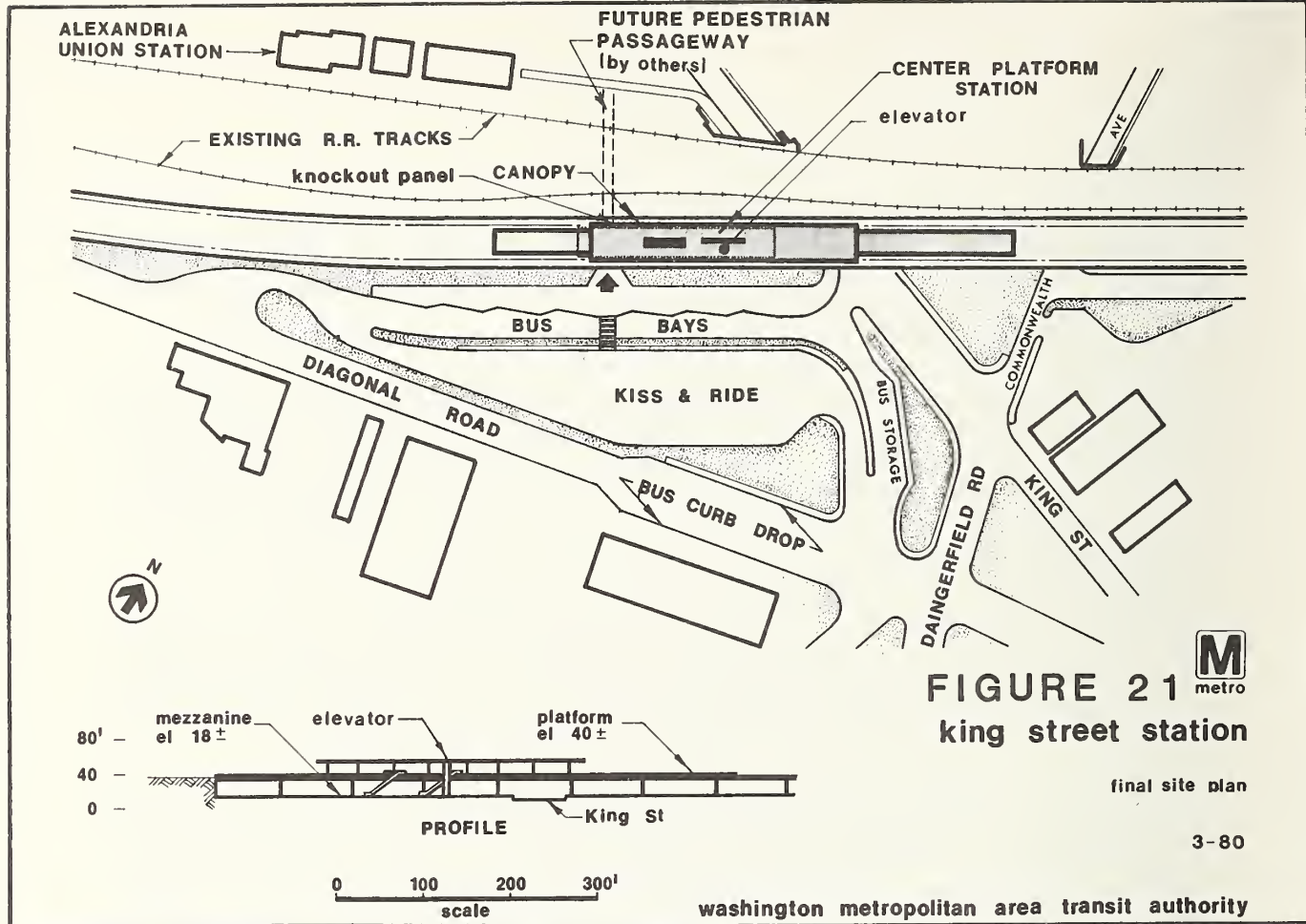
with emphasis on serving the transit station, streetscape improvements, focusing remaining development on the transit station, and protecting peripheral residential areas. The UMTA-funded 1977 Rosslyn Transit Station Area Study recommended several changes to the General Land Use Plan and rezonings to carry out the above recommendations, as well as streetscape improvements to facilitate access to the Metrorail station, specific urban design standards, and other recommendations to improve the appearance of Rosslyn and to focus activity on the transit station.

- The Rosslyn Capital Projects Report and subsequent Action Plan detailed the recommended capital improvements for the Rosslyn station area including:
 - \$4.5 million for sidewalks, curbs, and gutters
 - \$3.8 million for park acquisition and development
 - \$1.2 million for grade-separated pedestrianways
 - \$0.6 million for sanitary sewer improvements
 - \$0.3 million for bikeways
- Of this \$10.5 million total, \$6.5 million were recommended in the Y1978-1984 Action Plan. Several blocks to the west of the original Rosslyn plan area were identified as a "New Development Area" with the aim of achieving new residential development. Many needed improvements in this area between Wilson Boulevard and Route 50 are expected to be financed by new development. Other blocks within the Rosslyn station area and "up the hill" from the original Rosslyn plan area were designated as the Rosslyn Conservation and Infill Area where streetscape improvements were recommended to help stabilize the area and serve infill residential development.
- In addition to use of County general funds and bonds, Arlington planners recommended the use of a Special District Bond. Such a bond would finance streetscape, park and landscaping improvements in the original Rosslyn plan area by a special assessment of the benefitted taxpayers. It was found in 1978 that a 20-year, \$1 million bond issue would add less than 3 percent to the annual tax burden in the district. Virginia law allows such an action if a referendum is held and a majority of the proposed district's voters approve the process.

Station Area Issues

The following issues are shared by all three of these station areas:

- Will the R/B corridor's projected, post-1977 to year 2000 development of nearly 4,000,000 square feet of office and 15,000 residential units be built in accord with adopted policies, plans, and zoning that strive to focus the densest development next to transit stations?
- Will mixed-use and dense residential uses be developed within the station "bulls eye" areas to provide for all-day activity and use of transit services? New zoning classifications of "COA" (Commercial/Office/Apartments) and "R-C" (Apartment Dwelling and Commercial District) have been created to encourage such development.
- Can the quality of individual developments and connecting areas be upgraded to create more attractive, useable areas of dense developments on the very valuable sites near transit stations? The newer County plans for station areas contain urban design guidelines in response to this issue.
- Can station area residential neighborhoods within or on the periphery of the "bulls eye" areas be protected from the negative impacts of nearby dense development? Another related issue is whether low- to moderate-cost residential units can be retained despite nearby dense, high-value development. Arlington has put in place a system of residential conservation areas and negotiated a redevelopment plan for the Colonial Village garden apartment complex to help protect neighborhoods and low- to moderate-income housing stock.
- Finally, to what degree should the County become involved in the development process as in joint developments and in provision of public parking facilities to encourage and support private development and redevelopment? Arlington County has remained conservative with respect to committing public funds to support directly what is largely private, profit-making development.



King Street Station, right center, 1981. WMATA photo by Paul Myatt.

4.12 King Street Station

Location

The King Street Metrorail Station on the Blue and Yellow Lines is being constructed across the RF&P Railroad tracks from Union Station in the City of Alexandria. The station will be west of Old Town Alexandria between Duke and King Streets. A pedestrian tunnel will connect it to Union Station.

Station Area Characteristics

The station impact area is divided by the RF&P Railroad alignment with residential (Rosemont) and institutional (George Washington Masonic Temple) land uses to the west and mixed land uses to the east. The western portion of the area is considered stable. The auto sales, vacant parcels, service, retail and scattered offices and industrial uses stretching for about seven blocks to the east and south of the station are considered to be ready for redevelopment by City officials. Figure 22 shows the existing land uses for the impact area east of the station.

Studies, Plans and Zoning

This station's proposed location was made final in 1974. The City of Alexandria Department of Planning and Community Development has given the station area intense attention since then. The city published an OMTA-funded impact study in 1976 and the King Street Station Area Plan in 1978. City planners and Alexandria developers anticipate the station's presence will accelerate the redevelopment and rehabilitation of the 30-35 acres of deteriorated commercial area shown in Figure 23.

Subsequent to the station area plan's adoption, the City hired a consultant to perform market and fiscal analyses of the proposed redevelopment area and to recommend a redevelopment strategy. The firm projected the area would capture 15-20 percent of the City's 2.5 percent share of the region's increasing amount of office development. A 21-year staged development program was designed on a parcel-by-parcel basis for the redevelopment area. The City and King Street station area are expected to capture traditionally downtown activities locating in the suburbs. While structured parking will be required, rental rates of \$11-\$13/square foot (in 1979) can be charged in Alexandria for new, first-class office space versus much higher rates in downtown Washington. Large office users such as government, financial and insurance firms, information processing firms and service industries were anticipated as probable future users of the station area. The consultant projected that 2.1 million square

FIGURE 22

KING STREET EXISTING LAND USE

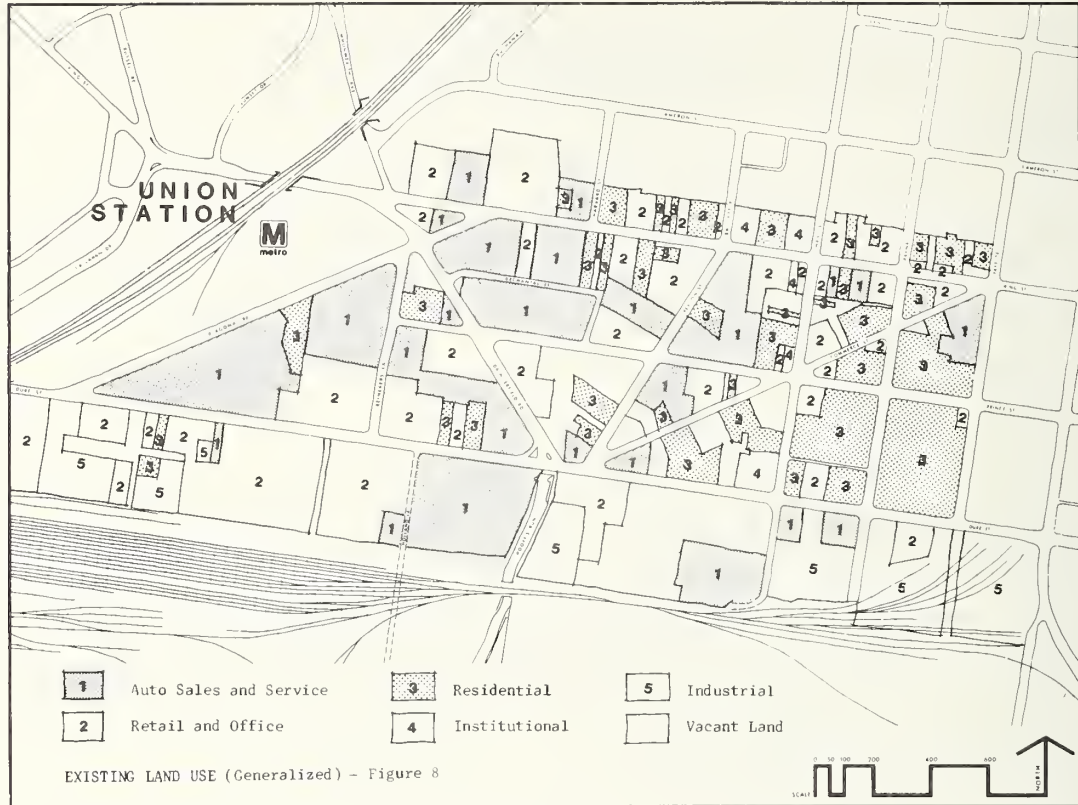
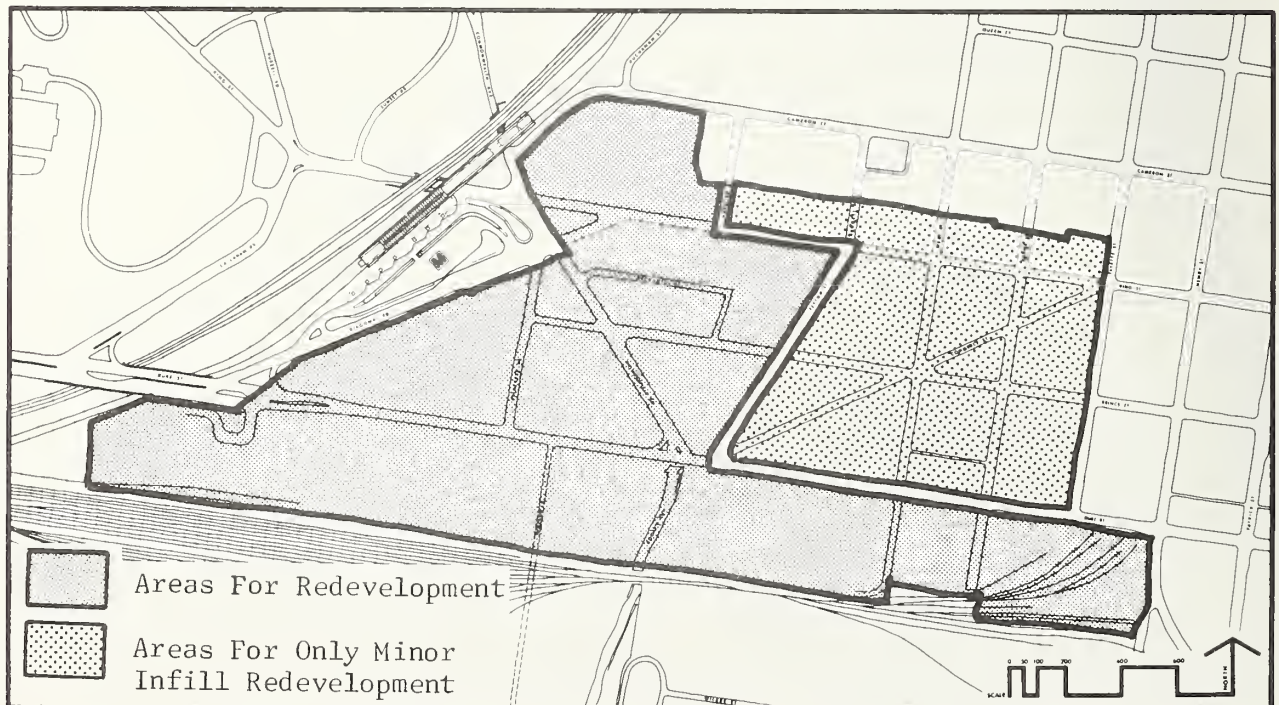


FIGURE 23

KING STREET GROWTH POLICY



feet of office, 250,000 square feet of retail, and 280 residential units will be attracted to the King Street Station area by 1990.

The City reclassified its zoning code in 1979 and thereby nearly cut in half the acceptable density for commercial and industrial development in the station area as follows:

C-3 zoning from 6.0 FAR to 3.0 FAR

I-1 zoning from 6.0 FAR to 2.5 FAR

I-11 zoning from 7.0 FAR to 3.0 FAR

All heights from 150' to 77' by right

The M-1 zone is structured to allow increased residential densities 80 d.u./acre v. 54 d.u/acre as allowed under the C-3 zone.

A Transit Parking District Ordinance was passed to allow for reductions in parking requirements and incentives for retail uses. Highlights of the ordinance are:

- up to 1 space for each 665 square feet for office vs. 1/400;
- exemption of the first 10,000 square feet of retail or the first 25 percent of space if used for retail in a mixed use project;
- use of valet parking allows 40 percent reduction of garage space, that is, aisle and spacing requirements are waived;
- 75 percent of parking must be in structure;
- all surface parking must be landscaped and screened; and
- no parking can front a street unless physically impossible to do otherwise.

The parking ordinance is being used as a tool to achieve a variety of transportation, economic and urban design policies. Parking reductions reflect the City's objective to discourage auto use and encourage transit use. These reductions and the use of valet parking can reduce the developer's up-front construction costs and allow more of his budget for amenities. Since the City wants to encourage retail uses, they have eliminated most retail parking requirements which may be used as an excuse for not providing retail. The City recognizes that the market for retail during the work week will probably be the daytime office worker who has already made a transportation mode choice. Therefore, retail space does not necessarily add appreciably to parking demand. Lastly, since first floor parking fronting a street and large areas of surface parking kill pedestrian activity, foreclose retail or are simply unsightly, they have used this ordinance to regulate against these occurrences.

In addition to regulatory techniques to guide development, the Planning staff initiated the King Street Task Force. The Task Force is composed of all the major actors affecting or affected by the area development-- property owners, developers, architects, City staff, citizens, the Chamber of Commerce, WMATA, and the RF&P Railroad. The Task Force is a voluntary cooperative effort to promote area growth under the guidelines established in the Adopted King Street Station Area Plan. Using private funding, the Task Force has retained a marketing consultant and a landscape architect firm. The firm has prepared a draft Urban Design Plan which proposes standards for streetscape treatment (paving, lights, utilities, signage, trees, street furniture, etc.) which would be adopted and implemented by the developer and the City. These standards would provide an identity and design continuity for the King Street area and create a more human pedestrian environment for mixed-use development. The Plan will be presented to Council for consideration within the next two months.

Station Area Issues

One Alexandria developer interviewed was quite disturbed by the zoning classification described above. He attributed it to the City's reacting only to the current concerns of residents and not considering the long term highest and best use of the station area. The City does recognize parking as a constraint on the station area's development and has considered how centralized parking can be provided as well as existing residential areas protected. Public improvements including roadway and streetscape improvements are badly needed to avoid anticipated congestion and to improve the area's image. There is potential for a joint WMATA and RF&P Railroad Company development at the Metrorail station site. The overall issue for management of the station area is that pressure for its redevelopment is strengthening due to the impending opening of the Metrorail station and the strong Northern Virginia office market. Local officials must manage and support that development pressure so that publicly agreed upon height, density limits, and land uses are observed, quality developments are constructed, and the station area's commercial district is strengthened in the best possible manner.

4.13 Friendship Heights Station

Friendship Heights is a major residential, retail and office complex along Metrorail's Red Line. It could become an exemplary area with respect to Metro-related development. However, key station area developments that would help to unify the Central Business District (CBD) have not yet occurred and are now constrained by area traffic limitations.

Station Location and Impact Area

The Friendship Heights Metrorail Station's location was decided in 1971, though its location has been presumed as early as 1959. It was originally scheduled to open in late 1979. It is now expected to be operating by late 1984. The station will serve the Friendship Heights central business district and residential areas to the west and east of the CBD. The station platform is located underground in the District of Columbia. It will have entrances from three of the four corners at the intersection of Wisconsin and Western including bus bays, Kiss n' Ride, and pedestrian access at ground level beneath the proposed Chevy Chase Metro Building on the northeast corner of the intersection and also at the Woodward and Lothrop department store entrance in the northwest quadrant. There will also be a streetside accessway on the west side of Wisconsin Avenue, one half block south of Jennifer Street and on the east at Belt Drive.

Figure 24 shows, within the broken line, the station areas that have received the most intense planning attention due, in part, to the anticipated opening of the Metrorail station. In addition, agencies in the District have given detailed attention to an additional area two blocks deep (to Fessenden Street) on the south side of the area delineated on the map and one block deep (to 41st Street) on the east side of the area.

Station Area Characteristics

The Friendship Heights Central Business District has developed since the early 1950s into a 2,000,000 square foot office and retail center with about 3,000 high-rise residential units on the north side of the area. It stretches for six-tenths of a mile along Wisconsin Avenue with about two-thirds of the area designated for moderate- to high-density development being in Maryland and one-third in the District. A strong market demand for both office and retail development has sustained in this middle- to upper-income area for many years. The CBD's central intersection of Wisconsin (a major Montgomery County-District of Columbia transportation arterial), Western, Military, and Willard Avenues is also the site of the Friendship Heights Metrorail station.

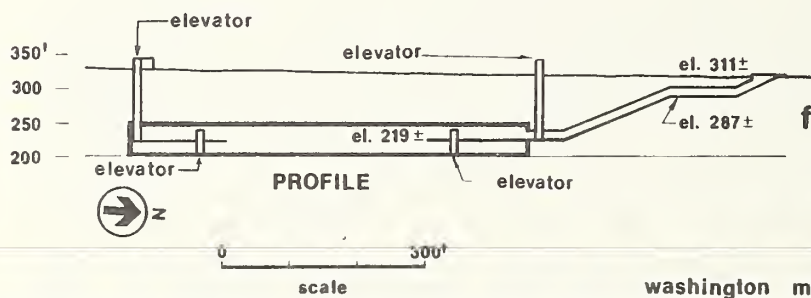
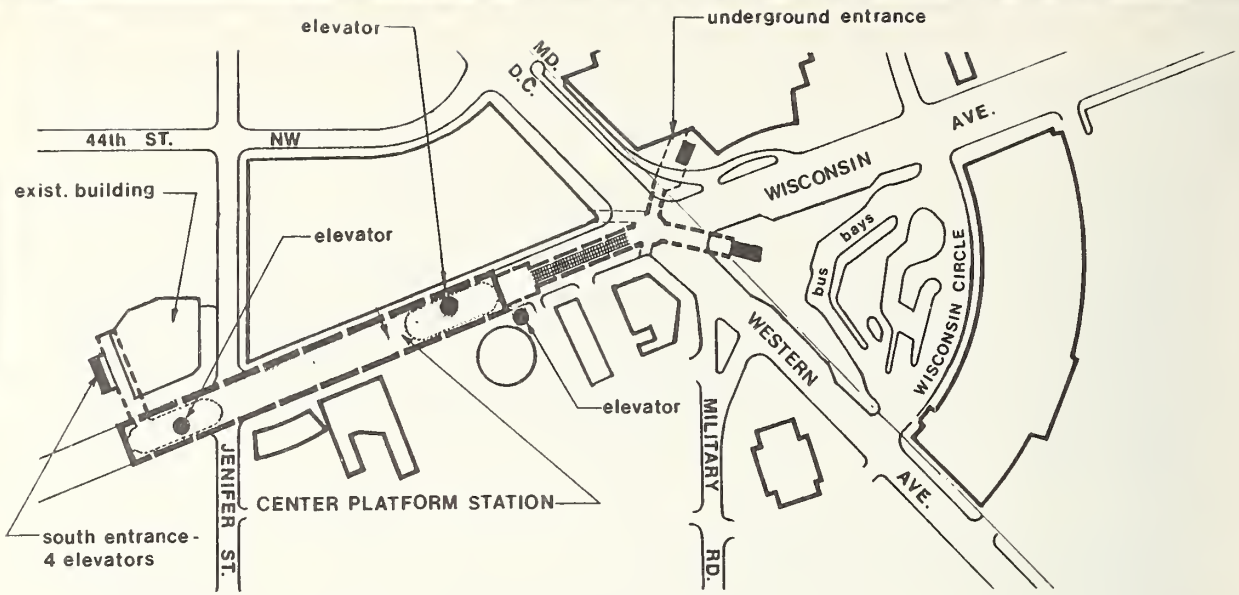


FIGURE 24 
friendship heights station

final site plan

2-80

washington metropolitan area transit authority



Friendship Heights, 1983. WMATA photo by Paul Myatt.

Since 1973, when planned land use and zoning were being drastically changed in the Maryland portion of the CBD, nearly all additional development has occurred in the District of Columbia portion of the CBD. Currently, the immediate station area is dominated by low- to mid-rise retail uses and services. The main concentration of high-rise office and residential development, built in the 1960s, is in the northwest part of the station area. That is, north of Willard Avenue and several minutes walk from the station's entrances. Older, generally affluent single family residential development surrounds the CBD in both the District and Maryland.

The Friendship Heights CBD has been an important retail center since the 1950s with a Woodward and Lothrop, Saks Fifth Avenue, and Lord and Taylor department stores plus other large retail stores. However, the retail development is not continuous. It is divided by major roadways, parking lots, low intensity uses, and office development. The Highland House is the only major mixed use development.

Studies, Plans and Zoning

Development in Friendship Heights was guided in the 1960s by the Plan for the Year 2000 (1961) in the District of Columbia and the Wedges and Corridor Plan (1964) in Montgomery County. Both encouraged growth concentration and containment in radial corridors, with greatest densities at nodes well served by transit. The high-rise apartment and office towers in the northwestern area of Friendship Heights were built during the 1960s, in accord with the Wedges and Corridor Plan.

The 1968 Comprehensive Plan for the National Capital, produced by the National Capital Planning Commission, designated Friendship Heights an "Uptown Center." Such a center was to be a:

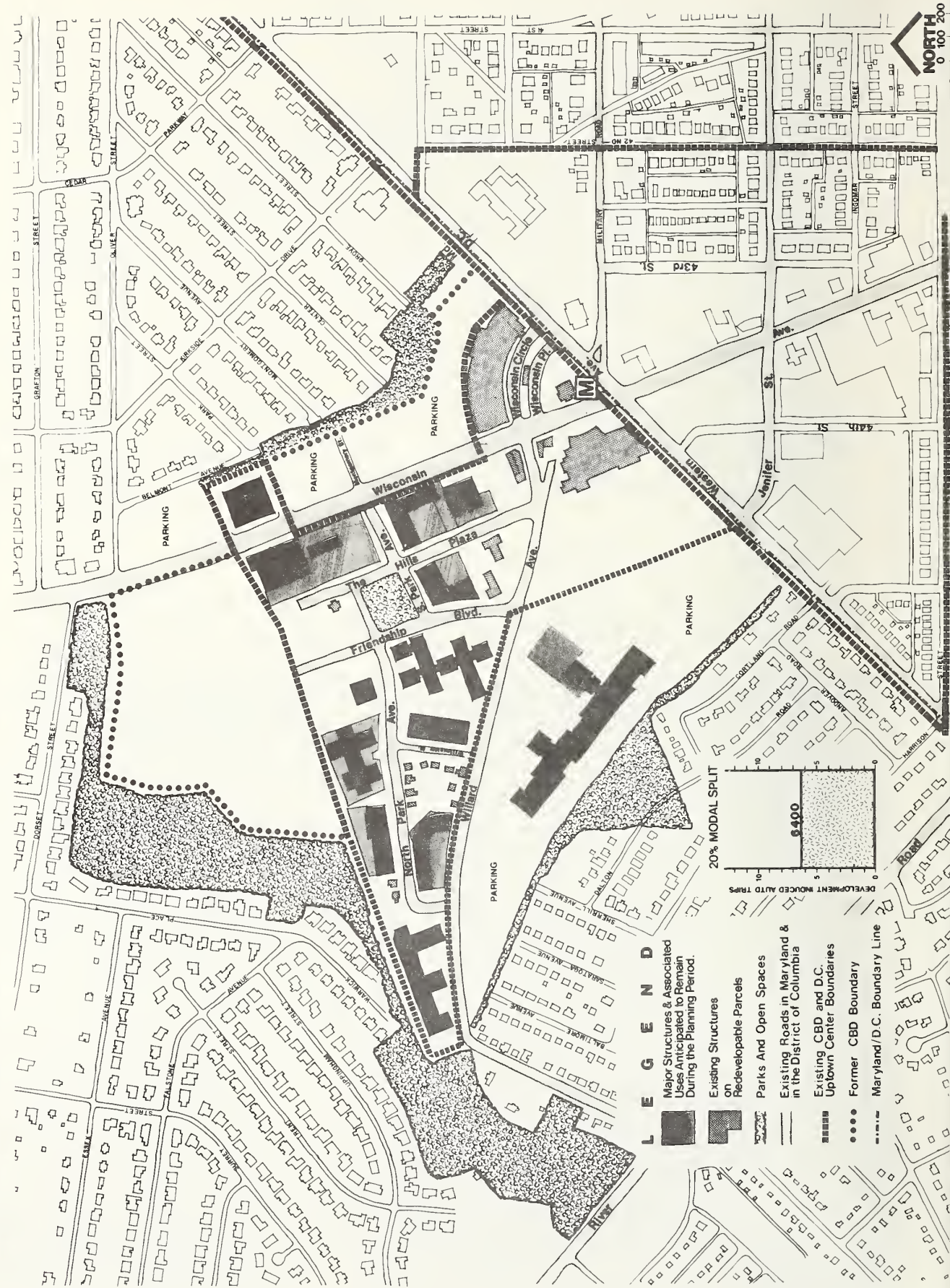
multipurpose activity center with strong transit orientation and significant concentration of employment (total employment in the 5,000-10,000 range) and high-density residential as the principal elements developed in a manner which serves the surrounding low-density community while protecting it from avoidable intrusions.

The Montgomery Plan

The Montgomery County Council adopted the Master Plan for the Bethesda-Chevy Chase Planning Area in 1970. It recognized that the character and complexity of the Friendship Heights activity center required special attention as one of the County's CBDs with both local and regional scope and serviceability. Also, the "advent of METRO dictates a complete reexamination of the nature and extent of

FIGURE 25

FRIENDSHIP HEIGHTS EXISTING DEVELOPMENT



development and redevelopment that might be involved." The Master Plan proposed the orderly expansion of the CBD, site plan review of new developments around the transit station for possible reduction in parking requirements and extension of the arterial street system. While calling for protection of surrounding neighborhoods, the Master Plan proposed maximum utilization of the land in the business district within permitted limits. Also, "traffic capacities of streets and public transportation systems should be geared to land use proposals in the Master Plan."

A number of Friendship Heights business leaders collectively funded a study of the area's growth potential in 1971. The resulting "Koubek Plan" concluded that an additional 7-1/2 million square feet of office, 1-3/4 million square feet of retail, and 3,500 apartment units could be developed in the CBD by the year 2000. They argued that this additional development could transform the area into an integrated, mixed-use center focused on the Friendship Heights Metrorail Station. FARs would range up to 6.0; 15,000 parking spaces would be added; a "ring-road" would be built to divert traffic around the main intersection and transit station, and a continuous system of pedestrian walkways and minirail system would connect most high intensity uses to the Metrorail station.

The citizens associations of the Friendship Heights area reacted strongly to oppose the "Koubek Plan" on the grounds of potential traffic congestion, neighborhood and environmental impacts. Montgomery County, District of Columbia, and National Capital Planning Commission planners studied the area and produced a Sector Plan in Maryland and a somewhat coordinated Sectional Development Plan for the District of Columbia portions of the CBD.

A task force was formed in 1973 to address Friendship Heights planning issues in which Montgomery County (M-NCPPC officials) and the District of Columbia (NCPC and D.C. officials) shared interests. Their "Joint Statement" recognized that road capacity was the major constraint on new development in the CBD. They agreed on an allocation of allowable additional trips proportionate to the affected areas in the two jurisdictions, two-thirds assigned to Maryland, one-third to the District of Columbia. While the task force recommended that the "ring-road" be built, it also recommended that a monitoring process be established to improve the area's modal split (percent transit), reduce traffic congestion, or reduce development scale.

The District Plan

Released in 1973, A Plan for the Friendship Heights Area of the District of Columbia was developed by District of Columbia and National Capital Planning Commission officials plus a representative of the Montgomery County Planning Board. It resulted from one of the

first studies carried out under the Sectional Development Plan provisions of the District's zoning regulations. It represented some consensus on what should become the District's portion of the Friendship Heights CBD; but it was not officially adopted as a comprehensive plan for the area. Only the recommended zoning changes were subsequently adopted (1974).

The Plan called for maximizing transit patronage, construction of the ring road and a southern entrance to the Metro station, and limiting off-street parking to encourage use of transit. A 30 percent modal split was assumed for peak-hour work trips with a maximum addition of 3,294 development- induced work trips (a reaffirmation of the 2/3:1/3 allocation).

Zoning revisions adopted by the D.C. Zoning Commission resulted in greater matter-of-right commercial development density immediately about the transit station (4.0 FAR, 90 foot height), but generally reduced the allowable commercial density for other blocks in the Uptown Center. An exception was raising the maximum density bonus in the R-5-B apartment buildings district from 0.2 to 1.2 FAR to encourage dense residential development. The Plan also recommended five optional development areas be recognized where PUD provisions could be used to gain greater development flexibility.

Implementation of the Plan's proposed phased Capital Improvement Program was made contingent on the following:

Phase I of the CIP--The results of a D.C. study of potential air and noise pollution, and

Phase II of the CIP--Achievement of greater than 30 percent modal split and generation of not more than 3,300 automobile trips in the D.C. planning area.

The National Capital Planning Commission approved the Sectional Development Plan in 1973. The D.C. Zoning Commission adopted the zoning plan in 1974. The other plan elements containing proposals for PUDs, circulation, CIP, and changes in the Metro system were recommended to the D.C. Zoning Commission in 1975 and again in 1978. The Zoning Commission found it did not have authority to adopt them.

Friendship Heights Sector Plan

Large parcels of land, zoned for very intensive uses, had been assembled by the early 1970s in the Maryland portion of the CBD. The County recognized the area has "virtually infinite market potential for continued development." Those conditions plus the proposed construction of Metrorail and decisions not to construct a number of area expressways that would have relieved traffic loads

caused Montgomery County to do a detailed comprehensive ("sector") plan for the area. The Plan was adopted in June of 1974 by the M-NCPPC after intense discussion by area residents, landowners, developers, and residents of adjoining neighborhoods. It recognized the carrying capacity of the area's existing arterials and anticipated mass transit facilities as well as environmental elements as constraints on development in the CBD, and that development under existing zoning would cause excessive traffic. The Plan proposed reduction in the amount and intensity of allowable CBD development. Medium-density, mixed office and retail uses were designated for tracts close to the transit station with lower density, primarily residential, further away. The size of the CBD was reduced and new CBD zoning categories were proposed by a citizens' committee to study zoning in CBDs and transit station areas.

The area was largely rezoned from C2 (allowing up to an FAR of 12.5) to CBD-1, the lowest density CBD zone. The CBD-1 category allows up to an FAR of 1 for matter-of-right development and up to FAR 2 under an optional, detailed site plan review method involving developer provision of open space and amenities, and up to FAR 3 when 80 percent of the development is residential. Two parcels, on the northeast corner of the intersection of Wisconsin and Western Avenues, were zoned CBD-2 to allow an FAR of up to 2 or up to FAR 4 under the optional method.

The County's planners based the transportation element of the Plan on an anticipated modal split of 20 percent (30 percent was used by planners for the District portion of the CBD). The County used vehicle trip generation factors for evening peak-hour traffic that were the same as those used by District planners for retail development but 36 percent greater for office space and 40 percent higher for residential development. The Transportation Element of the Plan concluded that:

- The Ring Road should be completed prior to the start of Metro construction;
- CBD pedestrianways and direct pedestrian access to the transit station from adjacent high-density development should be provided;
- Preferential treatment should be given to transit station bus service, and
- All day, nonresidential parking should be discouraged within the CBD.

The Plan also contained general and specific design criteria for anticipated developments including illustrative design concepts. The design guidelines called for a system of grade separated

pedestrianways to connect nearby developments to the transit station, as well as creating an "attractive, convenient Metro entrance to Friendship Heights." Plans for the provision of other public services, maintenance of air quality, and protection of adjoining neighborhoods are also provided in the Sector Plan.

The Sector Plan was intended to be a development guide for 6-10 years "with a recommendation for review when 50 percent of the recommended development is realized or prior to the opening of METRO and again 2 years after the opening of mass transit services."

Station Area Issues

The following station area issues related to land use were identified, either in the area's plans or during interviews of Montgomery County and District of Columbia officials, area residents and land owners, and developers now active in the area:

- Will those parcels very near the transit station's entrances now occupied by low-density, somewhat older commercial buildings be redeveloped as proposed in the plans for the area? This is of particular concern in the Maryland CBD where maximum allowable office development density was reduced from FAR 14 to FAR 2 in most of the CBD area.
- The date of anticipated opening of the transit station has slipped from late 1979 to late 1984. How has this affected the area's businesses and anticipated development?
- Will planned highway improvements, including the loop road, be made prior to the station's opening? Also, if redevelopment occurs as planned, will vehicle traffic loads prove to have been well-managed and to have necessitated the major reductions in allowable development densities adopted in 1974?

4.14 Silver Spring Station

The Red Line alignment to Silver Spring and Glenmont (just outside the Capital Beltway) was adopted in 1968 though anticipated for several years before then. The site of the Silver Spring station was approved in 1971. The station was scheduled to open in 1977 and actually opened in February of 1978. It will continue to be a terminal station until 1988 when service will extend north to the Wheaton station.

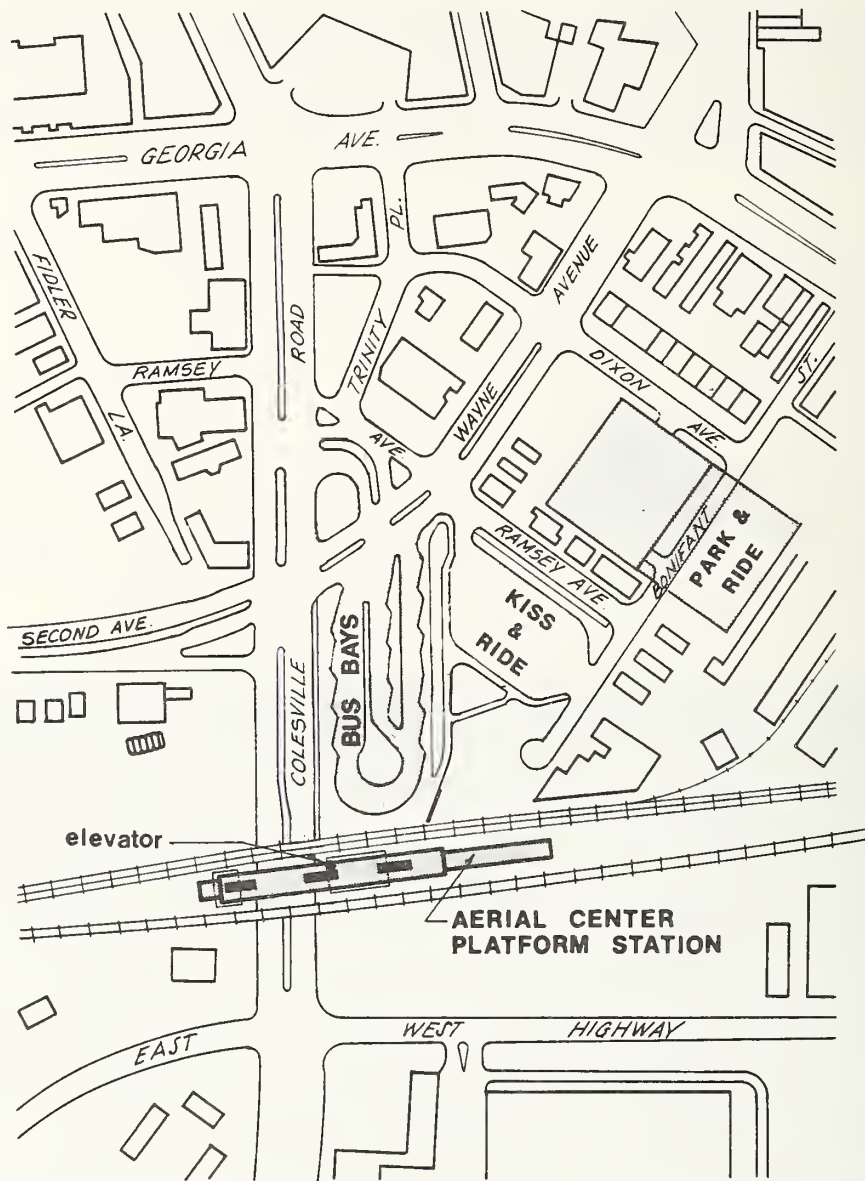
Station Location and Impact Area

The Silver Spring Metrorail station is on the east side of the B&O Railroad alignment and south side of Colesville Road, as shown in Figure 26. It has 16 off-street bus bays; 58 Kiss n' Ride spaces; and 1,500 nearby structured parking spaces with 1,000 more recently added as part of Montgomery County's Silver Spring Parking District.

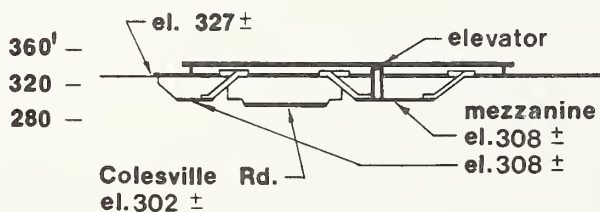
Planners for the Maryland-National Capital Park and Planning Commission (M-NCPPC) consider the area shown in Figure 28 as the area of direct Metrorail station impacts in Silver Spring.



Silver Spring Station spanning Colesville Road in a view to the east, 1981. WMATA photo by Paul Myatt.



0 300'
scale



PROFILE



0 300'
scale



FIGURE 26
silver spring station

final site plan

2-82

washington metropolitan area transit authority

Station Area Characteristics

Montgomery County officials hoped that the coming of Metro would provide a catalyst for development and revitalization of the Silver Spring CBD and vicinity. The area first developed in the 1920s, after the "electric car" had connected it to downtown Washington in 1898. It became for residents of Montgomery County and Northwest D.C. a shopping center that grew with the widening of Georgia Avenue and completion of the Capital Beltway. A boom of high-rise office and apartment development occurred in the 1960s so that today Silver Spring is a major regional employment and retail center ranking first in the County in gross retail square footage. It also leads the County's CBDs in office space, apartment units, and hotel rooms.

As shown in Figure 27, the retail core is at the intersection of Colesville Road and Georgia Avenue, only two blocks from the Metrorail station. Yet the station is surrounded by predominantly low-intensity uses including car dealerships, surface parking lots, and parking garages. The area's high-rise residential and office developments are generally located along Georgia Avenue, north of Colesville Road.

Before 1967, Silver Spring was second of the region's retail centers in terms of value of retail sales. Suburban malls have since displaced it. The County's mid-1970s sewer moratorium that lasted until 1979 and the 1973-'74 downturn in the national economy discouraged growth in the area despite the anticipated opening of the Metrorail station. The retail core stagnated to the degree that County officials considered it an area that required special assistance.

Studies, Plans and Zoning

Planning for the Silver Spring Metrorail area began in 1966 with a survey of existing conditions, growth potential, trends, and alternative land use and transportation plans. A 1968 statement of concepts and goals and 1969 preliminary master plan were produced but a detailed plan for the greater Silver Spring area was not adopted by the County Council. Rather, the area's first detailed plan was adopted for a smaller, more focused area. The Silver Spring Central Business District and Vicinity Sector Plan was adopted in July of 1975. It established both a long-term (25-30 years) concept plan for growth and a near-term, (6-10 years) detailed development program.

The long-term concept plan recognizes there will be two focal points for Silver Spring development: The "Metro Center" area and the "Retail Center." It recommends the highest intensity development (up to FAR 8) be in the Metro Center area in the form of mixed-use development. The Retail Center around the junction of Georgia Avenue and Colesville Road is to be strengthened and enhanced.

FIGURE 27

SILVER SPRING EXISTING LAND USE

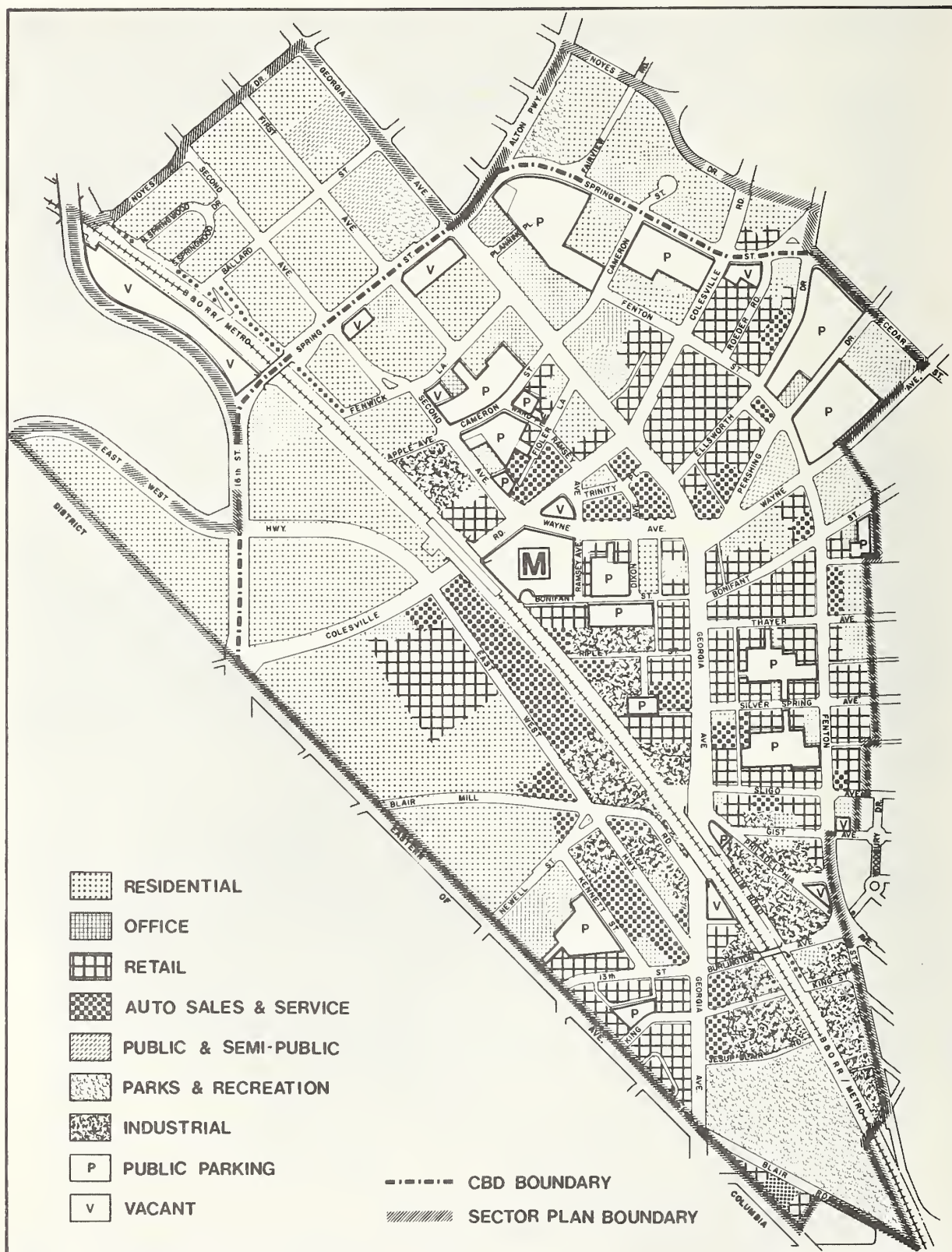
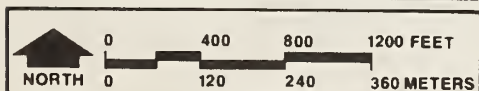
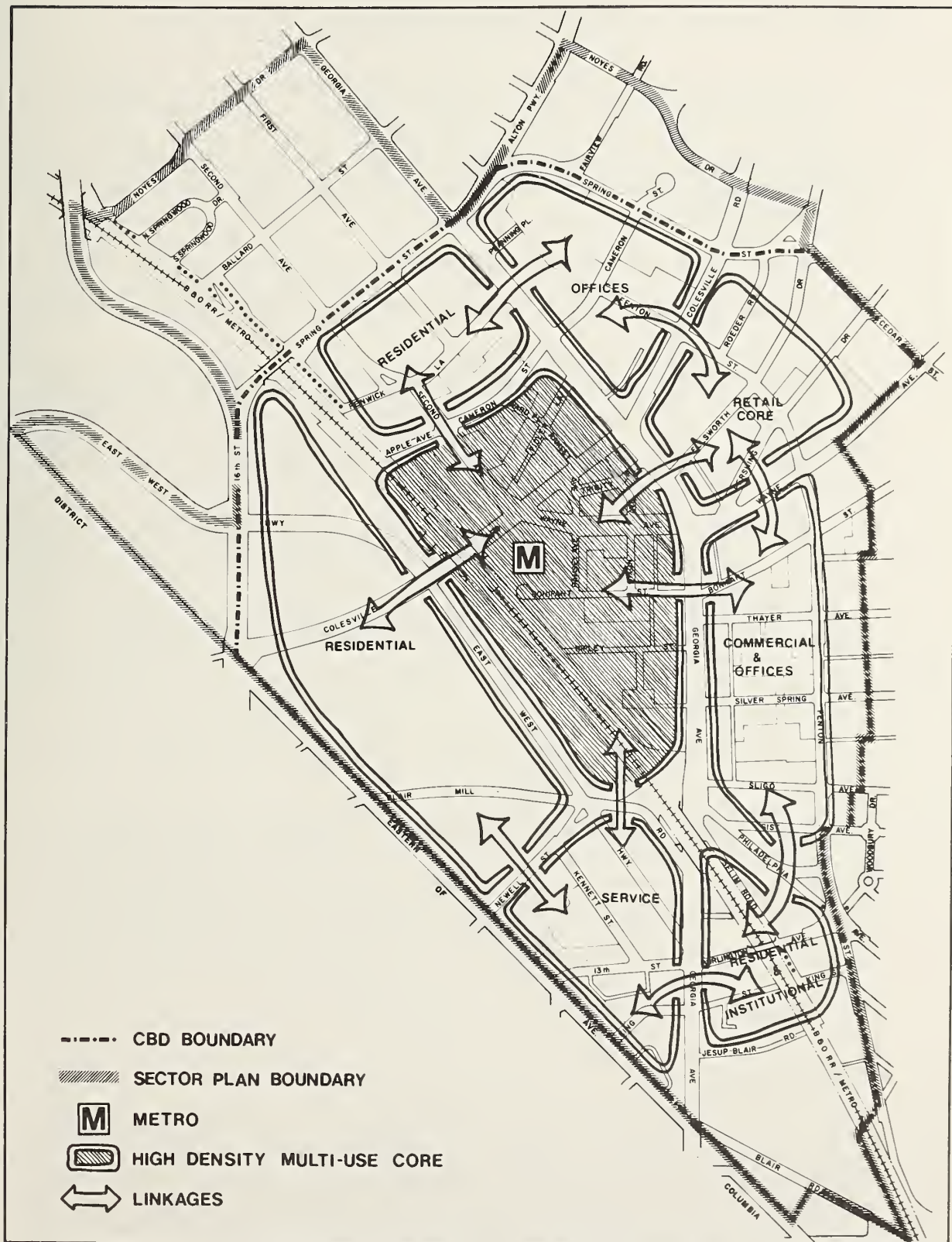


FIGURE 28

SILVER SPRING LAND USE CONCEPT PLAN



Specific provisions of the Sector Plan included the following:

- The capacity for the area's future development is constrained by the road network, water and sewer systems, and air quality;
- The Land Use Concept Plan for the area shown in Figure 28 focuses additional development on the Metro station and the retail and office core;
- A Metro park and a civic, convention, and transportation center were proposed to consolidate bus, rail (Metro and Amtrak), cab, and limo services and to connect the Metro station with the retail and office core areas;
- Station impact area residential uses are to be preserved and increased;
- Street improvements were recommended to facilitate circulation to office, retail, and the rail stations;
- As WMATA did not provide parking spaces at the station, the Plan recommended access improvements to existing parking lots operated in the Silver Spring Parking District, as well as upgrading the lots to structured parking and considering joint development arrangements for the space above such garages;
- WMATA planned to reroute their buses to focus on the Metrorail station; and
- Pedestrianway improvements were planned, particularly to link the Metro station and retail core.

The Sector Plan was to be implemented through a major rezoning to support the proposed land use plan; a public investment program focused on improving access to the station; a development staging plan to target dense, new development close to the Metrorail station; and a CBD landscape plan to improve the area's appearance. A revitalization task force was formed of local business leaders and the County Office of Economic Development to focus attention on attracting new development to Silver Spring.

Station Area Issues

The principal issue of the late 1970s for the Silver Spring CBD and vicinity was whether the coming of a Metrorail station and associated improvements would spur redevelopment of the retail area and those parcels immediately around the transit station site. Public policies, programs, and capital funds have been coordinated to help assure that this planned revitalization and redevelopment would occur.

4.15 Addison Road Station

Location

The Addison Road Metrorail Station was opened in December 1980. It is in Prince George's County, just south of the City of Seat Pleasant and east of the City of Capitol Heights. It is the terminal station of the Blue Line and lies 2-1/2 miles inside the Beltway along the south side of Central Avenue.

Station Area Characteristics

The station area contains both tract and scattered single-family detached homes, some nearby strip commercial, and small amounts of industrial and garden apartment development. Baber Village, the vacant site of a former HUD housing project, lies within walking distance to the east of the station.

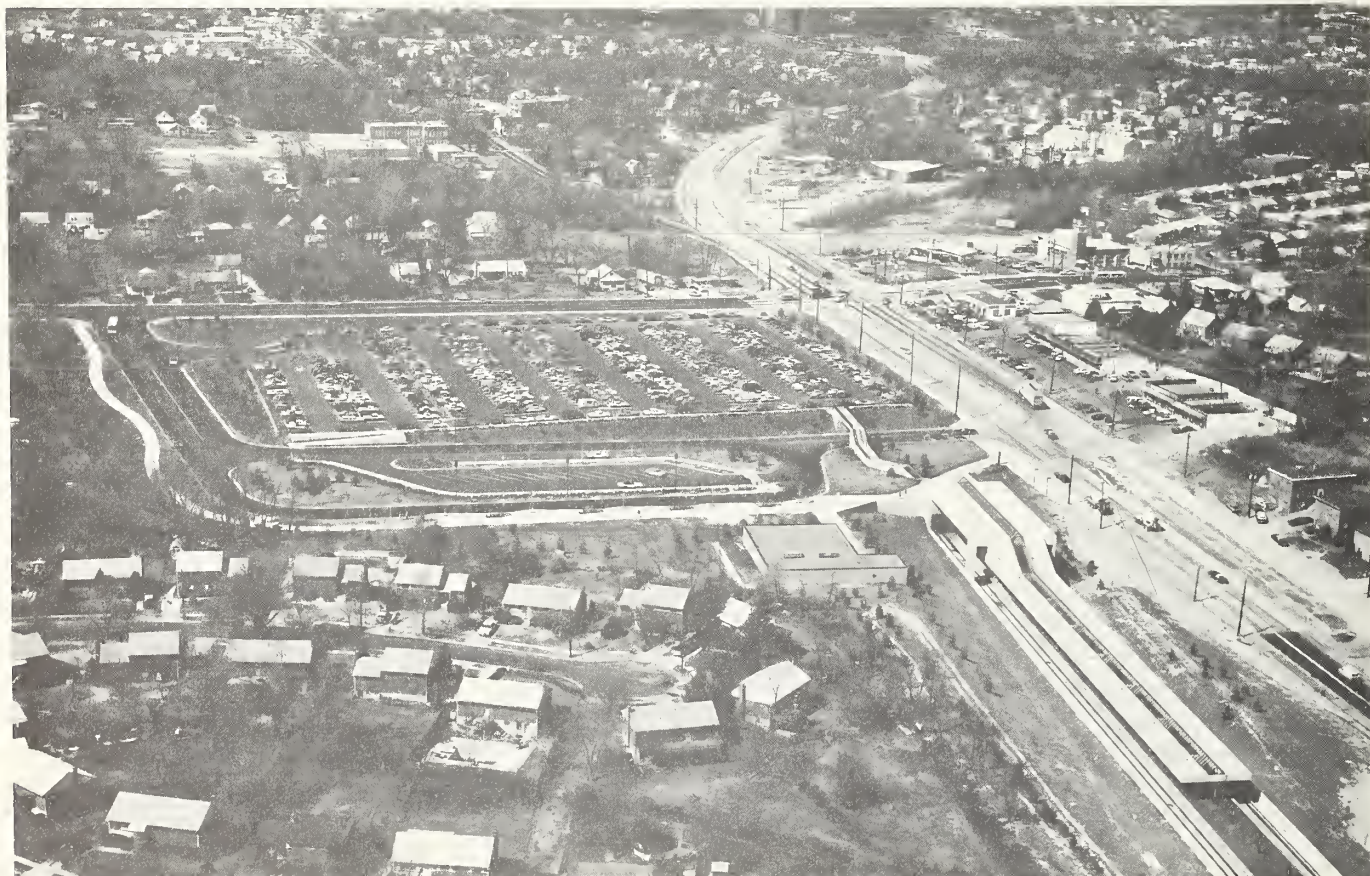
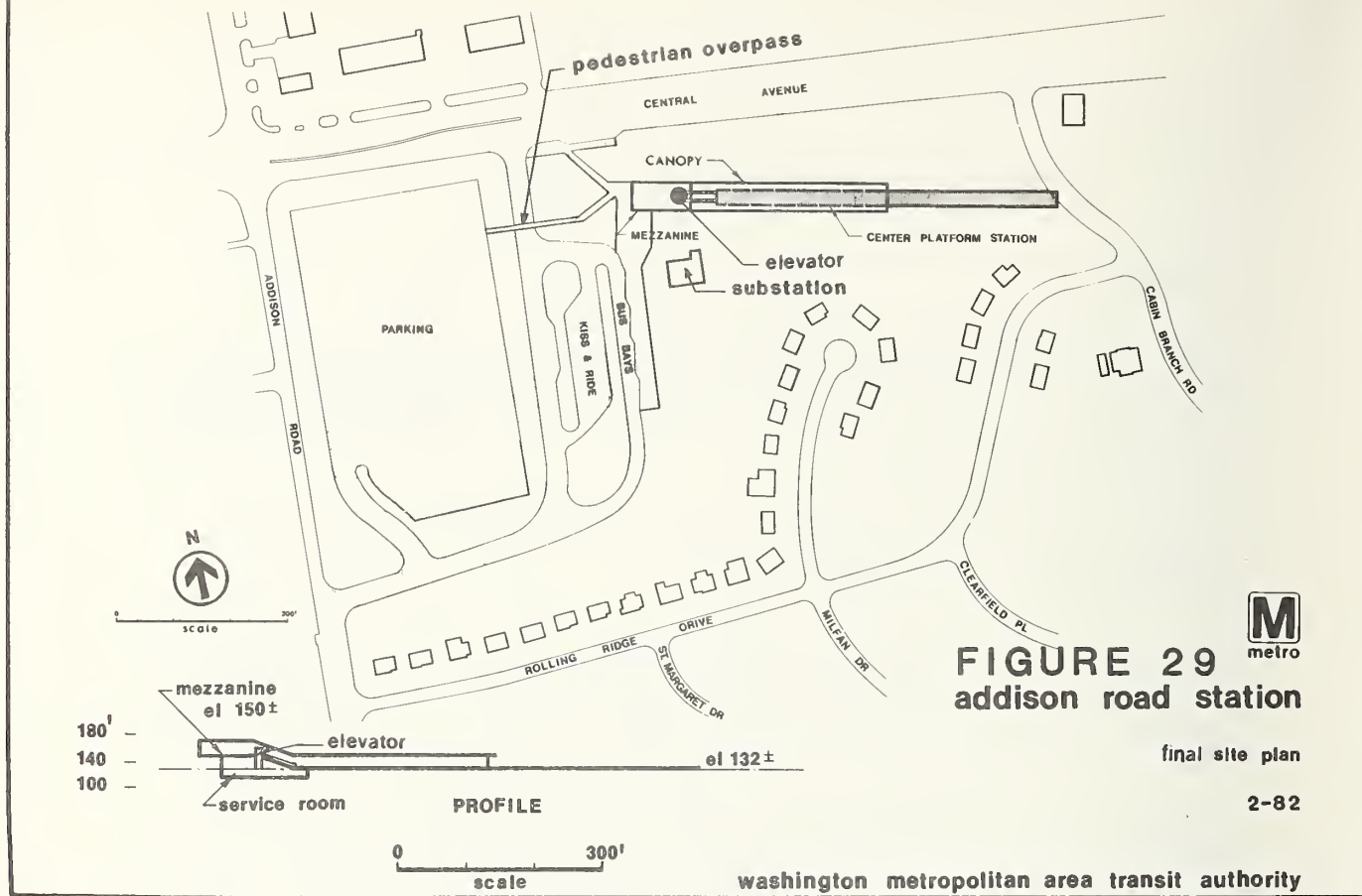
A wide range of development issues have been addressed and specific goals and objectives identified. Included among these are:

- Promotion of private investment in the area of many underused or vacant parcels near the station;
- Coordination among participating staffs and agencies involved in the development process.
- The physical enhancement of the station area.
- Promotion of development objectives which have been agreed upon between the County and the City of Seat Pleasant.

A task force of county and city staffs was formed in 1980 to improve coordination and agree on specific development strategies.

Studies, Plans and Expectations

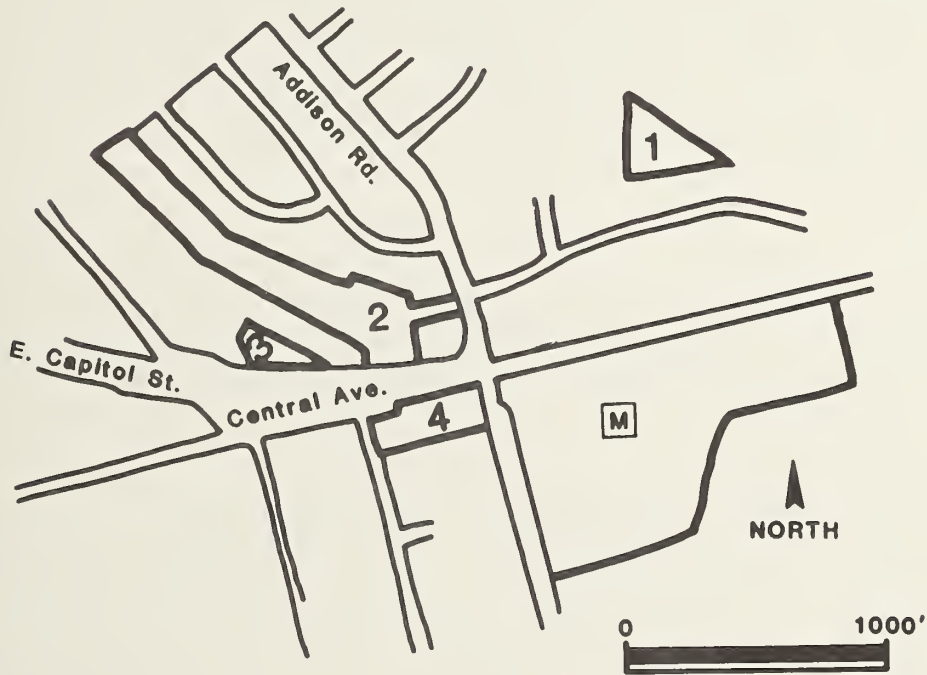
The County has studied the anticipated impacts of this station since 1974. County planners prepared a development profile in 1979 to provide data and address development issues. A market analysis and proposed five-year development and implementation plan were prepared in 1980 by a consultant to the County to prepare for the station's opening. During these five years of study and planning, the objectives have shifted from one of residential and retail infill to greater commercial development in the station area with associated employment benefits. The City of Seat Pleasant has urged the County to be more concerned about increasing employment in the station area.



Addison Road Station, 1981. WMATA photo by Paul Myatt.

FIGURE 30

ADDISON ROAD DEVELOPMENT PARCELS



KEY: PARCEL NO.	ACREAGE	ZONING	OWNERSHIP
1	3.0	R.R. Unsubdivided	Private, Vacant
2	6.7	I-1 Unsubdivided	Public, Vacant
3	2.2	I-2 Unsubdivided	Private, Vacant
4	1.9	C-2 Unsubdivided	County -- Intended for Parking Lot

Seat Pleasant studied and annexed a 15-acre industrial parcel near the station with the objective of attracting additional employers to the area.

The area's zoning is at different stages of refinement. The City of Capitol Heights and area north of Central Avenue underwent a Sectional Map Amendment and associated zoning changes in 1977. The area south is currently undergoing Master Plan revision in conjunction with a Sectional Map Amendment. Few zoning changes have occurred in recent years with the principal uses of the area expected to be residential.

A revitalization plan for a six-acre commercial strip across from the station was developed by M-NCPPC Urban Design staff and presented to property owners. While the County and owners expressed interest in pursuing the idea, a small-scale commercial revitalization project, the availability of loans and financing could not be guaranteed. Thus, the proposal was tabled until more favorable market conditions exist.

To the area's advantage are the Metrorail station, close proximity to the District's large population, nearness to the Beltway, and many vacant and underutilized parcels. In 1979, the Federal City Council identified no committed investment for the area. They speculated that approximately 100 hotel rooms and 100,000 square feet each of commercial/office and retail development may be constructed in the foreseeable future.

The recommended development program of the County's consultant proposes about 40,000 square feet of retail, 20,000 square feet of office, and about 130 acres of 10-14 dwelling unit/acre townhouses or low-rise condominiums by 1985. In the Fall of 1980, the only knowledge of development interest among city and county planners was that some retail stores might expand and that a major grocery store chain had shown interest in the area.

The implementation strategies recommended by the County's consultant include provision of amenities and infrastructure, and financial and market incentives. Due to severe fiscal restraints the public and private sectors have been unable to aggressively pursue recommended strategies.

4.16 New Carrollton Station

Station Location and Impact Area

The New Carrollton station is the terminus on the Orange Line and has been in operation since November 1978. The station is bounded by the Pennsylvania Railroad (Amtrak) right-of-way, the Capital Beltway and Route 50, in an area referred to as the Ardmore Triangle. Prince George's County officials consider the Triangle, which consists of approximately 160 acres, the primary Metrorail station impact area. This area has long been zoned for industrial but was largely vacant until the mid 1970s due to a lack of infrastructure and highway access.

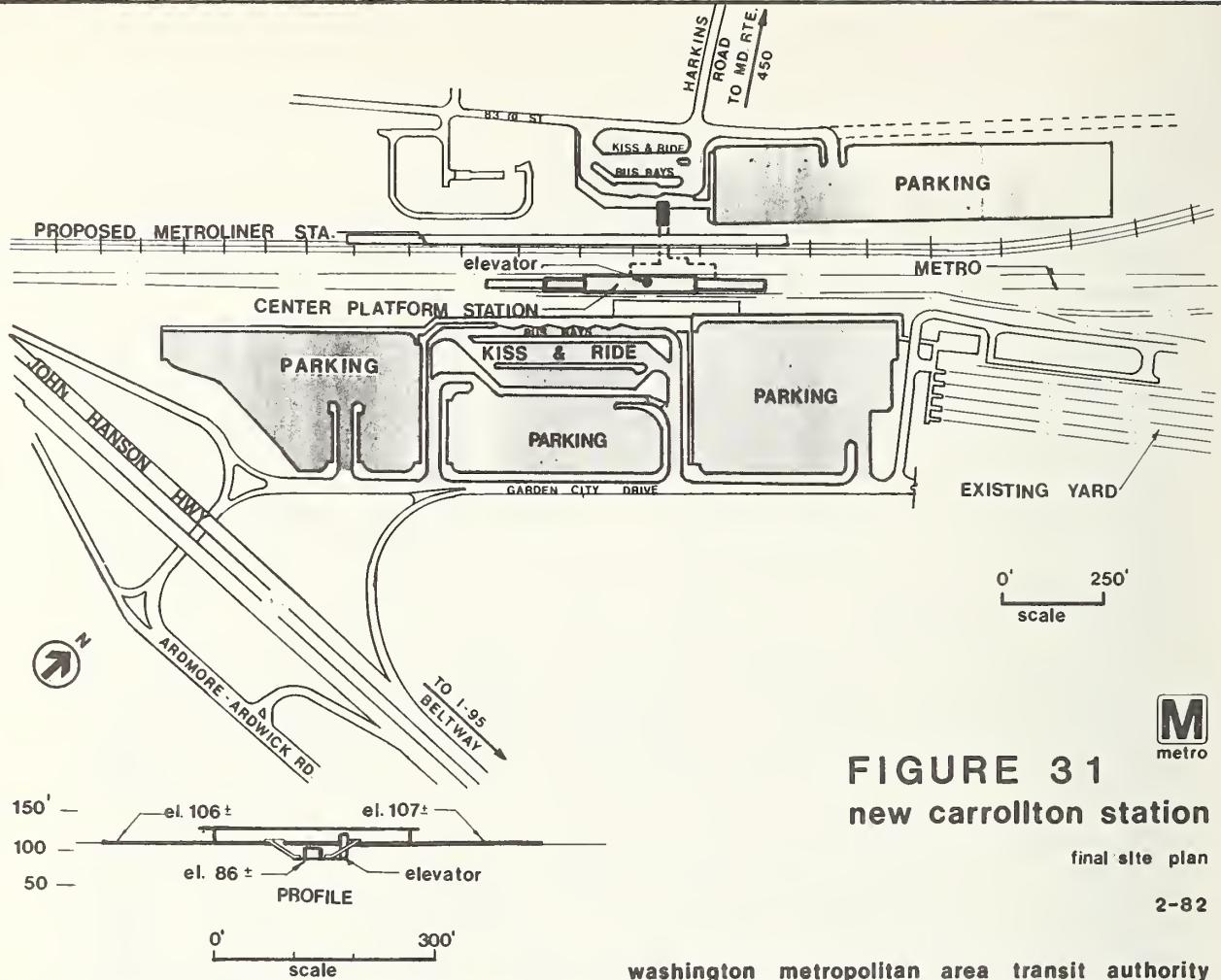
The temporary Capital Beltway Amtrak station, the Metrorail station, associated parking lots, and the WMATA service yard occupy close to 80 acres of the Triangle. A permanent Amtrak station sited across the tracks parallel to the Metrorail station is currently under construction with a Fall 1983 completion date. The relocation will shift some attention to lands along the north side of the railroad alignment and allow convenient connections for users of both the railroad and the transit system. The remaining 80 acres of the Triangle lay immediately south and east of the station. This acreage was acquired by Cabot, Cabot, and Forbes Company in 1970 with the expectation that it could be developed once Metrorail service and highway access were provided. However, due to unanticipated Metro construction delays and difficult economic times, the 80-acre tract was sold to Shell Oil Company in 1976.

Shell Oil Company improved the area by installing roads and utilities. The Metrorail station opened in 1978 and two lanes of highway access were provided to Route 50 in a combined effort by the State and County. By 1981, the company had been able to sell all but 6 acres of the property to developers for low-density office park development permitted as matter-of-right under the area's industrial zoning.

As of 1983 within the Triangle, approximately 800,000 square feet of office space has been built. An additional 200,000 square feet of office space, 100,000 square feet of support retail and a 300-room motel complex are to be constructed. These figures do not include a proposed 400,000 - 1,000,000 square feet of mixed-use development in air rights conveyance over Metro's parking facilities.

Studies, Plans and Zoning

The station vicinity in general and the Ardmore Triangle in particular, current site of the Metro East Employment Center, were chosen for special study because it was anticipated to be a highly used station with great development potential. Market and planning



New Carrollton Station and yards, 1981 WMATA photo by Paul Myatt.

studies of the Triangle by the Maryland-National Capital Park and Planning Commission recommended that high-density office, retail, medium-density residential and community facilities be developed on the site.

Necessary public actions called for in the studies included:

- building a new Amtrak terminal across the tracks and connected to the Metrorail station;
- adopting and implementing a detailed plan for the area, including a rezoning;
- coordinating private sector management of stormwater runoff; and
- providing access to the area with ramps off Route 50.

Although the County's impact assessment studies were never officially adopted, the office commercial element has been implemented through the Metro Park East Development and many of the recommended public actions have been or will be implemented.

Station Area Issues

The principal issues with respect to the station area's development follow:

- Access - The Ardmore Triangle is served by both Metrorail and Amtrak, but the lack of highway access in the mid-1970s was only partially corrected by a State and County sponsored, 2-lane accessway from Route 50. Traffic to and from the office developments that have been constructed, plus the heavy commuter use of the Metrorail station, threaten to overwhelm that limited highway access. Access therefore, is a dominant factor in determining the level of additional development. Currently over \$100 million of access improvements are programmed for the area. Flyover ramps from the Beltway and Route 50 into the Triangle have been advanced and will greatly increase accessibility in the near future. An extension of Route 410 to Pennsy Drive and a bridge from Pennsy Drive over Route 50 into the Triangle are also planned.
- Parking: - At the New Carrollton station 1,500 long-term Metro parking spaces have been provided on the south side of the tracks, with an additional 1,000 spaces proposed, and 500 spaces have been provided on the north side of the station. A 600-space parking garage for the permanent Amtrak station is scheduled for construction in mid-1984 with a completion date of mid-1985. The garage will be built on land currently used for Metrorail

FIGURE 32

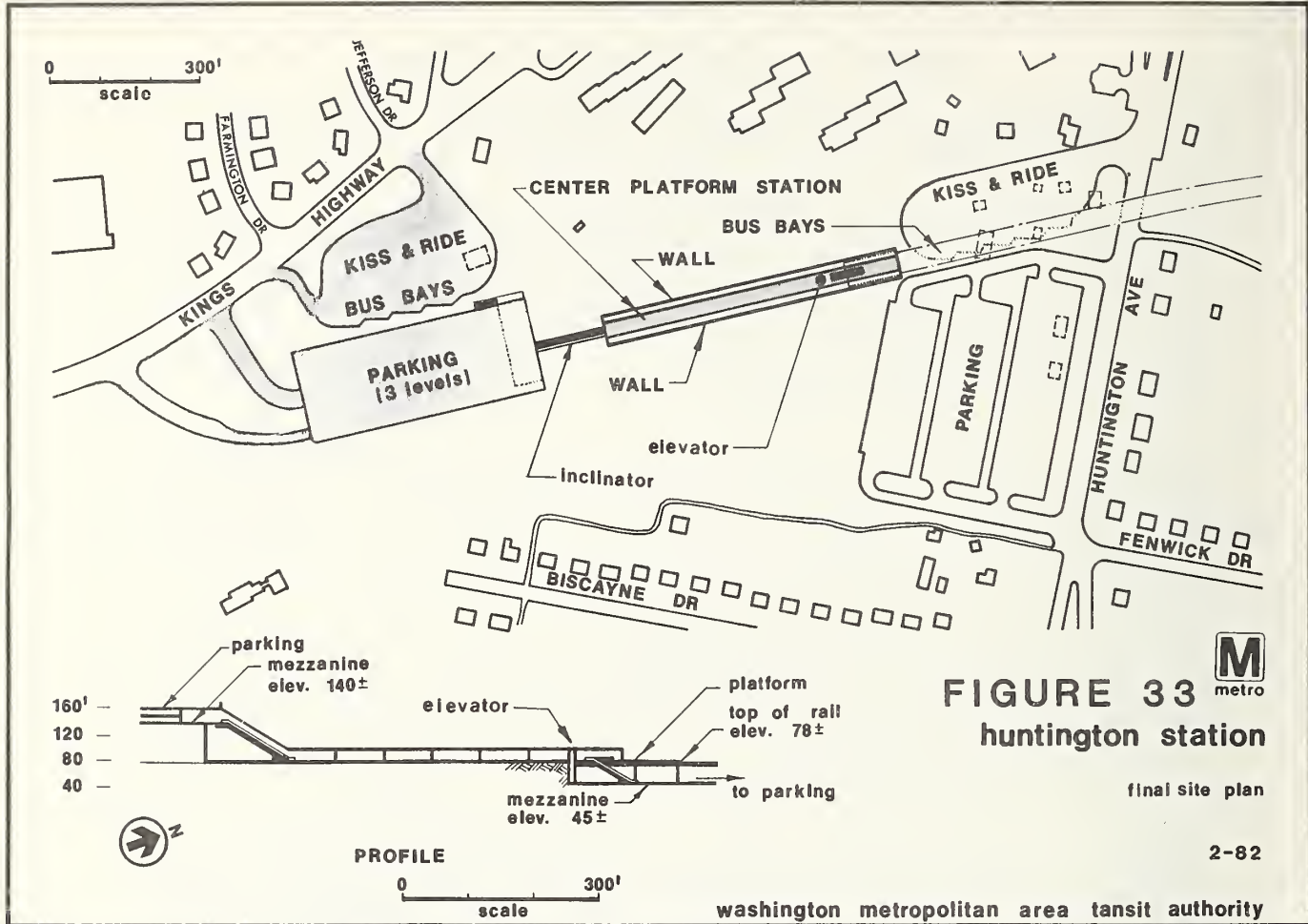


long-term parking. This will result in a loss of approximately 300 spaces for Metrorail users which will be replaced at the Landover station. Since WMATA's proposal for development in air rights conveyance over Metro's parking facilities will generate the need for additional parking spaces in the immediate vicinity of the station, parking certainly is a factor in determining the acceptable level of development.

In an effort to mitigate issues impeding development, a Transportation System Management (TSM) study was initiated in April 1983 to explore ridesharing programs, intersection improvements, traffic light patterns, as well as improved bus service as solutions to access and parking problems.

The County is also exploring reduction in parking requirements for development near Metrorail stations to encourage new development and decrease traffic congestion. A Tax Increment Finance District (TIF) has been created to assist with the funding of public improvements. TIF funds have initially been earmarked for the Amtrak Parking Garage.

Although residential units have not been developed in the Triangle as initially recommended, development opportunities of a residential nature exist on the north side of the New Carrollton station. When the market for residential development becomes more favorable, the opportunity to diversify the office/hotel environment with a residential component is available and encouraged.



Huntington parking structure and station, 1981. WMATA photo by Paul Myatt.

4.17 Huntington Station

Station Impact Area

The Huntington Metrorail Station is scheduled to open in 1984 in eastern Fairfax County as the southern terminal station of the Blue Line. The surface level station is between Huntington Avenue and North King's Highway with 1,250 parking spaces and 1,900 more planned.

Station Area Characteristics

The station area is largely residential with a large collection of older duplex homes, small and larger detached single-family homes, garden apartments, townhouses, and high-rise rental units along nearby Route 1. Limited industrial and office development is across Huntington Avenue from the station, as well as strip commercial along Route 1 and two small shopping centers on North King's Highway. There are scattered parcels of vacant land within walking distance of the station. WMATA owns 61 acres with 12 of those under short-term lease to the Fairfax County Park Authority. Station area residents are concerned about potential traffic congestion and commuter parking in residential areas.

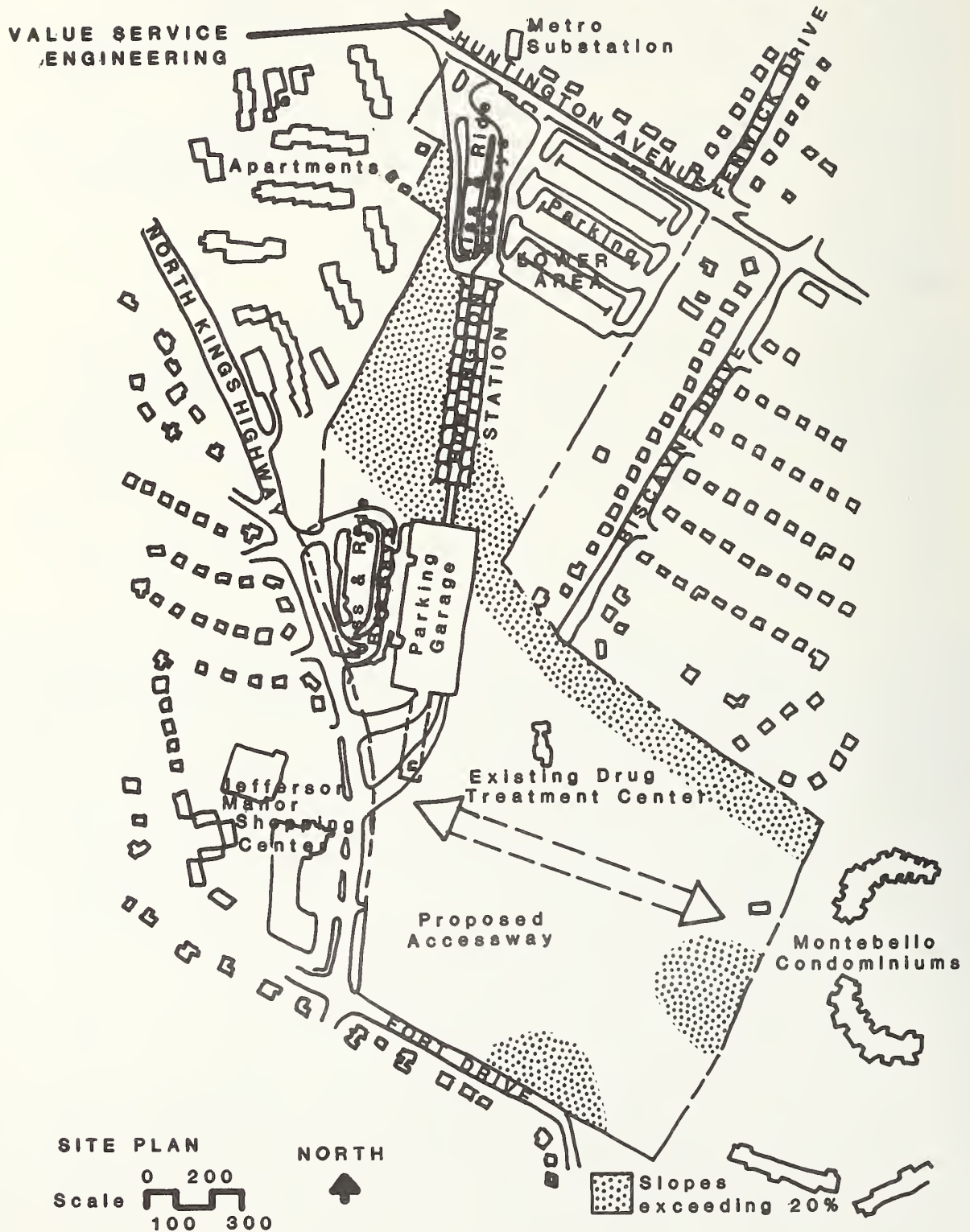
A lesser though mounting concern with accelerating property value increases within walking distance of the station has also been reported.

Studies, Plans and Zoning

The Metrorail alignment in eastern Fairfax County was debated in the 1960s, was once proposed to go as far south as Mt. Vernon, and was settled in 1969 with stations to be at Huntington, Van Dorn, and Franconia-Springfield. UMTA-funded studies of the probable impacts of the Huntington station have assumed that the area should remain largely residential in character. Natural constraints and the desire to protect existing neighborhoods have influenced the portion of the 1975 Fairfax County Plan that deals with the Huntington station area. The plan recommends that current land uses be protected and be compatible with existing neighborhoods. The anticipated role of the Metrorail station is to collect bus and auto riders. The majority of new commercial development is planned for vacant parcels along Route 1, though the plan also states that more auto-oriented land uses should not be created because additional traffic would restrict Metro-generated auto traffic. Infill office development is recommended for the north side of Huntington Avenue across from the station.

FIGURE 34

HUNTINGTON SHUTTLE BUS PROPOSAL



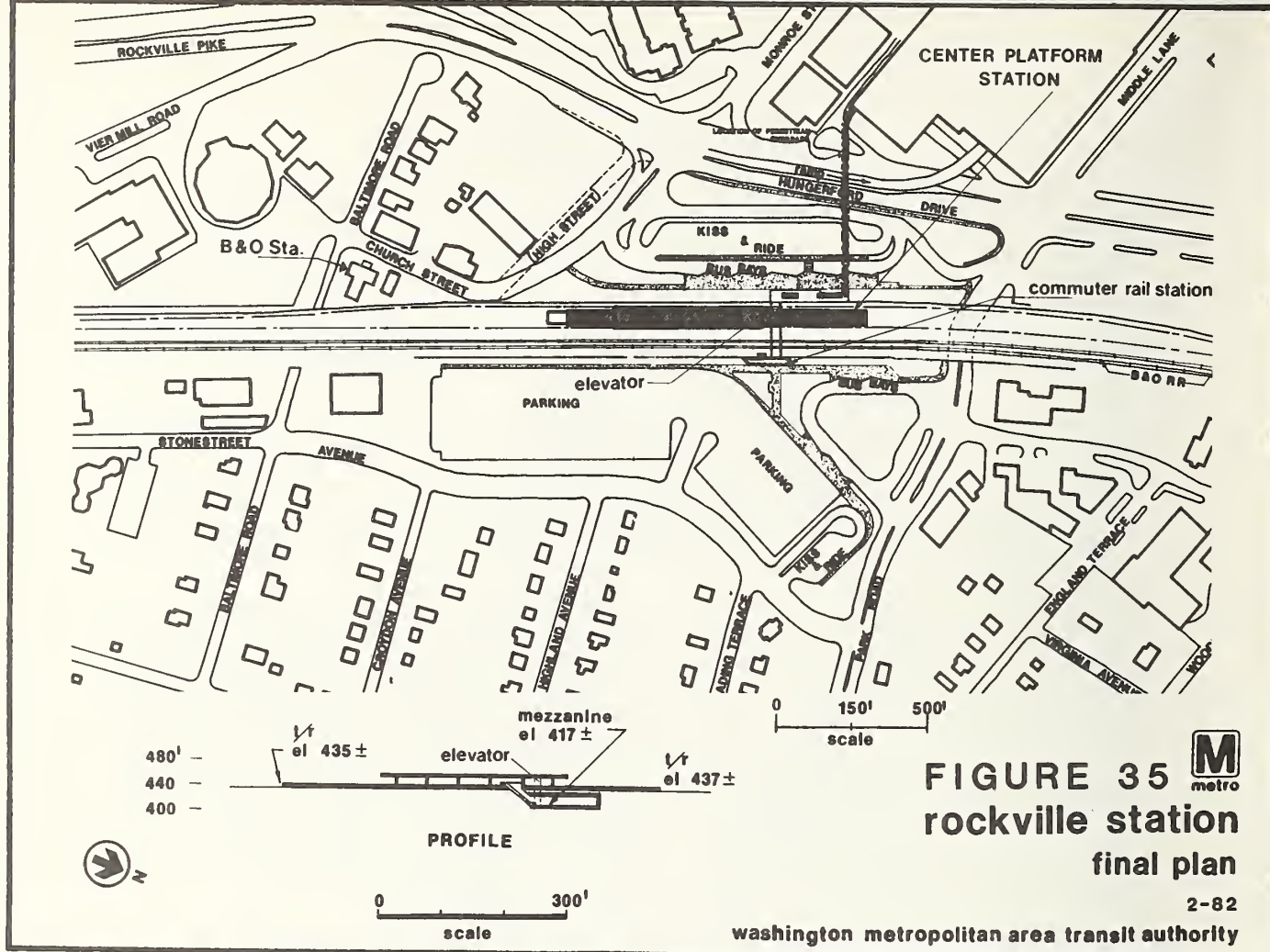
Planned land use and zoning are generally the same for the area, though some higher-density development is planned along Route 1 beyond what current zoning allows. Neither planning nor zoning has been significantly changed since 1975. There has been one parcel of nine acres along Route 1 rezoned from low-density residential and commercial to moderate-density residential (8-12 units/acres).

While townhouses will be constructed on the site, the developer's attorney noted that this is an underutilization of a developable parcel within walking distance of a Metrorail station. Another zoning change from residential to commercial (office) uses has been proposed and deferred indefinitely for land along Huntington Avenue across from the station.

The Montebello condominium project is developing at approximately 30 dwelling units per acre adjacent to Metro. The developer proposes that a shuttle bus accessway link the Metrorail station to the project, as shown in Figure 34. A proposal was recently approved for the consolidation of five vacant underutilized lots at the Huntington Avenue/Route 1 intersection for the purpose of constructing a mixed retail/residential development at approximately 46 dwelling units per acre. Further, vacant land owned by WMATA is itself a prime piece of property for which development has not been precluded.

Station Area Issues

Access, congestion, and parking are reported as the dominant concerns of station area residents and potential users. Highway improvements are currently being made in response to concerns about vehicular access and congestion. More than 3,000 parking spaces are planned for the station. In addition, Fairfax County is developing a residential area parking permit program to protect surrounding neighborhoods after receiving enabling legislation from the Commonwealth of Virginia. Development pressures are present and have resulted in development of the area's remaining vacant parcels at densities some believe inappropriate for a Metrorail station area.



Rockville Station at left under construction, 1981. WMATA photo by Phil Portlock.

4.18 Rockville Metrorail Station

Location

The Rockville Metrorail Station is the next to last, planned station on the Red Line's Shady Grove Route. Rockville is a city of 44,000 persons, located 12 miles northwest of Washington, D.C. and 4 miles north of the Capital Beltway. The I-270 corridor bisects the City and represents more than 3.8 million square feet of high-tech research and development. Metrorail is planned to open at Rockville's Twinbrook Station (1.5 miles south of the CBD), and Rockville Station, on the east of the CBD, in late 1984. Both are surface platform stations within the B&O Railroad alignment. The Rockville Station will have motorcycle, Kiss n' Ride, longer-term parking spaces, and bus bays on the eastern or Croydon Park neighborhood side of the tracks. A smaller area on the western side between Hungerford Drive (Route 355) and the tracks will contain Kiss n' Ride spaces and bus bays. It will be spanned by a 360-foot glass-enclosed pedestrian bridge connecting the station to the City's central business district (CBD).

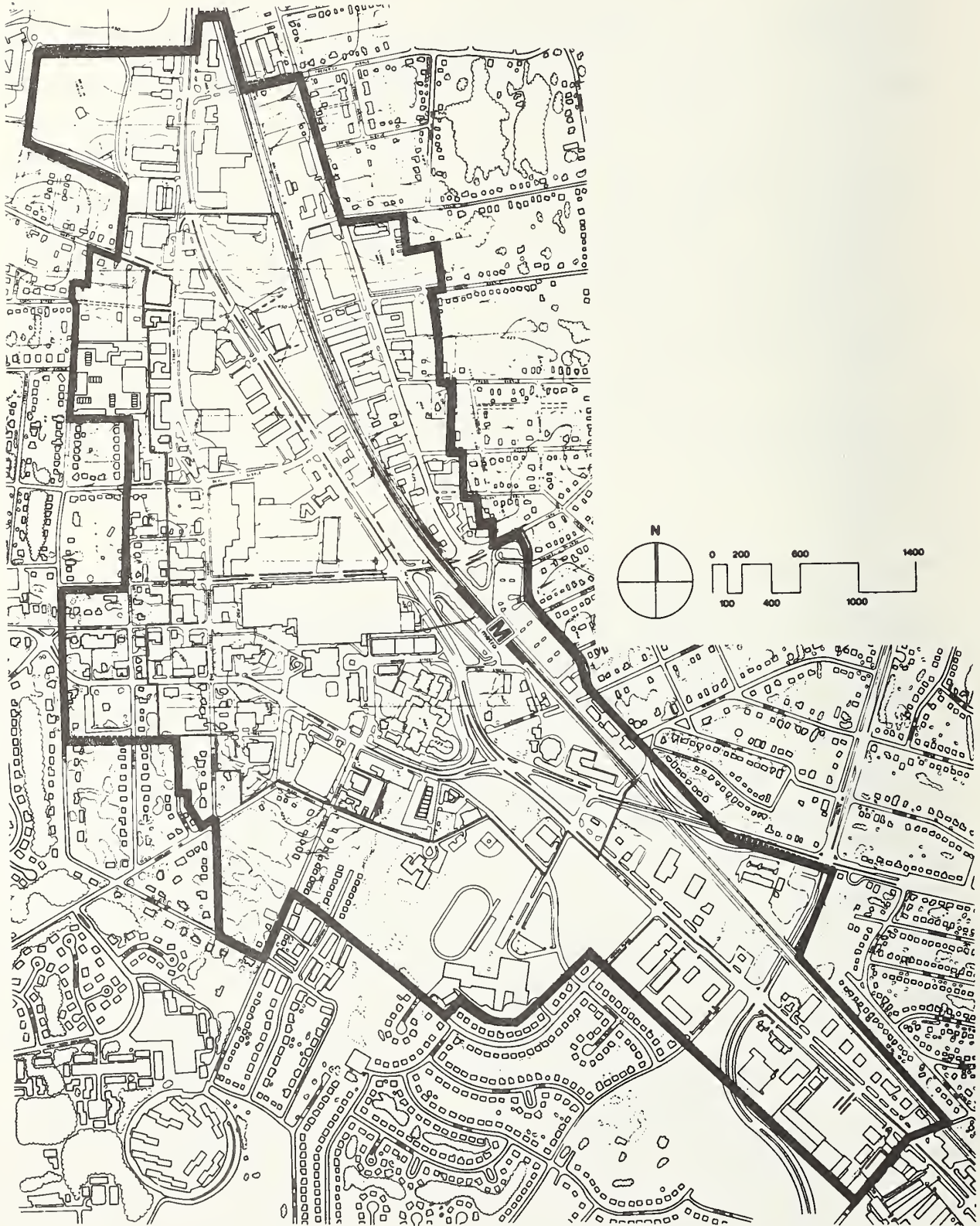
Station Area Characteristics

The central business district of the City of Rockville has been a focus of planning attention for 2 decades. The CBD's center lies within the triangle of land between Jefferson Street and Hungerford Drive (Maryland Route 355). The Commons Mall (Rockville Mall) was built there as part of a larger \$24 million urban renewal project in the late 1960s and early 1970s. The financial failure of the shopping mall component, the decision by Montgomery County government to centralize its administrative headquarters in the CBD, the coming of Metro, and a sustained strong office market combined in 1977 to force the City to re-examine its downtown development plans. A much more comprehensive Town Center Plan has been developed for the 438-acre area in 1979. Figure 36 shows the boundaries of this planning area which includes the Rockville Metrorail Station as a supporting element. The City anticipates a reasonable walking distance from the Metro station to be 3/8 to 1/2 mile, which includes most of the Town Center planning area and Croydon Park neighborhood to the east of the station.

The Town Center planning area contains the headquarters of the City of Rockville, the Montgomery County Government, as well as offices and courts of the State of Maryland. These combined with the offices of major private employers in the Town Center area provide over 6,000 jobs. A 1980 inventory showed there were 4.2 million square feet of nonresidential development in the Town Center area.

FIGURE 36

ROCKVILLE TOWN CENTER BORDERS



There is a small amount of older one-story, light industrial land uses along the east side of the B&O Railroad to the north of the transit station. The older Croydon Park neighborhood is immediately east of the station. It is almost entirely residential, consisting largely of modest woodframe, detached homes.

Studies, Plans and Zoning

Rockville was the first community in Maryland to undertake a federally supported urban renewal program. It began in the early 1960s with the objective of strengthening the City's business district to compete with suburban shopping centers and provide public amenities. Failure to attract a major department store is now given as the major reason for the project's poor performance.

A general loss of confidence and feeling of failure and frustration with the Urban Renewal Program led to the Town Center planning process in 1977. Federal planning funds had already been used to assess the anticipated impacts of the Rockville Metrorail Station and its relationship to the rest of the City. However, the problems facing the Town Center area were the City's dominant issues. Metro's arrival was viewed as part of a more complex solution. The problems and opportunities facing the Town Center area were outlined in the City's March 1977 Background Report. The Rockville Planning Commission then worked with the citizens and business people to develop goals, objectives, policies, and strategies for the Town Center area recorded in the March 1978 report: Town Center Economic Forecasts and Development Policies. A comprehensive planning process was begun that resulted in the August 1979 Town Center Urban Design Plan. There is special attention to the Metrorail station regarding land use, transportation and urban design. Figure 37 is part of that urban design plan.

The plan recommends four new CBD zoning categories to replace the existing CBD zone and implement the plan's land use and urban design recommendations. These new zones vary in the degree uses are mixed, densities permitted, and height limits imposed based on bonus and incentive provisions. They would encourage an additional 2.3 million square feet of nonresidential development (with full use of bonus provisions) in addition to the 4 million square feet of existing nonresidential development. The existing zoning envelope for the area was 12+ million square feet, conservatively estimated.

The plan also recommends an increase of nearly 850 multifamily residential units in the downtown area as part of nearby mixed-use development projects. "Residential development in close proximity to the Rockville Metro Station will present a strong appeal to persons who depend on rapid rail transit to reach employment centers outside of Rockville or to those who wish to walk to work within the City."

FIGURE 37

ROCKVILLE URBAN DESIGN PLAN



The plan recommended that 18 percent (277 units) of the full development forecast of 1,532 units be of the rental assistance type.

The plan attempts to balance the transportation choices for workers and residents. Rail, bus, auto, bicycle, taxi, and pedestrian circulation opportunities were analyzed and improvements recommended. The Metrorail station will be adjacent to the core area where highest densities and building heights (110-300 feet) are recommended. The 360-foot, glass-enclosed pedestrian bridge from the station to the Commons will then link to a planned north-south core area pedestrian spine as shown in Figure 37. A proposed people-mover system is also planned to connect the core area to the transit station at such time as densities and intensities of land use would support the introduction of such a system.

The city is banking that construction of the new County Government headquarters plus new and existing City and State Court facilities and anticipated supportive office and residential development will re-energize the CBD. Metrorail service is treated as an integral element of the transportation strategy of that revitalization process.

Station Area Issues

The following issues related to the Metrorail Station were identified in the 1979 Town Center Urban Design Plan:

- The major access routes "do not convey a positive visual image." Rather, they appear haphazard and are lined with uncoordinated strip development. The Metro station is considered one of the six gateways to the core area. Considerable attention is given to this issue in the Urban Plan with specific design improvements recommended. The City, in association with Partners for Livable Places, has undertaken a streetscape enhancement program to improve the visual and perceptual approaches to the CBD and Metro station.
- Land development within the core area of the Town Center is below the development potential possible. Also the Commons (Rockville Mall) conveys a negative image due to a lack of variety, quality stores and a sense of inaccessibility. (The Commons is among the closest of major developments to the transit station.) The Town Center Plan addresses this issue directly with land use and urban design recommendations. If carried out, several million square feet of additional nonresidential development and 850 multifamily residential units will be developed.
- The railroad and Metrorail alignments restrict access to the east. To lessen this issue, the Park Road underpass, on the transit

station's north side, has been widened from 2 to 5 lanes. Montgomery County's Ride-On bus service will be expanded into Rockville beginning in 1983, and service will be programmed to expand in stages, timed to the Metro construction schedule. Closing of the Frederick Avenue at-grade railroad crossing 6 blocks north of the transit station in 1980 will somewhat isolate the Lincoln Park neighborhood east of the tracks. A pedestrian bridge to allow access to the northern areas of the Town Center has been provided. In the near future, Ride-On bus service will be extended to bolster the lost access caused by Metro construction.

- The existing commuter rail station has been relocated and provided adequate parking to meet projected need. A shared commuter rail facility will help unite and balance the commuter patterns.
- Large surface parking lots in the existing CBD isolate land uses, promote automobile dependency, and create an unattractive visual environment. The Plan recommends designation of a parking management district wherein parking requirements may be reduced based on use, mix, distance from Metro, available bus service, or where requirements may be met off-site in public or private parking facilities. Also, a planned shortfall in parking is recommended to stimulate use of other modes and "formation of public and/or public/private parking ventures."

Plan Implementation Techniques

Zoning revisions are the most common station area plan implementation techniques used at the 18 stations studied. A typical controversy is that the recommendations of planners for increased density of commercial development around a transit station will be opposed by nearby residents. Plan recommendations for increased density of development usually lead to either a request for a rezoning or to changes to the currently used zone classes.

Planners, citizens, and public officials in the City of Alexandria developed the King Street Station Area Plan. In 1977 the density allowances in the King Street Metro Area were 6.0 FAR and 7.0 FAR. These densities have never been achieved in the City and are totally unrealistic in a practical development sense. The Planning staff reduced the FAR to 3.0 with no objections from developers or from citizens. The Planning staff also recommended reducing the height allowance from 150 feet to a range of 77 feet - one hundred feet. Some citizens wanted a height lower than 77 feet in an effort to restrict development. However, a compromise was reached to allow buildings up to 77 feet with no exception. City Council has recently asked staff to reexamine the flat height limitation and to explore more flexible approaches to height issues.

Illustrative site plans have been used by the Cities of Alexandria and Rockville and Counties of Arlington, Montgomery, and Prince George's in station area plans to provide guidance and ideas to developers. These range in level of detail from rough sketch plans to detailed site and even architectural plans, depending on staff resources and how prescriptive a jurisdiction's officials choose to be. Generally the approach has been one of providing guidance and encouragement rather than a prescriptive approach. A notable exception is the development prospectus jointly developed by Montgomery County planners (M-NCPPC) and WMATA for the large site above the Bethesda Metro Station. Detailed design guidelines along with illustrative sketches were included in the prospectus. Officials of M-NCPPC said such a prescriptive approach will continue to be the exception, but was judged necessary on this occasion due to complexity of expected uses and importance of the site to the whole of the Bethesda CBD.

Prince George's County officials sought authority to buy, assemble, and sell developable sites near planned transit stations in the mid 1970s. The proposal, termed Question 19, was interpreted as a "big government type of land grab activity" and was defeated. A technique successfully implemented by the County at New Carrollton is the Tax Increment Financing district where incremental increases in real estate tax revenues from new development in the TIF district are earmarked to pay for public investments to support such development.

Arlington County has continued to award density bonuses for developers providing public facilities. Rosslyn Center, a 22-story office tower beside the transit station, was increased from 15 stories of matter-of-right development in return for provision of public improvements that included pedestrian bridges and a small parcel for public open space.

The 1962 Rosslyn Master Plan recommended that developers of the area develop a network of grade-separated pedestrianways and bridges. Nearly all of that originally planned system has been built, largely at the expense of the area's developers, with the final links expected to be constructed in the next few years. The Metrorail station will be served, though not as the center of focus, by the walkway system.

County studies of the mid-1970s recognized that much of Rosslyn's pedestrian traffic is at street level and that existing sidewalks are inadequate and unattractive. The 1977 Rosslyn Transit Station Plan Study recommended both completing the grade-separated pedestrian system and making many sidewalk and pedestrian crossing improvements to facilitate access to the Metrorail station. Highest priority in the area's bikeway program was recommended for station-related bikeways.

These recommendations were followed up in developing the Rosslyn capital improvement program. A "special district" was recommended for financing streetscape (sidewalk and crossing), park, and landscaping improvements for the Rosslyn office and hotel core area. This technique is available to Virginia jurisdictions under State laws. Taxpayers in the core area would have to ratify the technique before it could be used. If supported, their increased taxes would finance the issuance of bonds to pay for the proposed improvements.

CHAPTER 5

STATION AREA SUMMARIES

District of Columbia
Arlington County
City of Alexandria
Montgomery County
Prince George's County
Fairfax County
City of Rockville

5. STATION AREA SUMMARIES

District of Columbia

Anacostia Station

A significant change from the location proposed in 1968 was adopted in 1978. Based on community opposition, the proposed station was shifted from the deteriorated commercial core of Anacostia once slated for urban renewal to an undeveloped freeway site near the shore of the Anacostia River. Plans governing the new site have been modified more to accommodate the transit station than to foster development related to transit. Greatly due to uncertainties regarding the likelihood of the station's construction, as well as to a poor market, development has neither occurred nor is likely soon.

Farragut North Farragut West

The Farragut Square area had been rezoned to accommodate growth of downtown office space before Metro was a certainty. The significant growth which took place around the stations is not attributable to plan changes made to capitalize on rail transit. However, the amount of additional office space built in the area could not have been accommodated without the substantial increases in transit capacity provided by Metrorail. The most significant effect of Metro in these station areas has been to stimulate redevelopment of older commercial buildings. Three significant joint development projects-- Connecticut Connection, International Square and Washington Square--have incorporated subway station entrances into the the lower levels of new office/retail buildings which have retail space in areas which would have been parking.

The Farragut Metrorail stations did not change the strong demand for office space in the area, but they did stimulate significant changes in the designs of buildings constructed adjacent to the stations. The changes were made to take advantage of knock-out panels in the stations' walls so that new buildings could have direct access to Metrorail.

Gallery Place and Metro Center

Metrorail service to the downtown retail core caused few planning or zoning changes. The area had been experiencing physical decline and sharp drops in retail sales since the early 1950s. The combined effects of new suburban retail centers and the 1968 riots hastened the decline of downtown. Suggested Metro-related modifications to

long-standing planning and zoning policies were either disapproved or have not been implemented. Examples of these include raising the building height limit downtown and joint development of vacant urban renewal tracts around both stations. Despite significant developer interest in vacant renewal tracts, complications have delayed the start of any transit-related projects.

Metrorail has been a motivating factor for development around both Metro Center and Gallery Place stations. Several major office buildings have been constructed in the downtown area, and the D.C. Convention Center was built to the north of the area partly due to the site's proximity to Metrorail.

The District Government has released a new downtown plan which places great emphasis on transit and on relating new development to Metrorail. The plan also calls for much residential development, both hotels and apartments. The likelihood of new housing downtown is uncertain, for almost all new development has been commercial, primarily office.

Navy Yard

Several significant changes in policy plans for the Navy Yard station area have taken place due to Metrorail. The most significant of these is revision of plans for the adjacent Washington Navy Yard and Southeast Federal Center. Federal plans for these properties were initially revised to permit wholesale redevelopment of the Navy Yard with new office structures. The latest plans call for renovation of factory buildings as office buildings and new construction of a limited number of office buildings to permit consolidation of Navy headquarters at the site.

The other significant plan change related to Metrorail is the proposal for the mixed-use Capitol Gateway development to the southwest of the station. This proposal includes housing related to Metro, as well as office and hotel uses.

Despite significant planning efforts, no development has taken place around the Navy Yard Metro station. Uncertainty over the likelihood of the station's construction has been a strongly contributing factor, along with the slow market.

Rhode Island Avenue

Metrorail was a significant factor in plan changes for the Rhode Island Avenue station area. With the planned introduction of rail transit, the area plan was amended to foster transit-related high-density office and commercial development.

Development called for in plans for the Rhode Island Avenue station area has not taken place, an exception being the construction of federally assisted housing somewhat near the station. The station area has a competitive disadvantage for office development when compared to other areas. It is a relatively low-income area which could not support a significant amount of new retail. Government plans to establish employment centers in the area are either incomplete or not being realized.

Takoma

Plans for the Takoma station area and for surrounding commercial and residential areas have been consistently controversial. The community successfully fought being bisected by the proposed North Central Freeway, and opposition to Metro-related development closely followed the anti-freeway victory. Plan changes related to Metro have served to reduce the amount of development permitted in the immediate area, to modify planned segregation of commercial and residential areas by encouraging mixtures of uses at a reduced scale, and to lessen neighborhood disruption caused by new development.

There has been no new development in the station area in one of the region's neighborhoods with the fewest physical changes during the recent past, despite Metrorail and years of planning for its coming. One effect of Metro in Takoma Park has been an increase in the area's attractiveness to more affluent households able to purchase large old homes. This effect has had a side-effect of displacing less affluent people who have generally been renters.

Arlington County

Ballston, Court House and Rosslyn

Plans for the Ballston, Court House and Rosslyn station areas were modified in anticipation of Metrorail service as part of the planning process for the Rosslyn-Ballston Corridor (Rosslyn, Court House, Clarendon, Virginia Square, and Ballston Station areas). Arlington County developed a clear strategy to concentrate new development around Metro station areas and consequently modified land use and public facility plans to support the strategy. These modifications were most pronounced for the Ballston area, now planned to become Arlington's downtown. Ballston is served by both Metrorail and the Custis Parkway (I-66). New high density office/commercial and residential development along with preservation and conservation of established residential neighborhoods is planned. The focus of new development will be the rehabilitation of an aging retail shopping center. A site plan has been approved for the development and expansion of this facility into a multi-level shopping mall of 745,000 square feet and new office space totaling 780,000 square feet. Since

1978 over 300 townhouse units in nine separate projects and 60,500 square feet of office space have been constructed. Site plans have been approved for 2.5 million square feet of office/commercial space and 665 residential units.

The Court House station area is planned for high density office/commercial and residential development, as well as conservation and preservation of established residential neighborhoods. New development is planned to be focused around the Government Center which includes the Arlington Court House. A joint development project between Arlington County and a private developer is planned for vacant County-owned property adjacent to the Court House and the Metro Station. This project will include new public space for the County Board and County Administration, as well as private office, residential, retail and hotel development centered around a new civic plaza. Since 1978 413,700 square feet of office/commercial space and 305 residential units have begun construction. Site plans have been approved for 990,000 square feet of office/commercial space and 122 residential units. One of these projects will rehabilitate an established garden apartment complex and add new residential units. In addition there will be 760,000 square feet of office/commercial space with an underground connection to the Metro station on the site.

The Rosslyn station area developed largely during the 1960s and 1970s, however much development has taken place since the opening of Metrorail. About 1.8 million square feet of office/commercial space and 80 residential units completed construction since 1978. Some 281,000 square feet of office/commercial space and 10 residential units are presently under construction. Site plans have been approved for 518,900 square feet of office/commercial space, 860 residential units, and a hotel with 325 rooms. New streetscape and several parks are presently being developed in Rosslyn.

In the total Rosslyn-Ballston Corridor 1.8 million square feet of office/commercial development and 370 residential units have completed construction since 1978. Currently, 694,700 square feet of office/commercial space and 371 residential units are under construction. Since 1978 site plans have been approved for 4,655,900 square feet of office space, 1600 residential units and one hotel with 325 rooms.

In the Jefferson Davis Corridor (Crystal City and Pentagon City station areas) development begun in the 1960s has continued at a strong pace since the opening of the Metrorail. This area is located on major vehicular transportation routes (I-395 and Route 1) near the Pentagon and National Airport. Since 1978 1.5 million square feet of office/commercial space, 1200 residential units, and 1000 hotel rooms have been built. Currently, 1.2 million square feet of office space, 135 residential units and 197 hotel rooms are under construction. Since Metrorail opened, site plans have been approved for 2.6 million

square feet of office/commercial space, 1700 residential units and 1800 hotel rooms which will be constructed in the future.

Countywide 12.5 million square feet of office/commercial space, 3100 residential units and 3000 hotel rooms have been constructed or received approval for site plans since 1978.

City of Alexandria

King Street

The City of Alexandria gave the King Street Station area considerable attention in anticipation of Metrorail. The city's strategy is to use the transit station as the catalyst for redevelopment of deteriorating commercial areas near the historic Alexandria railroad station. A staged development program for an approximately 35-acre target area was designed on a parcel-by-parcel basis to capture office and retail development related to Metrorail. A noteworthy aspect of the revised plan for the area is the result of neighborhood opposition to high-density redevelopment, combined with parking and market constraints. A 1979 zoning action almost halved the permissible density for new development around the station by decreasing both the allowable building heights and floor area ratios.

Despite new limitations, Metro-related development has begun to occur around the King Street station. A Washington developer of projects which emphasize status has begun an office building in a run-down area near the station. The Richmond, Fredericksburg and Potomac Railroad has negotiated to develop a 300-room hotel and office building on railroad property across the tracks from the Metrorail station. The railroad company has stated that they would not have considered development had Metrorail service not been planned. The King Street station may be the site of a joint development project if a bridge building is constructed atop the tracks to link the Metrorail station to the RF&P project. There are no plans for residential development.

Montgomery County

Friendship Heights

The Friendship Heights area had become one of the region's largest centers with a mix of high-rise apartments, status retail and large office structures before Metrorail was planned. Changes to plans in anticipation of Metrorail have reduced the permitted densities around the Metrorail station in response to growing traffic problems and to community opposition to increased development. Plans as amended now call for a medium-density mix of office and retail in the station area.

Joint development of an office and retail structure is proposed for a site directly above the transit station entrance in Maryland. A new apartment building has been developed on nearby Willoughby Street and plans for an additional 640 dwelling units have been approved.

Silver Spring

The coming of Metrorail caused major modifications to plans for the Silver Spring station area. The station area was replanned from general commercial and industrial to high-density mixed use in order to create a "Metro Center" west of the existing central business district. The revised plan calls for a link between the two centers consisting of a civic and convention center, transportation center, a retail mall and an urban park. Residential developments nearby should be preserved, as well as a portion of the existing railroad-related industrial uses. The Montgomery County Planning Board has begun implementation of the revised plan by rezoning much of the area to encourage a greater intensity of uses around the Metrorail station, by construction of significant public works such as street improvements and parking garages, and by working with the business community to facilitate development as called for in the plan.

The planned redevelopment of the area around the Silver Spring Metrorail station has been slow to occur, although an office/retail building has recently been completed. Proposals for mixed-use developments around Metrorail have been under discussion for some while, but are slowed by regional economic conditions. Silver Spring is a Metrorail area with great development potential attributable to its regional location and to the rail transit station.

Prince George's County

Addison Road

Addison Road station area plans were modified as a result of the transit station to encourage greater commercial development instead of residential and retail infill. A primary objective of plan revisions is to stimulate employment growth in the somewhat deteriorated commercial area nearby. Planning and zoning implementation steps have taken place unevenly, partly due to the fragmentation of the area into different political jurisdictions.

There has been little development associated with the Addison Road station to date. Factors discouraging rail-related development include the weakness of the station's market area, the negative image of the area due to physical deterioration and perceptions of crime, and the increased coordination requirements associated with jurisdictional fragmentation.

New Carrollton

Plans for the New Carrollton Metrorail station area were modified due to the transit station to encourage high-density office and residential development of what had been formerly planned to be industrial areas. There were many factors justifying the plan revisions by the Prince George's County Planning Board, including the area's excellent highway access to U.S. 50, the Capital Beltway, and the Baltimore-Washington Parkway. Other factors include the proposal to integrate the existing Capital Beltway Amtrak station with the Metrorail station, and the strong market for development due to these and other factors. Plan implementation measures occurred following the plan modifications, including rezonings to permit higher-density office and residential uses, significant improvements to access roads leading to the station area, and water/sewer improvements.

Development at New Carrollton has been strong, but has in some cases not occurred as called for in plans revised in anticipation of Metrorail. A key problem is the great intensity of office development bringing with it particularly difficult access and parking problems. Although residential units have not been developed in the Triangle as initially recommended, development opportunities of a residential nature exist on the north side of the New Carrollton station. When the market for residential development becomes more favorable, the opportunity to diversify the office/hotel park environment with a residential component is available and encouraged. There is no question that Metrorail has been a motivating factor for development around the New Carrollton station, but there is also no question that the area has developed far short of the potential still associated with its advantages. Despite this, Metrorail has established New Carrollton as an important location with great potential.

Fairfax County

Huntington

Planning and zoning changes related to the Huntington Metrorail station have been minimal. The station lies in the midst of established residential neighborhoods planned for conservation and a minimum of redevelopment.

The Fairfax County government is following a policy of maintaining the majority of the area around the Huntington station as a low-to-moderate density residential area. Some office development is planned along nearby Route 1, but is to be small in scale. As this report went to press, the County was re-evaluating established policies to guide land use and transportation planning in the vicinity of Metro and to re-evaluate all land uses in its proximity. Developing strategies for implementing nonresidential land uses will be just one area of staff concern.

It is possible that the long-standing policy of encouraging only residential uses around the Huntington station could be amended as a result of the study underway.

Huntington is one of the few case study stations which has attracted a significant new residential project. Construction of the 1,020 high-rise Montebello condominiums has begun on a site adjacent to transit authority property south of the station. Plans are that a shuttle bus accessway will connect through WMATA-owned land using WMATA service roads to link the Metrorail station and the Montebello development.

City of Rockville

Rockville

The planned operation of Metrorail has been a strong force for changes in planning around the Rockville station. The history of planning for the station is linked to the history of downtown Rockville, the first community in Maryland to undertake a federally supported urban renewal program. Massive redevelopment of downtown Rockville began in the early 1960s, and the city became the northern rail transit terminus in the 1962 subway plan eventually defeated in Congress. Nevertheless, expectations of rapid transit service and increased accessibility were part of the reasoning behind the downtown Rockville renewal plan.

Urban renewal replaced the old retail core of Rockville with a large, unusual mall structure which has been a commercial failure. The renewal project also provided a number of town houses and apartments adjacent to the mall. The current subway plan first adopted in 1968 again placed the northern terminus of the transit corridor at Rockville along the B&O Railroad. A car storage and inspection yard associated with the 98-mile system's Rockville terminus would have created massive community impacts, hence the terminus and yard were moved several miles north to create the plan for a 101-mile system.

The most significant change in planning related to the coming of Metrorail was the initiation of the Rockville Town Center Plan process in 1977. A comprehensive planning process resulted in the 1979 Town Center Urban Design Plan which calls for large concentrations of high-density commercial and residential development in the Town Center. The Metrorail station is adjacent to the core area where highest densities and building heights (110-300 feet) are recommended. Other significant plan aspects include protection of neighborhoods near Metro, improvements in vehicular access to the transit station, and a downtown pedestrian path system linked to Metro by a 360-foot glass-covered bridge.

Although Metrorail has been a motivating factor in planning changes, only limited developer interest is evident around the transit station. Realtors report that new leases are being negotiated for shorter periods in expectation of a Metro-inspired boom, that Metro proximity was influential in securing favorable financing for an office building two blocks away, and that land values began to escalate once construction of the station began.

APPENDIX A

Metro Joint Development Project Data



metro joint development project data

Telephone (202) 637-1593

March, 1983

BETHESDA METRO CENTER

Wisconsin Avenue
Bethesda, Montgomery County, Maryland

Location:	On the west side of Wisconsin Avenue, just south of Old Georgetown Road and Edgemoor Lane, and east of Woodmont Avenue.	
Project: Description:	A development package that includes a 17-story office building, a 12-story, 355-room hotel, a 3-level retail arcade, 4 levels of underground parking, and an underground Metrobus and Kiss & Ride level, all linked together by a large landscaped plaza with a depressed multi-use area in the center which may be utilized for community activities, performing arts or ice skating during the winter.	
Physical Components:	Sq. Ft. Total Site Area: 156,241 Office Space: 267,886 (Net) Hotel: 209,250 (Net) Retail Space: 32,966 (Net) Parking Spaces: 1,400 within project	Bus Terminal Facility: 10 bus bays Kiss & Ride Spaces: 32 Metro Access: Metrorail and Metrobus integrated within project
Development Cost:	\$100 - \$120 million (est)	
Development Period:	Developer Selected: October, 1980 Final Site Plan Approval: January 7, 1982 Start Construction: March, 1983	
Leased Fee Owner:	Washington Metropolitan Area Transit Authority	
Lessee/Developer:	R & K Metro Associates, Limited Partnership	
Design Group:	Benham-Blair and Affiliates, Inc. and Navy, Marshall & Gordon, P.C.	
General Contractor:	OMNI Construction Co.	
Leasing Agent:	Not selected	



Bethesda Metro Center project under construction, 1983. COG photo by Pfoutz.



Bethesda Metro Center Model. WMATA photo by Paul Myatt.



metro joint development project data

Telephone (202) 637-1593

March, 1983

VAN NESS-UDC STATION

4250 Connecticut Avenue, N.W.
Washington, D.C.

Location: On the west side of Connecticut Avenue, N.W., between Idaho Avenue to the north and Veazy Terrace to the south, adjacent to the University of the District of Columbia, Van Ness campus, and the west entrance of the Van Ness-UDC Metro Station.

Project Description: A 7-story office and retail building that includes five floors of office space, two floors of retail space, and three levels of underground parking, as well as weather protected bus bay and kiss-&-ride facilities for transit passengers.

Physical Components: Total Site Area: 65,600 square feet
Office Space: 162,500 square feet
Retail Space: 41,500 square feet
Parking Spaces: 250
Bus Terminal: 5-bus bay facility
Kiss-&-Ride: 24-space auto drop-off/pick-up facility
Metro Access: Metrorail/Metrobus integrated within project along with pedestrian bridge access to UDC campus
Development Cost: \$28 million (EST)

Development Period: Prospectus Issued: January 3, 1979
Developer Selected: May 3, 1979
Start Construction: March 31, 1981
Occupancy: Spring, 1983

Leased Fee Owner: Washington Metropolitan Area Transit Authority

Developer/Lessee: Prudential Insurance Company of America

Architect: Hartman-Cox

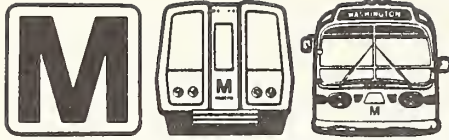
Construction Contractor: Blake Construction Company

Retail Leasing Agent: Charles E. Smith Company
920-8500

Office Leasing Agent: Leggatt, McCall and Werner
842-3030



Van Ness-UDC Station joint development project lies between Connecticut Avenue and UDC buildings at left, 1982. WMATA photo.



metro joint development project data

Telephone (202) 637-1593

May, 1982

MCPHERSON SQUARE STATION

1400 Eye Street, N.W.
Washington, D.C.

Location:	On the southwest corner of the intersection of 14th and Eye Streets, N.W., Washington, D.C., adjacent to the southwest entrance of the McPherson Square Station.
Project Description:	A 13-story office and retail building that boasts a direct underground connection to the McPherson Square Metro Station. In addition to the street level, the underground connection makes retail activity economically feasible at two other levels below the surface (the Metro level and the B-1 level).
Physical Components:	<p>Total Site Area: 17,710 square feet</p> <p>Office Space: 153,567 square feet (net)</p> <p>Retail Space: 10,725 square feet (net)</p> <p>Parking Spaces: 80</p> <p>Metro Entrances: Escalators and elevator for the handicapped integrated with development.</p>
Development Cost:	\$15 to \$20 million (est.)
Development Period:	<p>Prospectus Issued: February, 1980</p> <p>Developer Selected: June 12, 1980</p> <p>Start Construction: October, 1981</p> <p>Occupancy: Fall, 1983</p>
Leased Fee Owner:	Washington Metropolitan Area Transit Authority
Lessee/Developer:	Fourteenth and Eye Streets Associates, a limited partnership
Architect:	Arthur Cotton Moore/Associates, P.C.
Builder:	Pennsylvania House Construction Company, Inc.
Leasing Agent:	The Braedon Companies 466-2130



cPherson Square joint development project in a 1983 WMATA photo.



metro joint development project data

Telephone (202) 637-1593

May, 1982

FARRAGUT NORTH STATION

Connecticut Connection
1101 Connecticut Avenue
Washington, D.C.

Location: On the northeast corner of Connecticut Avenue and L Street, N.W., one of the busiest intersections in downtown Washington, with a direct underground connection to the northeast mezzanine of the Farragut North Metro Station.

Project Description: A 12-story office and retail building, containing four floors of retail space (two are below grade) and ten floors of office space. Direct below-grade access to the transit station made retail activity economically feasible at the two lower grades.

Physical Components:
 Total Site Area: 17,566 square feet
 Office Space: 143,933 net square feet
 Retail Space: 41,650 net square feet
 Metro Entrance/Mezzanine: Integrated with development and Metro A/C cooling tower on rooftop

Development Cost: \$13 million + or - (1976 dollars)

Development Period:
 Prospectus Issued: December 3, 1974
 Developer Selected: April, 1975
 Start Construction: July, 1976
 Occupancy: Summer, 1978

Leased Fee Owner: Washington Metropolitan Area Transit Authority

Lessee/Developer: Miller/Connecticut Avenue Associates

Architect: Skidmore, Owings & Merrill

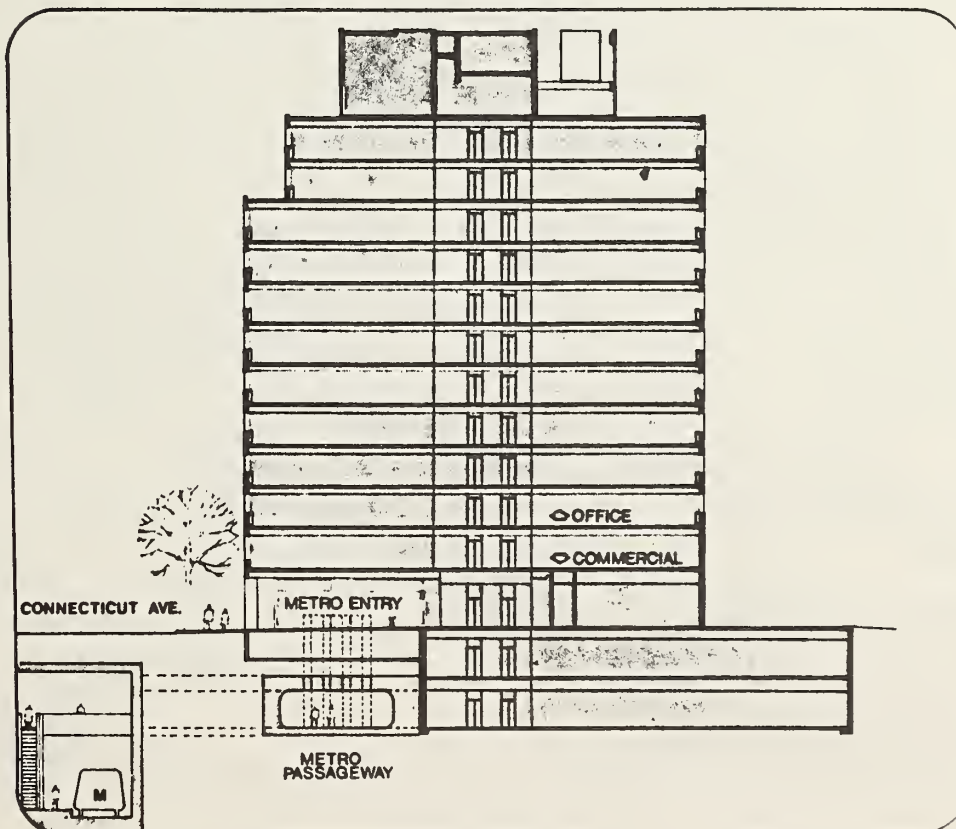
Structural Engineer: KCE Structural Engineers

Construction Management: Charles E. Smith Companies

Leasing Agent: Charles E. Smith Co.
 Miller Companies
 585-5800



See also photo page 49.





metro joint development project data

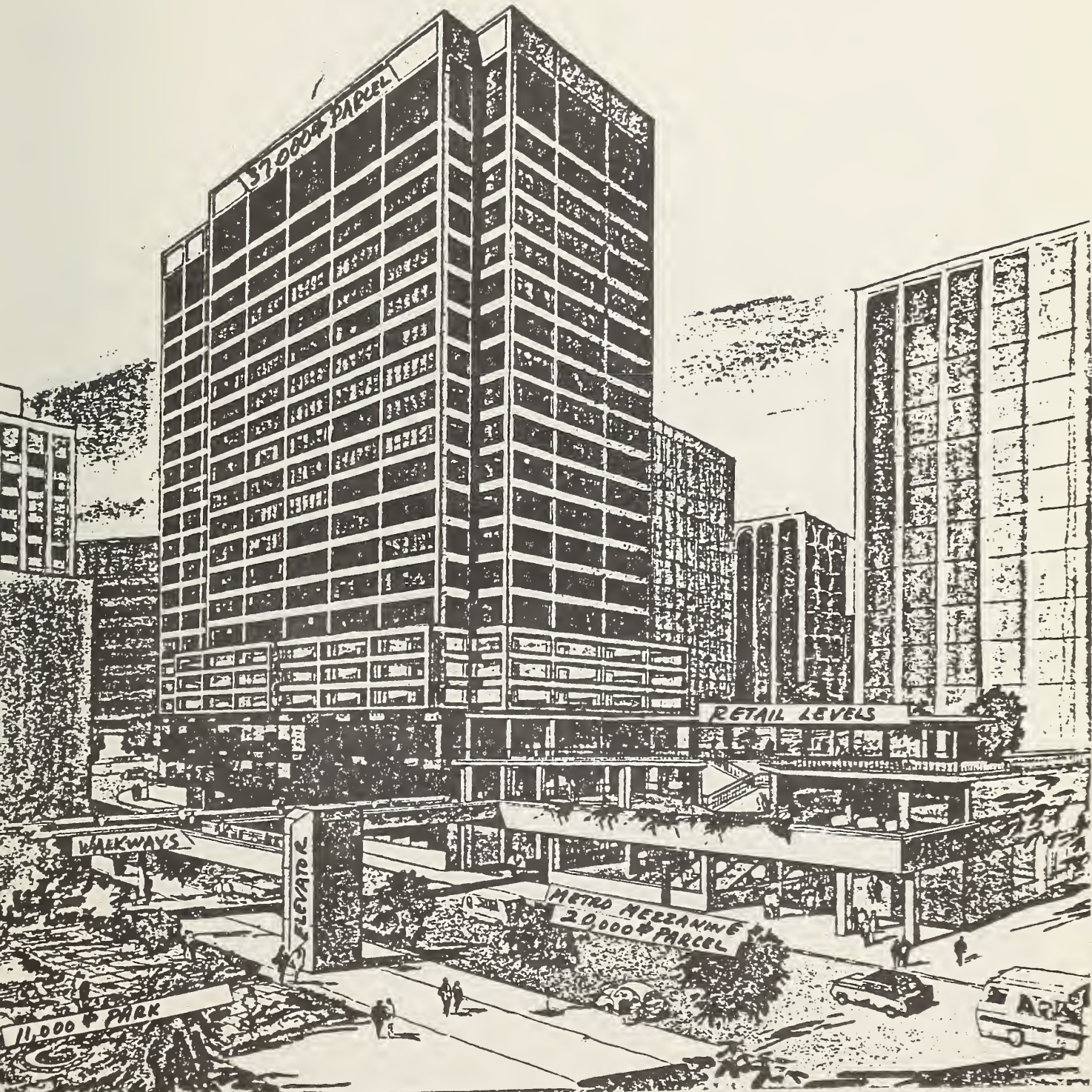
Telephone (202) 637-1593

May, 1982

ROSSLYN METRO CENTER

1700 North Moore Street
Rosslyn, Virginia

Location:	Between N. Fort Meyer Drive and N. Moore Street, north of Wilson Boulevard, with a direct connection to the Rosslyn Metro Station.
Project Description:	A 22-story mixed retail and office building constructed adjacent to and interconnected with the Rosslyn Station mezzanine. Special features include: 3 levels of retail space, 19 levels of office space, elevated pedestrian walkway connections to neighboring office buildings to the east and west, a through-block arcade connecting the second level with Wilson Boulevard to the south and an at-grade pedestrian passageway to the local bus stop on N. Moore Street.
Physical Components:	Total Site Area: 68,225 square feet (31,286 s.f. purchased from WMATA, of which 11,000 s.f. was dedicated for park.) Office Space: 336,450 square feet (GFA) Retail Space: 55,343 square feet (GFA) Parking Spaces: 510 Metro Entrance/Mezzanine: Integrated with development
Zoning Bonus:	Arlington County granted the developer additional F.A.R. that resulted in a building 5 to 6 stories higher than that allowed under existing zoning, in exchange for developer's agreement to contribute to the cost of constructing pedestrian bridge connections, as well as his agreement to dedicate as a park the 11,000 square foot parcel upon which was located the elevator for the handicapped between N. Lynn and N. Moore Streets.
Development Cost:	\$22 million (1978 dollars-EST)
Development Period:	Advertised for Proposals: June 17, 1973 Selection: December 13, 1973 Start Construction: September, 1977 Occupancy: Fall, 1979
Purchaser/Developer:	Rosslyn Center Associates, a joint venture
Architect:	Abel and Weinstein
Builder:	Majestic Builders Corporation
Leasing Agent:	Weaver Brothers, Inc. 986-4231



See also photo page 72.



metro joint development project data

Telephone (202) 637-1593

March, 1983

FRIENDSHIP HEIGHTS STATION

Chevy Chase Metro Building
Chevy Chase, Maryland

Location:	Within the triangle bounded by Wisconsin Avenue, Wisconsin Circle and Western Avenue, N.W. and adjacent to the north entrance of the Friendship Heights Metro Station.
Project Description:	A 13-story office and retail building that includes eleven floors of office space, and two floors of retail space, three levels of underground parking, as well as weather protected Metrobus terminal facilities and Metrorail station entrance.
Physical Components:	<p>Total Site Area: 59,600 square feet</p> <p>Office Space: 212,508 square feet (GFA)</p> <p>Retail Space: 16,000 square feet (GFA)</p> <p>Parking Spaces: 381</p> <p>Bus Terminal Facility: 5 Metrobus bays, 3 Ride-On bus bays</p> <p>Metro Access: Metrorail and Metrobus integrated within project</p>
Development Cost:	\$25 to \$30 million (EST)
Development Period:	<p>Final Site Plan Approval: January 6, 1982</p> <p>Start Construction: December, 1982</p> <p>Occupancy: Late 1984</p>
Landowner/Developer:	Chevy Chase Land Company of Montgomery County, Maryland
Architect:	Bagley, Soule, Lee
Civil Engineers:	John J. Allen Associates
General Contractor:	OMNI Construction Co.
Leasing Agent:	B.F. Saul Co. 986-6135



See also photo page 88.



metro news release

Telephone (202) 637-1055

For Immediate Release (May 12, 1983)

Joint Development Proposal
Accepted at Gallery Place
North Metro Site

The Washington Metropolitan Area Transit Authority (WMATA) announced today its acceptance of a proposal from North Gallery Place Associates (NGPA) for joint development at the Gallery Place North Metro Site (east of Seventh Street, N.W., between G and H Streets).

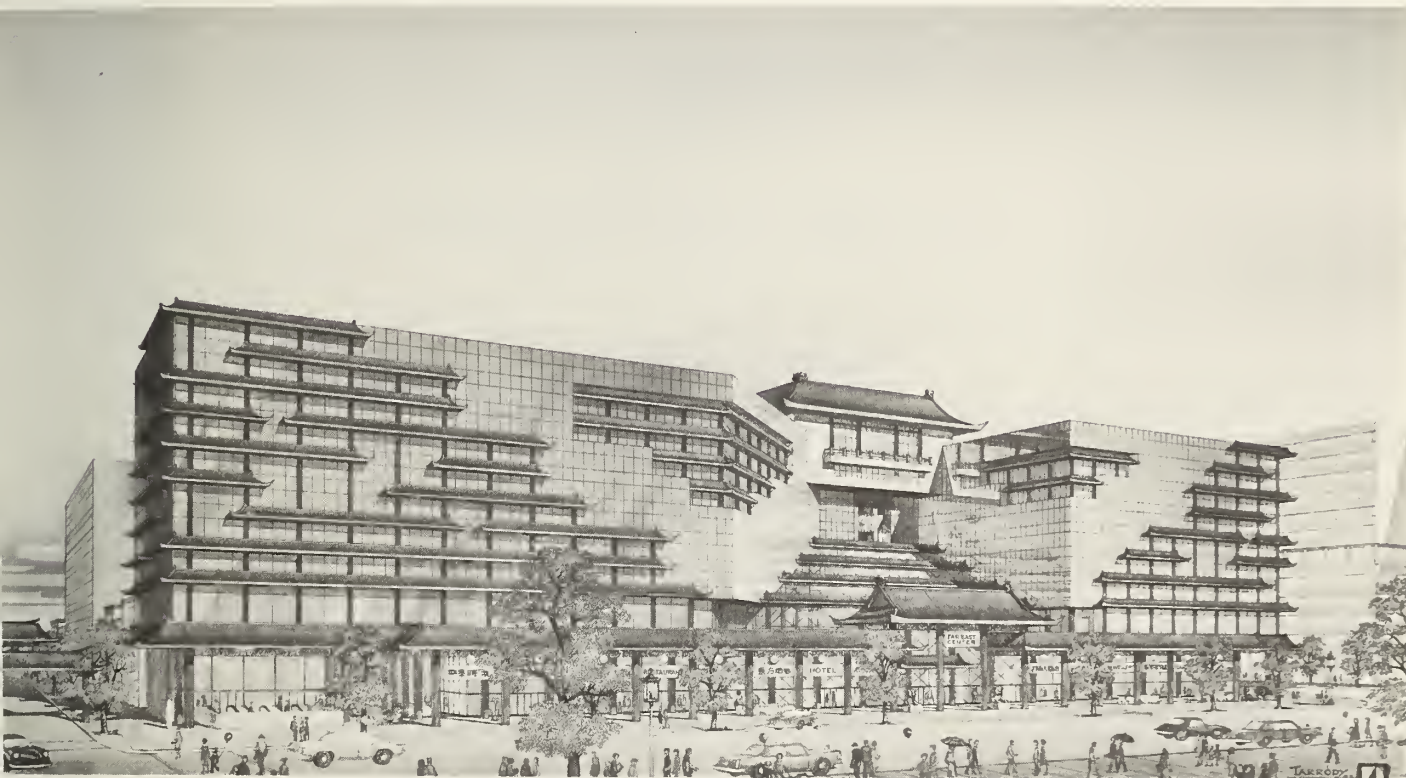
The proposed project, called the "Far East Trade Center", will be a mixed-use project, containing a 527-room hotel, some 220,000 square feet of office space, at grade and below grade retail space, 165 housing units, and underground parking. In order to accommodate a project of this scale (in excess of 1 million square feet) NGPA will have to lease or purchase nearby parcels owned by Bergmann's, Inc., in addition to leasing 50,895 square feet of land from WMATA.

North Gallery Place Associates is a partnership whose general partners are the Chinatown Development Corporation (Chairman Dr. William Chin-Lee, President James S. Pao), Charles Luria Associates, and Robert M. Stein. The Far East Trade Center's design is the work of Architects Engineers Planners Associates (AEPA) headed by Alfred H. Liu. Construction will be handled by a joint venture between the Gilbane Building Company and Ronald Hsu Construction Co., Inc. Development cost of the Far East Trade Center is estimated to be \$116 million with completion scheduled for 1986.

The Trade Center will contribute significantly to the rejuvenation of Washington's "Old Downtown" and lead to an enhanced, more lively and exciting Chinatown. Benefits to WMATA will include an estimated 8000 Metrorail trips generated on an average week-

(more)

day, as well as some \$1 million annually in leasing income once the Trade Center is completed. Net fiscal revenues to the District of Columbia should exceed \$3 million annually and employment at the Far East Trade Center should be about 1600 persons.



Far East Trade Center proposed to extend from G to H Streets along Seventh Street, N.W. with direct access to the Gallery Place Station.

APPENDIX B

Metro System Interface Project Data



metro system interface project data

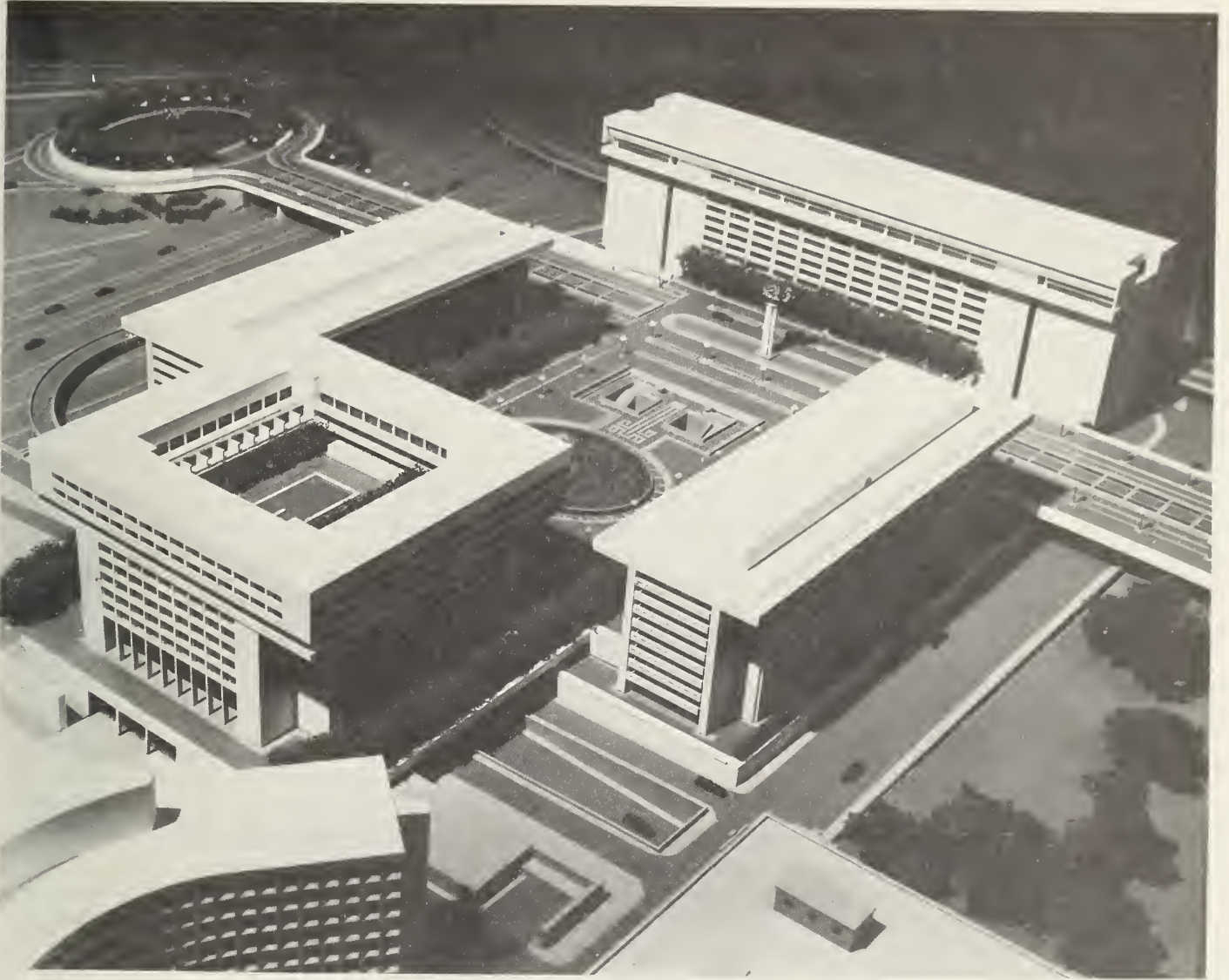
Telephone (202) 637-1593

May, 1982

L'ENFANT PLAZA STATION

L'Enfant Plaza East
Washington, D.C.

- Location: On the south side of D Street, S.W., west of 7th Street, S.W., adjacent to the headquarters of the Department of Housing and Urban Development and within the L'Enfant Plaza complex.
- Agreement:
- Dated June 9, 1971 with L'Enfant Plaza East, Incorporated.
 - Permitted L'Enfant Plaza East, Inc. the right of direct access to the west entrance of the L'Enfant Plaza Station.
 - Provided for the contemporaneous construction, and subsequent operation, of the Metro entrance facility with the owner's construction of the L'Enfant Plaza East building by owner's contractor.
- Consideration:
- WMATA received a multi-dimensional perpetual easement containing an irregular volume of 114,343 cubic feet for the location and operation of the west entrance to the L'Enfant Plaza Metro Station.
 - WMATA paid the owners the actual cost to construct the station entrance structure, amounting to \$436,235.
- Savings to
WMATA as
Basis for
Direct Access:
- Permanent easements were granted to WMATA at no cost.
 - Construction of the station entrance concurrently with the construction of the L'Enfant Plaza East building saved WMATA an estimated \$750,000 compared to the cost of constructing the station entrance after the building was completed.





metro system interface project data

Telephone (202) 637-1593

May, 1982

METRO CENTER STATION

11th & G Streets, N.W.
Washington, D.C.

- Location: On the southeast corner of 11th and G Streets, N.W. at the Woodward & Lothrop Department Store (Woodies) with a direct connection to the east entrance of the Metro Center Station.
- Agreement:
- Dated July 10, 1969.
 - Permitted Woodies to locate a commercial mezzanine above the Metro tunnel connecting their north and south stores via escalators and direct access to the east mezzanine of the Metro Center Station.
 - Permitted WMATA to locate its public escalator entrance within Woodies store property at southeast corner of 11th and G Streets (a street grade to mezzanine entrance).
- Consideration:
- Design and construction of Woodies mezzanine and direct access accomplished at sole cost of Woodies.
 - Permanent easements in store property to house Metro entrance from street to mezzanine conveyed to WMATA at 50% of fair market value.
- Savings to
WMATA Basis
for Granting
Direct Access:
- Equal sharing of common elements of construction associated with Metro tunnel and Woodies commercial mezzanine resulted in approximate \$250,000 cost reduction to WMATA.
 - Reduced price of permanent easements was \$265,000.
- Other
Considerations:
- Total approximate Woodies cost for commercial mezzanine and access was \$750,000, exclusive of above savings to WMATA.
 - Woodies investment was made years in advance of initial Metrorail operations in March 1976.
 - Woodies rents the public space below G Street from D.C. Government.

3-17

Metro and Downtown Retailing: The Case of Woodward and Lothrop

The downtown of Washington, D.C., includes the traditional central retail district of the city. Many of the city's older retail firms are located here along with the major Washington department store chains of Garfinckel's, Woodward and Lothrop, and the Hecht Company. In recent years, this retail area has lost business to the suburbs and to the specialty retail shops on Connecticut Avenue. A low ebb was reached in 1974 with the closure of Kann's and Lansburgh's department stores.

This downtown area has looked with hope at the coming of the Metro system to the area. The Woodward and Lothrop department store (known locally as Woodies) has been in the vanguard of stores to capture the benefits of Metro. Located at Metro Center, the transfer station for the two major lines of the system, Woodies has opened a direct entrance to the lower level of the store from the station's mezzanine level. This arrangement, which has been very successful, can be attributed to Woodies' Edward Hoffman, who conducted early negotiations with WMATA on the location of Metro Center and on an exchange of easements between WMATA and the store. Ultimately, Woodies paid for constructing their entrance to the station, but not for any part of the station proper (nor does it pay rent for its access). Hoffman's previous experience at Higby's in Cleveland had convinced him of the importance of transit access.

Recent store remodeling, which is part of a \$6 million overall renovation, has concentrated on the parts of the store near the Metro station. First, Woodies' station entrance at the mezzanine level has been transformed to look like a small boutique where the merchandise changes frequently to catch the eye of the subway user. At the far end of this shop, escalators take customers up to the lower level of the department store. This was once Woodies' budget store, but has been renovated at a cost of \$750,000 to form "Down Under," a group of shops emphasizing junior fashions for customers in their early or mid-teens. In addition to enlarging Down Under's area, new display techniques emphasize modern lighting, metal structures, and vaguely defined boundaries between sections to encourage customers to move among the displays.

It is interesting to note that the general pedestrian pattern at Woodies is designed to attract the customer from the station through the major portion of Down Under. To reach the upper levels, one must proceed on a circuitous route through the basement level before reaching the escalators that connect to the store's ground floor. This gives a large exposure to the restaurants and shops at the basement level.

As part of the drive to improve the store and better understand the market available, Woodies conducted a customer survey. "Traffic is everything" says William McDonald (Woodies' vice president for marketing), and "Metro has unequivocally increased the store's traffic." Almost one-fifth of this traffic enters Woodies through its Metro entrance (whether or not using the station entrance), coming from work. The most popular departments for this predominantly male crowd are women's and men's accessories. The survey also provides sidelights on the noontime rush. Over one-third of Woodies' patrons arrived between noon and 2 P.M. McDonald also stated (at a meeting on Metro policy) that since the opening of the Blue Line in July 1977, there had been a 70 percent increase in customers at the downtown store.



The direct entrance to the station's mezzanine has dramatically increased retail traffic to the store. In this photo, Woodward and Lothrop customers await the inauguration of Saturday Metro service at Metro Center. (WMATA photo by Paul Myatt.)



metro system interface project data

Telephone (202) 637-1593

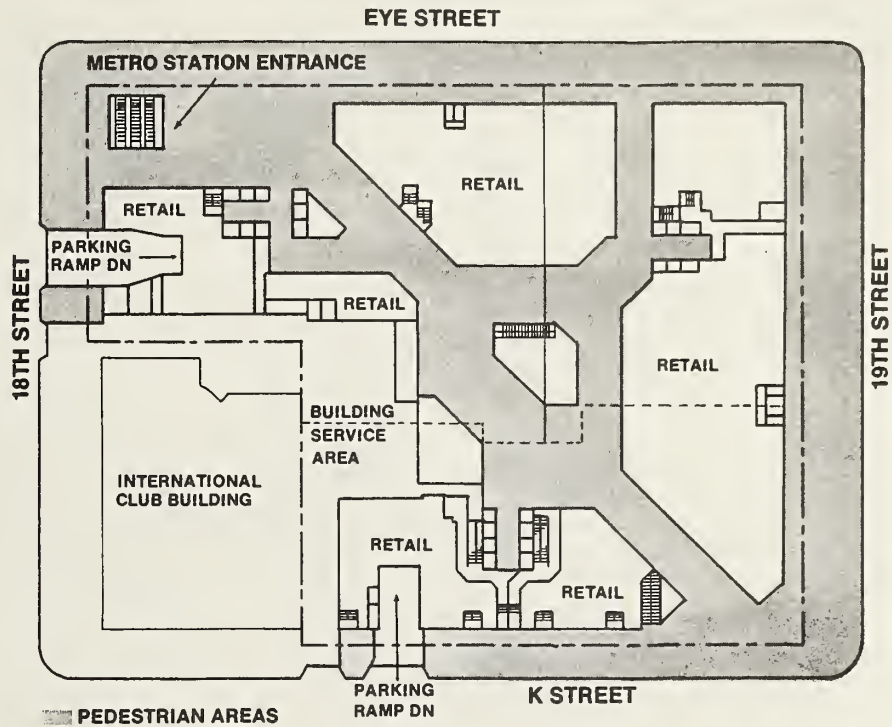
May, 1982

FARRAGUT WEST STATION

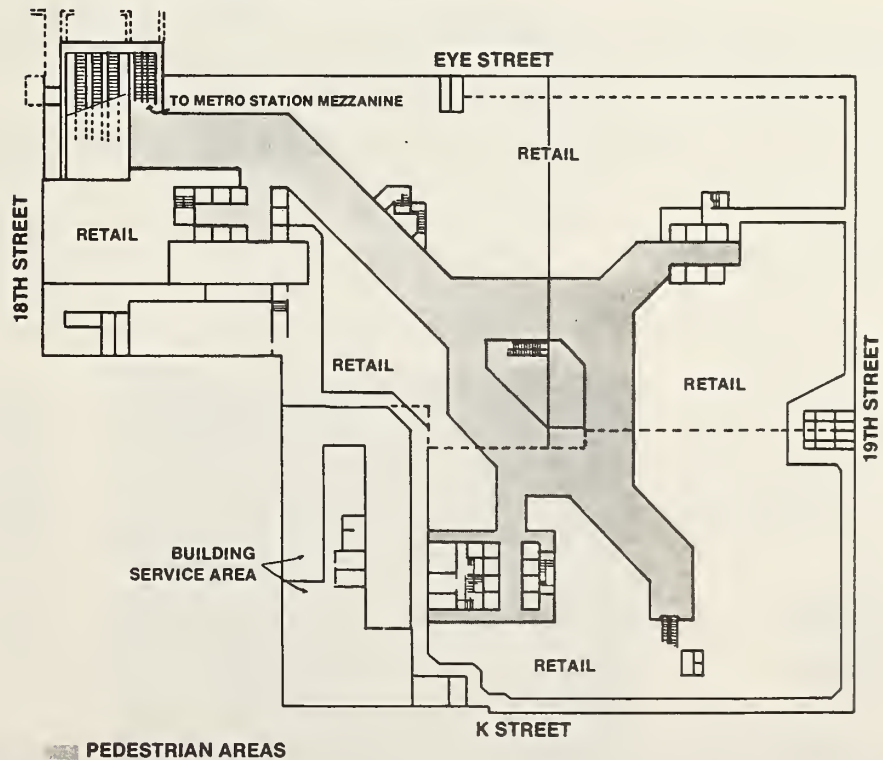
1850 K Street, N.W.
Washington, D.C.

- Location:** On the northwest corner of 18th and Eye Streets, N.W., with direct access between the west entrance of the Farragut West Station and a retail and office development known as International Square, which encompasses nearly the entire block between 18th and 19th Streets, N.W., to the east and west, and K and I Streets, N.W., to the north and south.
- Agreement:**
- Dated February 26, 1970 with Washington Medical Center.
 - Permitted owners direct access at the passageway/mezzanine level immediately adjacent to the Metro entrance.
 - Permitted WMATA to locate its public escalator entrance on private property at the northwest corner of 18th and Eye Streets, N.W.
- Consideration:**
- Additional design and construction costs for WMATA to extend passageway reimbursed by owner.
 - Permanent easements granted by owner to house Metro entry from street to mezzanine at no cost to WMATA. Additional roof top easement granted for Metro cooling equipment.
 - Relocation and site clearing by owner at no cost to WMATA.
 - Temporary construction area provided for 3 year period.
 - WMATA granted to owners direct access at passageway/mezzanine level in exchange.
- Savings to WMATA as Basis for Direct Access:**
- Permanent easements granted to WMATA were estimated to save \$500,000 in cost to WMATA (1970 dollars).
 - Site relocation and demolition estimated at \$100,000 cost savings to WMATA.
- Other Remarks:**
- Subsequent developer expended: 1) approximately \$220,000 to increase column and footing load capacity around Metro entrance, and 2) approximately \$50,000 relocation and demolition costs by owner.
 - The entire block (excepting N.E. corner) was leased by owner to O.T. Carr, Hyman & Equitable, joint venture subsequent to WMATA/owner 1970 agreement.
 - International Square complex contains approximately 1.1 million square feet of office, retail and service space.
 - The system interface (direct Metro access) will channel pedestrians through the retail mall and atrium diagonally through the entire block.

INTERNATIONAL SQUARE—GROUND LEVEL PLAN



INTERNATIONAL SQUARE—LOWER LEVEL PLAN



'3-20 International Square retail levels. The direct connection to the Farragut West Metro Station prompted the Carr Company to include two levels of retail space in the project. On both levels, the mall and atrium design provides a shortcut from 19th and K Streets through the mall to the station entrance.



metro system interface project data

Telephone (202) 637-1593

May, 1982

PENTAGON CITY STATION

South Hayes Street

Arlington, Virginia

Location: On the east side of S. Hayes Street between Army-Navy Drive to the north and 15th Street to the south, adjacent to the Pentagon City Office Tower No. 1.

Agreement:

- Dated August 23, 1977.
- Permitted River House Corporation and Pentagon Tract Development Corporation (now Rose Associates) to construct a connection to the Metro passage-way at the mezzanine level (presently under construction). Additionally, provides opportunity for additional entrance at owner's cost.
- Granted WMATA perpetual and assignable multi-dimensional easements for the Pentagon City Station, the station entrance and rights-of-way, in addition to a 30 foot service road easement and required utility easements.

Consideration: • WMATA received all real estate requirements at no cost and a net savings of \$220,000.

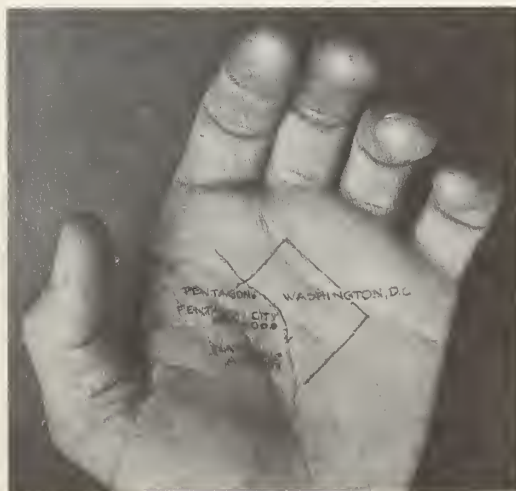


All the truly important addresses are close by. Our location puts you less than three miles away from the White House and federal office buildings, only a mile away from National Airport and within walking distance of the Pentagon.

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Enter Building One and you are greeted by a spectacular three-story skylit lobby. Unique and highly efficient floor plans with eight corner offices

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Prestigious new
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per floor offer panoramic views of Washington and the Pentagon. And as Pentagon City grows, its new parks, shops and hotels will be at your fingertips.

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If you'd like Washington in the palm of your hand, call Frederick J. Meno, III, Vice President, at Rose Associates, Inc., 703-528-0060 today.



PENTAGON CITY

Built by Pentagon City Development Company, an affiliate of Rose Associates.



metro system interface project data

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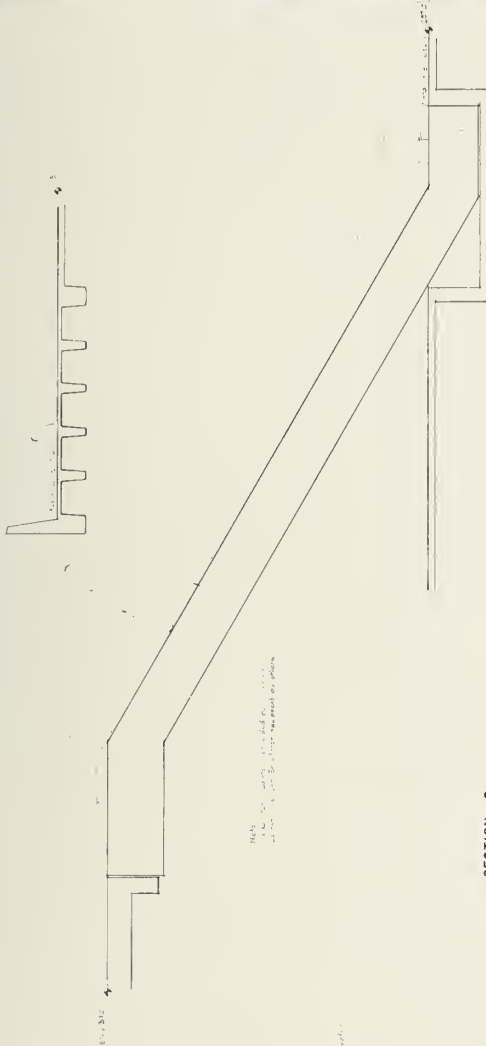
May, 1982

FRIENDSHIP HEIGHTS STATION

Wisconsin & Western Avenues
Montgomery County, Maryland

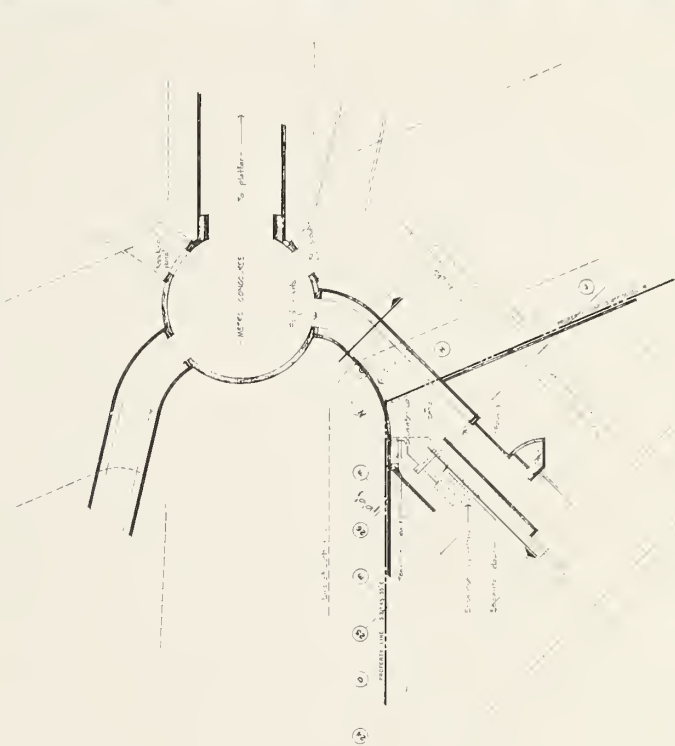
- Location: At the northwest quadrant of Wisconsin and Western Avenues at the Woodward & Lothrop Department Store (Woodies).
- Agreement:
- Dated May 15, 1972.
 - Permitted Woodies to connect their store below grade to the Metro station concourse level, which is a circular rotunda constructed by WMATA under the intersection of Wisconsin and Western Avenues.
 - Permitted Montgomery County to connect off of the Woodies passageway to provide a street access in this quadrant.
- Consideration:
- Design and construction of the passageway between the Metro concourse and Woodies store accomplished at the cost and expense of Woodies.
 - Design provision made by Woodies to permit subsequent connection from Woodies passageway to street level.
 - WMATA was paid \$300,000 by Woodies.
 - WMATA provided any easements or rights within Woodies property for Metro construction at no cost.
- Remarks:
- Woodies has completed the access between its store and the Metro station concourse.
 - WMATA under a financial agreement with Montgomery County is in the process of designing the passageway to surface connection in this quadrant.

TOWN
CENTER
AT
CHEVY
CHASE



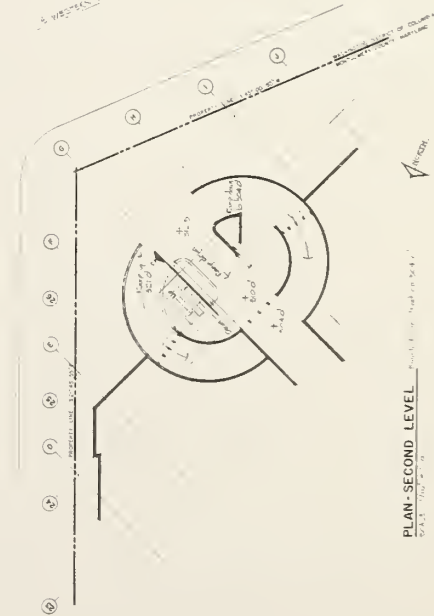
SECTION 2
1/4\"/>

SECTION 1
1/4\"/>



PLAN - METRO LEVEL
1/4\"/>

EXHIBIT "A"



PLAN - SECOND LEVEL
1/4\"/>

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