# FRIENDSHIP HEIGHTSVI

#### ABSTRACT

TITLE: A FINAL DRAFT SECTOR PLAN FOR

THE CENTRAL BUSINESS DISTRICT

OF FRIENDSHIP HEIGHTS,

MONTGOMERY COUNTY, MARYLAND
Montgomery County Planning

Board of The Maryland-National

Capital Park and Planning

Commission

SUBJECT: Sector Plan for the Central
Business District of Friend-

ship Heights, Montgomery

County, Maryland

DATE: Final recommendations by the Montgomery County Planning

Board, October 1973

PLANNING AGENCY: Montgomery County Planning

Board of The Maryland-National

Capital Park and Planning

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ABSTRACT: This document contains maps for

supporting text of A Final Draft Sector Plan for the Central Business District of Friendship Heights, Montgomery County, Maryland. The Sector Plan, when adopted, will amend the Master Plan for the Bethesda-Chevy Chase Planning Area, adopted by The Maryland-National Capital Park and Planning

Commission in October 1970.

The Sector Plan accepts traffic-carrying capacities of local streets and mass transit as reasonable constraints on development within the

Friendship Heights Central Business District at this time and finds that development under existing zoning would generate traffic far in excess of capacity at the service level required to achieve an acceptable goal of service. The land use recommendations of the Plan propose to reduce the amount and intensity of development within the CBD by designating medium-density, mixed office and retail uses for tracts close to the proposed METRO station, with lower density, primarily residential uses in the areas farther from the METRO station. The Plan also recommends a reduction in the size of the Friendship Heights CBD.

The Plan proposes the application of new central business district zoning categories, developed by the Citizens' Advisory Committee to Study Zoning in Central Business Districts and Transit Station Areas, to be effected by sectional map amendment following adoption of the Sector Plan.

The Plan provides a guide for development over a six-to-ten-year period, with a recommendation for review shortly before, and two years after, the opening of mass transit service, scheduled for December 1978.

The Sector Plan presents planning objectives and guidelines for future development under the major headings: transportation, development scale, design criteria, and special issues.

# SECTOR PLAN

# FINAL DRAFT

Friendship Heights Central Business District Montgomery County, Maryland

A proposed Amendment to the <u>Bethesda-Chevy Chase</u> <u>Master Plan, Montgomery County, Maryland</u>, being also a proposed Amendment to the <u>General Plan for the Physical Development of the Maryland-Washington Regional District</u>

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
MONTGOMERY COUNTY PLANNING BOARD
8787 Georgia Avenue
Silver Spring, Maryland 20907

October 1973

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The Advisory Committee takes no position or vote as a body on a master plan. The members advise the Montgomery County Planning Board on the problems, needs, and views of their groups or areas. These views are then considered by the Planning Board in its deliberations on the plan.

The Sector Plan as presented herein, therefore, consists of the recommendations of the Planning Board, as approved on September 27, 1973, after revision by the staff on the basis of testimony presented at the public hearings on February 7, 12, 26, and 28 and on March 3, 1973 for submission to the Montgomery County Council. The listing of the names of the members of the Advisory Committee does not indicate approval or disapproval of this Plan by any member of the Advisory Committee.

<sup>\*</sup>Commissioner Scharf did not participate in decisions on this Sector Plan.

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#### FRIENDSHIP HEIGHTS SECTOR PLAN

#### PREFACE

This Sector Plan is based on technical studies and recommendations of the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission (M-NCPPC). The staff, in preparing the plan, consulted extensively with other interested agencies of the State of Maryland, Montgomery County, and District of Columbia governments, including the Maryland State Highway Administration, the Montgomery County Department of Transportation, the National Capital Planning Commission (NCPC), the D.C. Department of Highways, the D.C. Zoning Commission, and the D.C. Comprehensive Physical Planning Section of the Office of Planning and Management.

The Planning Board and staff also had the benefit of extensive, detailed discussions with the Advisory Committee for the Friendship Heights Central Business District, a group of individuals nominated by organizations representing the wide range of interests of municipalities, citizens' associations, landowners, and developers in the surrounding neighborhoods. The first draft of the Plan was submitted to the County Executive in October 1972, for consideration by the County government. After review, the County government forwarded extensive comments to the Planning Board for consideration in its deliberations on the Plan, along with detailed criticisms and proposals received from members of the Advisory Committee.

In December 1972, the Preliminary Sector Plan was published by M-NCPPC. Public hearings were held on February 7, 12, 26, and 28 and March 3, 1973. The record of those public hearings, together with the plan presented by the Citizens Coordinating Committee, was carefully reviewed and considered

in the development of this Sector Plan.

In May of 1973, the Montgomery County Planning Board of M-NCPPC and the National Capital Planning Commission, with the concurrence of the Mayor/Commissioner of the District of Columbia, established a joint task force to resolve planning issues in Friendship Heights involving both jurisdictions. The Task Force report, Appendix E of this document, was accepted by the Planning Board on September 6, 1973.

# I. INTRODUCTION

The Sector Plan for Friendship Heights is a specific study relative to an adopted Master Plan. That Master Plan for Bethesda-Chevy Chase and Vicinity (B-CC), adopted October 1970, included only general recommendations for the Central Business District of Friendship Heights, because the significance of this particular center required more detailed study and specific recommendations. The character and complexities of the Friendship Heights activity center--distinctive from all other central business districts in the County in that this center possesses the unique quality of being both local and regional in scope and serviceability--warranted elaboration, thorough investigation, and special treatment. The Sector Plan addresses these specifics.

#### GEOGRAPHIC EXTENT

The Sector Plan covers the geographic area centering on the proposed Friendship Heights Transit Station, to be located at Wisconsin and Western Avenues. Plan amendments are focused on the Friendship Heights Central Business District (CBD) and its immediate environs. Developments in this limited sector may well have an impact extending beyond these boundaries (as will developments in downtown Washington relative to trip generation); however, the need for specific decisions, concerning key elements of the Plan in proximity to the proposed METRO station, necessitates the more limited geographic scope of these amendments. As stated in the Bethesda-Chevy Chase Master Plan, general policy guidelines for treatment of the wider areas will continue to apply.

#### PLANNING PERIOD

As recommended in the final report of the Citizen's Advisory Committee to Study Zoning in

Central Business Districts and Transit Station Areas, the recommendations in this Sector Plan are necessary to guide proposed development and land use and to meet public facility needs over the next six to ten years, subject to the periodic review outlined below.

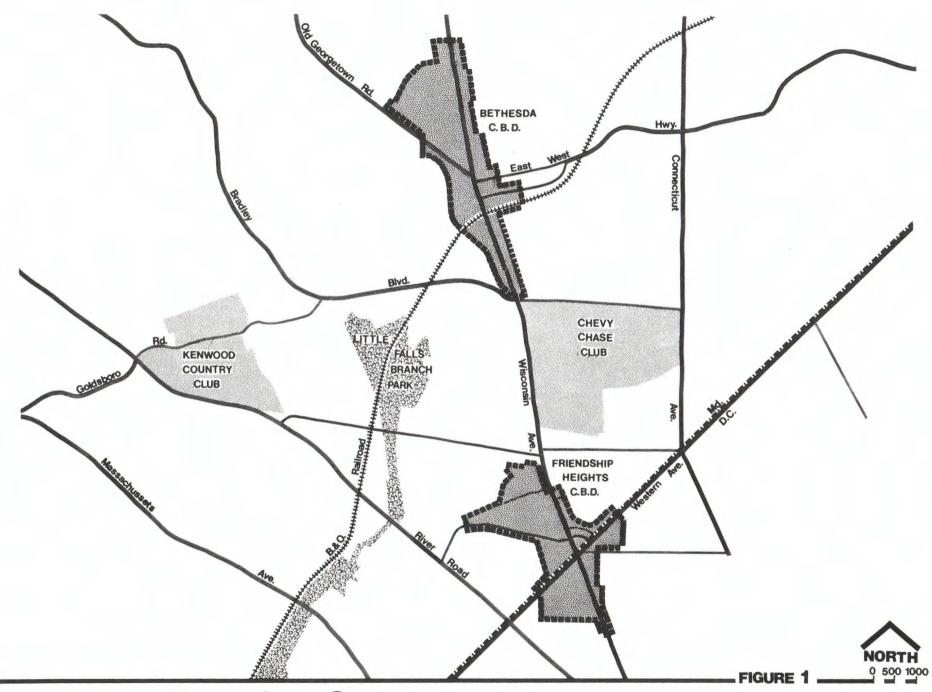
#### SCHEDULING OF PLAN REVIEW

As time passes and schedules for planned development and improvement become more precise, review of the Plan can also be scheduled more precisely. A "data base" review should occur within the 12-month period prior to the opening of the METRO station in Friendship Heights. In this way, conditions in the Sector Plan area can be measured and analyzed immediately prior to the opening of METRO, providing a valuable data base for subsequent intensive review of the Sector Plan.

This Plan should be reviewed thoroughly two years after the opening of METRO (anticipated at this time to occur in December 1978) to determine whether or not a restudy of the area is warranted, based on experience in operation. If, on the basis of that study, amendments are found necessary, the Plan should be amended or replaced with a new Sector Plan.

In addition, the Task Force, composed of members of the Montgomery County Planning Board, members of the National Capital Planning Commission, and representatives of the District of Columbia government, should be maintained to monitor development in Friendship Heights and to make recommendations to the respective planning agencies for amendments to this Plan, whenever appropriate.

Through this important review process, the Sector Plan for the Friendship Heights CBD can be kept current; and its effectiveness protected.



FRIENDSHIP HEIGHTS

**REGIONAL LOCATION MAP** 

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#### OBJECTIVES

This Sector Plan refines and implements the policy objectives of the adopted <u>Bethesda-Chevy</u> <u>Chase Master Plan</u>; namely,

- 1. To provide for the attractive, cohesive, and orderly development of the Central Business District of Friendship Heights and environs, at a scale which can be tolerably balanced against the constraints imposed by the seriously limited feeder road system;
- 2. To protect and preserve the fine existing residential neighborhoods adjacent to the CBD;
- 3. To utilize new zoning tools to help achieve the above goals, with designs that create an attractive environment and include provisions for such public amenities as open space and protected pedestrian movement; and
- 4. To undertake public improvement programs and enact zoning changes required to support the proposed planning objectives.
- FINDINGS AND RECOMMENDATIONS
- 1. Transportation System
  - a. External road system limits development

    scale--The amount of development must be
    related to the ability of the existing
    feeder road system (Wisconsin and Western
    Avenues, Military Road, River RoadWillard Avenue) to serve the area. Transportation studies reveal the capacities of
    these external roads cannot be significantly improved, except at unacceptable
    financial and environmental costs.

- b. Internal CBD road system should be improved--Eight major alternative systems for circulation within the CBD have been evaluated, in terms of operational characteristics, financial considerations, and the effect upon the surrounding residential communities. Based on review of these studies, the Plan recommends that an internal ring road system be established. The establishment of such a road will require the extension of Friendship Boulevard (as recommended in the Bethesda-Chevy Chase Master Plan). This improvement, while it cannot increase development capacity, which is restricted by limitations in the external feeder road system, will permit traffic to flow more efficiently within the CBD.
- c. METRO transit station, concourse, and bus layover areas -- The Montgomery County Planning Board and staff have considered proposed designs for the METRO station and concourse, bus layover, and "kiss-n-ride" areas and for improving access to, and the appearance of, the METRO station, itself, because the station design will influence the tone and quality of development throughout the CBD. Since the Washington Metropolitan Area Transit Authority (WMATA) has not yet completed studies for the design of the transit station surface facilities and concourse, the Plan recommends that the Montgomery County Planning Board staff and appropriate Montgomery County government staff continue to work in cooperation with WMATA toward improvement of the station design and access. A southern entrance to METRO should be located in the District of Columbia to distribute METRO-oriented traffic more

efficiently and to improve circulation in the entire area.

- d. Pedestrian circulation—The Plan presents a basic system of pedestrian circulation. Some elements of this system can be obtained through development of the remaining tracts under the new CBD zones. Other elements will have to be constructed by the appropriate governing agency and/or through agreements among owners of existing developments. The proper functioning of the area, however, requires an efficient system for pedestrian movement.
- 2. Development and Land Use Policy Issues

If development should occur at the scale and intensity permissible under existing zoning, the feeder road system would be impacted to an intolerable degree. This Plan recommends a substantial scaling down of total allowable development, to keep development and land use as consistent as practicable with the transportation facilities of the area. The Plan recommends, for specific, undeveloped tracts and tracts likely to be redeveloped within the next six to ten years, land uses which are designed to produce a scale and pattern of development compatible with the severe transportation constraints of the CBD. The Sector Plan recommends medium-density commercial and office uses for parcels nearest the METRO station and lower densities, primarily in residential uses, on undeveloped properties farther from the METRO station area. The Plan does not anticipate the redevelopment of the intensive office, retail, and residential uses recently developed in the area. These recommendations will regulate development proposed under the optional form allowed in the CBD zones in substantial conformity to

the Sector Plan. The design concept of the Plan specifically prohibits expansion of commercial and high-density residential uses beyond the limits of the designated CBD boundary.

Recommendations for major tracts in the CBD and adjacent areas are:

- a. Allow no further commercial or office development on the Government Employees Insurance Company (GEICO) tract.
- b. Rezone the Woodward & Lothrop tract (Parcel 2) to CBD-1, allowing a maximum development of FAR 2 (floor area ratio). (See Table II for specific development recommendations.)
- c. Withdraw the Bergdoll tract (Parcel 3) from the CBD and retain its residential (R-H) zoning classification, allowing for approximately 792 dwelling units.
- d. Rezone to the CBD-2 category the portion of Chevy Chase Land Company property located in the northeast quadrant of Wisconsin and Western Avenues, now zoned C-2 and including the Chevy Chase Shopping Center, which will allow development of FAR 4 under the optional method. Retain in its present R-60 zoning the remainder of the parcel located north of Wisconsin Circle and now used for parking, and withdraw this portion of the property from the CBD.
- 3. Protection of Residential Neighborhoods

The Plan proposes to strengthen existing street patterns, buffers, and green strips which now shield residential communities

immediately adjacent to the CBD and to protect adjoining neighborhoods from traffic spillover emanating from the business areas. The following is a digest of such proposals:

- a. Maintain all existing street culs-de-sac and preserve unimproved street rights-ofway.
- b. Preserve parklands and open spaces within and around the perimeter of the CBD utilizing these areas exclusively for recreational purposes.
- c. Areas west of GEICO
  - (1) Preserve wooded area southwest of the GEICO building as open space. This area is now protected by a special exception, and it should not be disturbed by any other special exception granted on the GEICO property. A portion of the GEICO property will be acquired for use as a small neighborhood park.
  - (2) Maintain all existing residential street culs-de-sac near Western Avenue and establish such a cul-de-sac at the Western Avenue end of Cortland Road to prevent shortcut traffic.
- d. Study, in cooperation with the Montgomery County Department of Transportation, the feasibility of barricading certain intersections and abandoning unimproved rights-of-way in residential communities.
- e. Adopt legislation which will permit the limiting of parking on residential streets closest to the CBD (particularly portions of Chevy Chase Village and Brookdale) to

cars belonging to area residents and their guests or necessary service vehicles.

Until the late 1940's, the intersection of Wisconsin and Western Avenues was little more than a small crossroads and trolley terminal in the midst of several quiet suburban residential communities. Friendship Heights, in the area to the northwest of the intersection, was developed in the early years of the 20th century as a residential suburb of large homes on large lots.

The first significant commercial development came about 1950, when Woodward & Lothrop opened one of its first suburban branch stores at Wisconsin and Western Avenues, opposite the bus terminal. The Chevy Chase Shopping Center, on the east side of Wisconsin Avenue, was opened in 1953. In the late 1950's, spurred by proposals for a major roadway corridor paralleling Wisconsin Avenue from Maryland to the District of Columbia, landowners in Friendship Heights began to assemble parcels for development; and, in the early 1960's, a number of large parcels were rezoned for intensive commercial use or for high-rise residential use. The prospect of extension of mass transit and the proposed location of a transit station at Wisconsin and Western Avenues intensified pressures for development. The surge of building in the 1960's included very large, high-rise apartment hotels, such as The Irene and The Willoughby, relatively far from the proposed transit station, as well as large office buildings and retail facilities fronting on Wisconsin Avenue. The offices of GEICO, to the west along Western Avenue, were expanded. Land assembly and development pressures in the District of Columbia portion of Friendship Heights began to be felt somewhat later than in the Maryland portion. Some development has taken place along Wisconsin and Western Avenues in the District, and major development proposals for the tracts nearest to the METRO station are awaiting decisions by the District of Columbia authorities.

The Bethesda-Chevy Chase Master Plan, adopted in October 1970, acknowledged the existing development and anticipated continuing pressure for expansion of commercial and luxury residential facilities within the boundaries of the Friendship Heights CBD. That Plan specifically called for more detailed study of proposed land uses and facilities in this Sector.

The need for more specific planning guidelines and detailed recommendations for guiding development and the provision of future public facilities is now even more urgent than it was in 1970, for a number of reasons, including:

- 1. The proposed construction of the METRO rapid transit station, scheduled to serve Friend-ship Heights by December 1979
- The recent rapid development of high-quality retail facilities, prestige office space, and luxury apartment complexes in the Friendship Heights area
- 3. The continued pressure for further development on both sides of the Maryland-District of Columbia boundary line
- 4. The facts that large parcels of land have already been assembled for development, in contrast to other CBD's where ownership is fragmented, and that many of these large parcels are already zoned for very intensive uses
- 5. The prospect of a virtually infinite market potential for continued development if sufficient land and traffic-carrying capacity are available
- 6. Problems arising from the differing requirements and procedures of the two major political jurisdictions, Montgomery County and the

#### District of Columbia, in this area

This Sector Plan outlines a visually appealing, economically sound METRO-centered CBD that can be allowed to develop within the limits of planned public facilities, providing for the maximum possible protection of existing residential neighborhoods. The Plan reflects the desire to achieve a more rational, cohesive development at densities which are more realistically related to the capabilities of the road network and other public facilities. Transportation improvements will provide for better functioning traffic and pedestrian access, with a minimum of disruption to adjacent areas, if development is planned, and proceeds, at a proper scale. The recommendations are also aimed at shielding and buffering adjacent residential areas from the impacts of high-density CBD development and traffic.

#### SIGNIFICANT RECENT CHANGES

1. The decisions not to construct the North Central Freeway (which would have linked the Capital Beltway through Silver Spring to downtown Washington), the Wisconsin Avenue Expressway, the Palisades Interstate Route, and two grade separations at Connecticut Avenue, together with severe curtailment of a major widening of Connecticut Avenue, necessitate modification of the Bethesda-Chevy Chase Master Plan. Traffic calculations and proposals in that Master Plan were based on the assumption that the North Central Freeway would be built and would carry a significant proportion of through traffic entering Washington from the north and west. The deletion of this Freeway from the proposed network thrusts upon Wisconsin and Connecticut Avenues and other major roadways in the Bethesda-Chevy Chase area traffic volumes over and above those contemplated in the 1970 Master Plan.

- Detailed recent studies of traffic and land use problems in certain sectors now demonstrate a need to modify earlier assumptions.
- 3. Development proposals for the District of Columbia portion of Friendship Heights appear to be more intensive than they were assumed to be in 1970.
- 4. There is an increasing awareness on the part of governmental agencies and the general public concerning the environmental problems of air pollution and waste disposal which tend to be aggravated with increased concentration of urban development. The Friendship Heights area is highly susceptible to air pollution, and this condition should not be further aggravated.



#### IV. POLICY GUIDELINES: EXISTING AND PROPOSED

#### MASTER PLAN PROPOSALS

The adopted Master Plan recommendations which apply to the Friendship Heights CBD are chronicled here. Most are reaffirmed in this Sector Plan, except as modified by qualifications and amendments stated below: (New material underlined)

 "Provision for the orderly expansion of the CBD, including encouragement of multi-use developments with adequate public amenities, such as open space." (B-CC Master Plan, page 18)

#### Amended

The adopted B-CC Master Plan recommendation "Provision for the orderly expansion of the CBD" should be revised to read "Provision for the orderly <u>utilization</u> within the new recommended <u>limits</u> of the CBD, including encouragement of multi-use developments with adequate public amenities, such as open space."

The amount of development that can be tolerated in the CBD is limited by the capacity of the feeder road system; therefore, no expansion of the CBD should be contemplated. The development scale recommended in the B-CC Master Plan exceeds the ability of the feeder road system to accommodate additional trips generated by such development.

This Sector Plan recommends a reduction in the size and total scale of development of the CBD and the preservation of buffers, to contain the CBD and to protect the surrounding residential neighborhoods from physical and visual impact.

2. "Provision for orderly development around the transit station through comprehensive site plan review of new developments for possible reduction in parking requirements, where direct pedestrian access to the transit station entrance is available, and for extension of the arterial street system." (B-CC Master Plan, page 18)

## Reaffirmed

3. "Protection of surrounding single-family neighborhoods by the provision of park buffer areas and transitional uses." (B-CC Master Plan, page 18)

# Reaffirmed and refined throughout the Sector Plan

4. The Land Use and Transportation Plan map (B-CC Master Plan pocket insert) shows a proposal for improving the intersection at Dorset Avenue and Grafton Street by realigning these streets. The Sector Plan rejects this proposal because it would undoubtedly induce a greater traffic flow on both streets through residential areas. The improvement was, at one time, a part of the Maryland State Highway Administration five-year improvement program. It was recently removed from that program.

# POLICIES FOR BUSINESS AREAS

The Statement of Concepts, Guidelines, and Goals for the B-CC Master Plan enumerates five specific points, under the heading of "Business

Area Goals," which are applicable to the Friendship Heights CBD (B-CC Master Plan, page 32). These policy statements are reaffirmed, subject to the following qualifications and amendments: (New material underlined)

- BUSINESS AREA GOALS
- "Maximum utilization of land within permitted limits in the existing business districts should be encouraged."

#### Amended

This statement is altered as the result of subsequent studies and more intensive investigation. The maximum utilization of land within limits permitted by the B-CC Master Plan throughout the CBD would result in an extreme overload on the traffic-carrying capacities of the feeder road system. The Sector Plan recommends intensifying development only on parcels immediately adjacent to the transit station and calls for a reduction of development intensity on parcels at a greater distance from METRO.

2. "Business activity and employment opportunities should be encouraged in the three established business centers-Bethesda, Chevy Chase, and River Road-and discouraged elsewhere in the planning area."

# Amended

This statement is reaffirmed to the extent that encouragement of "business activity and employment opportunities" does not cause a severe hardship on traffic conditions or conflict with

other criteria for the rational development of the CBD.

3. "The ultimate size of each center should be established, and expansion beyond those limits should be precluded by use of transition zones with moderate density and intensity of development."

#### Amended

This statement is reaffirmed; however, the utilization of open space and green buffers is included as a method of precluding CBD expansion beyond the reduced limits recommended in the Sector Plan.

4. "The traffic capacities of the streets and public transportation systems should be geared to the land use proposals contained in the Master Plan."

#### Amended

Since the B-CC Master Plan was adopted, the traffic-carrying capacities of the feeder road system have been investigated thoroughly. The land use proposals recommended in this Sector Plan are geared to the traffic capacities of the feeder road system serving the Friendship Heights area since traffic capacities of feeder roads cannot be adequately enlarged due to excessive financial and environmental costs.

5. "Development in Friendship Heights should complement and extend the high-quality fashion and office center already established. Contiguous areas to the west should be limited to apartment house construction."

#### Amended

This statement is reaffirmed to the extent that "complement and extend" shall refer to conditions within the reduced limits recommended for the CBD and shall be consistent with traffic capacities and other criteria for the rational development of the CBD. "Contiguous areas to the west" shall include the apartment development north of Willard Avenue and west of Friendship Boulevard."

- CHEVY CHASE BUSINESS DISTRICT (FRIEND-SHIP HEIGHTS) (B-CC Master Plan, page 33)
- 1. "The Chevy Chase Business District is expected to become more intensely developed with additional office space and residential development and with some additional retail structures. An example of a redevelopment opportunity is the Chevy Chase Center."

#### Amended

The retention of the Chevy Chase Shopping Center parking area in the R-60 zoning category and its removal from the CBD virtually preclude any redevelopment during the planning period covered by the Sector Plan.

#### POLICIES FOR RESIDENTIAL AREAS

The Statement of Concepts, Guidelines, and Goals for the B-CC Master Plan also sets forth policies governing residential areas (B-CC Master Plan, page 31). These policies are reaffirmed, subject to the qualification and amendments stated below:

1. "Neighborhood integrity should be maintained and not disturbed by the creation of additional traffic corridors or the intrusion of incompatible nonresidential uses."

#### Reaffirmed

2. "To form a belt of transitional uses for the protection of adjacent single-family residences, medium-density residential development, and other uses of moderate intensity of development should be located to provide a buffer between the distinctly different areas."

#### Amended

This guideline is not generally applicable to the Sector Plan for Friendship Heights since expansion of multi-family uses into existing single-family neighborhoods is specifically rejected in the Sector Plan. Instead, the Friendship Heights Sector Plan recommends preservation of the existing open space and green buffers to insulate single-family residential neighborhoods from CBD activities.

3. "High-density development should be limited to areas within walking distance of public transportation, daily shopping facilities, schools, entertainment, and employment.

Areas meeting these requirements are within or adjacent to the major business centers."

(Item 4, page 32, B-CC Master Plan)

#### Amended

The Sector Plan reaffirms the first sentence, per se. The second sentence is changed to delete the words "or adjacent to" since high-

density residential development is not encouraged adjacent to the Friendship Heights CBD, except on Parcel 3.

#### POLICIES FOR HOUSING TYPES

1. "Single Family Housing--Most of the planning area consists of well maintained neighborhoods of single-family homes, for which no change is contemplated over the planning period. These areas need to be enhanced by the continued provision of excellent community facilities; the elimination of through traffic from local residential streets; and the prohibition of incompatible uses, as well as the positive provision of transitional uses along their boundaries." (B-CC Master Plan, page 13)

#### Reaffirmed and Amended

This statement is reaffirmed and elaborated upon, utilizing the provision of open space and green buffers as an effective method of enhancing and protecting residential communities.

2. "Multi-Family Housing--New multi-family development is proposed to take place largely within or adjacent to the established CBD's of Bethesda and Friendship Heights." (B-CC Master Plan, page 14)

# Reaffirmed and Amended

This statement is reaffirmed and amended, recommending no multi-family development beyond the revised CBD limits, except on Parcel 3.

#### POLICIES LIMITING COMMERCIAL USE

1. "No change is recommended in the zoning classification of properties fronting on Wisconsin Avenue from Bradley Boulevard to Dorset Avenue. These properties front on the west side of Wisconsin Avenue, between the Bethesda and Chevy Chase-Friendship Heights business districts." (B-CC Master Plan, page 14)

#### Reaffirmed

Prevent commercial strip development along Wisconsin Avenue between the Friendship Heights and Bethesda CBD's.

2. "The merging of the Chevy Chase and River Road business area is not desirable and is, therefore, not recommended." (Statement of Goals, page 33)

# Reaffirmed

Prevent extension of commercial development linking the Friendship Heights and River Road business areas.

# GOALS

A primary goal of the Sector Plan is to provide an efficient, economical, and safe transportation network which will serve the specific area and the entire metropolitan region. This goal has very important implications for the future development of Friendship Heights. One is that ridership of public transportation must be encouraged. The Friendship Heights CBD/District of Columbia Uptown Center will be served by surface buses and by the proposed subway system. Patronage of these modes must be encouraged, whenever possible, to reduce automobile traffic and its adverse environmental effects and to ensure the economic viability of METRO. In recognition that these modes cannot meet all the transportation needs of the Friendship Heights CBD/Uptown Center, private autos also must be accommodated. Access to, and circulation within, the area for private vehicles must meet at least the minimum accepted standards for the control of congestion in urban areas. The above goals must not be attained at the expense of the pedestrian circulation system, which should maintain a high level of comfort and accessibility.

# POLICIES AND ASSUMPTIONS

Certain assumptions, concerning conditions throughout the planning period, must be made. A major assumption is that Friendship Heights will continue to operate as an "outlying business district," rather than as a "central business district," as defined in the <a href="Highway Capacity">Highway Capacity</a> Manual--1965. This assumption implies that the vehicular capacities of the streets serving Friendship Heights will be approximately 25 percent greater than those of similar streets in the core area of downtown Washington. It also implies that the vehicular trip generation of the various land

uses will be higher than that of similar uses within the Washington, D.C, CBD. With this in mind, calculations were made for vehicular generation rates for Friendship Heights which range between the low values expected in an urban CBD area, such as downtown Washington, and the higher values that could be expected in the more suburban locations. These rates reflect not only the urban nature of the Friendship Heights CBD/Uptown Center, but also the effects of METRO service on the various land uses.

The vehicular trip generation rate of a particular use in a given location is dependent on the modal split; that is, the mode of travel, such as auto, transit, or by foot. In turn, the modal split is a function of the types of uses provided in that area. Vehicular trip generation calculations were made on the basis of both 20 and 40 percent modal splits. The 20 percent modal split (that is, 20 percent of all person trips would be on transit) is the figure provided by WMATA, and the 40 percent split represents an estimate of the maximum transit usage that could be expected to or from Friendship Heights if a variety of measures are taken to increase transit ridership (see Appendix A for a more detailed analysis of such measures). Upon evaluation of modal split increase probabilities and the costs required to effectuate this increase, this Sector Plan accepts the 20 percent modal split as realistic for the planning period. I

1Based on slightly different assumptions, the D.C./Uptown Center sectional development plan used a modal split of 30 percent. After review of these assumptions and of the differences in development in Maryland and the District of Columbia, the Planning Board is retaining the 20 percent assumption for planning purposes in this area.

It should be noted that the modal split is meant to be representative of the entire Friendship Heights CBD/Uptown Center, implying that those uses closest to the transit station entrance will have the highest modal split (i.e., more transit usage) and those areas farthest from the transit station will have the lowest modal split. The vehicular generation rates used in this Sector Plan reflect this fact and are comparable to, or lower than, the rates used in previous studies of this type.<sup>2</sup>

The actual physical improvements to the transportation network that can be expected during the planning period presented another factor that had to be calculated. After consulting with the staffs of the Maryland State Highway Administration, the Montgomery County Department of Transportation, the District of Columbia Department of Highways and Traffic, the Comprehensive Physical Planning Section of the Office of Planning and Management of the District of Columbia government, and the National Capital Planning Commission, it has been determined that no major improvements to the street system feeding the CBD will be forthcoming in the forseeable future, due to the considerable financial, social, and environmental costs involved. (Major improvement would imply a new facility feeding the CBD.) The Sector Plan assumes that certain TOPICS 3 type improvements can be made to the interior streets and to the arterials feeding the CBD. These improvements are included in the recommendations.

Additional studies were conducted to consider the effect of replacing the median strip on Wisconsin Avenue with a reversible lane, to provide

greater carrying capacity during peak hours. These studies conclude that a total maximum increase of 10 percent in traffic capacity into the CBD could be achieved; however, to be effective, this improvement should extend along Wisconsin Avenue to the Beltway and into the District of Columbia as far as Massachusetts Avenue. The cost to both Maryland and the District of Columbia (approximately \$4.9 million) precludes implementation of such a program in the planning period. This improvement, therefore, is of no benefit, in terms of the development scale contemplated in the Sector Plan.

A study of the possibility of constructing a grade separation of Wisconsin and Western Avenues was made by the District of Columbia Department of Highways and Traffic and the Planning Board staffs. It was concluded that such construction would facilitate no traffic benefits, in view of the fact that turning movements now allowed at the intersection would have to be reassigned to nearby intersections which would not have sufficient capacities to handle the increased traffic volumes.

Traffic counts show that existing volumes are relatively constant through the Friendship Heights CBD/Uptown Center for at least a two-hour period during the evening rush hour. The Sector Plan, therefore, concludes that a program of "staggered" work and/or retail shopping hours will not be a practical means of increasing development potential in Friendship Heights.

The Plan also assumes that, with the coming of METRO, through auto trips to and from Washington, D.C., will be reduced initially and will not regain the present level until after the planning period. This assumption is consistent with work done by planning groups in other cities, in connection with mass transit systems, and is borne out in projections made for the Washington area by the

 $<sup>2</sup>_{\mathrm{Trip}}$  generation rates are assumed to be slightly higher in Maryland than in the District of Columbia.

<sup>3</sup>See definition in Appendix C.

Metropolitan Washington Council of Governments.

The Sector Plan adopts the policy that only those streets that can be functionally classified as arterials—Wisconsin Avenue, Western Avenue, Military Road, and Willard Avenue—will act as access (feeder) roads to the CBD. This policy is intended to limit future development to a level which can be served by the above streets, in order to prevent an increase in vehicular traffic on the predominantly residential streets that cross the cordon line into the CBD.

Concurrently, a policy has been assumed that major bus feeder service, utilizing standard transit coaches, should be restricted to operation only on these arterial routes. Transit service into the residential communities which adjoin the Central Business District should utilize a small vehicle. Such a vehicle, with a seating capacity in the range of 7 to 15 passengers, would be about the size of a large station wagon or a small van-type delivery truck or milk truck.

One of the most important assumptions made in the Sector Plan in the analysis of traffic problems in Friendship Heights is that Level of Service D. as defined in the Highway Capacity Manual -- 1965, is the lowest level of service desirable in an urbanized area such as Friendship Heights. Level of Service D is characterized by traffic volumes approaching capacity and by substantial delays to vehicles. This level represents the most congested operating condition that still exhibits stable vehicular flow characteristics. To allow the service level of the street system to drop appreciably below this standard in an attempt to increase patronage of public transportation only perpetuates traffic problems and may actually decrease the use of a mass transit system by everyone except those few within walking distance (800 to 2,000 feet) of a portal.

#### CONCLUSIONS AND RECOMMENDATIONS

Friendship Heights is situated on Wisconsin Avenue, one of the most heavily used arterials leading into the District of Columbia, but vehicular access to the CBD/Uptown Center is limited to four major streets: Wisconsin Avenue, a six-lane, north-south arterial; Western Avenue, a four-lane, east-west arterial, expanded to six lanes within the CBD/Uptown Center; Willard Avenue, a four-lane street which terminates at River Road, just west of the Friendship Heights CBD; and Military Road. a two-lane street, traversing established residential areas east of the CBD/Uptown Center within the District of Columbia. There are also several local residential streets which serve the area and are commonly 36 feet, curb to curb, with parking on both sides. To increase the amount of traffic using these major streets would encourage shortcutting through those residential areas immediately adjacent to Friendship Heights and would present safety hazards.

The four arterial streets mentioned above must serve not only development-induced traffic; i.e., traffic destined to or originating in Friendship Heights, but also heavy volumes of through traffic with destinations other than Friendship Heights. These two types of traffic meet serious conflicts in traffic flow through the area.

Local traffic is best served by a street network and signal system which can accommodate relatively slow-moving traffic (10 to 15 miles per hour) with high volumes of turning movements and frequent starting and stopping. Through movement can best be accommodated by a system of arterial type, with relatively high speeds (25 to 35 miles per hour), few turning movements, and more constant traffic flow. The most obvious solution to this conflict, where it is possible to do so, is to provide separate facilities to handle the two

types of movements. In Friendship Heights, however, the volumes of both types of traffic and the limited number of facilities available to handle the traffic preclude this as a possible solution. If, for example, it were decided to use Wisconsin Avenue as a through street only and to prohibit left turns from the street, the total number of intersections available elsewhere within the Friendship Heights CBD/Uptown Center to handle the displaced turning movements would be reduced and an extra burden would be placed on the remaining intersections. If, on the other hand, turning movements are not prohibited and adequate storage space is not provided for the left-turning vehicles, the capacity of the street system to handle through traffic is reduced, due to the frictional effects of turning vehicles and of the storage of turning vehicles in space at through lanes that could otherwise be used for through movement.

Both types of traffic, through and local, will continue to pose problems, even with the coming of METRO and the improvement in service expected to be provided by other public transportation facilities. As stated earlier, both private and public modes must be accommodated if each is to operate effectively and efficiently. The recommendations of the Sector Plan represent a solution which is recognizably a compromise, proposed to encourage public transit ridership and, at the same time, to provide at least minimum driver comforts to both types of traffic in the private mode.

- 1. Recommendations to Improve Internal Street
  Traffic Flow
  - a. Construct the extension of Friendship Boulevard between Willard and Western Avenues prior to the start of construction of the METRO station at Western and Wisconsin Avenues -- The

start of METRO construction is now estimated to be July 1975 (Item 1, Figure 2). This improvement should be included in the Montgomery County Capital Improvements Program.

- b. Begin the study for the design and ultimate construction of a demandresponsive signal system in the Friendship Heights CBD/Uptown Center, to allow more efficient use of existing street capacities -- This will require District of Columbia and Maryland State Highway Administration cooperation.
- c. Construct the northern extension of Friendship Boulevard easterly to intersect with Wisconsin Avenue (Item 2, Figure 2) -- This extension lies within the limits of the Town of Somerset.
- d. Widen existing Friendship Boulevard to 62 feet between North Park Avenue and the northern extension of Friendship Boulevard (Item 3, Figure 2) -- This improvement should be constructed by developers of Parcels 4 and 5, as shown on Figure 5.
- e. Extend The Hills Plaza to connect with the northern extension of Friendship Boulevard (Item 4, Figure 2) -- This improvement should be constructed by the developer of Parcel 5 to match the existing paving width on The Hills Plaza.
- f. Widen Willoughby Street to 48 feet of pavement on an 80-foot right-of-way (Item 5, Figure 2) -- This improvement should be constructed by the developers of Parcels 6 and 7, as shown on Figure 5; however, if the developers submit a

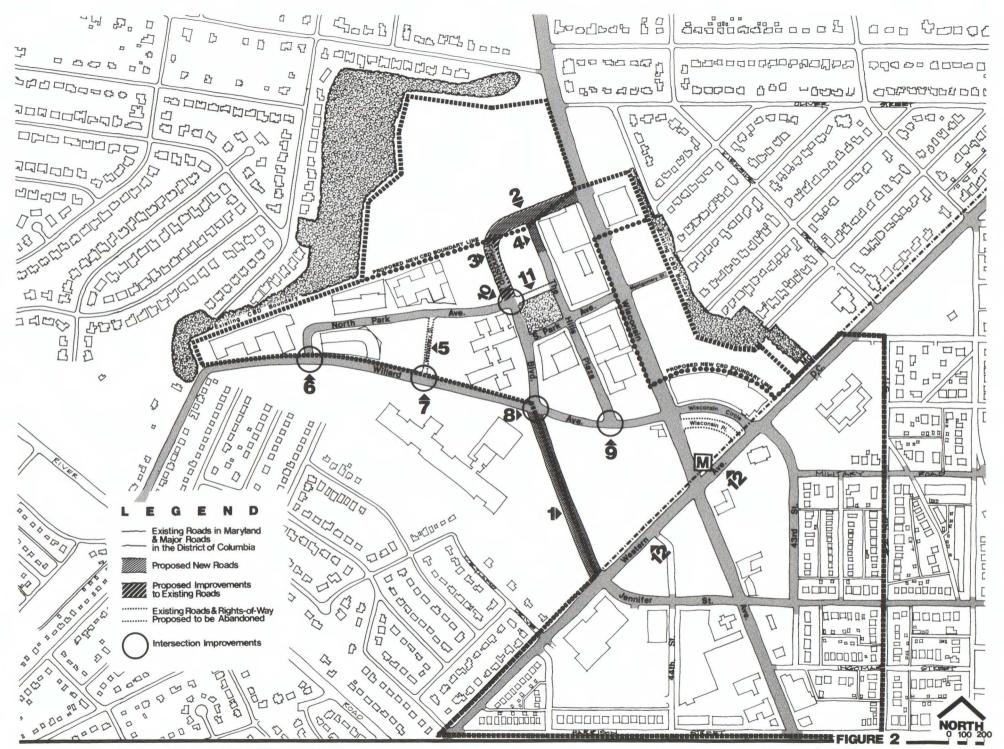
proposal for combining Parcels 6 and 7 as a single development (see suggestion for such a development on Figure 13), serious consideration should be given to the abandonment of Willoughby Street if adequate ingress and egress provisions are designed into the proposal.

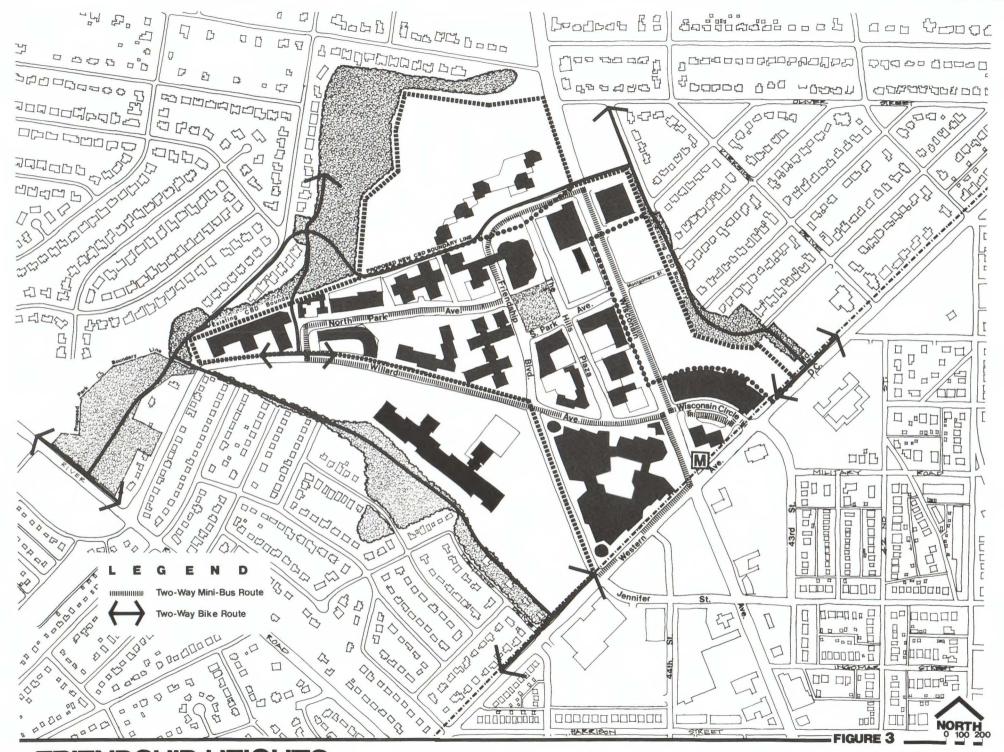
- g. Complete the proposed ring road by way of a connection to 43rd Street extended and the abandonment of Military Road west of 43rd Street -- The District of Columbia Sectional Development Plan for the Friendship Heights/Uptown Center also proposes these improvements.
- h. Improve the intersections of Willard Avenue in Maryland at:
  - (1) North Park Avenue (Item 6, Figure 2)
  - (2) Willoughby Street
     (Item 7, Figure 2)
  - (3) Friendship Boulevard (Item 8, Figure 2)
  - (4) The Hills Plaza (Item 9, Figure 2)
- i. Provide storage for turning movements at all major intersections with the ring road -- This recommendation implies improvement of the following intersections in the District of Columbia:
  - (1) Jenifer Street at 44th Street
  - (2) Jenifer Street at 43rd Street
  - (3) Jenifer Street at Wisconsin Avenue

- (4) 43rd Street at Military Road
- (5) 43rd Street extended at Western Avenue and Wisconsin Circle
- j. Institute the following changes in traffic regulations in the CBD:
  - (1) Prohibit on-street loading during peak traffic periods.
  - (2) Prohibit on-street parking during peak traffic periods.
  - (3) Permit right-turn movement, after stop, on red signal at selected intersections.
- k. Close North Park Avenue east of Friendship Boulevard and convert the land to open space and pedestrian use (see Item 11, Figure 2).
- Once the ring road has been completed, experiment with closing portions of Western Avenue to facilitate pedestrian circulation (Item 12, Figure 2).
- 2. Proposals Considered and Rejected
  - a. The following changes have been investigated and are specifically rejected in the Sector Plan, on the basis that the benefits anticipated to be derived do not warrant the very high fiscal and/or environmental cost involved:
    - (1) Widening of Wisconsin Avenue between the D.C. Line and Bradley Boulevard (the beginning of the north-south, one-way system in Bethesda) where necessary to provide three 12-foot through lanes in each direction and

- (2) Relocation of Dorset Avenue at Wisconsin Avenue to align with Grafton Street
- b. The Planning Board also has investigated and <u>rejects</u> a proposal to close Wisconsin and Western Avenues in both jurisdictions and to replace them with a ring road. This proposal is rejected because:
  - (1) Closing Wisconsin Avenue is not viewed as practicable by either the District of Columbia or Maryland highway officials;
  - (2) All traffic would be placed on the ring road, requiring a mixture of local and through trips;
  - (3) Unsafe "weaving movements" would be necessary to move from parking to radial streets leading into the ring road; and
  - (4) The distances from bus stops on the ring road to the METRO portals are too great to encourage transit ridership.
- 3. Recommendations to Encourage Transit Ridership in Friendship Heights:
  - a. Provide direct access to the transit station from the highest density activities;
  - b. Provide weather-protected pedestrian ways for circulation within the CBD and for transit transfer and transit-to-building pedestrian movements;
  - c. Give preferential treatment for bus movement to and from the transit station;

- d. Develop local-service commercial facilities within walking distance of residential areas;
- e. Discourage all-day, nonresidential parking within the CBD by appropriate pricing and other mechanisms;
- f. Develop two types of bus feeder service: operate trunk line service utilizing standard transit coaches on the major arterial routes only and use small vehicles (mini- or midi-bus) only for routes on residential streets.
- g. Encourage development of a local-service, fine-grained, small-vehicle transit loop to connect local residential and office buildings with major shopping facilities, in conjunction with the development of a pedestrian network;
- h. Establish a south portal entrance to the METRO station in the District of Columbia. on the west side of Wisconsin Avenue in the block south of Jenifer Street -- The Washington Metropolitan Area Transit Authority (WMATA) will provide a "knockout" panel in this location to facilitate construction of a future entrance. The ability to make efficient distribution of METRO-destined traffic, however, will be enhanced if the south portal could be built as part of the initial program. The entire METRO system would benefit by the resultant induced ridership and revenues; therefore, the south portal should be financed as a system cost. When the south portal is provided, then the "kiss-n-ride" facility should be moved away from its programmed location at Western and Wisconsin Avenues.







#### BASIC ASSUMPTIONS

Traffic on feeder roads is the primary constraint on the amount of development which is feasible in Friendship Heights. Studies of the relationships of traffic and development scale are based on the following assumptions:

- METRO will serve Friendship Heights by December 1978, and construction on some phases of the station will commence by July 1975.
- 2. Minimum <u>desirable</u> traffic conditions at peak hour are Service Level D for a period of 60 minutes (for definitions of Service Levels D, E, and F, see Appendix C). Any development scale that results in service lower than Level D or that prolongs peak-hour conditions beyond a 60-minute period is deemed to be undesirable.
- 3. Service Level D translates into a maximum of approximately 11,000 development-induced trips (evening peak-hour vehicle trips originating in, or destined to, the Friendship Heights CBD/Uptown Center in both Maryland and the District of Columbia segments) over and above through-traffic trips and those trips to and from the METRO station. 1
- 4. A modal split of 20 percent of work-oriented person trips by METRO or bus, 10 percent walk-on trips, and 70 percent private auto trips generated by development in Friendship Heights can reasonably be assumed.

- 5. At a modal split of 20 percent, the study assumes anticipated vehicle trips per evening peak-hour on the basis of 0.7 vehicle trip per residential dwelling unit, 1.5 vehicle trips per 1,000 square feet of office space, and 3.6 vehicle trips per 1,000 square feet of retail commercial.<sup>2</sup>
- 6. Future mixed office and retail development in Friendship Heights, unless specifically controlled by conditions of the Sector Plan, will continue to reflect the current mix of approximately 65 percent office and 35 percent retail commercial uses.
- 7. Traffic generated by the existing GEICO office building, although the building is outside the CBD limits, must be included for purposes of calculating traffic flows and limitations.
- 8. Land presently zoned R-H and recommended to be retained in that category will develop to maximum permissible density; i.e., 43.5 dwelling units per acre.
- 9. Existing development in the Friendship Heights CBD (Maryland only), including three residential structures now under construction is: 1,028,000 square feet of office space; 437,000 square feet of retail commercial space; 2,999 dwelling units; and 230 motel units.

Tusing somewhat different assumptions with regard to TOPICS improvements, the District of Columbia estimates traffic capacity at about 10,000 trips for Level of Service D.

<sup>&</sup>lt;sup>2</sup>District of Columbia assumptions, based on 30 percent modal split, were .05, 1.1, and 3.6 vehicle trips per 1,000 square feet of floor area, respectively, for residential, office, and retail use.

- 10. The Inter-jurisdictional Policy Task Force on Friendship Heights, composed of members of the Montgomery County Planning Board, the National Capital Planning Commission, and the District of Columbia government, on August 30, 1973, agreed that available new trips should be allocated to the two jurisdictions proportionate to the size of the respective areas; i.e., two-thirds to Montgomery County and one-third to the District of Columbia (see Appendix E).
- INVESTIGATION OF ALTERNATE METHODS OF REDUCING DEVELOPMENT SCALE

In determining the development scale recommended in the Sector Plan, a number of alternatives were investigated. The development potential possible under the existing zoning maps was calculated. The effect of lower density zones available at the time the Preliminary Sector Plan was being prepared for public hearing was also examined. Since only "Euclidean" zones may be imposed by sectional map amendment, no "floating" zones (R-H, R-T, R-CBD, etc.) could be considered. None of the then available "Euclidean" zones meet the tests of reducing peak-hour traffic flow and compatibility with existing uses or the necessary tests of reasonableness. The new CBD zones, however, can be applied by sectional map amendment; can provide greater control over development to keep it in scale with traffic capacity; and can meet the necessary tests of reasonableness, when applied with care in Friendship Heights.

#### • DEVELOPMENT RECOMMENDATIONS

Since any appreciable widening or other improvement of feeder roads to expand traffic-carrying capacity is accepted in this Sector Plan to be virtually impossible and/or undesirable, due to fiscal constraints and environmental impact,

the Sector Plan concludes that the only feasible way to bring development scale to a more nearly tolerable balance with traffic-carrying capacities is to limit the amount of development. On this basis, the following recommendations apply until such time as a demonstrable increase in the traffic-carrying capacities of feeder roads is made or until a truly workable alternative to the private automobile can demonstrate an appreciable reduction in road traffic in the Friendship Heights CBD (see Figure 5).

- Reduce the size of the CBD and rezone the resultant CBD to the CBD-1 and CBD-2 categories, attaching thereto the development criteria listed in Table II (see also Figures 5 and 7).
- 2. Prohibit the expansion of commercial and highdensity residential uses beyond the limits of the recommended CBD boundary.
- 3. Restrict expansion of Parcel 3 to that permissible under existing R-H zoning (approximately 792 dwelling units) -- This density of development provides an adequate tapering of intensity of land use at the edge of the CBD to protect nearby single-family residential areas in the Town of Somerset. The Friendship Heights CBD limit should be contracted to exclude Parcel 3.
- 4. Allow no further commercial or office development on the GEICO tract and retain present zoning (commercial office under existing structures and single-family residential on the remainder of the property, with special exception permitting parking); allow for the possibility of constructing a single-deck parking structure over the parking lot immediately southeast of the GEICO building.

- Restrict Parcel L to the urban parkland use now existing.
- 6. Allow no further expansion of structural improvements on the land designated as Parcel F, specifically the open area at the northwest corner of Friendship Boulevard and Willard Street--Landscaping of this piece of land is encouraged in the Sector Plan.
- 7. Recommend the assembly of small lots in the area designated as Parcel 6 and develop this area together with Parcel 7 as an integrated residential proposal——As was mentioned previously, in recommendations on transportation, the abandonment of Willoughby Street should be given serious consideration if such a combined proposal provides for adequate ingress and egress.

Table II summarizes the development scale proposals of this Sector Plan. If all vacant or redevelopable land is utilized at the maximum intensity permitted, 4,166 new local trips will be generated. Adding this to the 2,239 new District of Columbia trips and the 6,424 existing trips, a total of 12,919 trips could be produced. Due to constraints of space, time, and cost it is unlikely that every parcel will develop, or will develop to the full amount permissible under its zone. It would appear that no new development will occur on the Woodward & Lothrop tract or on the Chevy Chase Land Company tract during the planning period of the Sector Plan, given the densities allowed or the limitations on buildable area. This would reduce new Maryland trips to 2,030 and keep the total traffic generated below the 11,000 capacity. The redevelopment of Parcels 8 and 12 and the development of Parcel 9 are also problematical, at best, although they have been included in the "Probable Development" column in Table II. Parcel 1 also is shown in the "Probable Development" column (Table II), although it is recommended for public acquisition and use.

Since trip generation figures are, at best, estimates made prior to any actual experience with METRO, and prior to implementation of strict air quality controls which may affect automobile usage, it is essential that the pace and impact on traffic resulting from actual development of private property and public improvements be closely monitored, so that further amendments to the Sector Plan can be initiated to reflect experience.

#### IMPLEMENTING THE PLAN

As an aid in implementation of the Sector Plan, a schedule of sequence of recommended projects and an estimate of associated costs have been prepared. The schedule and estimate, as well as a listing of jurisdictions controlling the proposed programs, are included in Table III and should be used by the various controlling agencies to guide the programming of capital expenditures.

As a further implementation technique, a sectional map amendment shall be prepared by the Planning Board upon adoption of the recommendations of the Sector Plan. A sectional map amendment is a proposal for amendment of the zoning map to reflect the recommendations of the Sector Plan, in effect rezoning all land within the revised CBD boundaries of Friendship Heights to conform with the Sector Plan and reconfirming existing zoning adjacent to the CBD. The sectional map amendment process is a standard tool which is utilized by the Montgomery County Planning Board and the County Council to bring existing and proposed land uses into conformance with sector plans.

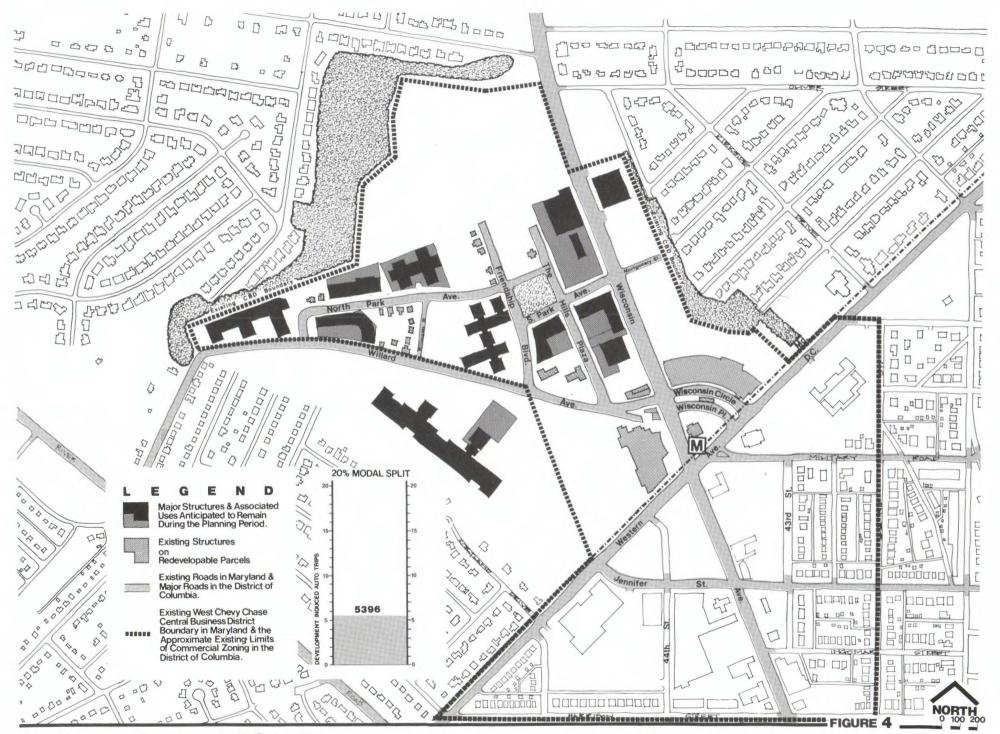


TABLE I
EXISTING CONDITIONS
Developed Parcels

							Traffic Generation
	Parcel	Acres	Square Feet	Zone	Existing Development	FAR	20% Modal Split
Α.	Irene	2.51	109,219	C-2	525 DU's	6.64	368
В.	Bradley House	1.34	58,396	RCBD	291 DU's	8.24	204
C.	Park Tower North	1.05	45,936	RCBD	309 DU's	8.50	216
D.	Highland House	1.06	46,298	C-2	390 DU's	8.45	273
E.	Highland House West	1.06	46,253	RCBD	308 DU's	8.29	216
F.	Willoughby	3.22	140,201	C-2	823 DU's	7.23	576
G.	Chevy Chase Building	1.12	48,755	C-2	250,000 sq.ft. office 15,000 sq.ft. retail	5.12	429
Н.	Holiday Inn	1.81	79,012	C-2	230 motel units 30,000 sq.ft. retail	1.63	288
J.	Barlow Building	1.09	47,230	C-2	235,000 sq.ft. office 20,000 sq.ft. retail	5.10	425
K.	Elizabeth	1.48	64,403	RCBD	353 DU	7.30	247
L.	Friendship Hgts. Park	.93	40,511	C-2	Park	-	_
M.	Saks	1.14	49,444	C-2	104,000 sq.ft. retail	2.10	374
N.	GEICO	22.29	970,830	R-60		.44	762
21.4		3.96	171,620	C-0	508,000 sq.ft. office		
Exi	sting Chevy Chase	_	-	C-2	35,000 sq.ft. office	1.06	377
	enter				90,000 sq.ft. retail		
	sting Woodward & Lothro	p -	_	C-2	178,000 sq.ft. retail	.44	641

		Develop	able Parcels		
Parcel	Acres	Square Feet	Zone	Existing Improvements	
1	.35	15,246	C-2	Two single-family residences	
2	7.97	345,173	C-2	178,000 sq.ft. retail	
3	18.19	792,356	R-H	Vacant	
4	2.03	88,426	C-2 & R-60	Five single-family residences	
5	1.28	55,757	C-2	One single-family residence	
6	1.38	60,112	C-2 & R-60	Nine single-family residences	
7	1.25	54,450	RCBD	Vacant	
8	1.26	54,885	C-2	Car Wash & Gasoline Service Statio	
9	.89	38,768	C-2	Vacant & single-family residence	
10A	6.20	270,072	R-60	Parking by special exception	
10B	1.73	75,359	C-2	90,000 sq.ft. retail	
				35,000 sq.ft. office	
11A	.60	26,136	C-2	Bus station	
11B	.74	32,234	C-2	Restaurant	
12	.22	9,583	C-2	Commercial building	

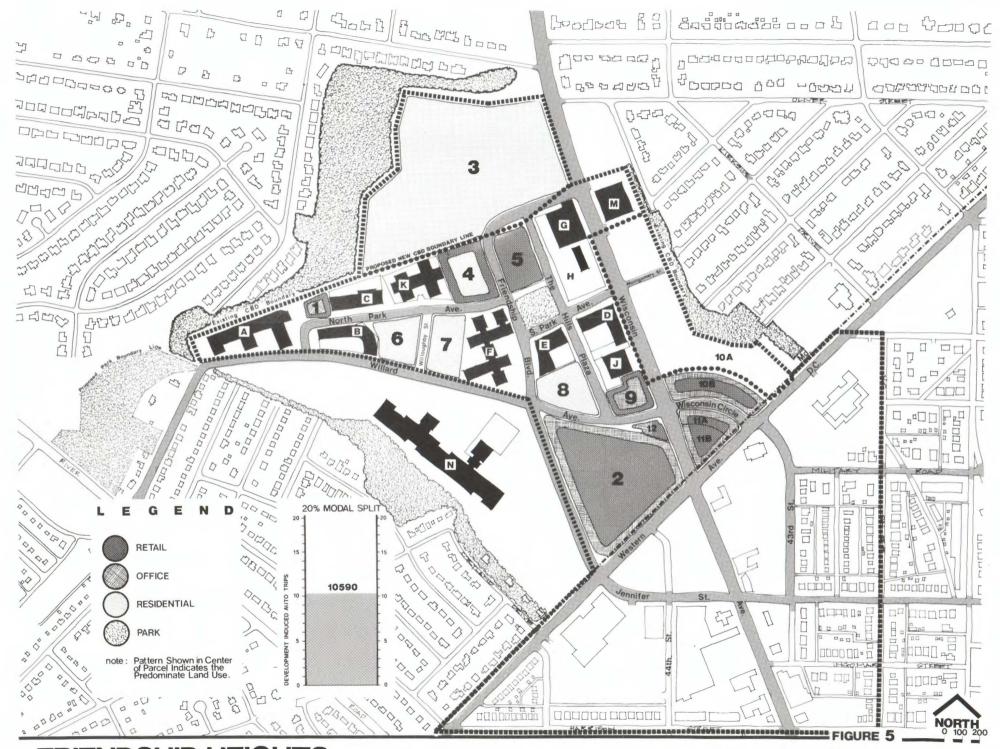
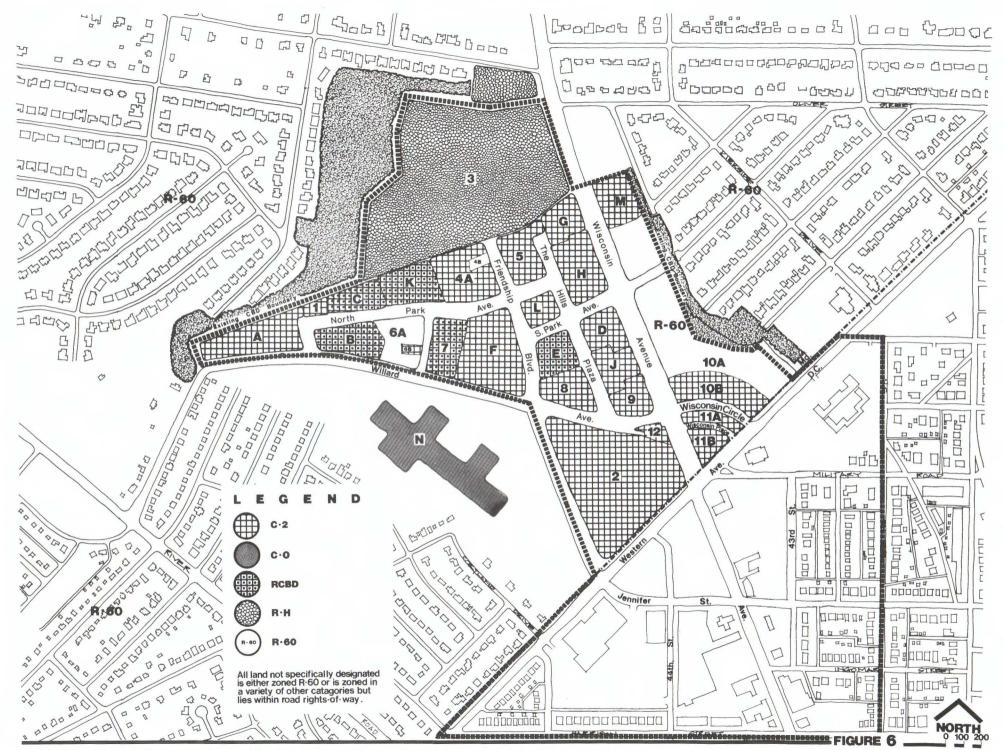


TABLE II PROPOSED ZONING AND DEVELOPMENT CRITERIA

			Maximum Allowable Develo	Probable Development		
arcel	Acres	Zone Proposed	Uses	New Trips at 20% Modal Split	Uses	New Trips at 20% Modal Spli
1	0.35	CBD-1 Standard1	15,500 sq.ft. (10,000 sq.ft. office; 5,500 sq.ft. retail)	37	Same	37
2	7.97	CBD-1 Optional- non-residential	694,000 sq.ft. (197,000 sq.ft. minimum office; 497,000 sq.ft. maximum retail) new trips only		No new development expected	None
3	18.19	Retain existing RH: delete from CBD	792 DU's	554	Same	554
4	2.03	CBD-1 Optional- mixed use <sup>2</sup>	80%± of FAR residential; 20%± of FAR retail; 3 FAR mixed use (200 DU, 55,150 sq.f retail)	340 Et.	Same	340
5	1.28	CBD-1 Optional- non-residential	2 FAR, all retail (111,500 sq.ft.)	401	Same	401
6	1.38	CBD-1 Optional- residential	125 DU/acre (173 DU)	120	Same	120
7	1.25	CBD-1 Optional- residential	125 DU/acre (156 DU)	109	Same	109
8	1.26	CBD-1 Optional- residential	125 DU/acre (157 DU)	110	Same	110
9	0.89	CBD-2 Optional- non-residential	4 FAR: 155,000 sq.ft. (115,000 sq.ft. office; 40,000 sq.ft. retail)	316	Same	316
10A	6.20	Retain in R-60 with Special Excep- tion for Parking		None	None	None
10B	1.73	CBD-2 Optional- non-residential	35% retail; 65% office new trips only	296	None	None
11A	0.60	CBD-2 Optional- non-residential	35% retail; 65% office new trips only			
11B	0.74			396	None	None
12	0.22	CBD-2 Standard- non-residential	2 FAR: 12,450 sq.ft. office:6,700 sq.ft. retail	43	Same	43
			Existing D.C. & Maryland Trips produced by Maryland development	10,5903		2,030 6,424 8,454
		New D.C. trips per	D.C. Sectional Development Plan Total Local Trips			2,329 10,783

1 parcel 1 should provide space for doctors, dentists, and personal service facilities (barber shops, beauty shops, cleaners, etc.)if it is developed privately.
2 parcel 4 should provide service and convenience commercial retail for the residential sector of Friendship Heights to include groceries, drugs, etc.
3 12,223 trips were indicated by the Preliminary Sector Plan, December 1972. The current proposal

represents a 12.66% reduction.



## TABLE III

# CAPITAL IMPROVEMENTS AND STAGING PROGRAM

Pro	oject	Staging	Jurisdiction	Estimated Cost
1.	Friendship Boulevard Extended, Willard Avenue to Western Avenue (Items 1 & 8, Fig. 2) 1/	Complete by July 1976	Montgomery County $\frac{2}{}$	\$580,000 <sup>2</sup> /
2.	Friendship Boulevard Extended, North end of Existing Friendship Boule- vard to Wisconsin Avenue (Item 2, Fig. 2)	To coincide with develop- ment of Parcels 4 or 5	Town of Somerset $2/$	\$180,000 <u>2</u> /
3.	Existing Friendship Boulevard, Widening north of N. Park Avenue (Items 3 & 10, Fig. 2) $\frac{3}{4}$	To coincide with develop- ment of Parcels 4 or 5	Friendship Heights & The Hills Special Taxing District $\frac{2}{}$	\$ 95,999 <u>2</u> /
4.	The Hills Plaza extended to Friendship Boulevard Extended (Item 4, Fig. 2)	To coincide with develop- ment of Parcel 5	Friendship Heights & The Hills, Special Taxing District 2/	\$ 20,000 2/
5.	Willoughby Street Widening (Item 5, Fig. 2)	To coincide with develop- ment of Parcels 6 or 7	Friendship Heights & The Hills Special Taxing District $\frac{2}{}$	\$ 32,000 <u>2</u> /
6.	Willard Avenue-N. Park Avenue, intersection improvement (Item 6, Fig. 2)	To coincide with con- struction of Projects 2 and 3	Montgomery County	\$ 15,000
7.	Willard Avenue-Willoughby Street intersection improvement (Item 7, Fig. 2)	To coincide with con- struction of Projects 2 and 3	Montgomery County	\$ 15,000
8.	Willard Avenue-The Hills Plaza intersection improve- ment (Item 9, Fig. 2)	To coincide with construction of Projects 2 and 3	Montgomery County	\$ 15,000
9.	Recreation facility for Parcel 1, if the land is acquired by a local taxing district	After 1980	Possible future local taxing district and M-NCPPC	\$ 10,000 <u>4</u> /
10.	Dalton Road Urban Park	Acquisition FY 76 Development FY 77	M-NCPPC	\$ 25,000 <u>4</u> /

TABLE III (CONTINUED)

Proj	ect	Staging	Jurisdiction	Estimated Cost
11.	Scenic easement and bicycle path.	After 1980	M-NCPPC	\$ 15,000 4/
12.	Willard Avenue Local Park	FY 75 & 76	M-NCPPC	\$ 71,000 <u>4</u> /
13.	Friendship Park Extension	To coincide with develop- ment of Parcel 5	Friendship Heights & The Hills Special Taxing District	\$ 10,000 4/
14.	Pedestrian Underpass, Wisconsin Avenue at Friend- ship Boulevard Extended (see Fig. 8)	To coincide with construction of Projects 2 and 3	Montgomery County	\$ 45,000
15.	Pedestrian Underpass, Wisconsin Avenue at South Park Avenue (see Fig. 8)	To coincide with construction of Projects 2 and 3	Montgomery County	\$ 45,000
16.	Pedestrian Overpass between Parcels 4 and 5 (see Fig. 8)	To coincide with develop- ment of Parcels 4 and 5	Friendship Heights & The Hills Special Taxing District	\$ 15,000 <u>5</u> /
17.	Pedestrian Overpass between Woodward & Lothrop and the Humble Oil Tract in D.C. (see Fig. 8)	To coincide with develop- ment of the two involved tracts	Montgomery County & District of Columbia	\$ 25,000 <u>5</u> /
18.	Pedestrian Overpass between Woodward & Lothrop and Parcel 8 (see Fig. 8)	To coincide with develop- ment of the two involved tracts	Montgomery County	\$ 20,000 <u>5</u> /
19.	Provision of escalator equip- ment, METRO concourse from northwest corner of Wisconsin & Western Avenues	Prior to METRO station opening	Montgomery County	\$360,000 <u>6</u> /
20.	Cul-de-sac on Cortland Road at Western Avenue	Upon adoption of Sector Plan	Montgomery County	\$ 5,000

<sup>1/</sup> Includes Willard Avenue-Friendship Boulevard intersection improvement (Item 8, Fig. 2).

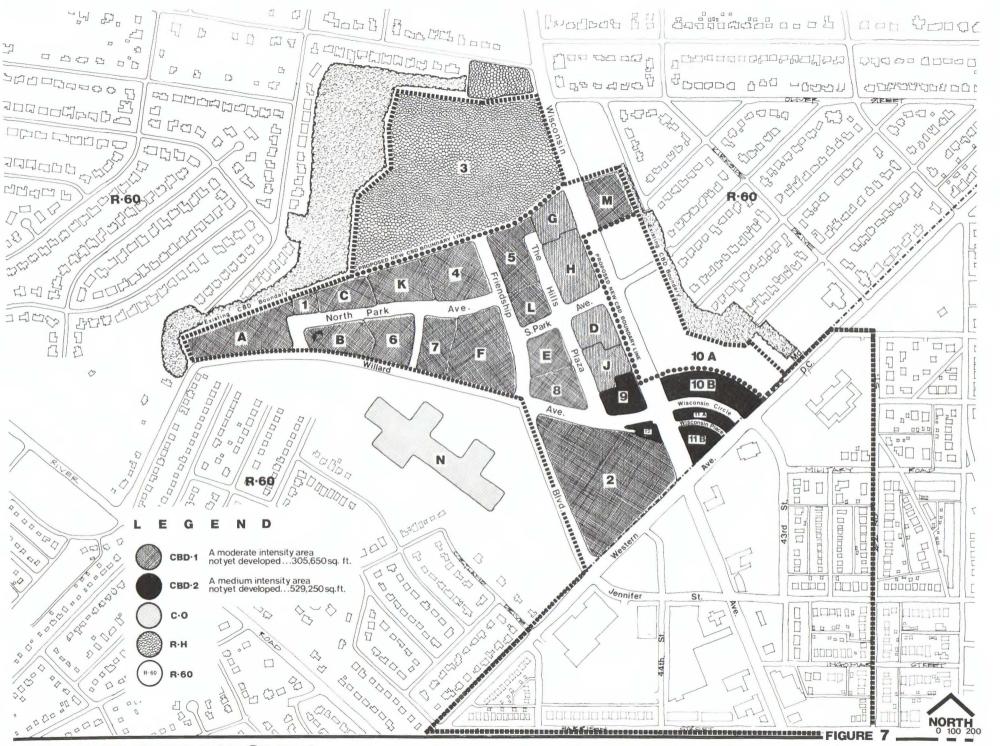
 $<sup>^{2}</sup>$ / A portion of the cost of this project should be recovered from the adjacent developer.

Includes North Park Avenue-Friendship Boulevard intersection improvement (Item 10, Fig. 2).

Excludes land cost.

Costs to be borne by developers.

<sup>6/</sup> In terms of 1976 costs.



The design criteria described for each undeveloped or redevelopable parcel will provide guidance to developers and to the public agencies responsible for development review, in order to achieve a good standard of environmental design and amenities for the benefit of residents, employers, patrons, and the public at large. The general site and building configurations shown in Figure 8, "Design Concept," illustrate how these design criteria could be applied. Figures 9 through 16 are schematic interpretations of design criteria for the individual parcels. These figures are not presented as the only way in which the area, or individual parcels, could be developed. In most cases, the design criteria are intentionally general to allow for flexibility in both building and site design. Some of the criteria are more specific, in order to provide a definitive guide in the review and evaluation of development plans during the site plan review process.

## PARCEL 1 (Figure 9)

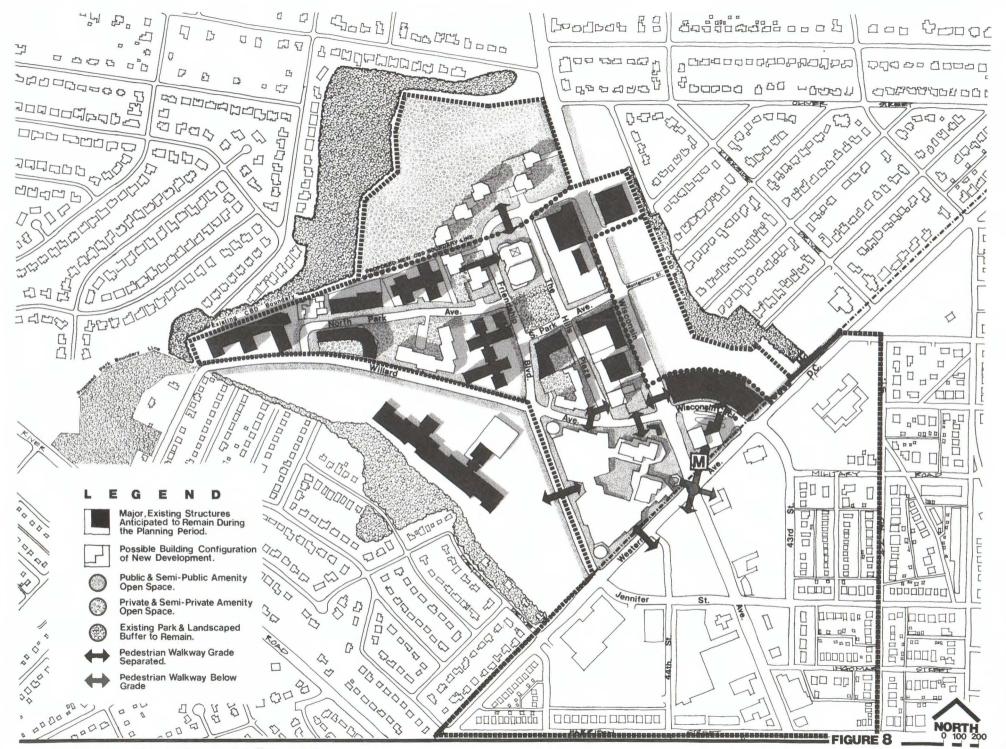
The Sector Plan has previously recommended that this parcel be acquired for public use. If, however, this parcel should remain in private use, we suggest it be developed as follows:

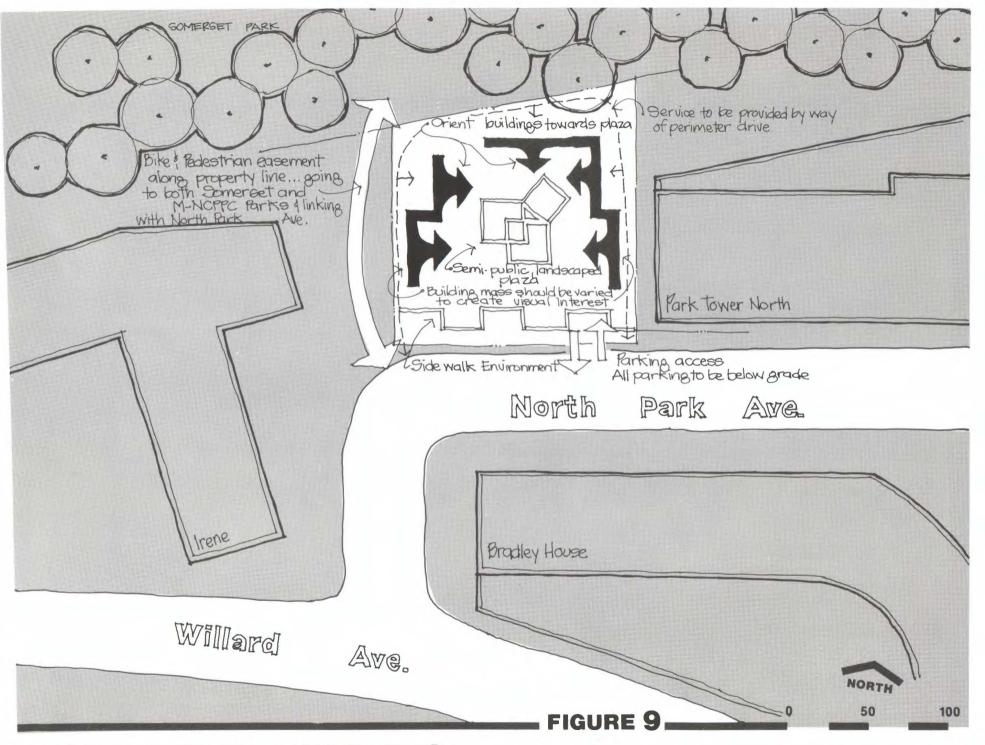
- The design should include a landscaped pedestrian plaza, creating a space that is both visually interesting and functional.
- The structures should be oriented around the landscaped plaza, rather than toward the street.
- Building facades should be staggered so as to create variety and visual interest.
- All parking is to be below grade.

- A pedestrian and/or bicycle easement through the site should be incorporated into the design. This easement might be located along the property line, adjacent to the Irene Apartments.
- All service to the development is to take place from the rear, by provision of an onsite service drive.

## PARCEL 2 (Figure 10)

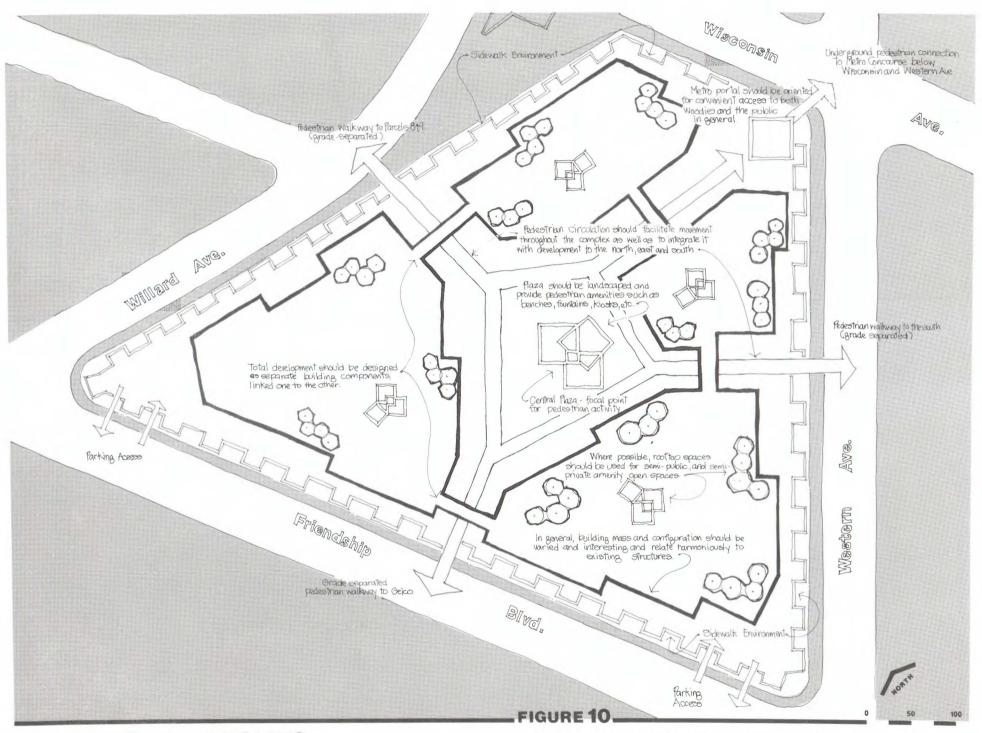
- The building complex should be designed as a series of separate elements interconnected, where appropriate, by grade-level plazas. If the plazas are protected from the weather, a major portion of the covering should be transparent or translucent to impart a feeling of openness.
- The design should, as far as possible, facilitate pedestrian circulation through the block at grade, while also developing gradeseparated linkages to parcels lying to the north, south, and west.
- A direct, grade-separated, pedestrian connection to the METRO mezzanine under the intersection of Wisconsin and Western Avenues should be provided. This connection should aslo have an entrance from the public sidewalk, to provide access at all hours to METRO and be equally accessible to both the development patrons and the public at large.
- Rooftop amenity open space should be provided for private and semiprivate use.
- All parking should be provided underground, with ingress and egress exclusively via Friendship Boulevard.





FRIENDSHIP HEIGHTS

**DESIGN CRITERIA PARCEL 1** 



**DESIGN CRITERIA PARCEL 2** 

 The massing of the complex should be designed so as to create building forms which will have variety and visual interest, relating harmoniously to the surrounding structures.

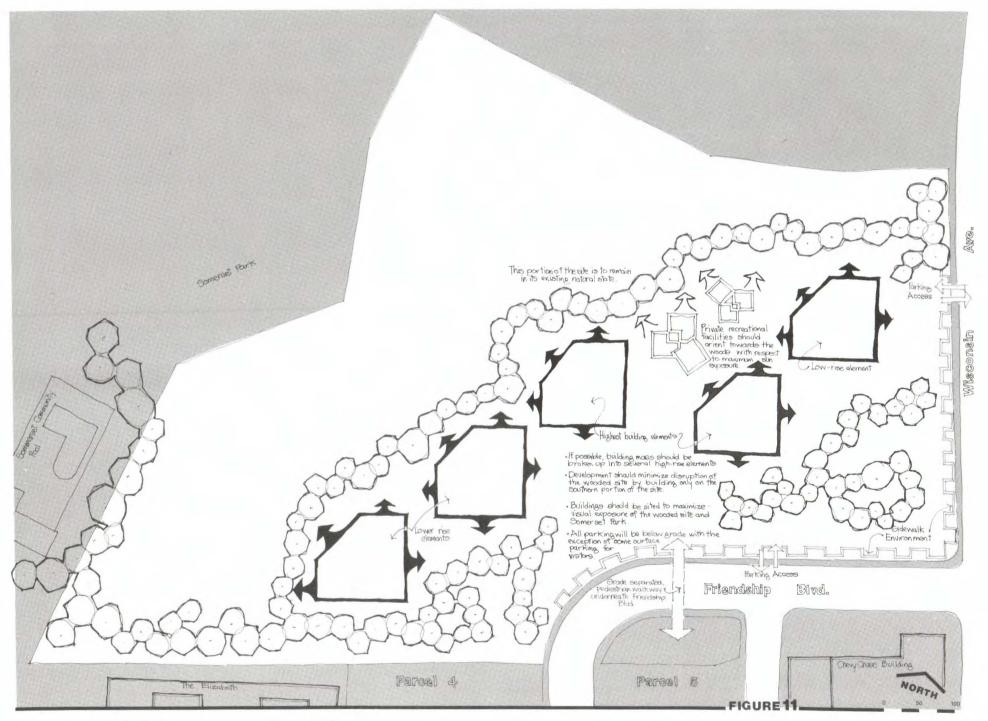
# PARCEL 3 (Figure 11)

- The development should minimize disturbance of the natural vegetation and terrain.
- Structures should be located toward the southern portion of the property in proximity to existing and proposed dense development. This is the flattest area of the site and will require a minimim of grading.
- Buildings should be sited to minimize visual exposure to the north and northwest.
- Buildings should relate to the topography of the site; lower elements should be located along the lower portions of the site, with a gradual step-up to the higher elements along Friendship Boulevard. No building should be higher than the building on Parcel G to the south. This height restriction is imposed so as to achieve a scale-down of building profiles away from the business district.
- The proposed development should include tower elements interspersed with low-rise buildings, in order to assure an aesthetically pleasing blend of the total complex with existing trees and terrain. Development with long, tall, slab structures should be avoided, to diminish the visual impact on adjacent areas.
- Private recreation spaces should be oriented toward the north, blending with the Somerset stream-valley park; however, the open spaces should surround and buffer all sides of the complex.

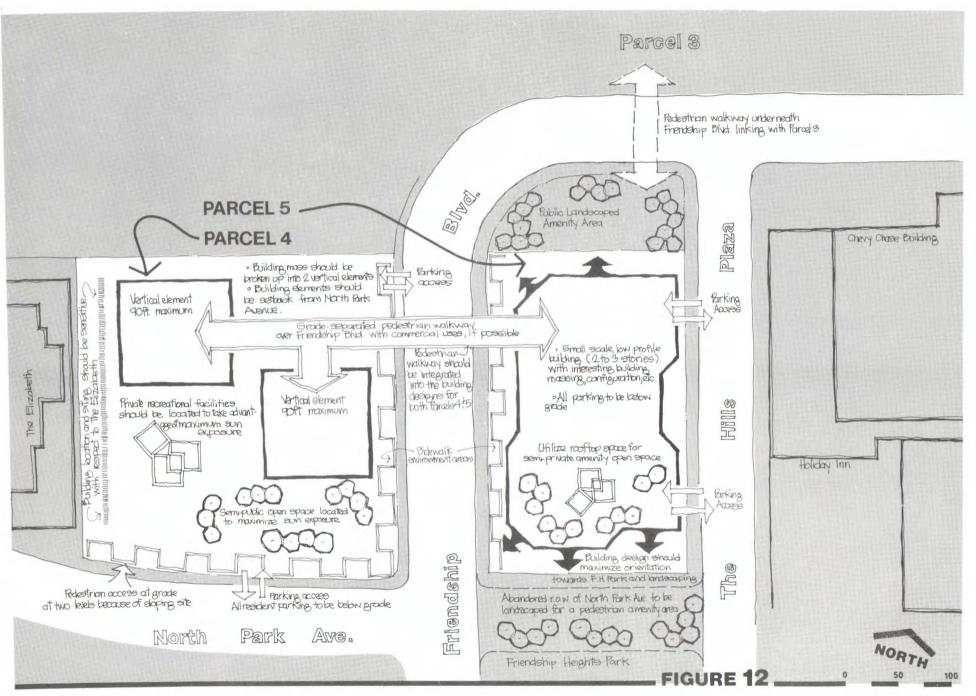
- All resident parking should be provided underground, with only limited, short-term service parking at grade.
- Strong consideration should be given to the provision of a grade-separated, pedestrian walkway across Friendship Boulevard to the west of The Hills Plaza extended.
- Two points of vehicular access should be provided to the site: one along Friendship Boulevard and the other along Wisconsin Avenue as far removed from the Wisconsin Avenue/Friendship Boulevard intersection as possible, preferably opposite Oliver Street.

# PARCEL 4 (Figure 12)

- The slope of the site along North Park Avenue would allow pedestrian access at two levels. Convenience commercial access should be located at the lower level at the western portion of the site, next to the Elizabeth Apartments.
- Any development should be carefully designed and located with respect to the existing structure to the west (the Elizabeth).
- Massing of the buildings should create visual lightness and interest. Preferably, it should be broken up into two or more vertical elements. Buildings should also be set back as far as possible from North Park Avenue, to achieve a sense of openness, to provide landscaping along the streets, and to create a generous pedestrian environment at sidewalk level.
- The development should incorporate a gradeseparated pedestrian bridge over Friendship Boulevard, linking Parcels 4 and 5. Logically, the bridge should link with the retail commercial uses authorized for Parcel 4.



**DESIGN CRITERIA PARCEL 3** 



**DESIGN CRITERIA PARCELS 4&5** 

- Private and semipublic open space should be oriented toward North Park Avenue to achieve maximum exposure to sunlight.
- All parking is to be below grade with access only via North Park Avenue.
- Rooftops should be utilized as amenity open space, whenever feasible.

### PARCEL 5 (Figure 12)

- Structures should be of modest scale and of a low profile (2 to 3 stories). They should be visually interesting and should relate harmoniously with the surrounding existing structures.
- Rooftops should be utilized as amenity open space, whenever feasible.
- The design of the development should incorporate the grade-separated pedestrian bridge, indicated under Parcel 4.
- The main pedestrian entrance for the complex should be oriented toward Friendship Heights Park and the abandoned landscaped portion of North Park Avenue.
- Parking should be provided underground, with parking and service access only via The Hills Plaza.

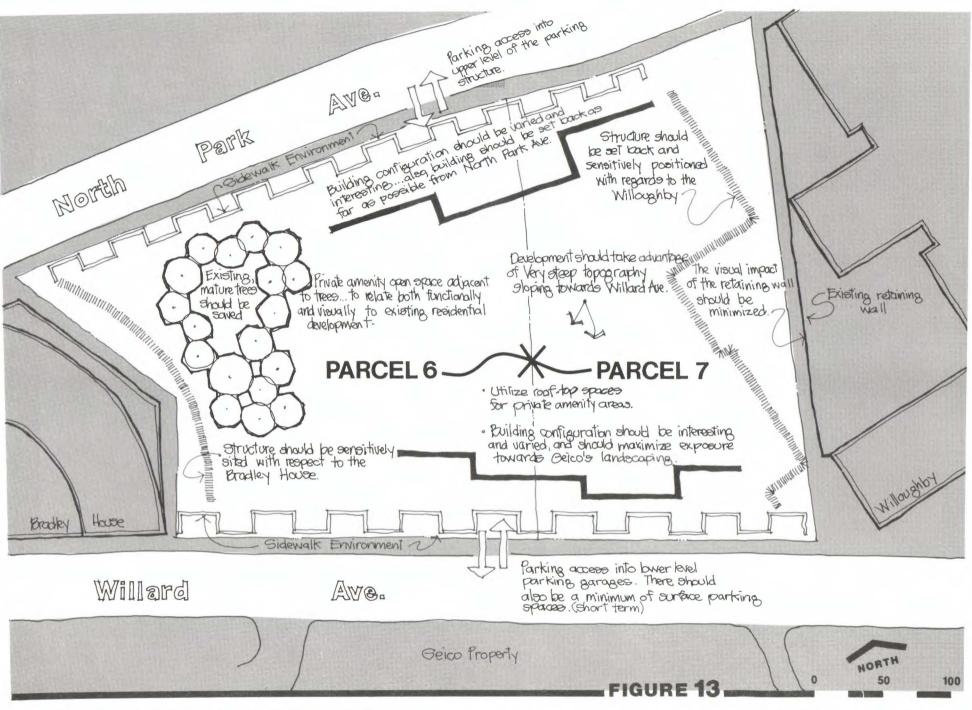
#### PARCELS 6 and 7 (Figure 13)

- These parcels should be developed jointly.
- The complex should be well-sited with respect to the adjoining structures (Bradley House and The Willoughby) so as to achieve good spacing, and to avoid overshadowing the street and adjoining development.

- Some of the existing, mature trees on both parcels should be saved and incorporated in the landscape design.
- The development should be designed so as to create a sizeable amenity open space, oriented toward North Park Avenue and the high-density residential structures to the northwest. This will tend to alleviate the growing "canyon" effect of North Park Avenue.
- Resident parking should be provided underground, with only a limited amount of shortterm service parking at grade.
- Both Willard Avenue and North Park Avenue should be utilized for ingress and egress to and from the underground parking facilities.
- The development should be oriented to maximize the visual effect of the landscaping on the GEICO property, as well as to maximize the view and utility of the open space provided on the site.
- The design should minimize the impact of The Willoughby's retaining wall on any proposed development by careful orientation and by the massing of proposed building and landscape elements.
- Whenever possible, rooftop space should be utilized as areas for active and/or passive recreation.

### PARCEL 8 (Figure 14)

 The building should be designed and located on the site so as to perform the "turning-of-the corner function" in the best possible manner, as well as to provide a maximum of private amenity open space on the site.



**DESIGN CRITERIA PARCELS 6&7** 

- Building mass and configuration should be kept to a low profile and should provide architectural variety, while harmonizing with existing structures. Private recreation areas should be oriented to maximize sun exposure.
- · All parking should be underground.
- Access to underground parking should be limited to The Hills Plaza.
- Rooftops are to be utilized as amenity open space, whenever feasible.

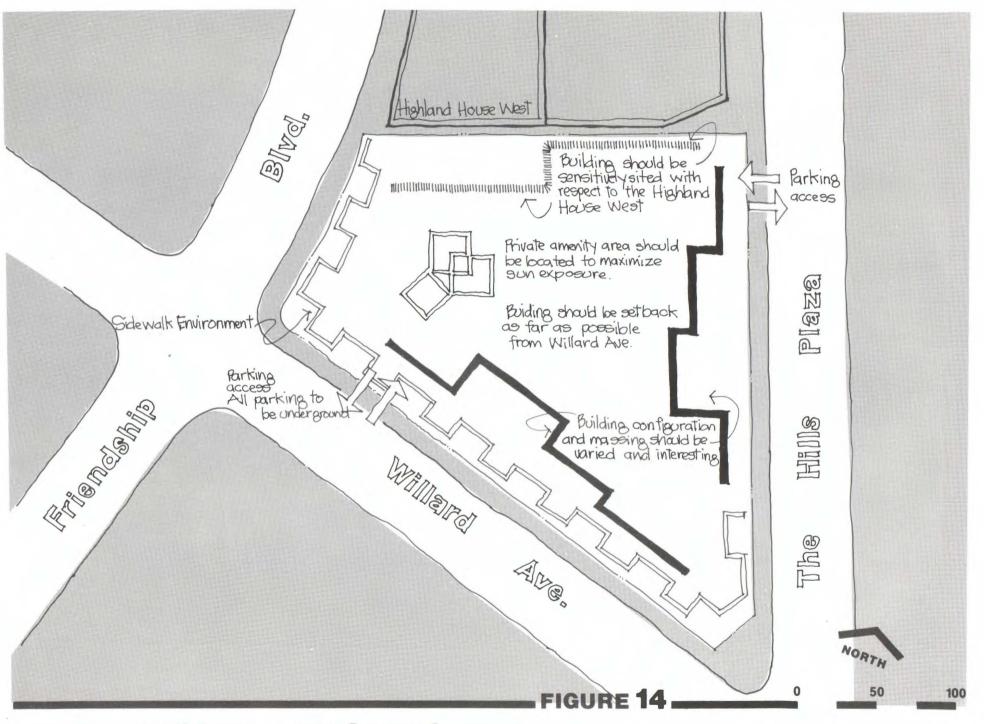
## PARCEL 9 (Figure 15)

- At least 40 percent of the site should be developed as semipublic open space oriented to Wisconsin Avenue. The topography of the site would make it possible to develop a terraced, sunken plaza with the possibility of utilizing landscaping, fountains, benches, and other amenities to add convenience and interest. Commercial space could be developed at the lower plaza level and linked to the entrance of the office structure.
- A grade-separated, pedestrian walkway should be developed from a lower plaza, across Wisconsin Avenue, to the development on Parcels 10A or 10B. It would also be desirable to connect retail commercial facilities with this walkway to add interest and amenity for the user. Another pedestrian walkway should link Parcel 9 to Parcel 2, across Willard Avenue.
- The proposed building should be sited so as to maximize sun exposure to the sunken plaza.
- All parking is to be provided underground, with access only from The Hills Plaza.

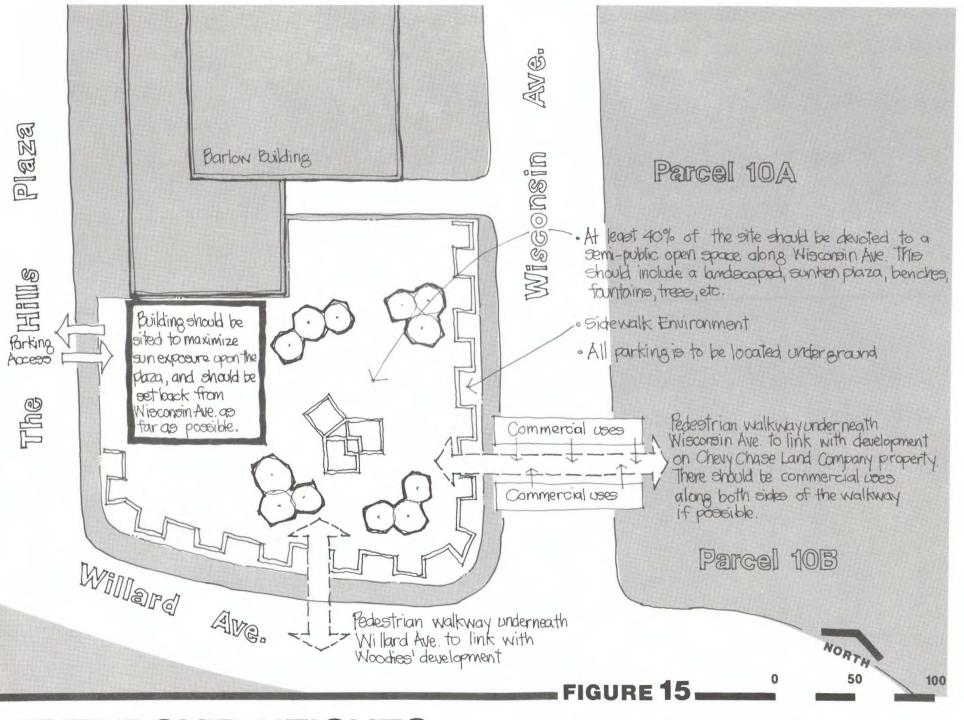
 Rooftops should be utilized as amenity open space, whenever feasible.

## PARCELS 11A and 11B (Figure 16)

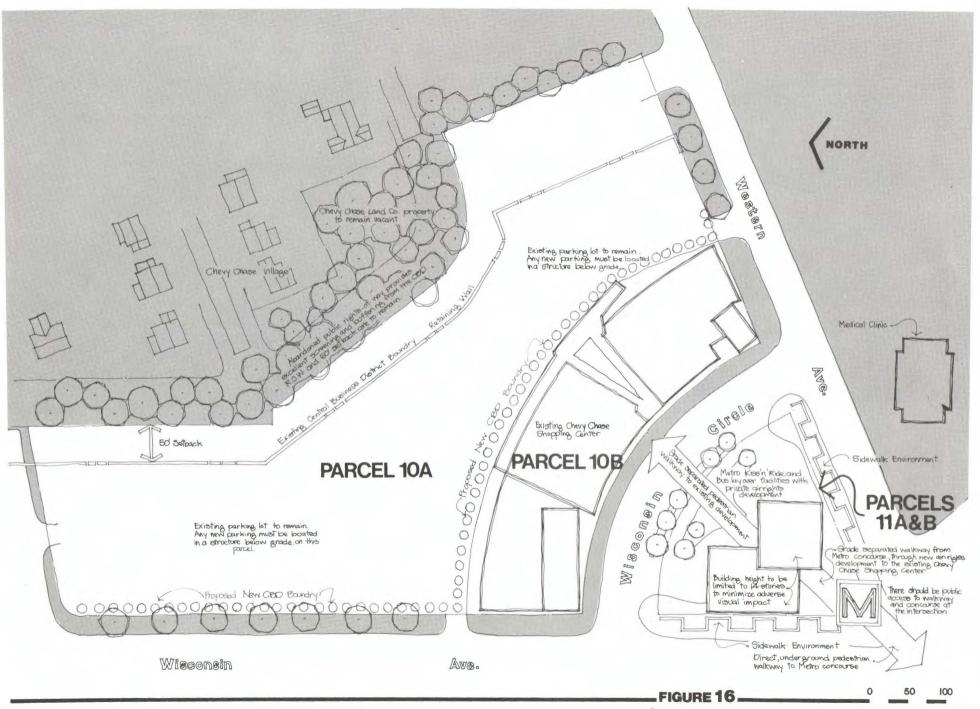
- Air rights and subterranean development rights over and under the METRO "kiss-n-ride" and bus layover facilities should be coordinated with WMATA so as to provide an attractive, convenient METRO entrance to Friendship Heights.
- There should be a grade-separated, pedestrian walkway from the METRO concourse to the new development on Parcels 11A and 11B, thence to the existing Chevy Chase Shopping Center on Parcel 10B, and to the parking facility on Parcel 10A. There should also be public access to the grade-separated walkway and concourse from the sidewalk.
- Building height should be limited to 14 stories. A building of greater height would have an adverse visual impact upon the Chevy Chase Village residential area.
- The building facade should be designed so as to create architectural variety and visual interest. Also, because of the highly visible location of the building, special consideration should be given to the color and texture of the building materials used so that the development relates harmoniously to the existing character of the area.
- The design should provide for the maximum of amenities and landscaping in the public areas between the "kiss-n-ride" facilities and the METRO portal. It should also facilitate pedestrian circulation to and from the portal.



**DESIGN CRITERIA PARCEL 8** 



**DESIGN CRITERIA PARCEL9** 



**DESIGN CRITERIA PARCELS 10 & 11** 

PARCELS 10A, 10B, and 12

These parcels are not recommended for redevelopment.

## SIDEWALK ENVIRONMENT

The prototypical design shown in Figure 17 is provided to guide the development of side-walks and plazas that are dedicated to public use. All such public spaces adjoining developable or redevelopable parcels should be improved at the time of the development of the parcel in question, according to detailed design criteria, for which Figure 17 is a general guide. Design, texture, and colors of sidewalk elements should harmonize with materials of adjacent development.

Submittal of such projects for site plan review, as now required in the CBD zones, will ensure conformance with desired design standards and provide amenities required by the County. In the interest of continuity, development plans for sidewalks and plazas should include proposals for development of adjoining parcels of land.

The hypothetical segment of a sidewalk environment depicted in Figure 17 satisfies the need for safe, efficient pedestrian movement, as well as for visual interest, aesthetic design, natural landscaping, and a variety of pedestrian amenities, all of which are essential to achievement of an exciting, stimulating urban environment. Well-designed benches, pavement, plantings, and other sidewalk elements can make the urban spaces more enticing than they otherwise might be.

The sidewalk width may vary (indeed it should vary to provide occasional plazas and seating areas); but, in any event, the sidewalk should be not less than 15 feet wide. In those

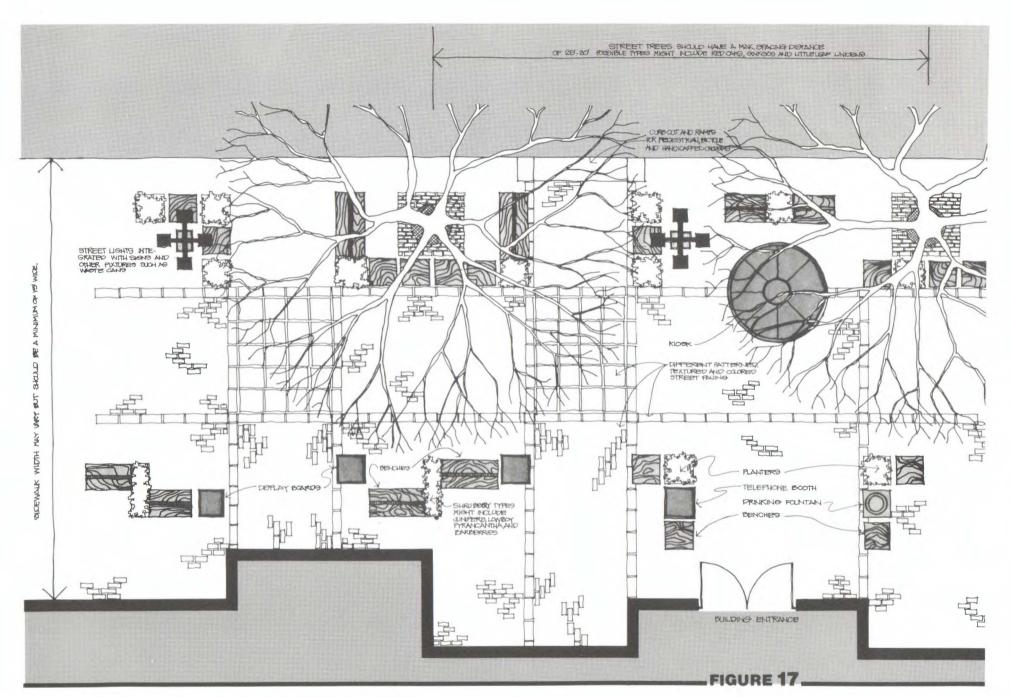
areas where the existing sidewalk right-of-way width is less than 15 feet, the developer should be required to dedicate and improve a minimum width of 15 feet.

Elements of the sidewalk environment that merit attention in development and design might include:

- Benches
- Planters
- Trees
- Drinking fountains
- Telephone booths
- Kiosks
- Display and advertising booths
- Street lights, signs, waste cans, mail boxes, display cases, seating, and similar elements
- Street paving (texture, color, pattern)

Trees and plantings are elements vital to the urban environment. They afford people contact with nature and perform a much-needed physiological function in the provision of oxygen, while removing carbon dioxide from the air. Tree foliage can form a visual screen at the street edge, while softening the hard surfaces and material with the green leaves, texture, and shadow—yet allow visual perception of shops and offices.

Maximum distance between trees should be 25 to 30 feet, depending upon the planting type used. Suggested trees for sidewalk planting might include red oak and little leaf linden. Suggested shrubbery for landscaping might include juniper, lowboy pyracantha, barberry, and ivy.



TYPICAL SIDEWALK ENVIRONMENT

Various special problems associated with the Friendship Heights Business District and environs have been investigated during the preparation of this Sector Plan. The following recommendations are addressed to these problems.

PROTECTION OF RESIDENTIAL AREAS SURROUNDING
THE CBD

A major goal of the Bethesda-Chevy Chase
Master Plan, which is reaffirmed in this Sector
Plan, is to protect and preserve the fine residential neighborhoods which surround the Friendship Heights Central Business District. These
communities of single-family homes are among the
most pleasant, desirable neighborhoods in the
County. The residents of these areas are dedicated to the preservation of their homes and
communities as attractive single-family areas; and
the Sector Plan proposals, relative to road systems
and development scale, as well as the specific
recommendations of this section regarding buffers
and traffic protections, are intended to endorse
and further this objective.

Careful study of the physical features of the Friendship Heights area shows that existing street patterns, culs-de-sac, green strips, and abrupt changes in grade between the CBD and surrounding neighborhoods already provide for these residential communities considerably better buffer protection than is in evidence for residential neighborhoods adjacent to other County CBD's. Some of the communities near the Friendship Heights CBD, however, suffer inroads of traffic congestion and parking, derived from increased activity in the CBD, which will worsen with added development unless programs are undertaken to preclude the imposition of further traffic and parking impact on these areas. The Sector Plan recommends a

series of measures, designed to protect the communities surrounding the CBD from the impact of traffic and parking generated by increased CBD activity.

The Sector Plan makes the following evaluations and recommendations, beginning at the eastern edge of the existing CBD at Western Avenue and moving counterclockwise around the existing CBD boundary line:

- 1. Chevy Chase Village Area, East and Northeast of CBD
  - a. That area of Chevy Chase Village immediately adjacent to the Chevy Chase Center parking lot benefits from a topographic barrier in the form of an abrupt change in grade, achieved by a tall retaining wall, and from screening by dense plantings at the top of the retaining wall. These plantings are in rights-of-way of two unimproved streets-Grove Street and Belmont Avenue. These planting areas should be preserved as unimproved rights-of-way; the residential streets of Chevy Chase Village which presently end in culs-de-sac (Park, Center, and Grove Streets and Montgomery Avenue) should not be connected as through streets.
  - b. The area adjacent to Saks' parking lot also is buffered by heavy plantings and by a retaining wall along the greater part of its common boundary with the Village of Chevy Chase. The proposal for removal of the land presently zoned R-60 from the CBD and the conditions of the currently existing special exception that grants parking use of this land offer adequate physical protection for the adjacent residential community.

c. The community northeast of the Chevy Chase Shopping Center parking lot already suffers from automobile parking spillover from the CBD. Unless positive action is taken to protect these residential streets from business parking, the condition will worsen, as more development occurs in the CBD. The Sector Plan, therefore, recommends the adoption of legislation limiting parking on these streets to the automobiles of residents and their quests and to delivery vehicles and others needed to service the residences. Residents' cars might be identified by stickers or other means, and some device would have to be created to provide for the temporary and shortterm parking of service vehicles and quests' cars. Until such legislation is approved, however, the Sector Plan recommends that two-hour parking limits be imposed on the affected residential streets and that this parking restriction extend a minimum of one-half mile into the developed single-family residential area.

### 2. Somerset Area

The Town of Somerset is adequately buffered from the CBD by existing parkland. The dense woods in the Somerset Park should be preserved in a natural state.

#### 3. Areas West of GEICO

Although the GEICO tract lies just outside of the CBD boundary line, the real "edge" condition to be addressed is GEICO's boundary with the Brookdale residential community, located southwest of GEICO. Since conditions vary along this perimeter, various segments are considered individually.

- a. The GEICO tract boundary from Willard
  Avenue to 300<sup>±</sup> feet southeast of the end
  of Sherrill Avenue is fenced and planted
  on the GEICO side. The preservation of
  this green buffer is assured by conditions
  of the special exception granted on the
  GEICO property.
- b. Existing culs-de-sac on residential streets in this sector should be preserved.
- c. The mature trees on the GEICO parcel, located southwest of the GEICO office building and extending across Dalton Street, should be preserved and this area retained as open space for use by area residents and GEICO workers. No additional special exceptions should be granted on the GEICO property, zoned R-60, that will permit this area to be disturbed. The objective of buffering the neighborhood from the GEICO development is assured by maintaining the area as a buffer under the currently existing special exception.
- d. The rest of the boundary, extending to Western Avenue, will be adequately buffered when existing plantings mature.
- e. Cortland Drive should be terminated in a cul-de-sac near Western Avenue, in order to eliminate an increasing traffic problem caused by use of this street as a shortcut.
- f. Shortcut traffic through the intersection of Westport Road and Merivale Road has intensified recently and will continue to do so, unless remedial steps are taken. The Sector Plan recommends that the Montgomery County Department of Transportation undertake a study of the feasibility of barricading this intersection to prevent traffic's passing straight through.

- g. Recommendations for the use of limited parking regulations to deal with the problems of business district overflow parking should be applied to the residential area southwest of GEICO, as well as to portions of Chevy Chase Village (see page 59, 1.c.).
- 4. Communities in River Road Area, West of CBD

The protection of fine, existing residential neighborhoods from the through traffic and overflow parking originating from the CBD may necessitate some street closings, traffic regulations, and parking limitations in areas farther removed from the CBD than those described above. Public safety is an important aspect since these communities have narrow streets; most lack sidewalks; and few of the children are served by school buses.

The Sector Plan recommends that the staffs of the Department of Transportation and the Planning Board conduct joint studies to determine how the existing and potential problems of these affected residential areas can best be resolved. Such studies should examine the feasibility of dead-ending or vacating existing unimproved rights-of-way, to prevent the penetration of through traffic into residential neighborhoods. In separate actions, the Planning Board has recommended to the County Executive that Baltimore Avenue be made discontinuous.

#### COMMUNITY FACILITIES

In response to comments from witnesses at the public hearing, County agencies have been surveyed to determine the adequacy of existing and planned public facilities in Friendship Heights. For the most part, all agencies report that the area is adequately served by community facilities. In

addition, a number of new facilities are planned or programmed for locations within service distances of Friendship Heights.

### 1. Libraries

- a. Existing Library Facilities
  - (1) Little Falls Community Library, Westbard and Massachusetts Avenues
  - (2) Chevy Chase Library, 8005 Connecticut Avenue
  - (3) District of Columbia libraries also serve the area. Branches are located at Chevy Chase Circle, Cleveland Park, and Tenley Circle.
- b. Proposed Library Facilities
  - (1) A Bethesda Regional Library west of Arlington Road is currently being planned and is programmed for construction to begin in fiscal year 1974.
  - (2) A deposit library collection (rotating) is to be located in the Senior Citizens' Center in Bethesda.

No new libraries are recommended for the Sector Plan area. In the event that a community center is developed in Friendship Heights, see page 62, 4b(1), the library system should consider providing catalogue service there, to enable residents in the area to order books through the community center.

- 2. Fire Stations and Rescue Facilities
  - a. Existing Fire Stations
    - (1) Station No. 6 (primary service station), Wisconsin Avenue and Bradley Boulevard
    - (2) Glen Echo Station, Sangamore Road and Massachusetts Avenue
    - (3) Chevy Chase station, Connecticut Avenue and Dunlop Street (north of East-West Highway)
  - b. Existing Rescue Facilities
    - (1) Bethesda-Chevy Chase No. 1, Auburn Avenue, to be relocated to Battery Lane and Old Georgetown Road
    - (2) The District of Columbia responds upon request; the closest D.C. facility is located on Wisconsin Avenue at Tenley Circle.

There are sufficient fire-fighting and rescue service facilities available to serve the Friendship Heights area.

The Montgomery County Chief of Fire Services reports that there are evidently no significant problems relative to fire fighting equipment service of central business districts. An Insurance Services Office Report and a Master Fire Defense Plan for Montgomery County are being prepared (in 1973). When available, these may offer further information on the fire service needs of the area.

- 3. Postal Facilities
  - a. Existing Post Offices
    - (1) Wisconsin Avenue and Montgomery Street, Bethesda
    - (2) Connecticut Avenue and Laurel Parkway, Chevy Chase
    - (3) Wisconsin Avenue and Upton Street, Washington, D.C.
    - (4) Connecticut Avenue and Northhampton Street, Washington, D.C.
  - b. Proposed Postal Facilities
    - (1) New postal facilities are under study for the area. The U.S. Corps of Engineers, which serves in a technical advisory capacity to the U.S. Postal Service, is presently examining the feasibility of locating carrier facilities on Connecticut Avenue at Manor Road and at other sites in the vicinities of the Montgomery Triangle, Parking Lot No. 31 located on Bethesda Avenue, the B & O Railroad, and the fire station on Bradley Boulevard.
    - (2) A request for a postal finance station has been submitted and is presently being considered for location adjacent to Westbard Shopping Center.

# 4. Community Centers

- a. Existing Facilities
  - (1) The Bethesda-Chevy Chase Recreation Center (Senior Citizen Center) on Walsh Street will be used for senior citizen programs operating on a daily basis on an interim basis over the next two years.
- b. Proposed Facilities
  - (1) Parcel 1--Parcel 1 should be acquired by the Villages of Friendship Heights and The Hills for public use. The Maryland-National Capital Park and Planning Commission should construct a community center on this parcel and operate it in cooperation with the Villages and the Montgomery County Recreation Department. The center should be designed to serve special needs in the community which will not be met by the facilities in Willard Avenue Local Park or by those in the Senior Citizen Center. The community center may provide, for instance, both indoor and outdoor recreation facilities of primary interest to the apartment residents of Friendship Heights. Consideration could be given also to the feasibility of using existing houses on this parcel for community services on an interim basis.
  - (2) Community Space in Housing Authority Building for the Elderly, East-West Highway and Pearl Street

This facility is proposed to be the

largest of the communitywide centers in the County and will contain community (recreational and service) space. This Center is to be funded by The U.S. Department of Housing and Urban Development and the County and will be heavily programmed by the County Departments of Recreation, Human Resources, Housing Authority, and Social Services. Medical services will also be available.

Its facilities could be programmed to share the community space and provide "inter-generational" activities.

The County is working to provide transportation for the elderly, to facilitate use by the elderly of these facilities.

- (3) A community center is needed within the apartment area in Friendship Heights to serve the special interests and needs of the largely adult population and to provide adequate space for community activities.
- (4) Community Centers/Small Schools Study

This study was requested by the County Executive and County Council and is being prepared by the Board of Education staff, together with citizens and public representatives, to determine the economics of and opportunities for the closing of small schools and to examine alternatives and utilization for those sites for community centers and other activities.

5. Parks

The Central Business District of Friendship Heights is virtually surrounded by public and private open space. This space provides area for passive recreation and visual relief for the residents. It also has a potential for use for some forms of active recreation.

There are a number of additional parcels located in and around the central business district that have been selected as suitable sites on which to provide additional parks and recreational facilities to serve the residents of Friendship Heights.

- a. Existing Facilities
  - (1) Little Falls Stream Valley Park
  - (2) Somerset Park
  - (3) Cumberland Park
  - (4) Friendship Heights Village Park
- b. Proposed Facilities
  - (1) Willard Avenue Local Park

This park is programmed for acquisition and development by M-NCPPC in fiscal year 1974. Located at River Road and Willard Avenue, it will be developed as a 7-acre neighborhood park and will include an athletic field; entrance road and parking area; 3 lighted tennis courts; a lighted, paved multi-use court; and playground equipment. Final determinations will be made after recommendations are received

from the citizens associations. Funds for construction have been earmarked for this purpose and are being reserved pending acquisition of the land.

This Sector Plan recommends that demand-activated traffic signals be installed on River Road and Willard Avenue, to provide safe access to the park for residents of the Brook-dale and Green Acres communities.

(2) Dalton Road Park

The approximately one-half acre triangular parcel, owned by GEICO, should be acquired as parkland to provide a small tot lot/play area for the Brookdale-Orchardale community. By placing play equipment in the north central portion of the site, there will be sufficient area for screening from the adjacent houses. Dalton Avenue is to remain open.

(3) Scenic easement, Willard Avenue to Western Avenue

The Planning Board will explore the feasibility of obtaining a scenic easement on the GEICO property to preserve the existing green buffer area and, in addition, should attempt to negotiate the easements necessary between Willard and Western Avenues to provide continuity for a bike and/or pedestrian path system. The ends of dead-end streets should be abandoned, as they protrude into the path route.

(4) Parcel 1

As suggested previously (see page 62, 4. b. (1)), this parcel should be acquired and developed as a community center. The land could be acquired by the Villages of Friendship Heights and The Hills and the construction of a community recreation building could, then, be funded by the County. There are presently two structures existing on the site which, perhaps, could be converted to recreational use.

(5) Bergdoll Tract (Parcel 3)

This 18.19-acre tract remains in its natural state and was proposed as a park by many who testified at the public hearing, conducted by the Planning Board on the Preliminary Sector Plan. Since that time, the Planning Board has carefully studied the feasibility of acquiring this site for park use. Study reveals that purchase at the estimated cost of the parcel cannot be justified in light of the greater need and higher priorities in other down-County communities.

On the basis of cost considerations and the amount of other open space existing in the area, this Plan recommends that the County Council, in cooperation with the governing bodies of the municipalities and special taxing districts and with the citizens associations of the area, determine whether or not the General Assembly should be asked to authorize

establishment of a special taxing district or levy in the area for the purpose of acquiring parkland desired by the residents beyond those specific additions recommended in this Sector Plan.

Establishment of a special taxing district to acquire land for public use requires State legislation; and the probability is that it may require several communities joining forces to provide the necessary funds. This special taxing district, if and when created, could consider the acquisition of Parcel-3 and also that of other parcels in the area to be purchased for park use.

In the event that Parcel 3 is not acquired by a local taxing district for park use, the Sector Plan designates this tract for multi-family residential development at 43 dwelling units per acre under the R-H zone. This will require that 50 percent of the site be maintained in open space. The Design Concept (Figure 8) indicates that the open space should be maintained adjacent to the Somerset Park, thus reinforcing the open space buffer.

(6) Somerset-Dorset Park

As stated in the Approved and Adopted Master Plan for the Bethesda-Chevy Chase Planning Area, October 1970:

"The Town of Somerset has applied for Federal funds to acquire property for park purposes in the northwest and southwest quadrants of the intersection of Dorset and Wisconsin Avenues. This park acquisition is desirable and is endorsed by the County Council."

On September 11, 1973, the Somerset Town Council reaffirmed its intention to acquire this property. The Sector Plan recognizes this proposal.

The Town of Somerset's proposed acquisition of this 1.79-acre parcel (situated at the southwest corner of the intersection of Dorset and Wisconsin Avenues) and the 2-acre Parreco property (west of the Irene Apartments), together with the Planning Board's programmed acquisition of a local park on Willard Avenue, will provide a continuous strip of parkland from Wisconsin Avenue to River Road.

# (7) Private and Semipublic Open Space

As indicated under "Design Criteria", the Montgomery County Planning Board, through the site plan review process of the CBD zones, will require the provision of additional open space within the CBD. New developments will be encouraged to promote the joint use of parking garages and other commerical and residential structures, to provide certain recreational facilities; e.g., rooftop tennis courts, putting greens, shuffle boards, gardens for active or passive recreation, plazas, and similar amenities.

#### PARKING WITHIN THE CBD

The issue of parking in the Friendship Heights central business district—a problem which, though recognized and considered, is not finalized in the Sector Plan—should be addressed in detail in the comprehensive study of CBD parking problems which was approved by the County Council to be undertaken under fiscal year 1974 budget.

Logically, the "proper" amount of parking is that amount which will provide "ample" automobile parking, yet not so much as to reduce the advantage of METRO, to reduce usage of bus service, and to overload the street system. The parking provisions of the CBD zones, in effect, reduce the amount of parking provided through private construction by approximately one-half the parking area required for comparable uses in conventional zones. The remaining parking requirements can be achieved by creating a parking district, reducing the allowable development scale, or changing the parking standards, as may be recommended by a forthcoming County-wide study of parking policies.

Auto storage must be provided for the residents of Friendship Heights, regardless of the inducements to ride transit for peak-hour work trips. Department store patrons exhibit tendencies to drive autos and should be provided with parking. Finally, there is the spillover problem of all-day parking on nearby neighborhood streets.

An obvious tool to increase modal split is parking control. The groups most likely to use transit are office and retail employees. One way to induce transit ridership of employees, while providing parking for retail patrons, is to structure the parking rates so that there is a low hourly rate for short-term parking (1 to 2 hours) and a high rate for all-day parking (9:00 A.M. to 5:00 P.M.). This implies some

degree of public control over parking, especially the rate structure.

The neighborhood spillover problem has been addressed in the Sector Plan, and a solution is proposed. (See section on "Protection of Residential Areas Surrounding the CBD" and Appendix E).

### BUS OPERATIONS

Buses will play a central role in the functions of the Friendship Heights Central Business District and surrounding communities. The projection regarding modes of arrival, developed by WMATA for 1990, indicates that approximately 85 percent of the METRO patrons boarding during the peak hour will arrive at the station by bus. No auto parking for the Friendship Heights METRO station will be provided by WMATA. The only private vehicle parking accommodations, in fact, will be 32 spaces for temporary parking for "kiss-n-ride" patrons.

The present WMATA proposal calls for all buses entering the CBD either to loop or to lay over in the northeast quadrant of the Western and Wisconsin Avenues intersection. No through bus routes are currently envisioned. The current plan calls for 96 peak-hour buses to serve METRO and the business district in 1990. All of these buses would enter the proposed facility along with the "kiss-n-ride" vehicles bringing patrons into and leaving the METRO station.

There are several disadvantages in attempting to handle all the buses in this fashion. First, all bus-oriented trips are forced into the center of the CBD which is already congested. Second, the outlying sections of the CBD would be best served by a bus network which would circulate throughout the CBD, rather than having all bus activity concentrated at one point. The best bus

system for this area would be one which would provide for layovers (i.e., those buses which will remain stopped for 5 to 10 minutes) to occur in the northeast quadrant of the intersection and allow non-layovers (those buses which stop, load and discharge passengers and continue on) to occur on the street.

To effectuate a bus system such as this will all but require that a multiple-portal entrance to the METRO station be constructed. An entrance of this design would minimize pedestrian-vehicular conflicts and provide safe, easy access to the station. The separating of curb-drop and layover facilities would allow the eventual separation of bus and "kiss-n-ride" activities, in conjunction with a portal, at the south end of the METRO platform and the use of the existing D.C. METRO car barn property for bus layover and/or "kiss-n-ride" patron's autos. This separation could become necessary, if policy decisions are made which will increase the modal split, and, subsequently, the number of buses necessary to serve the area.

The Sector Plan endorses the provision of an additional portal at the southern end of the Friendship Heights METRO station platform to be constructed as part of the initial phase of construction. This new portal should be considered a system cost, rather than a cost borne by the District of Columbia alone. Further, the Sector Plan supports the development of a multiple-portal system at the northern end of the Friendship Heights METRO station.

#### BUS ROUTINGS AND EQUIPMENT

It should be noted that all assumptions made to date, dealing with surface mass transit, are couched in terms of conventional bus systems and conventional 40-to-50-passenger buses. No evaluation has been made of the effects of demand-

responsive bus systems (e.g., "dial-a-bus") or the use of smaller buses for service within residential neighborhoods. To make any such evaluation is beyond the scope of this Sector Plan. Specific bus routes should not be designated, however, without consideration of the types of vehicles to be used.

The Sector Plan recommends that service operated with conventional equipment be restricted to the major arterial roadways. Any service routes by conventional bus systems within established residential communities should be discouraged. Any service in these areas should be provided by vehicles more in scale with the residential character of the existing street network. Most of the residential areas surrounding the Friendship Heights CBD are characterized by treelined, narrow streets which wind through the neighborhoods over rather severe terrain. The widening of these streets to provide for conventional buses would require removal of many trees which are a major environmental attribute of these residential areas. Furthermore, the introduction of heavy bus traffic into these areas would further aggravate an existing safety hazard to pedestrians, especially school children, who must walk along many of the streets without the benefit of sidewalks. The Sector Plan, therefore, recommends that bus service on residential streets be restricted to mini- or midi-bus vehicles, in the capacity range of 7 to 15 passengers and in the size range of large station wagons or small delivery vans, only.

The Washington Metropolitan Area Transit Authority has begun a comprehensive study of bus transportation for the entire Washington, D.C. metropolitan region. The principal result of this study will be a more precise determination of the type bus transit service required to serve, not only METRO demands, but also demands generated by

non-METRO destinations. Specific recommendations on bus service in Friendship Heights should be developed in conjunction with this study. The Montgomery County Planning Board staff will participate actively in this study through membership on a Technical Advisory Committee formed by WMATA.

Consultants for WMATA have completed recommendations on priority bus lanes throughout the metropolitan area. They have recommended that one priority bus lane should be established along Wisconsin Avenue as a "counterflow reversible lane"; i.e., this lane would operate in a southbound direction on the east side of the median during the morning peak hours. The northbound lanes have a lighter traffic flow in the morning peak hours and, therefore, restriction of the lane adjacent to the median to southbound buses would make more productive use of the existing roadway. Additional engineering studies are necessary to determine what improvements may be needed at boarding areas and what appropriate identification signing for the lane will have to be made. The consultants suggest that the system could be placed in operation before the end of 1974. The priority bus lane will aid in achieving the Sector Plan objective for improved transit service and is endorsed.

### AIR OUALITY

The planning area is a part of the National Capital Interstate Air Quality Region where Carbon Monoxide, Hydrocarbons, Nitrogen Dioxide, and Photochemical Oxident air pollution is caused by the use of automobiles by the traveling public. The Sector Plan recognizes the relationship between increased development and increase in traffic.

To reduce air pollution to acceptable levels and to attack the problem in a system-

atic manner on a nation-wide basis, the Federal Clean Air Act Amendments were enacted in 1970; and implementing regulations are being issued by the Environmental Protection Agency (EPA) from time to time, based on optimization of control technology and implementation plans. Similarly, the State of Maryland has enacted the Clean Air Act and promulgates implementation regulations from time to time (after obtaining approval of the EPA wherever necessary).

These laws and regulations, when faithfully implemented by the Federal, State, regional and local governments, should achieve improvement in air quality at acceptable levels. The Montgomery County Planning Board will adhere to and implement the directives of the State of Maryland issued from time to time as a part of the State Air Pollution Control Strategy formulated with the approval of the Federal agencies wherever necessary. These directives may have a regulatory impact on the development proposed in the Plan area, the nature of which cannot be precisely predicted at this time. Additionally, regulations have been promulgated by the Federal EPA requiring the review of complex sources by June 1975. Complex sources are buildings, facilities, and installations that have associated with them vehicular traffic that creates pollution. Since these regulations will not be in effect until 1975, they cannot be incorporated in this Plan. However, the Planning Board is cognizant of the problems and will adhere to the regulations as they are implemented.

The CBD zones, recommended by this Plan for use within Friendship Heights, require that any development which seeks to attain the maximum densities permitted in the zones must apply for permission to utilize the "Optional Form of Development." Under the provisions of the CBD zones, proposed development must provide an

assessment of its environmental impact and must indicate how it conforms to existing State and/or County environmental quality standards. Through this device, plans for proposed development will be reviewed, with reference to impact on air quality; and only development that is not in violation of State or County standards will be permitted to take place.

The Plan, viewed as a whole, utilizes the best planning strategy available to improve the air quality and assimilate the benefits of reduction in emission of auto exhaust pollutants as a consequence of strict enforcement of comprehensive Federal and State laws.

# BASIC BUILDING SERVICES AND STORM WATER MANAGEMENT

The basic building services (sewer, water, gas, electricity, and telephone) are independent variables, as they relate to the study of development scale undertaken in this Sector Plan, that will be available to support development to the extent that the necessary capacity exists. If capacities of various utilities do not exist when projects are proposed, development will be postponed until the necessary capacities are available but will not be permanently curtailed. The current lack of capacity for sewage treatment is a vivid example of this type of temporary constraint on immediate development in the Friendship Heights area. It is anticipated that future expansion of the Blue Plains Treatment Plant and the planned construction of the Advanced Wastewater Treatment facility in Montgomery County will resolve this difficulty. Furthermore, capital expenditures for necessary expansion of sewer line capacities are currently programmed for the next several years to accommodate an expected total increase of about .7 million gallons per day in sewage flow resulting from Friendship Heights

development. The Washington Suburban Sanitary Commission water saving program, including the provision of Plumbing and Gas Fitting Regulations, will continue to be applied, implementing water conservation and waste-water reduction measures.

The management of storm water, as related to new development, is presently being regulated through review of all projects by the Montgomery County Soil Conservation District. That agency requires that new developments provide on-site retention of storm water through use of detention basins, dry wells, rooftop storage, installation of pervious surfaces, and other devices to assure that proposed development will not increase storm water runoff and erosion.

### 1. GENERAL

The modal split is the measure of the distribution of trips being made to, from, and through a given area by the available means of travel by which those trips can be made. 'The modal split (i.e., split of travel into groupings by mode) is generally expressed as a percentage, with the percentage normally reflecting the segment of travel handled by modes other than automobile, including railroads, bus, or rapid transit. Pedestrian trips are normally excluded from such measures, unless specifically indicated, although they may be included in the base. For example, in 1970, the measured modal split for originating work trips in Friendship Heights was 9 percent of the work trips made were by vehicular means other than private cars--in this case, by local transit bus.

### 2. UNDERSTANDING THE MODAL SPLIT

The modal split is affected by many factors, including the quality and availability of transit, the quality and availability of automobile travel, the dispersion or concentration of places of work, and the life style of potential travellers. With regard to the first and third factors, it is significant to point out that modal split is sensitive to directional differences. In most metropolitan areas transit is oriented to a downtown core. Transit availability and quality are generally high in the peak direction in this orientation and frequently low or nonexistent in other directions. As an example, the following table cites a total of 100 work trips being made, 20 of which are by transit for an overall 20 percent modal split. This, however, is composed of a 24 percent modal split in the primary direction, an 8 percent split in one lateral direction, and a zero modal

split in the other. In short, the overall modal split tells nothing of directions which are notably low or notably high.

# HYPOTHETICAL MODAL SPLIT WORK TRIPS ORIGINATING IN ZONE

Trips	By Auto	By Transit	Modal Split
All Directions	100	20	20 percent
Regional Core	67	16	24 percent
Opposite Regional Core	15	3	20 percent
Lateral	12	1	8 percent
Lateral, opposite	6	0	0 percent

### 3. MODAL SPLIT ASSUMPTIONS

The analysis conducted by staff of the Montgomery County Planning Board in developing the Friendship Heights Sector Plan calculated as possible a 20 percent modal split for work trips. This modal split represents work trips originating in and attracted to Friendship Heights. In respect to the factors mentioned in the preceding paragraph, several points need to be noted.

The 20 percent modal split is based upon the coming of METRO in the north-south direction under Wisconsin Avenue, ultimately linking Friendship Heights by rail to Rockville to the north and D.C. to the south. It further accepts that the Washington Metropolitan Area Transit Authority will supple-

ment METRO with a feeder bus network, drawing traffic destined for the METRO system from points east and west and further distributing outbound traffic to the east and west. METRO has projected its share of the peak travel originating at Friendship Heights as 35 percent. The METRO projection for reverse direction travel (i.e., terminating at Friendship Heights) is 17 percent.

Given a realistic set of assumptions of METRO/WMATA transit service at Friendship Heights, a 20 percent modal split is reasonable. Without making changes in the level, the quality, and the availability of that transit service, a modal split higher than 20 percent, while obviously possible, is not likely.

4. INCREASING THE MODAL SPLIT BY LAND USE MODIFICATION

Within the direct purview of the planning functions are certain flexibilities to mold and direct the use of land. Certain land use functions have good transit-trip generation associated with them; for example, office functions tend to have a higher transit orientation than most commercial, and nearly all industrial, functions. Encouragement of transit-oriented development should be fostered to the exclusion of non-transit-oriented development, to modify the modal split upward. Maximum advantage should be taken of proximity to the transit system to utilize this potential most fully. Following are recommendations for increasing the modal split by land use directions:

- a. Requirement that developers of highdensity activities provide direct access into the transit station.
- b. Development of a network of weather protected pedestrian ways for circulation within the CBD and for

transit (METRO/bus) transfer and transit-to-building movements.

- c. Encouragement of local service, commercial facilities within walking distance of residential activities.
- d. Discouragement of all-day residential parking within the CBD (by appropriate pricing and other mechanisms).

On some of these points, some additional explanation may be useful. Transit usage depends not only on the quality and availability of the system, but also on characteristics of the user. While it is clearly outside the realm of public agencies to direct the nature of occupants in buildings, several points can be noted.

Office functions focusing on clerical and paperwork activities which draw workers from lower middle-income ranks will likely have a higher transit usage than the more purely middle-management activities. The persons in the former category are more likely to be transit-oriented to begin with; are more likely to live in areas with good transit availability; and can be more readily attracted to transit by pricing controls. Middle management personnel are more apt to be living in subdivision areas which cannot have effective transit service (poor availability) and are less likely to be willing to abandon the "American Ideal" auto syndrome than others might be.

Residential functions emphasizing occupancy by singles or childless couples, rather than families with children, and by persons over 60 or under 29, rather than in the ages between, will tend to generate a high transit usage. They similarly have an overall lower rate of total trip making.

It must be noted that some changes in land use or in occupancy (as just shown) will affect total trip making, as well as transit trip making. Sometimes these will be mutually supportive; i.e., increasing transit while decreasing, or leaving unchanged, auto usage. Other times these will be cross-supportive; i.e., increasing both transit and auto usage, or increasing a rate of usage, while decreasing absolute numbers perhaps below a critical threshold of system operation. Blanket statements of policy cannot, therefore, be expected as a matter of course to achieve the modal usage ends of the Sector Plan. More detailed intentions need to be examined (as in the qualifications discussed in this section) before any evaluation can be made. It is, therefore, exceedingly difficult to put onto the modal split projection any reliable projections of an increment that such changes or directions might induce. Substantial new movement in these directions may tend to increase auto traffic, as well as transit traffic, though perhaps not as fast. However, substantial movement in another direction could adversely affect modal split.

Staff have estimated the effectiveness of more direct land use direction, as discussed above. With intensive control and application, modal split approaching 24 to 26 percent (i.e., an increment of 4 to 6 percent) might be achievable. Site-by-site review of development impact would be necessary to monitor and modify modal split trends for this to be achieved.

5. INCREASING THE MODAL SPLIT WITH TRANSIT INCENTIVES

In addition to the transportation elements included in the Sector Plan, several other suggestions can be made to encourage as high as

possible a modal split. For the most part, the implementation of these recommendations is beyond the control of the Sector Plan and would require action of a continuing nature by others. The purpose of their inclusion in this Plan is for these recommendations to provide policy guidance to all such agencies for their implementation.

It is recommended that:

- a. A series of interim feeder bus routes be established to connect to the first phase terminal of METRO. These routes would, in essence, be the feeder routes ultimately to connect with METRO at Friendship Heights, Bethesda, and the Medical Center. Until METRO is opened to these stations, feeder buses should operate express to Van Ness Station, and be cut back as the line opens farther. Judicious establishment of a transit riding habit could result in a higher ultimate modal split and, by establishing a transit habit early, would certainly bring about a higher modal split during the planning period, perhaps on the order of an additional 5 to 6 percent.
- b. A limited-stop transit service be developed to connect Silver Spring, the Walter Reed Army Annex, Chevy Chase, Bethesda, Kenwood, and Georgetown using an off-street right-of-way. The B & O Railroad Georgetown Branch freight line may provide a right-ofway for such service which could utilize buses or rail cars of some type.
- c. A "shoppers shuttle" express service be developed to provide easy, direct access to, and circulation among,

shopping complexes along major arterials, such as Wisconsin Avenue/Rockville Pike. This could reduce the automobile load on CBDs, particularly in the P.M. peak, when shopping and commuting traffic are both high. Such a service might generate a 3-percent-peak-period modal split addition, but a well structured service might develop an off-peak split of up to 20 percent.

- d. A new bus transit vehicle design be encouraged to increase rider comfort. This would include use of high-back, individualized seats, full climate control, V-8 engines, a wider bus body for wider seats and aisles, better vehicle suspension, and better sound insulation. An estimated modal split increase of 1 to 2 percent is projected.
- e. Bus movements be provided by preferential signal control through on-board devices.
- f. Shelters be provided at all stops in all directions in CBDs, with protected entrances in METRO stations and (where possible) into major buildings. Off-street loading zones should be provided where bus travel is heavy to facilitate both bus and auto flow.
- g. A light-duty, demand-responsive, telephone actuated transit system be developed. This system would utilize small vehicle systems to service light-density areas with connections to major truck routes,

to limited-stop services described above, to METRO, and to selected destinations.

- h. A light-duty system be developed to link major destinations, METRO stations, shopping facilities, and parking facilities in the general Medical Center, Bethesda, and Friendship Heights Corridor.
- 6. ESTIMATED CAPITAL AND OPERATING COSTS FOR MODAL SPLIT INCREASE SYSTEM CHANGES

These costs are 1972 based, without escalations for future construction or usage costs, and are staff estimates only.

a. Sector Plan Local Improvements Assumed to Effectuate the 20 Percent Modal Split Base

Master Signal Control Systems \$750,000

b. Improvements to Effectuate a Higher Increment in Transit Usage

### 2.1 Capital Osts

Ι.	Additional buses (standard	
	and small)	\$5,280,000
2.	CBD bus-stop shelters	39,000
3.	Protected building	
	entrances	86,400
4.	Bus-loading area curb cuts	37,000
5.	Signal actuators system	90,000
	2.2 Annual Operating Costs	505,400



# CENTRAL BUSINESS DISTRICT ZONES

In order to channel and coordinate development within the County's Central Business Districts, the Montgomery County Council, on September 4, 1973, adopted a new system of zoning and new zones for use within the CBD's (Montgomery County Zoning Ordinance Sections 59-51.3, 59-51.4, 59-51.5). These zones, CBD-1, CBD-2, and CBD-3, are intended to encourage residential and commercial development at densities which can be supported by existing and proposed public facilities and which are compatible with the surrounding areas. They are designed to encourage provision of open space and other amenities and to promote better pedestrian circulation and improved vehicular circulation.

These CBD zones can be applied only within designated central business districts, and only in conformity with an approved and adopted Master Plan and/or Sector Plan. Each of the new zones permits residential or non-residential uses, or a mixture of residential and commercial uses in the same structure; and each zone allows for development by a "Standard" or "Optional" method. This new system was recommended by a special Citizens Advisory Committee to Study Zoning for Central Business Districts and Transit Station Areas.

#### PURPOSES AND VARYING DENSITIES

It is not intended that all central business districts necessarily include all of the three CBD zones; however, any combination of the zones will be permitted.

<u>CBD-1</u>, the lowest density, is for the periphery of business districts, or for central areas where higher densities are inappropriate.

CBD-2 allows moderate density and generally will be used adjacent to the CBD core areas. The standards are designed to encourage residential and mixed-use developments.

<u>CBD-3</u> permits the greatest density and is designed for land immediately adjacent to transit stations where existing and proposed public facilities support such densities. Although residential uses are permitted, CBD-3 will be developed primarily with offices, retail services and entertainment facilities. No CBD-3 zone is recommended for the Friendship Heights Central Business District.

Comprehensive rezoning to the new CBD zones will be initiated through the filing of a sectional map amendment at the time of final approval of a sector plan by the Montgomery County Council.

### DEVELOPMENT BY THE STANDARD METHOD

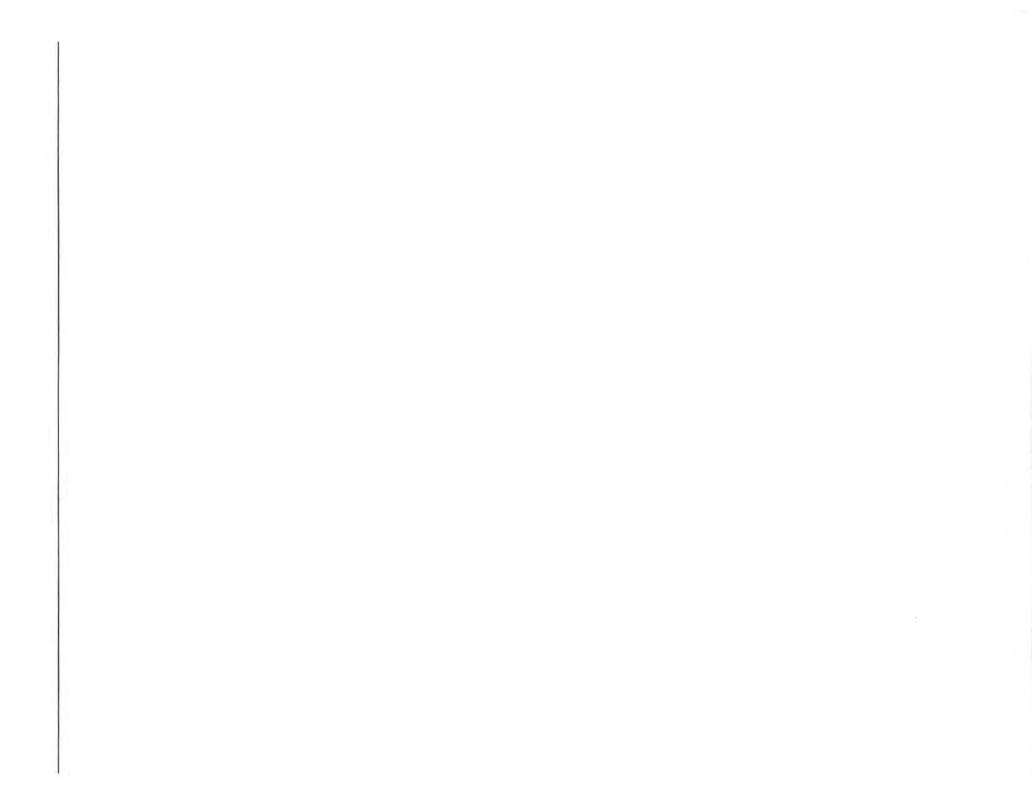
Property zoned CBD-1, CBD-2, or CBD-3 can be developed as a matter of right, according to the standard method of development written into the respective zone.

The majority of land in the CBD's is presently zoned to permit greater density of development than public facilities can support. To rectify this, the standards and requirements of the CBD zones reduce significantly the densities and floor areas that can be built within central business districts. Many of the zones previously used in CBDs impose no requirement to assure open space, light, and air; the new CBD zones specify open space and setback standards, in addition to other requirements.

### DEVELOPMENT BY THE OPTIONAL METHOD

Fragmentation of land holdings has been a major obstacle to attractive and coordinated development of the CBD's. In order to encourage land assembly which will permit more cohesive development and assure provision of open space, pedestrian walks, and other amenities, the new system permits property owners who meet a minimum acreage requirement (22,000 square feet) to elect to use an alternative "optional" method of development. The Optional Method allows the developer somewhat higher density than can be achieved under the Standard Method - but only if provisions for open space and other facilities and amenities specified by the Sector Plan are included. All optional developments will be subject to review by and approval of the Planning Board through the process of detailed site plan review. The result will be the creation of environments, capable of supporting greater intensity of uses, which will provide many facilities and amenities to benefit the general public, ordinarily not achievable through development by the standard method.

The additional gross floor area allowed under the Optional Method is intended as an incentive to encourage developers to elect to use this method of development.



# DEFINITIONS

● F.A.R. = FLOOR AREA RATIO: The Ratio of Gross Floor Area of the Building to the Gross Square Footage on the site.

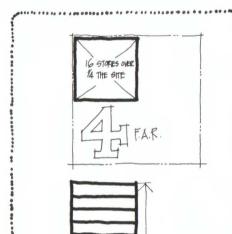


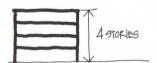


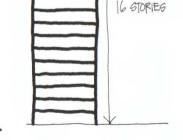












#### • LEVEL OF SERVICE

(Traffic Term - Source: Highway Research Board, <u>Highway Capacity Manual</u>, National Academy of Sciences, Washington, 1965)

Level of Service  $\underline{C}$  represents stable operation with intermittent loading of the approaches. Drivers may have to wait through more than one red signal, and back-ups may develop behind turning vehicles. This is the level typically associated with urban design practice.

Level of Service D approaches instability of flow, when delays to approaching vehicles may be substantial during short peaks within the peak period, but enough cycles with lower demand occur to allow periodic clearance of developing queues, thus preventing excessive back-ups. Level of Service D is considered a reasonable operating level for urban intersections.

<u>Level of Service E</u> represents the most vehicles that any intersection approach can accommodate. Long queues of vehicles develop, and delays are excessive (up to several signal cycles).

<u>Level of Service F</u> represents jammed conditions. Back-ups from location down-street or on the cross-street may restrict or prevent movement of vehicles out of the approach under consideration; hence, volumes carried are not predictable.

● <u>TOPICS</u> (Traffic Operation Program to Increase Capacity and Safety) - A program which provides Federal funding for projects which are designed to increase capacity or improve the quality of flow on the street system in urban areas. The types of improvements constructed under TOPICS (intersection channelization and widening, signalization and signing modifications, etc.) are usually projects which can be accomplished with minimum disruption to existing development.

# CALCULATIONS OF TRIP CAPACITIES

The capacity calculations made by The Maryland-National Capital Park and Planning Commission transportation staff for the Friendship Heights Sector Plan were based on procedures contained in the Highway Research Board's Special Report No. 87, The Highway Capacity Manual -- 1965. Staff of the District of Columbia Department of Highways and Traffic used these same procedures in its analysis of the Friendship Heights area, however, their actual calculations were done by computer. The street capacities calculated by both staffs for the existing condition are, in fact, within 3 percent of each other, which is exceptionally close agreement for an analysis of this magnitude. The major difference in the street capacities used as a constraint in the plans developed by the respective groups is judgmental as to the condition and sophistication of the traffic control devices which could be in operation when implementation of the Sector Plan commences. The transportation staff of this Commission believes that a demand-responsive traffic signal system can be put into operation in Friendship Heights to effectuate a 10 percent increase in capacity available for local generation (7 percent increase in overall capacity) from an existing level of 10,000 vehicle trips per hour to approximately 11,000 vehicle trips per hour. The District Highway Department, however, is of the opinion that the installation of a demandresponsive traffic signal system will not produce appreciably greater capacity than the present signal system.

The function of a traffic signal is to allocate right-of-way to opposing traffic flows at points of intersection. A fixed time traffic signal is set to allow only a fixed amount of right-of-way time to each intersection approach, irrespective of the actual amount of traffic at

that approach. With this type of signal system there are often times when the traffic at a particular intersection approach clears in less than the amount of time allocated for that approach. When this condition occurs, there is no traffic moving through the intersection. Traffic flow in an area such as Friendship Heights is ever changing; during certain short periods, the greatest demand on cycle time may be in the general northsouth direction, while at other times the greatest demand will be in the general east-west direction. A fixed time signal system such as that in use in Friendship Heights today cannot accommodate these peaks, which often last only for a few minutes. within the rush period. The timing must be adjusted to accommodate an average condition resulting in loss or inefficient use of right-of-way time. A demand-responsive system can achieve more efficient use of this right-of-way time, moving more traffic through an intersection in a shorter time span.

It is true that, when demand is constant and/or maximum for all movements at an intersection, a demand-responsive signal operates essentially as a fixed time signal. This, however, is rarely the case. The staff of this Commission believes that the technology is available to achieve the indicated increase in capacity; staff of the District of Columbia Department of Highways and Traffic chose, in this instance, to be more conservative.

# FRIENDSHIP HEIGHTS:

# THE DISTRICT OF COLUMBIA AND MONTGOMERY COUNTY, MARYLAND

# JOINT STATEMENT

of

# THE INTER-JURISDICTIONAL POLICY TASK FORCE ON FRIENDSHIP HEIGHTS

### TASK FORCE MEMBERS

# District of Columbia Government

Ben Gilbert, Director Office of Planning and Management

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Approved by Task Force on September 6, 1973

Since May of this year, an Inter-jurisdictional Policy Task Force of government officials from the District of Columbia and Maryland has been addressing the planning issues which involve both jurisdictions in Friendship Heights. The following is a summary describing those issues which the Policy Task Force has addressed.

### TASK FORCE POLICY STATEMENT

The Policy Task Force believes that there should be orderly development of the Friendship Heights Area and that the plans proposed and agreements reached should be based on sound planning principles.

We recognize that road capacity is the major constraint on new development in Friendship Heights and restricts new development to meet the constraints of traffic capacity. We have agreed on the total allocation of trips proportionate to the size of the affected areas in the two jurisdictions, with two-thirds assigned to Maryland and one-third assigned to the District of Columbia. The District has estimated road capacity at 10,000 trips. Based on somewhat different assumptions, Montgomery County has estimated it at 11,000 trips.

The Policy Task Force recognizes that, if all development occurs to the maximum potential, the area traffic capacity estimated at Level of Service D will be exceeded.

All development will not occur, however, before transit arrives, and therefore we recommend
that the two jurisdictions jointly establish a
continuing process to monitor development and to
take any actions possible to bring the scale of
development into closer alignment with traffic
capacity through measures to improve the modal
split, to reduce traffic congestion, or to reduce

development scale still further based on continuing empirical study of both traffic and development.

# AREAS OF TASK FORCE AGREEMENT

# Size of Planning Area

Originally, both jurisdictions agreed that the Friendship Heights Central Business District and Uptown Center contained a total of 67.7 acres, 45.3 of which were located in Maryland and 22.4 in the District. However, since the MCPB has proposed removing the Bergdoll Tract and the Chevy Chase Land Company parking lot from the CBD, the CBD and Uptown Center area now contains a total of 42.6 acres, of which 22.4 acres are in the District of Columbia and 20.2 acres are in Maryland.

# METRO Issues

Both jurisdictions agree that a southern entrance to the METRO should be located in the District to distribute METRO-oriented traffic more efficiently and to improve circulation in the area as a whole. Currently in METRO plans, there is only provision for a knock-out panel at the southern end of the station. Because of the importance of this station to both the District and Maryland and the effect on the operation of the total system, it is recommended that the WMATA Board consider making the southern entrance a system cost.

# The Ring Road

Both jurisdictions agree on the alignment of the "Ring Road" needed for access and distribution of local traffic. There is also agreement on the urgency of having the Ring Road operational by the time METRO construction begins, since WMATA presently anticipates that the intersection of Wisconsin and Western Avenues will have to be greatly constricted or closed for at least two years during METRO construction. Therefore, both jurisdictions are presently seeking funding in their budget for the Ring Road.

# Western Avenue

Both jurisdictions agree that when the "Ring Road" is operational, Western Avenue should be experimentally closed for limited periods of time so that any resulting traffic circulation problems may be studied. The question of permanently closing that portion of Western Avenue could then be addressed.

# Environmental Issues

Both jurisdictions are presently evolving environmental controls on a city and county basis and ordinances that will be used for central business districts and uptown centers. The District of Columbia is studying various appropriate environmental control mechanisms; Montgomery County is incorporating environmental controls in proposed new zoning ordinances.

The sewer moratorium has partially stopped further development on the Maryland side of Friendship Heights. The District has capacity available as per the Memorandum of Understanding agreed on by the local jurisdictions using the Blue Plains Treatment Plant. However, until the present improvements to increase the capacity of Blue Plains are completed in 1975, this capacity will not be available for the total development suggested in the plan for the District side. Therefore, a phasing program has been recommended by the D. C. Department of Environmental Services to defer full development by the District until

after July 1, 1975.

Montgomery County will not have additional sewer capacity until the proposed County Advanced Waste-Water Treatment facility is operational, before 1977 or later. This constitutes a de facto phasing program for the County.

# Traffic Management

We recommend that on a continuing basis both jurisdictions jointly examine every practical means of improving traffic conditions or flow, including actions designed to improve bus service. Immediate steps should be taken to improve bus service, even before METRO is operational. Both jurisdictions should accelerate their efforts to improve bus service and increase bus usage.

# Parking Controls

Adequate parking controls for both Maryland and the District are critical to the success of reducing traffic congestion and increasing the use of METRO.

In Maryland, the new CBD zones have been drafted to discourage parking and bring the amount of parking more nearly in line with District standards. We endorse the efforts of both jurisdictions to control on-street parking in order to preserve space on residential streets for residents and prevent excessive traffic on these streets.

# Pedestrian Ways

Both jurisdictions have suggested a system of connected pedestrian easements across Western Avenue, including a system of bikeways. These pedestrian paths and shopper busways are especially important to link the two areas together and to en-

courage shoppers to walk or ride the bus from store to store in the area instead of driving from lot to lot. To assure coordination of the pedestrian system, we recommend that the review conducted by each agency include referral of building plans to one another to secure comments.

# The Timing of the Proposed Plans

The plans proposed by both jurisdictions are phased plans, in that they are conditioned on environmental and traffic constraints which will prevent major development from occurring in the next five to six years. Enforcement of the sewer moratorium in Maryland and rezoning on the District side are the most likely constraints. The Policy Task Force considers phasing to be a key to successful development in the area.

# TRIP GENERATION

Total	Existing: D. CMaryland	6,424
Total	from Permitted Development-Maryland	4,166
Total	from Anticipated Development-D. C.	2,329
TOTAL	TRIPS	12,919*

\*This figure represents the maximum possible number of trips, assuming each parcel develops to the fullest extent <u>possible</u> on the Maryland side and to the extent <u>anticipated</u> on the D. C. side under the zoning recommendations of each plan.

Neither jurisdiction expects that each and every parcel will develop to the fullest extent possible during the time covered by the respective plans.

# FRIENDSHIP HEIGHTS TIME SCHEDULE RECOMMENDED BY THE POLICY TASK FORCE

Date	Montgomery County	District of Columbia
September 1973	Planning Board approves Final Draft	Policy Task Force Report to the National Capital Planning Commission and District of Columbia Government
October 1973	Printed Final Draft transmitted to County Council	National Capital Planning Commission recommend to the D. C. Zoning Commission zoning map change and text change for R-5-B District
December 1973	County Council holds public hearing	
January 1974	County Council approves Final Draft with possible modifications	D. C. Zoning Commission conducts Public Hearing on NCPC recommendations
February 1974	Planning Commission adopts approved Sector Plan: Planning Board files an application for comprehensive rezoning (Sectional Map Amendment)	D. C. Zoning Commission acts on NCPC recommendations
March 1974	Add proposed improvements during County Council work session on Capital Improvements	
April 1974	County Council adopts comprehensive rezoning	
July 1975	METRO construction begins	METRO construction begins
July 1976	Completion of Ring Road improvements	Completion of Ring Road improvements
July 1976	METRO construction at Western and Wisconsin Avenues	
December 1978	METRO operational	METRO operational

