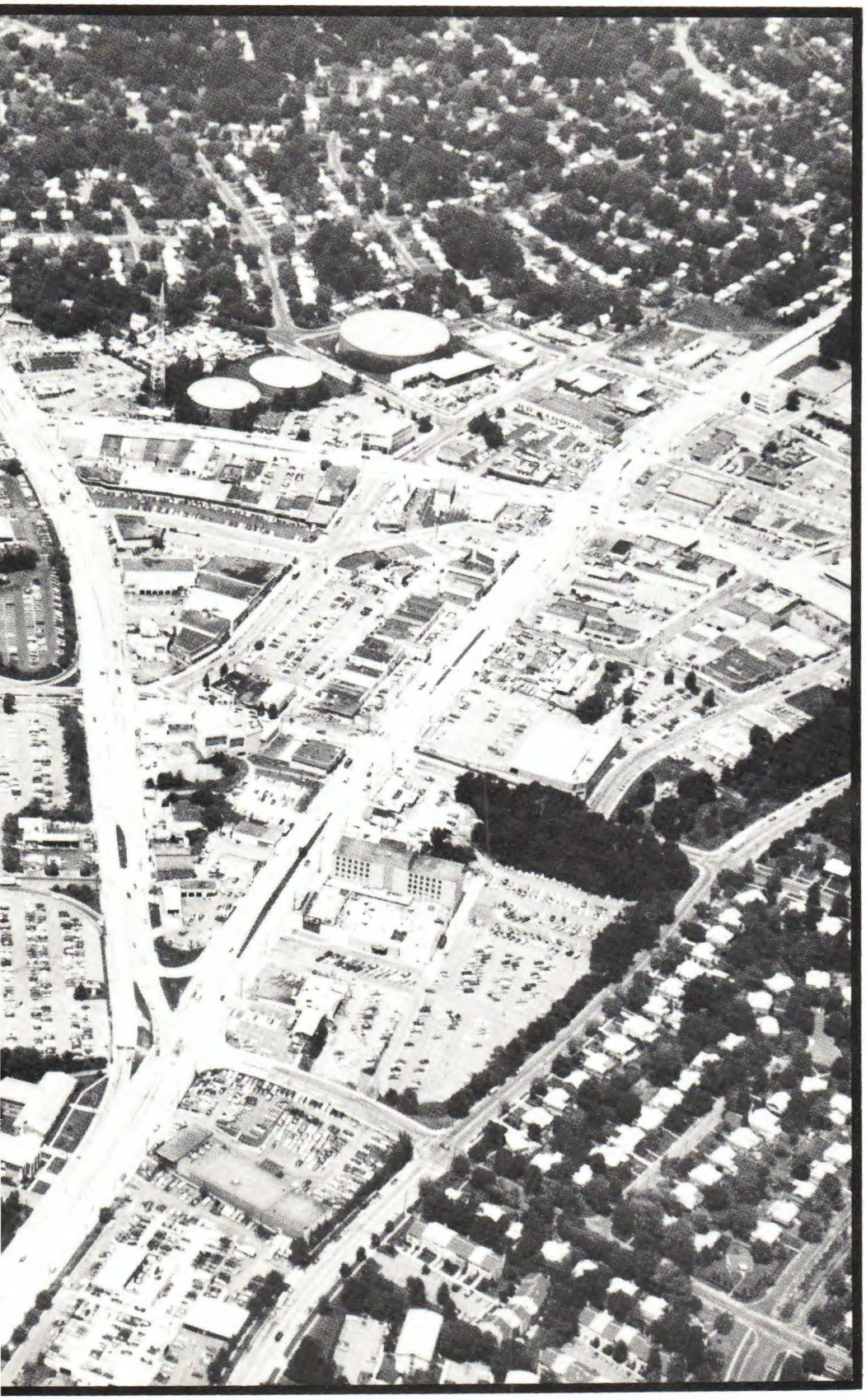
WHEATON

Approved & Adopted Sector Plan for Central Business District and Vicinity



ABSTRACT

TITLE:	Approved and Adopted Sector Plan for the Wheaton Central Business District and Vicinity
AUTHOR:	The Maryland-National Capital Park and Planning Commission
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ABSTRACT:	This publication contains the text with supporting maps and tables for the Sector Plan for the Wheaton Central Business District and Vicinity, which is an amendment to the adopted Master Plan, Kensington-Wheaton Planning Area VII, 1959, as amended, Montgomery County, Maryland; and an amendment to the General Plan for the Physical Development of the Maryland-Washington Regional District and the Master Plan of Highways within Montgomery County, Maryland. Developed by the Commission with the assistance of a Sector Plan Task Force Advisory Committee, this approved and adopted Sector Plan discusses the history of the area; establishes basic area objectives; and outlines the existing situation and proposals for the area of the Plan.

$2.75

APPROVED AND ADOPTED

SECTOR PLAN

FOR

WHEATON CENTRAL BUSINESS DISTRICT

AND VICINITY

MONTGOMERY COUNTY,

MARYLAND

An amendment to the adopted Master Plan, Kensington-Wheaton Planning Area VII, 1959, as amended, Montgomery County, Maryland;

being also an amendment to the General Plan for the Physical Development of the Maryland-Washington Regional District and to the Master Plan of Highways within Montgomery County, Maryland.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

JULY, 1978

The preparation of this report has been financed, in part, through a grant from the U. S. Department of Transportation, Urban Mass Transportation Administration, under the Urban Mass Transportation Act of 1964, as amended.

CERTIFICATE OF APPROVAL AND ADOPTION

This Sector Plan, being an amendment to the Zoning Plan for the Kensington-Wheaton Planning Area VII, September, 1959, as amended; the Street Plan for the Kensington-Wheaton Planning Area VII, September, 1959, as amended; the Zoning Plan for the Wheaton Business District and Vicinity, September, 1959, as amended; the Master Plan of Streets and Highways for the Wheaton Business District and Vicinity, September, 1959, as amended; the Master Plan, Kensington-Wheaton Planning Area VII, 1959, as amended, the Master Plan of Highways within Montgomery County, Maryland; and the General Plan for the Physical Development of the Maryland-Washington Regional District has been adopted by The Maryland-National Capital Park and Planning Commission by Resolution Number 78-16 on September 20, 1978, after a duly advertised Public Hearing held on April 12, 1978, pursuant to the provisions of Article 66D, #7-108, of the Annotated Code of Maryland, 1976 Cumulative Supplement, and has been approved by the Montgomery County Council, sitting as the District Council, by Resolution 8-2090 on July 18, 1978, after a duly advertised Public Hearing held on April 12, 1978.

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The Maryland-National Capital Park and Planning Commission is a bi-County agency created by the General Assembly of Maryland in 1927. The Commission's geographic authority extends to the great majority of Montgomery and Prince George's Counties: the Maryland-Washington Regional District (M-NCPPC planning jurisdiction) comprises 1001 square miles, while the Metropolitan District (parks) comprises 919 square miles, in the two Counties.

The Commission has three major functions:

(1) the preparation, adoption, and from time to time amendment or extension of the General Plan for the physical development of the Maryland-Washington Regional District;

(2) the acquisition, development, operation, and maintenance of a public park system; and

(3) in Prince George's County only, the operation of the entire County public recreation program.

The Commission operates in each County through a Planning Board appointed by and responsible to the county government. All local plans, recommendations on zoning amendments, administration of subdivision regulations, and general administration of parks are responsibilities of the Planning Boards.

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The listing of the names of members of the Task Force Advisory Committee does not indicate approval or disapproval of this Sector Plan by any Committee member. The Task Force takes no position or vote as a body on the Sector Plan. The members advise the Montgomery County Planning Board on the problems, needs and views of their groups or area. These views are then considered by the Planning Board in its deliberations on the Plan.

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CONCEPT PLAN

INTRODUCTION

This Sector Plan for the Wheaton Central Business District and Vicinity is based upon an analysis of existing conditions, review of several alternatives for the development of the Wheaton Business District and projection of probable future conditions in the area covered by the Plan.

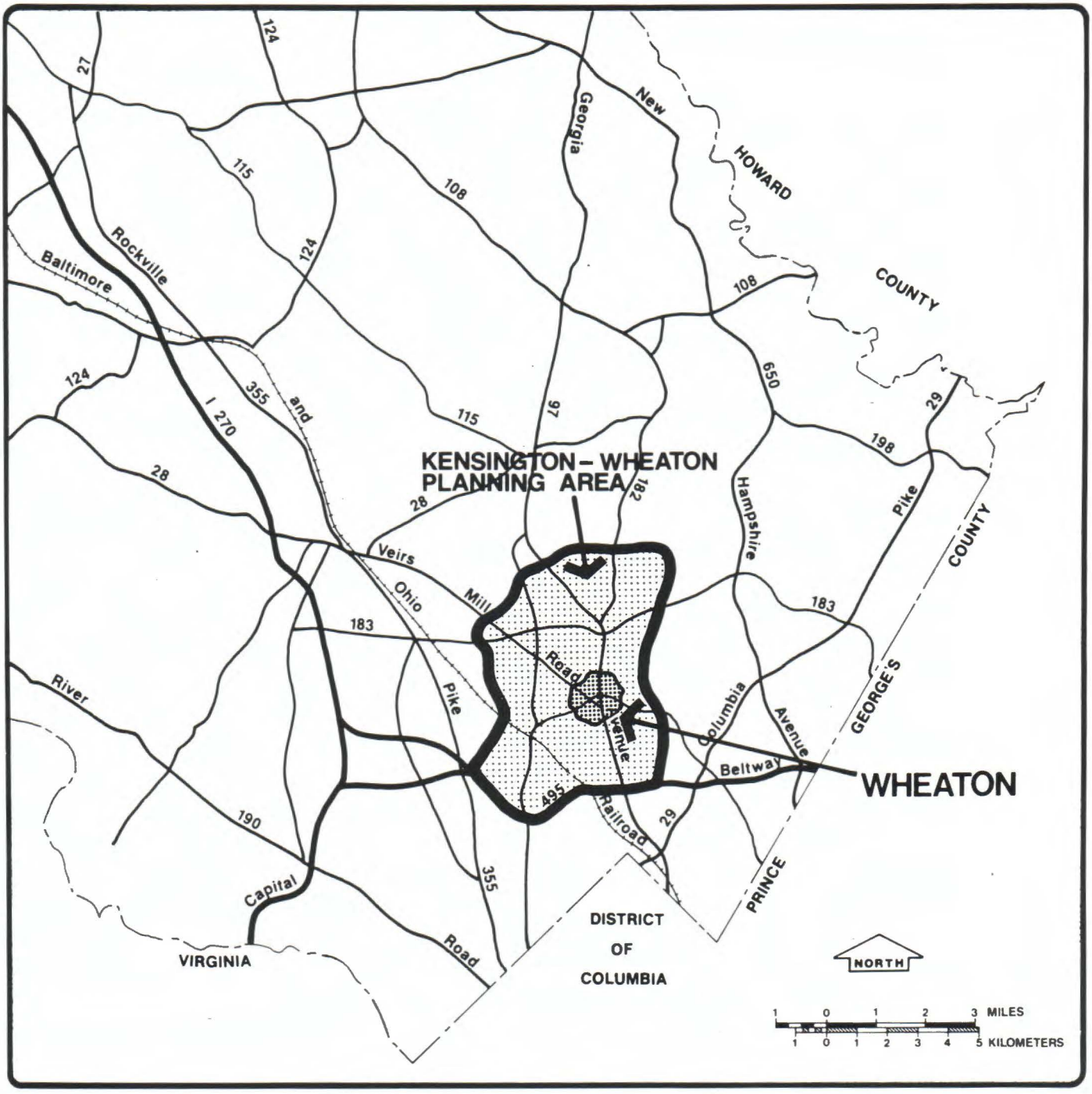
The Sector Plan for the Wheaton Central Business District and Vicinity is an amendment to the Master Plan for the Kensington-Wheaton Planning Area, adopted September 16, 1959, and to The General Plan for the Physical Development for the Maryland-Washington Regional District and the Master Plan of Highways within Montgomery County, Maryland.

The General Plan provides policy guidance at a broad County-wide level for future patterns of development in the County. It was first adopted by The Maryland-National Capital Park and Planning Commission in 1964 and updated in 1969. The General Plan recommends that:

- future growth be channeled into corridor cities along the I-270 Corridor and into existing, established down-County activity centers (such as Silver Spring, Wheaton, and Bethesda);
- future transportation needs be met through the development of a rapid rail transit system supported by an extensive network of local bus routes;
- rapid transit stations be located at places conducive to multi-use development within walking distance of those stations;
- a mixture of housing and employment opportunities be developed in Montgomery County; and
- new development be channeled so as to preserve and protect existing communities from adverse impacts and undesirable non-residential intrusion resulting from commercial growth, the placement and operation of METRO-related facilities, and other public and private land use decisions.

In October, 1974, the Montgomery County Planning Board published its First Annual Growth Policy Report, Framework for Action. While this report recalled many of the goals of the General Plan, it also noted that economic and social trends are suggesting that future metropolitan growth will tend to occur in older inner-suburban areas. The Report pointed out the need to develop mechanisms both to monitor and to direct these trends. Subsequent Growth Policy Reports have analyzed specific aspects of alternative patterns of County-wide growth.

The Master Plan contains broad policy, land use, and circulation recommendations for an approximate 15 square-mile area roughly bounded by Rock Creek on the west, Sligo Creek on the east, the "Rockville Facility" alignment on the north and the Capital Beltway (I-495) on the south. Following adoption of the Wheaton Sector Plan and Sector Plans for Forest Glen and Glenmont, a new and updated Master Plan for the entire Kensington-Wheaton Planning Area is to be prepared.



SECTOR PLAN LOCATION

WHEATON

MNCPPC

JULY 1978

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SECTOR PLAN

KW

PLANNING AREA

The basic aim of the Sector Plan is to attain a harmonious relationship and balance among the various physical, social and economic aspects of the Wheaton area within the context of the Kensington-Wheaton Planning Area and of Montgomery County. The Plan, therefore, provides a basis for the preservation of the existing Wheaton business community. While doing so, it also accommodates those elements of change which are appropriate to it, while providing for the social and economic needs of the population of the entire area.

A Sector Plan elaborates and details the General Plan, Master Plan and growth policy recommendations for a small area of the County. It serves as a guide to the Planning Board and the County Government in the programming of public works, in the adoption of zoning and other development controls, in the acquisition of land, and in the construction of facilities. A Sector Plan covers a smaller geographic area and a shorter time period than either the General Plan or an area Master Plan and carries out its recommendations to a greater level of detail. Because of its greater detail and shorter planning horizon, a Sector Plan must be periodically reviewed and adjusted to reflect future decisions, trends, or events not anticipated at the time of its adoption. Such a process includes a major reevaluation of the Sector Plan at intervals both of time and of actual change, depending upon such forces as the experience of METRO impacts actually gained once transit service has become operational.

BACKGROUND

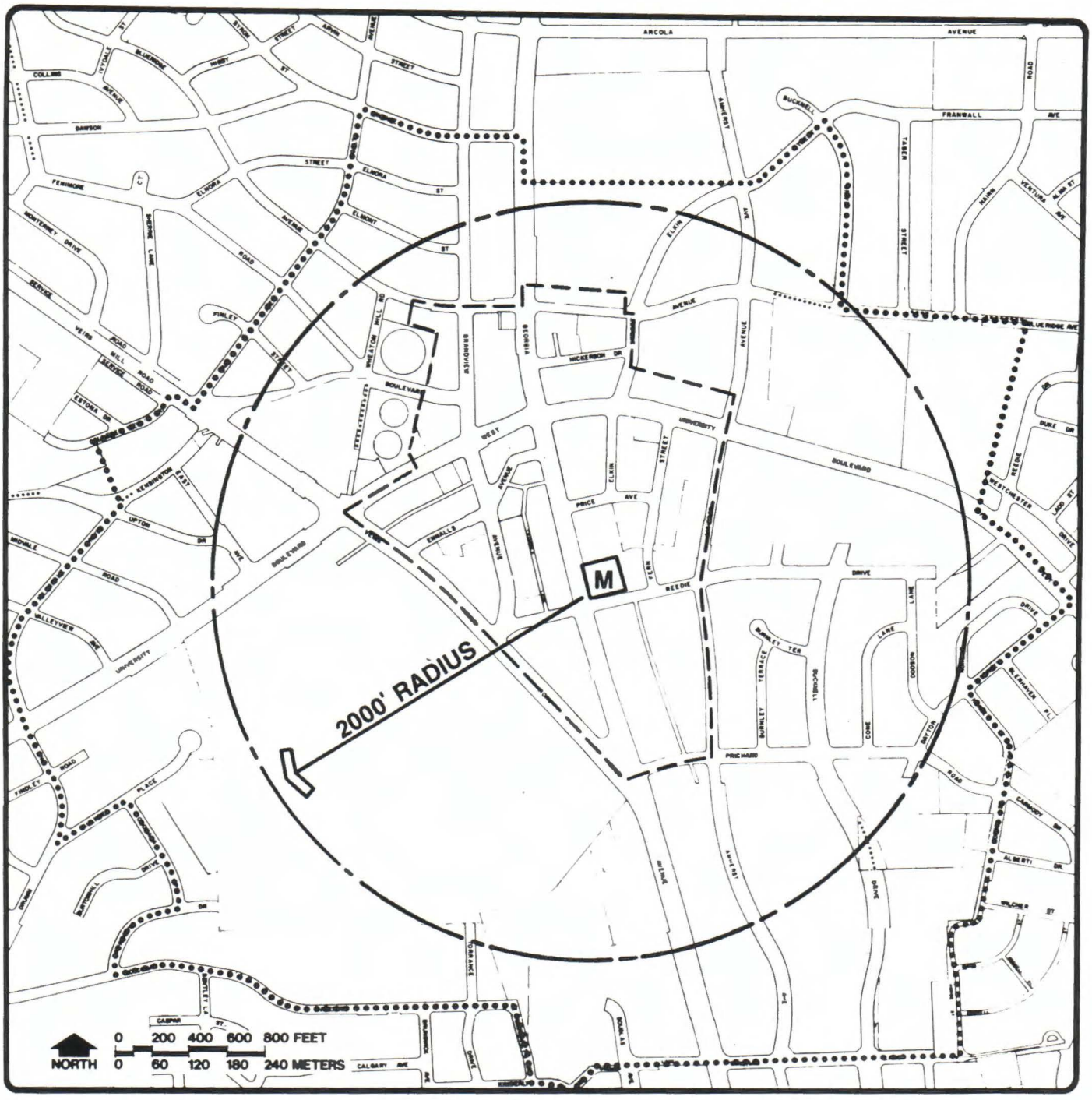
HISTORY OF WHEATON

Wheaton started out as merely a crossroads--Mitchell's Crossroads--named after the keeper of a Civil War era tavern at the corner of Old Bladensburg Road and the Union Turnpike, now known as University Boulevard and Georgia Avenue. G. Cissel of Howard County occupied the tavern as a residence and built a general store across Old Bladensburg Road (University Boulevard) from his home. It was a location of convenience to travelers and residents in the sparsely settled agricultural countryside and a prelude to the commercial district which exists today.

The area came to be known as Wheaton in honor of one of the top Union generals of the Civil War, Major General Frank Wheaton. A career soldier, he was in the Army of the Potomac for the entire war and led a division, brigade, or regiment in nearly every battle in which the Army of the Potomac engaged. At the age of 29 he was made a Brigadier General for distinguished service at the Battle of Fredericksburg. He was with General Sheridan through the Shenandoah Valley; he had two horses shot from under him at Gettysburg, another in the Battle of the Wilderness. When Confederate General Jubal Early marched on Washington in the summer of 1864, crossing the Potomac at Monocacy and marching through Mitchell's Crossroads and Silver Spring, General Wheaton commanded the Union troops that stopped the Confederates at Fort Stevens, near present-day 9th and Peabody Streets, N.W., Washington, D.C.

After the war, George Plyer, who had been under Wheaton's command at Fort Stevens, built a house along the Union Turnpike (Georgia Avenue) at what is now Plyer's Mill Road. When Plyer was appointed postmaster in 1869, the post office was named in honor of his former Commander, General Wheaton. Plyer carried out the duties of postmaster from his home on the Union Turnpike until his death; he was succeeded by his wife. Following Mrs. Plyer, G. Cissel became postmaster and the Wheaton Post Office moved to his store at Mitchell's Crossroads, where it remained until the 1920's. By the turn of the century, the name Mitchell's Crossroads had been replaced by Wheaton, but not much else had changed. Except for a few more houses, and a blacksmith shop/livery near Veirs Mill Road and Georgia Avenue, the next commercial building was not built until Dr. Atchinson from Washington built a gas station across from the general store. A few more stores followed, but the area remained dominantly residential.

With the suburban expansion of the 1950's, Wheaton's commercial district blossomed. From little more than a crossroads shopping area, Wheaton mushroomed in less than a decade into a major commercial center, boasting hundreds of new businesses serving a trade area in excess of a quarter of a million people. The development of Wheaton Plaza in 1960, introducing traditionally downtown department stores to the Maryland suburbs, further entrenched Wheaton's influence as a regional center of major importance in Montgomery County.



SECTOR PLAN AREA

—— - —— PRIMARY IMPACT AREA

WHEATON

---- PROPOSED CBD BOUNDARY

..... SECTOR PLAN BOUNDARY

MNCPPC

JULY 1978

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SECTOR PLAN

KW

PLANNING AREA

RECENT PLANNING HISTORY

In 1962, three years after adoption of the Kensington-Wheaton Master Plan, studies began in earnest to develop a rapid transit system to serve the Washington Metropolitan Area. In 1969, a regional system was adopted by the participating jurisdictions, including Montgomery County. This system, consisting of approximately 98 miles of line with 86 stations at the time, included a subway line (under Georgia Avenue) from Washington to Glenmont via Silver Spring. This route, commonly known as the "Glenmont Line," has stations in Montgomery County at Silver Spring, at Forest Glen Road, in Wheaton and at Glenmont. The Adopted Regional System was, in 1969, made a part of the revised General Plan described earlier in this document.

During 1974, the Montgomery County Planning Board established the Kensington-Wheaton Master Plan (Citizens') Advisory Committee to advise the Board on revisions to the 1959 Master Plan and on preparation of a new Master Plan for the Kensington-Wheaton area. The new Master Plan was to be supplemented by detailed Sector Plans for the three Transit Impact Areas of Forest Glen, Wheaton and Glenmont. Shortly thereafter, the Washington Metropolitan Area Transit Authority (METRO) began the process of developing general plans for the portion of the Glenmont Transit Line north of Silver Spring (construction to Silver Spring having already begun) and submitted these initial plans to the Montgomery County Government for review. In 1975, the Montgomery County Council examined the route in detail, including examination of the probable construction methods and specific sites for station facilities, and again approved the line to Glenmont with stations at Forest Glen, Wheaton and Glenmont. In 1975, the Council approved the location for the Wheaton Station and directed the Montgomery County Planning Board to prepare a Transit Station Impact Area (Sector) Plan for the area around the station.

However, at the direction of the Montgomery County Council, the method of citizen participation in the planning process was modified to provide separate citizen task forces for each Transit Impact Area, instead of a single committee for all planning in the Kensington-Wheaton Planning Area. On March 11, 1976, the Planning Board established the Forest Glen, Wheaton and Glenmont Task Forces to advise the Board in the preparation and development of sector plans for these areas. The Wheaton Task Force met in April 1976, to develop statements of goals and issues. In May 1976, the planning staff produced a report, Alternative Development Concepts for the Wheaton Sector Plan Area, which was the subject of an all-day Task Force worksession in June 1976. A Preliminary Draft Plan resulting from that planning process was the subject of a joint Council/Planning Board Public Hearing on April 12, 1978. This Plan includes revisions made on the basis of the record of that hearing.

This Sector Plan will be followed by a Sectional Map Amendment, a governmental action by which the zoning recommended in the Plan is implemented. The zoning action will serve to apply the Central Business District zoning recommended in the Plan within that portion of the Sector Plan Area designated as the Central Business District. It will also, however, establish the outside limits for the Central Business District, in order to best protect those adjacent residential areas from commercial encroachment.

Unlike Sector Plans for the Friendship Heights and Bethesda Central Business Districts, this Plan does not proceed as a detailed study from a recently approved and adopted Master Plan. It is, therefore, necessary as the first step in the development of this Sector Plan, to create a more general framework for the Sector Plan. The "Concept Plan," which embodies the overall guidelines for future growth and change, becomes the basis for the Sector Plan itself which then refines the long term concepts by recommending a detailed development program. The program covers a period of approximately six to ten years. In effect, it becomes the initial phase in the realization of the Concept Plan.

What can be accomplished in the period of six to ten years must be placed in the context of:

(a) present patterns of land use and ownership;
(b) current economic and market conditions;
(c) the current constraints of the transportation system including the fact that METRO will not be extended to Wheaton until 1984; and
(d) the constraints of the existing sewage system.

This six to ten year Plan is consistent with the level of development that can be realistically absorbed by the market and can be serviced by the existing and programmed transportation and sewerage systems.

The Sector Plan addresses specifically the Wheaton Central Business District and certain areas directly adjacent to it. The total Sector Plan area contains approximatley 460± acres. While the primary intent of the Plan is to guide the growth and development of the Central Business District, adjacent residential areas are included in the Sector Plan in order to establish public policies for the protection of these neighborhoods.

ENVIRONMENTAL ANALYSIS

For an area which is largely built up, the primary environmental conditions are those which affect air quality, noise levels, and water quality. For areas in which there are significant vacant parcels, issues related to natural systems including soil types and vegetative cover may also be significant.

AIR QUALITY

Air quality in a metropolitan region such as Washington, which has a relatively small amount of heavy industry, is predominantly a function of automobile traffic. Such traffic reflects regional patterns of urban development and the distribution of land uses throughout the metropolitan area.

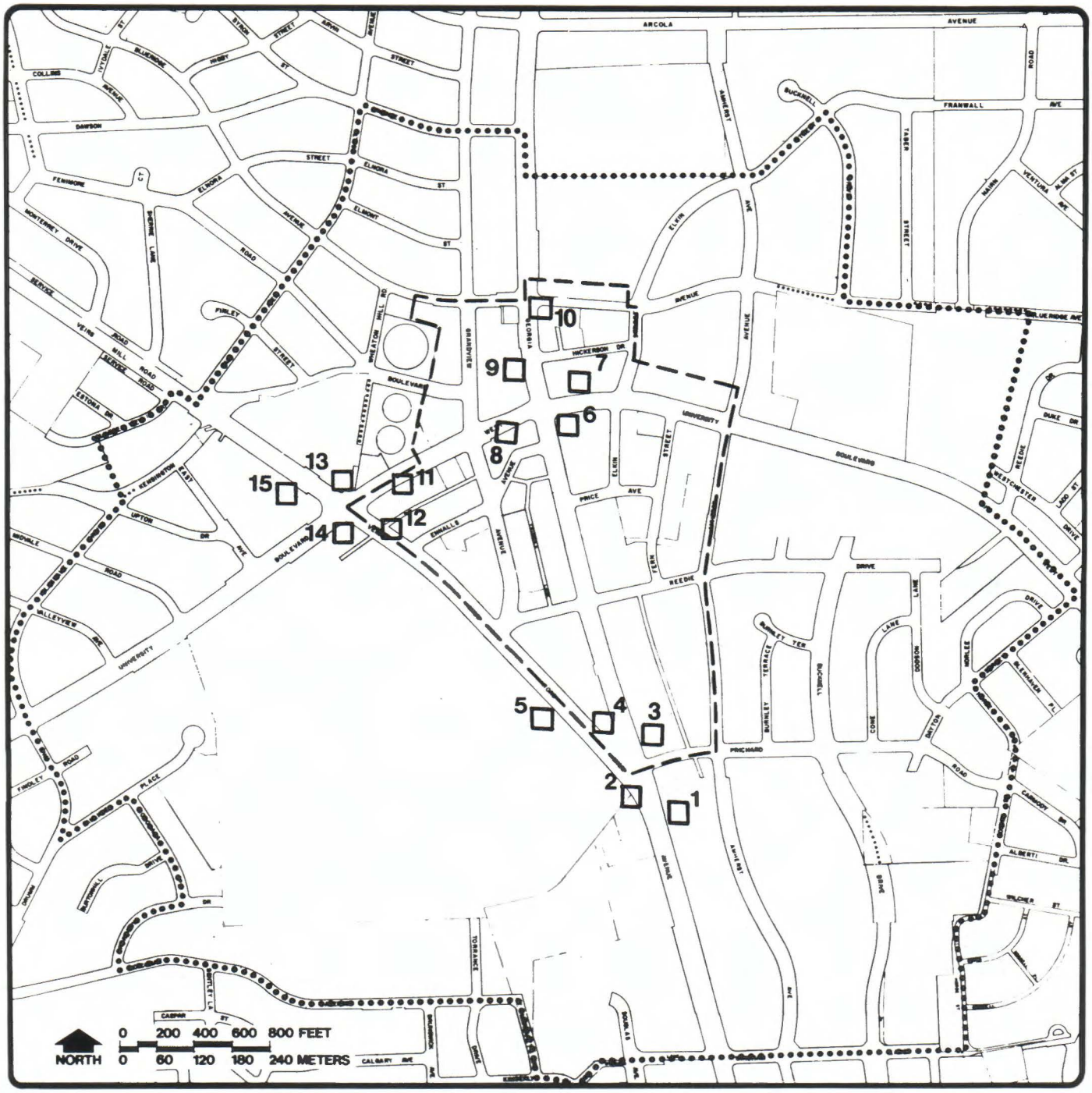
Air quality in parts of Montgomery County does not currently meet the National Ambient Air Quality Standards established as law by the Federal Clean Air Act. Violations result primarily from vehicle emissions of hydrocarbons (HC), nitrogen oxides (NO_x) and carbon monoxide (CO). Hydrogen and nitrogen oxide emissions often lead to the formation of photochemical oxidants. Summertime air pollution alerts related to high levels of such oxidants have become common in metropolitan Washington in recent years.

The oxidant problem has required area jurisdictions to prepare a Regional Transportation Control Plan designed to reduce air quality violations. Taking steps to reduce automobile dependence and to increase the availability and usage of public transit--including the provision of METRO--is one element of the Regional Transportation Control Plan. Through such steps both the level of automobile-induced air pollution and the impact of such pollutants can be reduced. The major reductions in poor air quality due to automotive exhaust, however, will result from the continued implementation of national standards controlling the actual output of pollutants by the vehicles themselves. As these new standards, and the devices they require, are applied to succeeding model years, the levels of emissions which cause air pollution from vehicles are expected to decline dramatically.

Most air pollutants easily disperse over large areas and are not susceptible to control at the Sector Plan level. This is true not only of oxidants, but also of sulphur dioxide (which results from types of combustion other than vehicular), particulates, and carbon monoxide.

To date, accepted research at the Federal level has resulted in establishing standards for the pollutants mentioned above, including carbon monoxide. Background levels of carbon monoxide can come from vehicle emissions over a large area while local carbon monoxide "hot spots" can also occur. Such " hot spots" are said to exist when a combination of background and local emission levels results in concentrations of carbon monoxide which exceed the National Ambient Air Quality Standards for that pollutant.

Two levels of CO concentrations have been established by the National Ambient Air Quality Standards of the Federal Clean Air Act. The first of these is a one-hour standard of 35 parts per million. The second is an eight-hour standard of 9 parts per million. "Parts per million," sometimes abbreviated as "ppm," represents



1985 CO-8 RECEPTOR LOCATIONS

WHEATON

---- PROPOSED CBD BOUNDARY
..... SECTOR PLAN BOUNDARY

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JULY 1978

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SECTOR PLAN

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PLANNING AREA

the level of concentration of CO in the air. Federal regulations state that standards may not be violated more than once per year. This analysis focused on the eight-hour standard which, in practice, is more frequently violated and more difficult to attain than the one-hour standard. Resolution of potential eight-hour standard violations normally assures resolution of potential one-hour standard violations.

Carbon monoxide analysis is a two-step procedure. Step one involves calculation of background levels of CO which typically occur throughout the area being studied. Background levels result from the cumulative effects of vehicle CO emissions in the immediate study area, and the portion of emissions dispersing from upwind areas which enter the immediate study area. In general, background CO levels decline as distance from the core of the metropolitan region increases.

Background CO calculations are based on data from the Metropolitan Washington Council of Governments (COG), which assists Maryland and other states with fulfilling their responsibilities for adherence to National Ambient Air Quality Standards. Subregional background data are generated through the use of computer modelling techniques based upon inputs which include vehicle traffic flows, weather conditions and selected actual monitored CO values. The COG 1985 projections use a recent regional population forecast to predict traffic and air quality levels.

Step two involves a calculation of local CO sources. High CO levels may be prevalent near major highways, particularly during periods of high traffic volumes and traffic congestion. The impact of such local conditions generally extend up to 150 feet from the source, after which background conditions begin to prevail. Local and background CO levels, however, are added together to establish the total CO level which would be experienced in a given area.

Local CO levels were calculated using a computer model ("HIWAY") developed by the U. S. Environmental Protection Agency. The model uses local meteorological and traffic data to predict CO levels along roadways. Calculations for 1975 are based upon current traffic volumes; 1985 calculations are based on projected average traffic conditions approaching roadway intersections.

Calculations of CO generally employ a "worst case" set of assumptions for meteorological conditions. Winter meteorological conditions are generally most conducive to high CO emissions; cold temperature engine operations lead to greater emissions while periods of low wind and stable atmosphere can result in slower dispersion of local pollutants.

A variety of wind directions was used to ensure that maximum CO concentrations were calculated. Other meteorological assumptions included a near calm atmospheric stability condition, a two mile per hour average wind speed, and a 39^{o} Fahrenheit average winter temperature.

Estimates of traffic conditions were made for the 1975 and 1985 time periods. Current (1975) conditions were partially based on field traffic counts recently performed at selected locations along Georgia Avenue. Peak eight-hour volumes

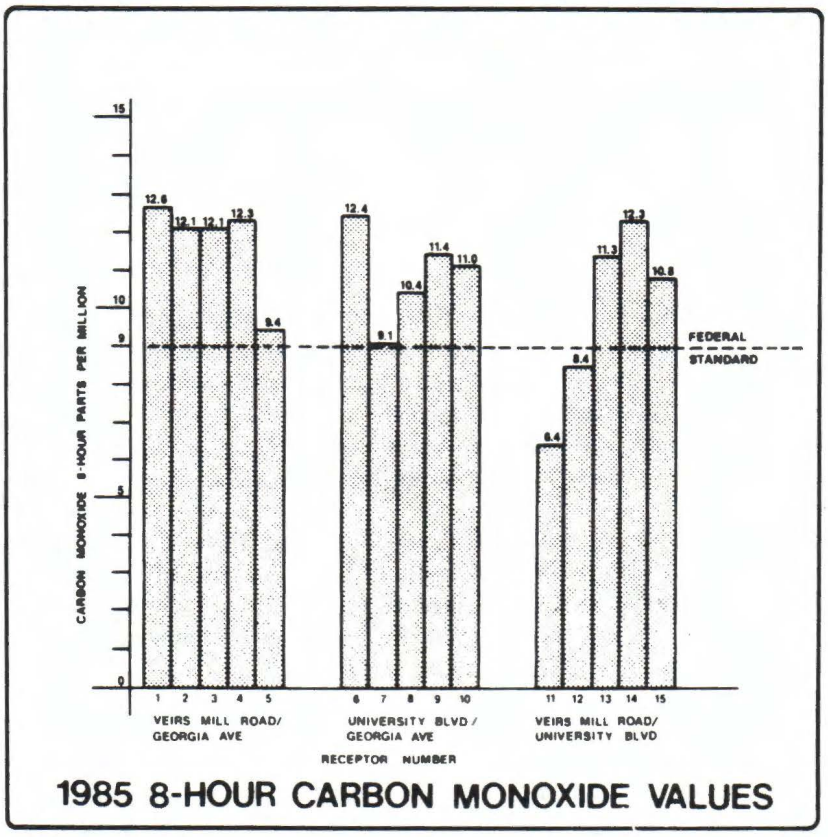


FIGURE 4

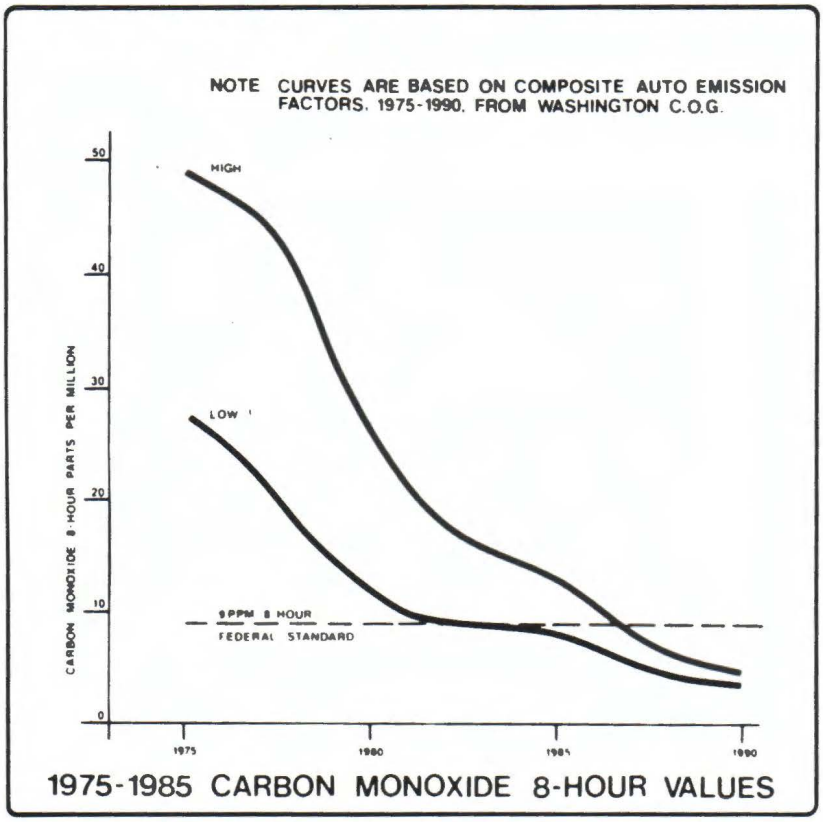


FIGURE 5

were determined from previously obtained field data and existing traffic studies performed by the Montgomery County DOT. Speeds were measured along each road link, which implicitly incorporated congestion on road segments approaching each major intersection. Future (1985) conditions are based on the proposed land use plan and volume projections for future years. The current roadway dimensions, plus currently programmed improvements, were assumed to exist in the 1985 time period. A slight decline in average speeds from the 1975 base year was assumed for 1985.

Violations were calculated in 1985 for 13 of the selected measurement points, or "receptors." (See Figure 3.) Seven receptors which exceeded the standard are located along the east and west sides of Georgia Avenue. The other receptors are near the University Boulevard and Veirs Mill Road intersections. CO levels above 12 ppm were calculated at all three intersections. Receptors located away from Georgia Avenue or on the major intersections are not in violation of the Federal Standards.

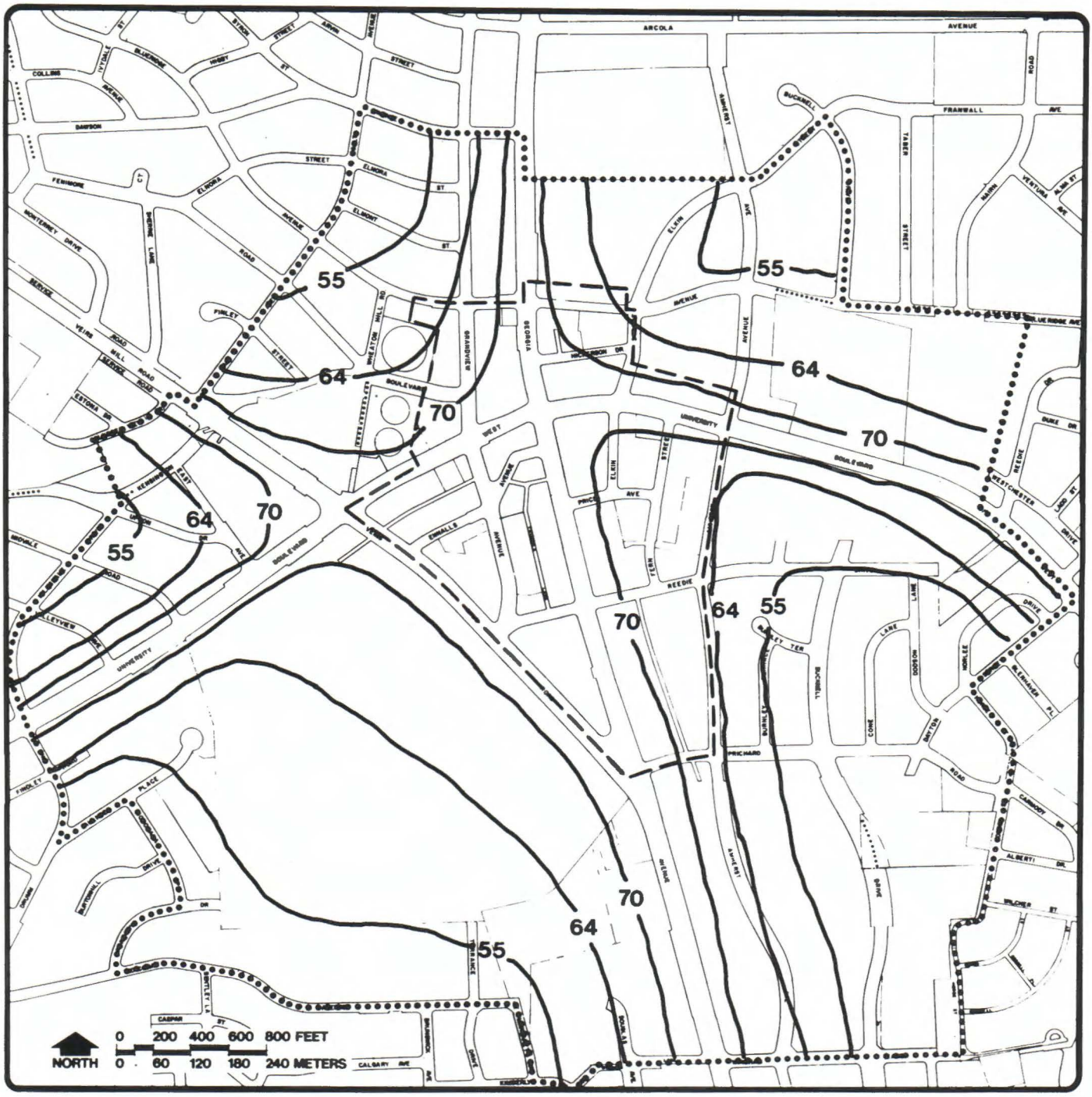
It should be noted that the calculations for 1975 indicated violations at all receptor locations. The substantial decline in CO levels from 1975 to 1985 is primarily the result of Federal controls on vehicular emissions.

Resolution of CO violations is strongly influenced by factors which are outside the direct control of the Wheaton Sector Plan. Auto emission controls are the primary long-term hope for attaining clean air standards. In addition, expected reductions in area pollution levels are dependent on regional transportation system improvements. Such improvements include the METRO mass transit system and other elements of a regional transportation plan. Governments within the region should also attempt to minimize the use of private automobiles by a single person for all types of trips. The benefits of alternative modes of transportation such as car pools and bicycles should be encouraged.

NOISE

In Montgomery County, highways are a major source of noise which affect the living environment. Residential land uses are among the most sensitive to noise impact, as are schools and hospitals. Commercial and industrial areas can generally tolerate higher noise levels because of reduced exposure time and higher levels of personal activity in indoor settings.

A continuous exterior level of 70 decibels (dBA) is representative of areas experiencing substantial intrusion by highway noise. The U. S. Environmental Protection Agency has determined that noise levels exceeding sound pressure level of 70 dBA, on an all day basis, can result in hearing loss. (The term dBA represents a sound level in decibels weighed for sensitivity of the human ear.) The Federal Highway Administration has identified the noise level of 70 dBA as a benchmark to be exceeded no more than 10 percent of the time as the maximum acceptable level for residential areas. A sound level of 70 dBA can be associated with such activities as speech at a distance of one foot, or the operation of a vacuum cleaner at a distance of ten feet. By comparison, the level of noise inside a sports car traveling 50 mph is about 80 dBA.



1985 NOISE LEVEL CONTOURS (dBA)

WHEATON

---- PROPOSED CBD BOUNDARY
..... SECTOR PLAN BOUNDARY

MNCPPC

JULY 1978

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SECTOR PLAN

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PLANNING AREA

An exterior noise level of 55 dBA is generally considered to be acceptable in residential areas. This sound level is the residential limit under both the Montgomery County Noise Ordinance and the State of Maryland's noise standards. The standard is based on the two-fold premise that outside activities in residential areas (such as barbecuing, gardening or speech communication) will be disturbed with a 55 dBA noise level and that buildings will attenuate noise levels inside by 10 to 25 dBA. This results in levels low enough not to cause annoyance or interfere with sleep, even with windows open.

Projection of 1985 noise levels were made using a computer model developed by the Federal Highway Administration and calibrated for the Wheaton area with actual field monitoring data. The model takes into account building barriers, car/truck mix and volumes, vehicle speeds, and vehicular trip generation resulting from land uses proposed in this Sector Plan. The noise levels are weighted to reflect the greater degree of distraction experienced at night.

The noise contour map, Figure 6, indicates the 55, 64, and 70 dBA contour lines. Residences in areas at or inside the 70 dBA contour can be expected to experience substantial noise intrusion, while those between the 70 dBA and 55 dBA contours can be expected to experience moderate noise intrusion from highway sources. Areas outside the 55 dBA contour can expect noise levels typically experienced in residential neighborhoods removed from roadways.

Georgia Avenue, University Boulevard, and Veirs Mill Road are the principal noise generators in the Wheaton Sector Plan area. For 1985, predicted noise levels of 70 decibels or above are common on properties adjacent to these major roadways and in the Wheaton Triangle area. Seventy decibel levels are also reached at the sidewalks and front yards along and to the north of University Boulevard. Projected levels of 64 decibels or above are more common, extending to most areas within one block of the major arterials. Levels above 55 decibels are projected to occur in areas up to two blocks from the major arterials. Neighborhood traffic activity will generally result in noise levels below 55 decibels throughout the remaining area.

NATURAL SYSTEMS

The natural environment is a resource that must be considered in the planning process. The construction of major buildings in areas of thick and well-drained soils, for example, is desirable in terms of improved construction time and cost. Wooded areas also protect against soil erosion and provide attractive visual buffers between various land uses and transportation facilities. Mature trees and exposed bedrock on a site can often be incorporated into the design schemes of the development.

Consultants to the Washington Metropolitan Area Transit Authority and the planning staff analyzed the soils, geology and vegetative cover of the principal vacant parcels in the Forest Glen, Wheaton and Glenmont transit impact areas. This analysis included the review and evaluation of environmental impact studies, aerial photographs, and reports and maps developed by the U. S. Geological Survey and Soil Conservation Service.

The analysis at Wheaton concentrated on the currently vacant parcels or underdeveloped parcels. The principal soil found in Wheaton are Glenelg and Manor silt loam. These soils in areas with less than an 8 percent slope pose only slight limitations and are well suited for development. Areas with 8 to 15 percent slopes are susceptible to erosion during construction.

WATER QUALITY

Water quality is largely a function of the capacity of the storm and sanitary sewer systems. Stormwater impact results primarily from the run-off of rain water from paved areas, including streets, parking lots and roof-tops. The constraint imposed by the sanitary system consists both of the sewer pipe size, which limits the volume of sewage which can be handled, and the regional treatment capacity for sewage, which itself reflects, in part, the quality demanded in the final resulting discharge of treated effluent.

The Wheaton Area currently produces a substantial level of stormwater run-off. The largest areas of paving are associated with roads and with the Wheaton Plaza Shopping complex. The impact of this facility is heightened by its proximity to the Wheaton Branch of Sligo Creek.

Virtually all of the existing development in Wheaton occurred under standards of run-off management and control which were lower than those prevailing today. Under today's higher standards, including requirements that new development contain excessive stormwater run-off on site, new development, when it occurs, can be expected to be managed so as not to degrade existing conditions.

In order to protect Wheaton Branch and Sligo Creek from erosion, sedimentation and flooding problems, Montgomery County Department of Environmental Protection has initiated the Wheaton Branch Stormwater Management Project, which includes the construction of a stormwater detention structure on the "Heitmuller Tract," along Dennis Avenue, east of Georgia Avenue. This structure will form a dry impoundment covering approximately 15 acres and will control run-off from the 775 acre sub-watershed above Woodman Avenue. The impoundment is being designed to protect the area against a range of peak flows from storms of from 2 to 100 year recurrence potential.

As a regionally-imposed constraint, sanitary sewage system problems cannot be resolved purely in the local context of a small-area Sector Plan. Regional plans to provide new or increased sewage treatment capacity and relief to overburdened transmission lines must be solved on a larger scale. The Sector Plan recommends that sufficient capability be made available to support the level of development ultimately recommended by the Plan.

THE CONCEPT PLAN

The term "downtown" or "marketplace" brings to many people's minds a number of colorful images . . . of varied and interesting shops, of movie theatres and restaurants, of open spaces amid tall buildings, of many diverse forms of human activity, and of throngs of people. "Downtown" is the community's principal market center offering a greater variety of goods and services than can be found anywhere else. It is the center of business and commerce for this market and the people it serves. It is, or should be, the expression of the community's vitality and dynamic character. The Central Business District is a symbolic, as well as a functional element in the urban scene and is an important factor contributing to the total economic and social health and vitality of an area. The preservation of this vitality as an element of the "urban" scene must be a matter of concern to the entire community.

The business core of Wheaton is, in the full sense of that term, one of the region's "marketplaces." It is the retail center for a large urban area encompassing portions of Montgomery and Prince George's Counties in Maryland and a portion of the District of Columbia. It offers a range of shops and services which is among the largest and most diverse in the Washington area.

Like most "urban" areas, however, Wheaton also suffers many problems. It is faced with automobile congestion steming from a road and street system designed without the full recognition of today's automobile usage. It is facing competition from other, newer commercial centers elsewhere in the metropolitan area. Its potential for change and new development is limited by the development that has occurred, and by problems of land assembly which result from the existing pattern of relatively small lot ownership.

At the same time, Wheaton's business district is being given a host of new opportunities, perhaps the most significant of which is the coming METRO Rail Transit System, which will link Wheaton to the rest of the Washington Metropolitan Area with new high speed public mass transportation. This system offers a great opportunity for expanding the vitality of the Wheaton "marketplace," building upon the new accessibility opportunities the rail transit system brings. Together with its existing road access to areas to the east in the Baltimore-Washington Corridor, Wheaton has potential for new growth.

With METRO scheduled to operate into Wheaton by 1984, it is important to prepare a Plan to help achieve the realization of these opportunities. Foremost among the goals of the Plan should be a realistic balance between the development potential that exists in Wheaton and the traffic carrying capacity of both METRO, and the street system which leads into and serves Wheaton. It is important to coordinate growth with public expenditures in order to maximize the effectiveness of new development and to prevent commercial encroachment and traffic spillover into adjacent neighborhoods, and thus to preserve them from deterioration.

This approach serves several purposes. It helps to ensure the economic success of the rapid transit system, in which a substantial public investment is being made, by linking closely the transit system with its potential users. Simultaneously, it provides the basis for establishing both an order, and a reasonable limit, to the development that will occur in the business core, insuring that new growth is scaled to the facilities which exist to service it.

Several planning policies emerge from this approach. The purpose of these policies is to guide the development of the Wheaton Business District and to protect the adjoining neighborhood from commercial encroachment. These policies are the basic framework upon which the Sector Plan itself is built.

(1) The basic objective of the Plan is to provide a framework within which the property owner and the businessman can realistically participate in varying degrees of investment and physical change within the context of the coming METRO rail transit system and of existing and proposed public improvements.

(2) A second objective is to preserve and strengthen Wheaton as a viable commercial "marketplace" and a residential community within Montgomery County. Future development should capitalize on the area's market potential, given a realistic projection of anticipated future demands.

(3) The existing fabric of low-density single family homes adjoining the Wheaton business area on the north, west, and east should be stabilized and protected.

(4) The METRO rapid rail transit line should be part of an improved public transportation system designed to induce travelers to use public means rather than private automobiles for inter- and intra-County movements. In order that it best meet this objective, the Wheaton METRO station should be provided with circulation and parking improvements that would facilitate transit and auto access.

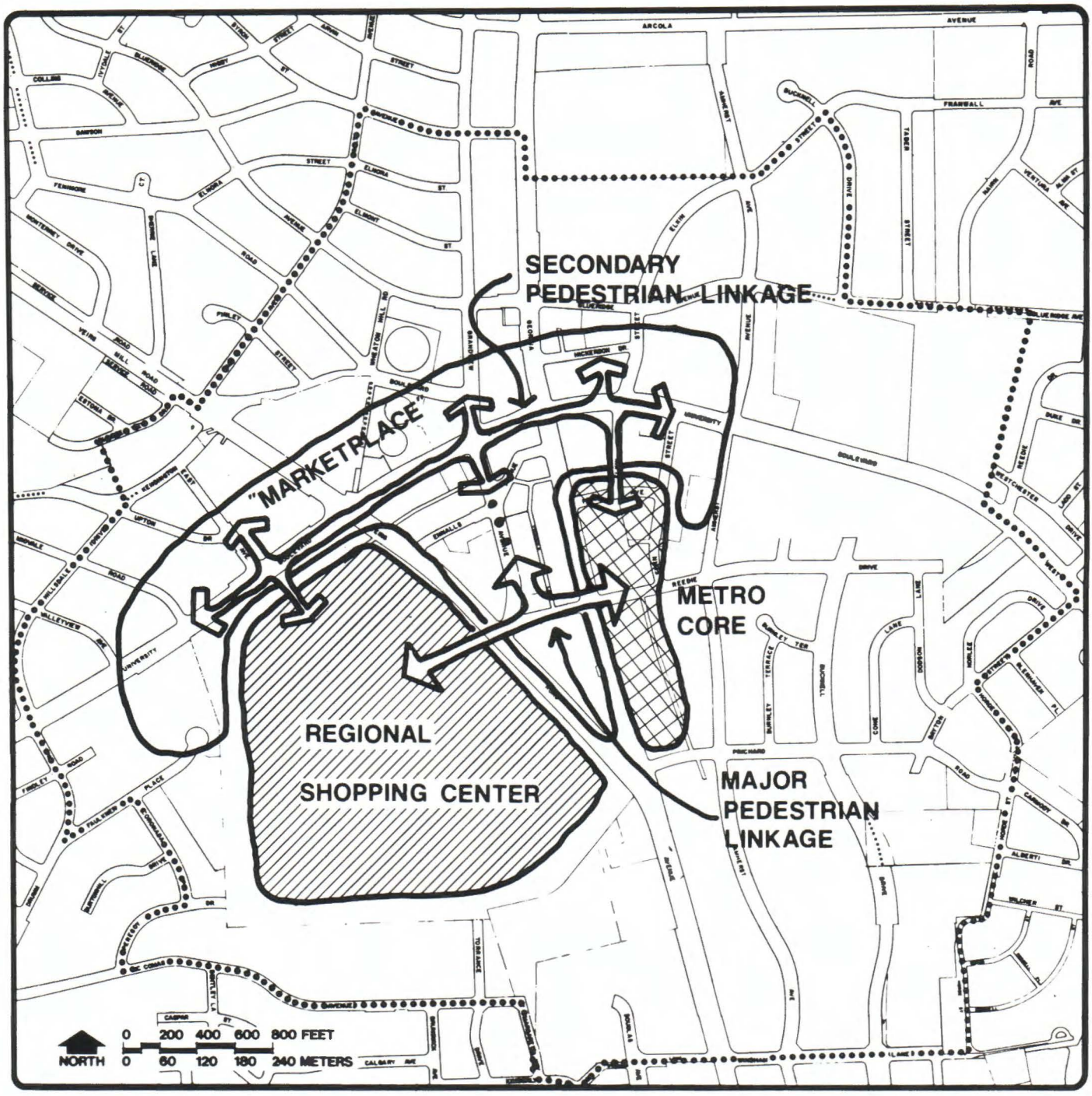
(5) Pedestrian access to the various parts of Wheaton should be improved.

(6) Highway improvements should facilitate access to and minimize disruption in the business area. The heavy volumes of through traffic should be separated, where possible, from local traffic movements.

(7) Convenient and adequate off-street parking should be provided with a maximum of shared use among different facilities. Parking should be located with a minimum walking distance to any desired destination. Massive paved areas should be avoided and, where feasible, parking should be developed in structure.

(8) The Wheaton area should continue to provide a range of housing opportunities to serve a broad spectrum of the metropolitan population. A variety of housing types would help to satisfy a demand for housing that may not be available in other parts of the County. A combination of apartments, townhouse and single-family homes can expand the age and family size mix in Wheaton.

(9) An increase in the local population base can generate greater support for retail establishments, entertainment and recreation facilities, restaurants, and the like. New residential development should be encouraged to insure the viability of the business areas.



CONCEPT PLAN

WHEATON

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SECTOR PLAN

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PLANNING AREA

The "Concept Plan" portrays the possible future of Wheaton, defining this future in terms of a general pattern of development. By establishing such objectives as are outlined below, it becomes possible to establish a foundation upon which decisions and commitments by both the private and public sector can be based. Because of their ultimate time horizon, many of these objectives are necessarily general. Also, since several pertain to a long term future, they may not have a direct parallel statement in the shorter term Sector Plan recommendations which follow in subsequent chapters.

The "Concept Plan" is based upon a policy that would encourage the ultimate redevelopment of areas adjacent to the METRO station and parts of the Wheaton Triangle. The Plan is based upon a policy that would actively promote land assembly, either by public or private initiative, and provides sufficient incentive for major private redevelopment. Development should be concentrated within a high intensity core, rather than sprawling with lower intensities over a larger area.

CBD Boundaries and the Core

A clear boundary will carry out the goals of a concentrated, high intensity core and will foster greater emphasis on pedestrian and transit movement in the Central Business District. The "core" is centered upon the METRO Station.

Firm limits on the Wheaton Central Business District will stabilize adjacent residential areas and protect them from commercial encroachment and undesirable speculation.

Areas of Compatible Uses

The Plan recognizes complementary concentrations for the organization of development in Wheaton. The area around the METRO Station should develop with the highest intensity of new activities. This focus, or "core," would be an area of mixed uses, including high density office activities, a range of public and private services, and retail development scaled to serve the surrounding population. Linked to this high intensity "core" is the "marketplace," the traditional retail area in Wheaton. Wheaton Plaza, a major regional retail center, should be strengthened as an integral part of the Wheaton business area. A major linkage should be created to tie together the METRO "core" area, the "marketplace," and the regionally-oriented Plaza. This linkage could include a grade-separated pedestrian walkway across Veirs Mill Road.

The nature and the density of new development can create a highly pedestrian oriented Wheaton Central Business District. Moreover, the nature of activities attracted to Wheaton can increase the regional "marketplace" function.

Residential Areas

The large vacant tracts of land on the fringes of the business area should be developed with low and moderate density residential uses (single-family detached units, townhouses, and garden apartments). Community facilities and services would be developed as needed, on scattered sites to serve both new and existing development.

The area to the east of the METRO Station is an established low density residential community. This is a physically stable area and should be protected from traffic, noise and other undesirable intrusions.

Similarly the area to the north and west of the business area is predominantly single-family residential. Parcels adjacent to University Boulevard and Georgia Avenue are under increasing pressure for various non-residential activities, which are tending to have a blighting influence on existing stable residences. These areas should be maintained and protected as residential communities.

Circulation

Through traffic will continue to be channeled into the main arterials which travel through the Central Business District. A local trafficway system will be designated to channel traffic directly to destinations or parking facilites. Convenient, adequate public parking should be provided to serve retail and service activities and METRO. The parking should be in close proximity to those uses it is intended to serve. To the extent possible, parking should be structured, and should be incorporated into mixed-use development whenever possible. Sidewalks and walkways should be continuous along all street faces within the Central Business District, and should connect to safe crosswalk locations at major intersections.

The METRO rapid rail system will be part of an improved public transportation system designed to induce the use of public transit rather than private automobiles. The Wheaton METRO Station will be provided with feeder and circulation systems which would facilitate transit use. This should include priority bus lanes in areas of high vehicular congestion. In addition, small vehicle bus service should be developed to serve low-density residential neighborhoods adjacent to the Central Business District.

The Visual Environment

Programs should be developed, and actions initiated (both public and private) to upgrade the physical environment of the business areas. In order to improve the vitality of the retail environment, public expenditure should focus on the creation and development of amenities now lacking, including unified street furniture, signing and lighting, continuity of walking areas, sitting and resting places, landscaping and weather protection, and cleaner, safer crosswalks.

SECTOR PLAN FOR THE WHEATON CENTRAL BUSINESS DISTRICT AND VICINITY

THE LAND USE PLAN

This Chapter focuses specifically upon the land use elements of the Sector Plan. Its foundation is in the Concept Plan, which establishes the character of future development. It begins with a description of existing land use within the Wheaton Central Business District and Vicinity and sets forth a more detailed plan for land uses. It focuses on those areas in which new development or redevelopment is recommended during the Sector Plan period.

EXISTING LAND USE

Land uses in Wheaton vary widely, ranging from single-family residential through many sorts of commercial activities, to and including both public and private institutional uses. A substantial amount of the land area is devoted to surface parking.

Three major concentrations of activities can be identified which have particular significance in the structure of the Wheaton Central Business District. These are the existing core of retail activities along Georgia Avenue, University Boulevard, and nearby streets; the concentration of retail activities in Wheaton Plaza; and the concentration of automotive-mechanical activities generally along Georgia Avenue and Veirs Mill Road south of University Boulevard.

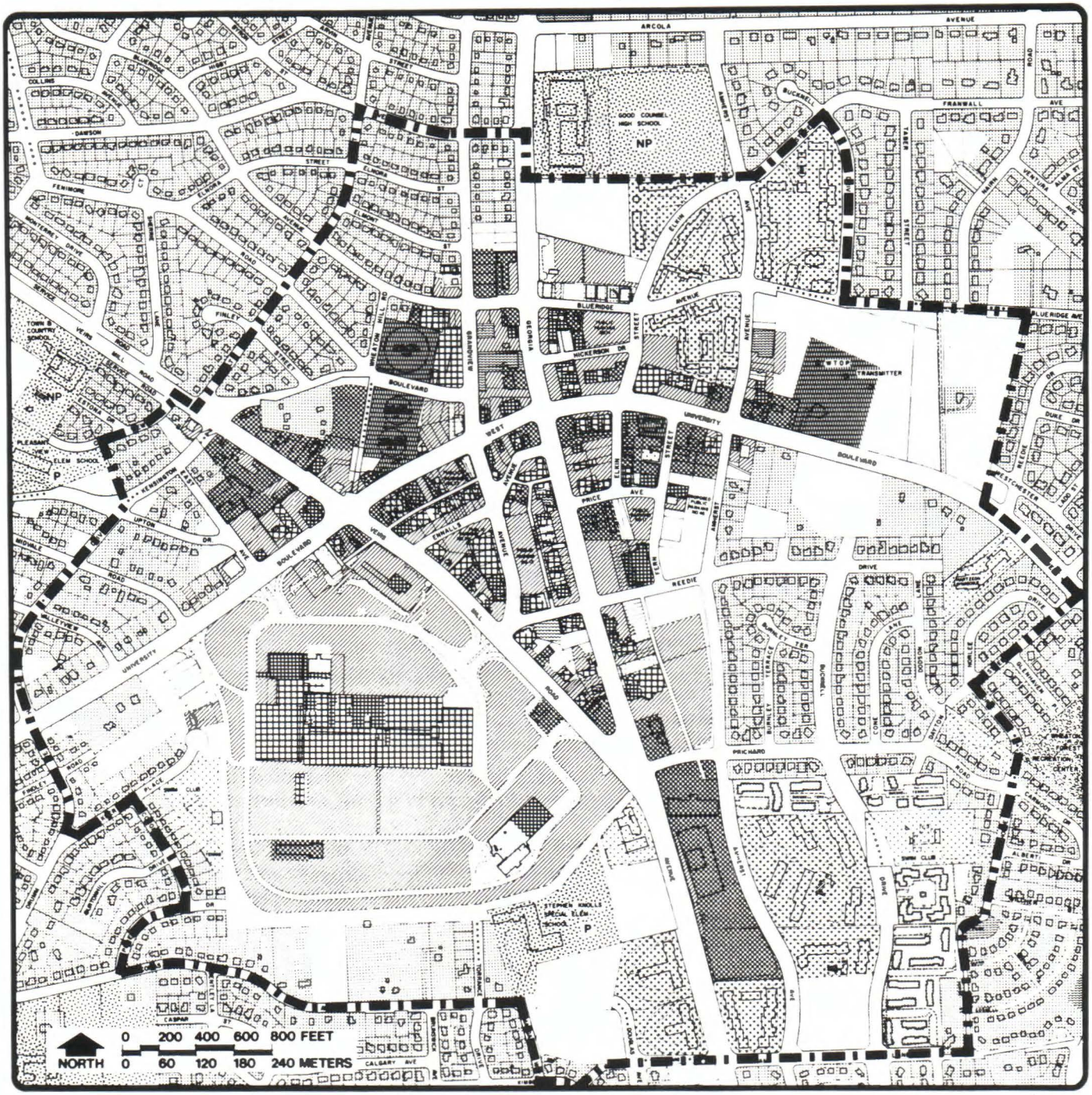
The existing retail core of Wheaton rotates about the primary crossroads intersection of Georgia Avenue and University Boulevard. Shops line both sides of University Boulevard in both directions from Georgia Avenue to east of Amherst Avenue, and west of Veirs Mill Road, as well as both sides of Georgia Avenue north of University Boulevard, and the west side of Georgia Avenue south to Veirs Mill Road. Most of the shops in these areas are general merchandise and service outlets, although several specialized outlets, serving a regional market, also exist.

The nature of these retail outlets changes toward the south and southeast, with an increasingly larger proportion of them devoted to mechanical and automotive supply and service functions. These retail uses predominate along Georgia Avenue, generally south of Reedie Drive.

Abutting the existing business district on the southwest is the regional shopping facility of Wheaton Plaza. The Plaza has 2 major department stores, over 70 specialty shops, 2 supermarkets and a number of freestanding office buildings. Slightly more than 2/3 of the land area of the Plaza is devoted to surface parking.

The Wheaton area has a substantial residential base, including large numbers of garden apartments, directly adjacent to the business center. The areas surrounding the Central Business District are occupied by single-family residences of a variety of sizes and ages. Most of these residential units are in good to excellent condition, except for selected blocks north and west of the business area where intrusion of some non-residential uses, including poorly executed building conversions, has adversely affected numerous properties.

A major non-residential land activity in Wheaton is automobile sales and service. There are about a dozen major automotive and auto-related outlets in Wheaton, predominantly along Georgia Avenue and Veirs Mill Road. These activities service a large market area not only for car sales, but also for service.



EXISTING LAND USE

RESIDENTIAL

- Single-Family
- Duplex
- Townhouse
- Apartment (1-4 Fls.)
- Apartment (over 4 Fls.)

COMMERCIAL

- Convenience
- General
- Office
- Automotive Related
- Parking

INDUSTRIAL

- Industrial
- Open Storage

PUBLIC & QUASI-PUBLIC

- Public Park
- P Public School
- Religious & Other
- NP Private School
- Governmental
- Health Care
- Utilities
- Vacant
- Dedicated Streets - Not Constructed

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PLANNING AREA

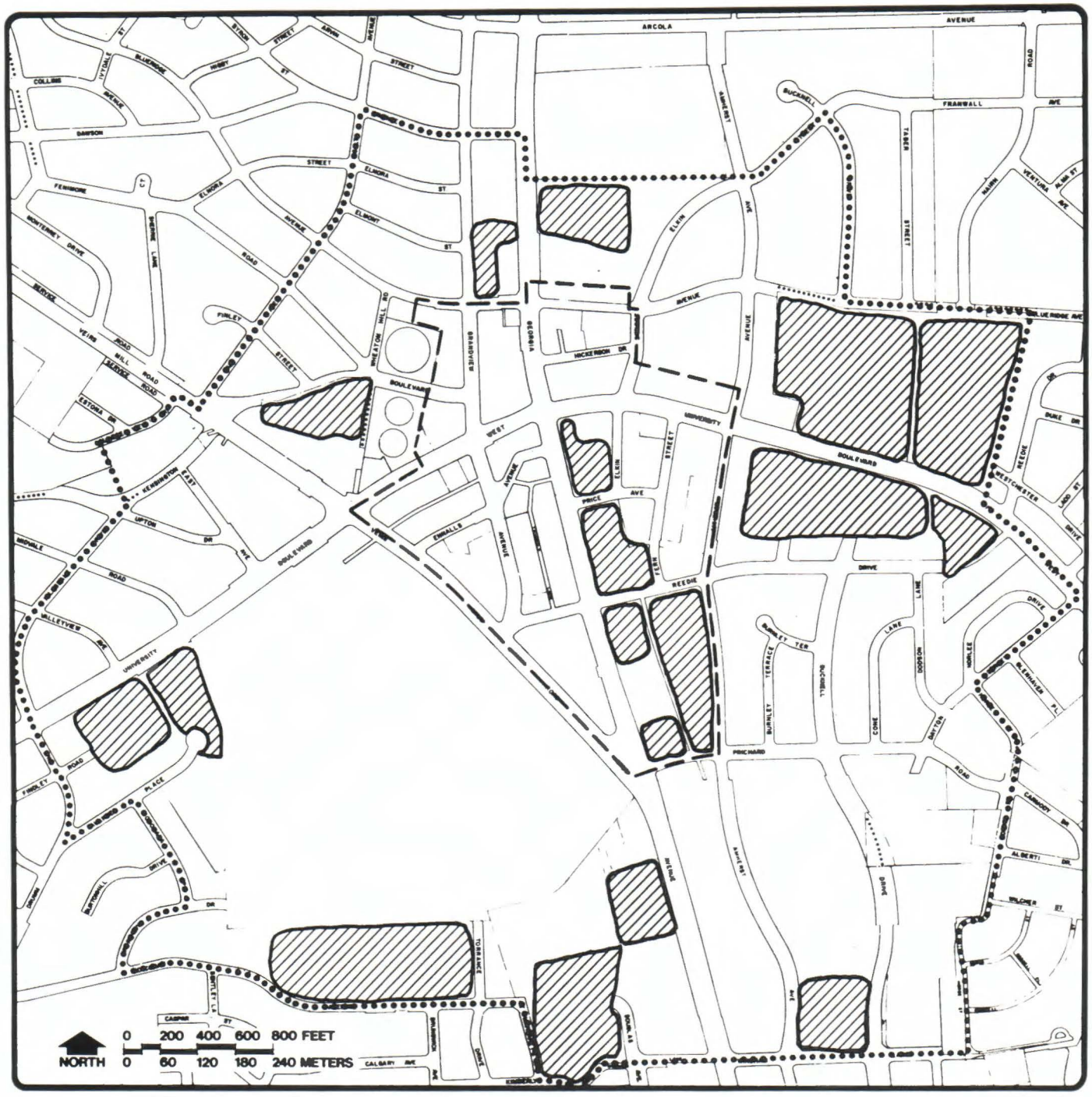
The Wheaton Business Center is unique in that it has two primary service function areas. A portion of it serves as a regional shopping center (Wheaton Plaza) attracting people from a wide area of the County and region; the remaining portion of the business district serves as a neighborhood shopping center attracting people from a much more local area. Integral to the local shopping area are specialty shops and services of wide ranging appeal.

WHEATON SECTOR PLAN
EXISTING LAND USE

Land Use	Land Area Devoted to Land Use (Acres)
Residential	
Single-Family	89.97
Townhouse	4.29
Multi-Family	36.74
Total	131.00
Commercial	
Convenience	7.15
General	17.30
Office	4.75
Auto Related	22.42
Parking	93.88
Total	145.50
Public and Quasi Public	38.04
Vacant (or underdeveloped)	44.53
Street and Highways	97.20
TOTAL	456.27

THE DEVELOPMENT ENVELOPE

The capacity for future growth in Wheaton is not unlimited. There are several constraints which the planning process must take into account. The capacities of the feeder road network, as analyzed above, of the water and sewage systems, and the quality of air, impose physical limitations on the size and density of the business core. Economic constraints emanate from the nature of the market demand for housing, commercial facilities, office space and other types of activities, both absolutely, and for Wheaton in competition with other centers of activity in the Washington Metropolitan Area.



AREAS SUSCEPTIBLE TO DEVELOPMENT

WHEATON

---- PROPOSED CBD BOUNDARY
..... SECTOR PLAN BOUNDARY

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SECTOR PLAN

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PLANNING AREA

At the same time, Wheaton has several advantages which need to be recognized. Wheaton is very accessible because of its position at the confluence of several major roads linking it with other suburban locations. It is astride a major, and historically important, cross-county arterial--University Boulevard--providing linkage westward to Kensington and Chevy Chase and eastward to Prince George's County. It is convenient to the Beltway, providing ready access to other parts of the Metropolitan Area. Wheaton has a sizeable area of influence in terms of retail trade and work place attraction, extending north to Aspen Hill and south into the District of Columbia. With the coming of METRO rail transit, Wheaton will be linked directly with Silver Spring and downtown Washington, adding a new dimension for future development and growth.

A "development envelope" is a measure of the capacity of an area--in this case the Wheaton Central Business District and Vicinity--to accommodate development based upon various constraints. The constraints reflect the area's ability to contain or handle traffic generated by activities within the area in combination with through traffic, and to handle the pollutants generated both by traffic and the use of the land.

While final quantitative values have not been calculated for these constraints, they have been taken into consideration in establishing the development envelope for Wheaton.

A second factor in establishing a development envelope involves making a judgment about how much land is required for a desirable level of growth to occur. Since development is largely the result of private investment and construction, and since land is privately owned by many separate owners, it cannot be assured that every piece of land within the development envelope will be developed to the full limit of the envelope. Some parcels will be only partially developed; some may not be developed at all. Existing low density uses may be quite profitable, and their owners may have no interest in redevelopment. Other parcels have new structures which are unlikely to be replaced for 30 or 40 years. In other cases, assembly of enough contiguous parcels of land for a substantial building will not be possible. Thus, much of the land within the development envelope of a mature area like Wheaton might not actually be available for new uses.

The size of the development envelope can be modified by increasing the capacity of the systems on which it is measured--for example, by building new links in the transportation system or reducing the output of pollutants by fixed sources. Taken as a whole, the development envelope sets the upper and outer limits of growth in the Sector Plan area for the six to ten year time period covered by this Plan.

In a developed area such as Wheaton, the many existing conditions, both natural and man-made, limit options of development. The location and character of existing residential, commercial and public lands become fixed guide-points; the majority of them are not subject to major change. As a result, the available options for those

areas are limited in scope to such improvements as landscaping, and other changes to existing physical appearance. Similarly, the location of major roads and highways, and the established locations for METRO and its related station facilities, preclude certain options.

A key factor influencing the location of new development in Wheaton is the existence of sites "susceptible" to private redevelopment. These sites include vacant parcels, underutilized parcels, and large parcels or groups of contiguous parcels under single ownership or control.

Of the approximately 460 acres in the area covered by the Wheaton Sector Plan, 80 acres can be considered "susceptible" to future redevelopment. Properties considered for redevelopment in this analysis include vacant land; land potentially affected by future METRO construction; land which may now be economically viable but containing uses incompatible with existing and future development (such as produce sales, junked autos, radio towers, auto repair, etc.); deteriorated or dilapidated structures; and large, underutilized parcels. Major parcels considered to have development or redevelopment potential are indicated on Figure 9.
Approximately 83 percent of Wheaton's land area is presently committed to existing development which precludes much redevelopment in the foreseeable future. These areas include:

- Stable uses on parcels which are unlikely to change (Wheaton Plaza, new construction, relatively new high-rise development, etc.).
- Publicly owned property not subject to redevelopment (roads, surface and garage parking, the County Service Center, etc.).
- Stable residential communities outside the business district and relatively free from traffic, noise or other intrusions from major roadways or from non-residential development.

THE LAND USE PLAN

There are critics of the American urban scene who contend that the traditional urban marketplace or "downtown," which has historically been the focus of activity and vitality in most communities, is doomed to extinction. If they are right, the future of these urban communities themselves is in doubt. Without an economic and social focus, and without a "cultural" center, the urban environment can become a meaningless, amorphous sprawl of directionless growth.

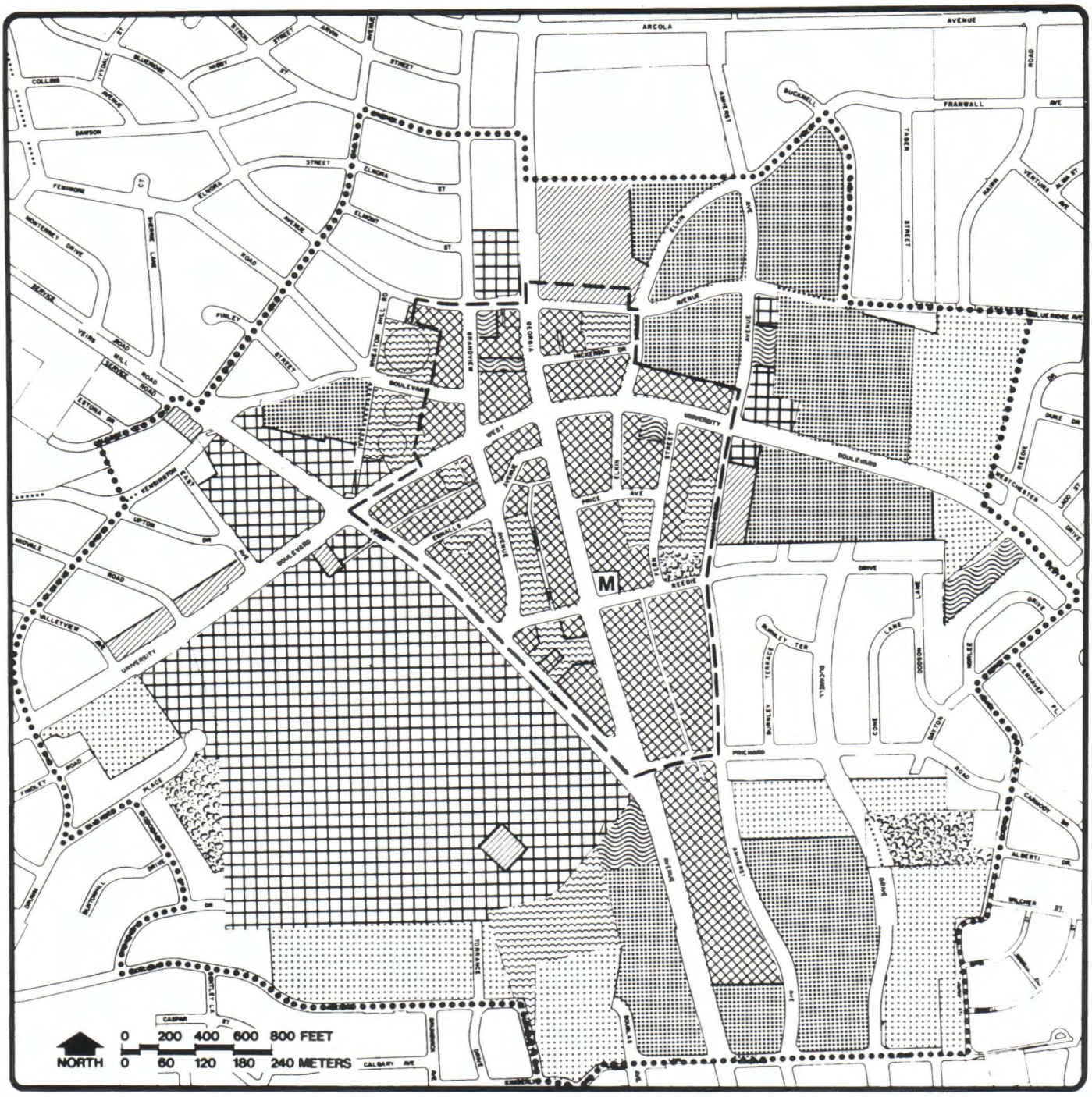
The "marketplace" is the community's principal trading center offering a great variety of goods and services that cannot be found elsewhere. It is also the entertainment center, offering a variety of fare possible only as long as there are concentrations of people to support it.

Despite the pessimistic prophecies of doom, despite the many problems which these "downtown" areas face, and despite the chaos wrought by the automobile, the Central Business District still has a distinct place in the urban framework. It is a symbolic, as well as a functional element in the urban scene. It is an important factor contributing to the total economic, physical and social health and vitality of the community.

Many of the basic ideas and concepts behind the Sector Plan are derived from the extensive post-war experiences with suburban shopping centers, such as Wheaton Plaza, and the adaptation of these experiences to the modernization of central business areas. Most post-war shopping centers have taken a similar form: a pedestrian walkway or mall in the center of the development; the mall bordered by commercial establishments; mall and stores surrounded by parking; and the whole development ringed by a road system distributing cars to the parking area from a major highway. The mall, in its simplest form, is a pedestrian way connecting commercial establishments and with major "magnets" (department stores) or anchors at each end. Often the parking areas are subdivided into a number of smaller parking fields, all accessible from ring roads and served by an internal circulation system designed to distribute traffic among the several parking areas.

This Plan attempts to use many of the basic elements found in successful shopping centers such as Wheaton Plaza: a separate pedestrian circulation system; a linking of a number of "magnets;" a series of parking facilities; and an integrated vehicular circulation system which is connected to major arterials. The pedestrian areas or "malls" are created by separating vehicular and pedestrian circulation. This can be accomplished either by constructing a separate pedestrian system or by excluding automobiles from the principal pedestrian arteries. Automobiles are stored in parking lots or parking structures built on the periphery of the "core" area.

The Land Use Plan translates the concepts desribed previously into specific land use recommendations within the Sector Plan area.



LAND USE PLAN

- Residential Low
- Residential Medium
- Residential Medium / High
- Mixed Use
- Office
- General Commercial
- Parks & Recreation
- Public
- Semi-Public

WHEATON

---- PROPOSED CBD BOUNDARY

..... SECTOR PLAN BOUNDARY

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SECTOR PLAN

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PLANNING AREA

The Central Business District of Wheaton is an urban marketplace. It provides a variety of goods and services that cannot be found elsewhere in the eastern part of Montgomery County. The coming of METRO adds another dimension to the Wheaton business area; it introduces the opportunity to restructure central Wheaton into an "urban place." Urban places are characterized by a land use pattern that is both compact and varied. Such a pattern can be strengthened by encouraging mixed-use development in which a variety of activities and establishments, including offices, shops, and apartments, can be found within individual buildings or in close proximity to one another. It is the objective of the Sector Plan to foster this type of development in Wheaton.

The sections which follow describe the Land Use Plan for the METRO "Core" and for office, commercial and residential uses in the Sector Plan area. In those areas designated as suitable for mixed use development, more than one land use may be recommended. In such areas, the Land Use Plan should be interpreted with flexibility, serving primarily as a guide to development.

The METRO Core

Integral to the land use concepts recommended in this Plan is the creation of a major activity core at the transit station site and the development of a number of linkages or "spines" between it, the retail "marketplace" in the Wheaton Triangle, and Wheaton Plaza.

Wheaton Plaza provides a "magnet" or anchor on the western end of the Reedie Drive spine. The METRO Station itself is the "magnet" on the eastern side. In between are the shops, services and public facilities in the Wheaton Triangle. The METRO site itself, however, is to be developed as a 250 car at-grade parking facility. The land developed as METRO parking, in and of itself, will not contribute substantially to the vitality of the Wheaton marketplace. The Plan, therefore, recommends an office core on and around the METRO station, and between University Boulevard and Prichard Road. This development could take place on air rights over the METRO parking facility and on land made available by METRO Station construction. Office development would benefit from the existence of excellent transportation (rail, bus, car) and the convenience of the varied shopping and services. The "marketplace" would benefit from the purchasing power of the office workers. In addition, the integrated planning and development of the METRO transit facility and multi-use office development provide an opportunity to improve mobility, increase METRO ridership, diminish negative environmental impacts, reduce traffic congestion, and increase the diversity of employment opportunities and services in the Wheaton area.

This type of integrated planning and development of a transit facility site is referred to under the broad heading of "Value Capture" planning. "Value Capture" is a mechanism whereby specific advantage is taken of the design and placement of transit facilities to add value to the site (and to surrounding sites) and to capture some portion of this value for the benefit of the transit system.

The simplest form of value capture takes place when a largely underground and surface transit facility--in this case, a below grade station and surface parking--is designed and built in a way that permits additional usable building space to be constructed on the site. This form of value capture is commonly called air-rights development, since the surface of the site is occupied by transit facilities and the building space is placed "in the air" over the site.

The convenience of direct access to the METRO from the "air-rights" development increases the value of the site for development, since site value is enhanced by convenience to transportation. Concurrently, the METRO system benefits because the proximate development generates substantial additional ridership for transit. Moreover, depending on the means of disposal of the site for development, the transit system may gain revenues from sale or lease of the air rights, which contribute to off-setting the total costs involved in providing public transportation.

As previously discussed, the Plan envisions a major pedestrian spine running east-west along Reedie Drive, anchored by Wheaton Plaza on the west and by the METRO Station facilities on the east. Georgia Avenue follows a ridge through the business district, to a high point north of University Boulevard. Veirs Mill Road follows a depression between Georgia Avenue and Wheaton Plaza rising to a high point at its intersection with University Boulevard. The major pedestrian spine takes maximum advantage of this topography to separate vehicles from pedestrians.

The Wheaton METRO Station Plan proposes a tunnel under Georgia Avenue at Reedie Drive to provide access to the METRO Station from the METRO surface facilities east and west of Georgia Avenue. While this 24' wide passage is designed primarily to provide access to the Wheaton Station, it also provides the opportunity for major pedestrian flow east-west across Georgia Avenue without pedestrian-vehicular conflicts. The actual tunnel is of minimum length; the approaches return to sidewalk grade approximately mid-block along Reedie Drive, between Georgia Avenue and Fern Street on the east and Georgia Avenue and Grandview Avenue on the west.

The existing topography west of Georgia Avenue along Reedie Drive, which is falling away to Veirs Mill Road and then rising to Wheaton Plaza, provides the opportunity to develop a grade separated pedestrian link above Veirs Mill Road. This linkage would connect directly to the mall level of Wheaton Plaza from approximately mid-block of Reedie Drive, between Georgia Avenue and Grandview Avenue. This pedestrian spine establishes a major link among the major shopping center (Wheaton Plaza), the retail marketplace, the Wheaton Community Service Center, the METRO "Core," the proposed Wheaton Urban Park to be located along Reedie Drive between Fern Street and Amherst Avenue, and the residential communities east of Amherst Avenue.

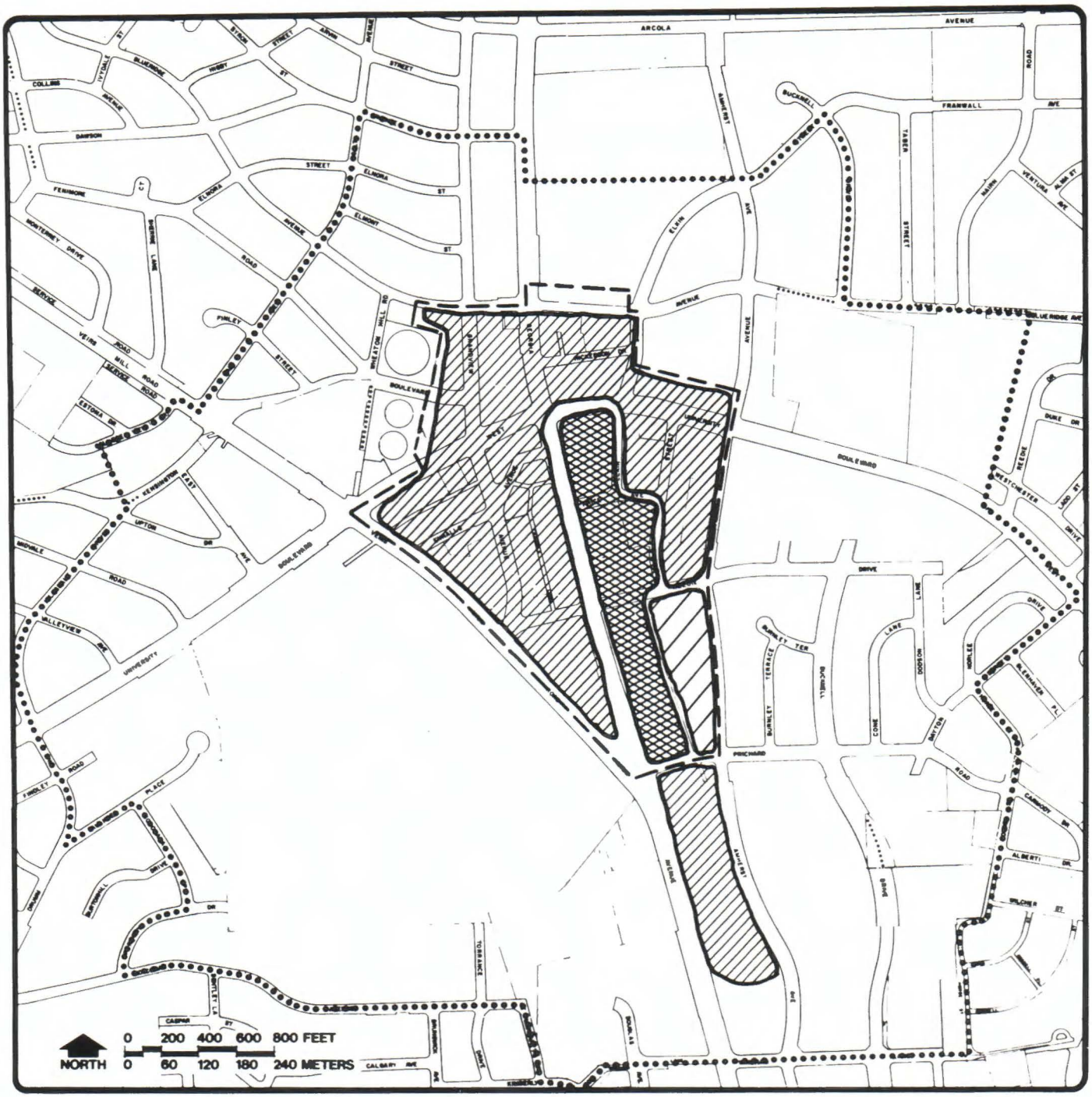
A semi-mall is also proposed along the alignment of Triangle Lane, between the proposed METRO Bus Terminal/Public Parking Facility and the shops fronting on Triangle Lane. This semi-mall, a major component of the pedestrian system, would be constructed from Reedie Drive to Ennalls Avenue and would provide direct pedestrian access from the east-west pedestrian spine north to University

Boulevard. The proposed configuration would permit access along Triangle Lane but would eliminate the parking directly in front of the shops. The semi-mall would be attractively paved and landscaped and include benches, kiosks, and other design features. The pedestrian traffic generated by the METRO bus bays, the individual shops, and the north-south pedestrian movement will create a pedestrian intensive space and should substantially increase the visibility of all the shops along Triangle Lane. A mid-block connection between the semi-mall and Georgia Avenue should also be considered as the area is redeveloped.

The Plan envisions a secondary pedestrian spine running east-west along University Boulevard that would provide comfortable pedestrian access to the businesses along University Boulevard and the commercial activity to the north. This spine would be linked to the major pedestrian spine along Reedie Drive by the semi-mall. This secondary spine could be developed by utilizing and expanding the existing sidewalk systems. The sidewalks in this area are very narrow as a result of the widening of University Boulevard. In a number of cases the storefronts are located only far enough back of the right-of-way line to provide space for a single row of parking that requires backing of vehicles directly onto University Boulevard. As redevelopment at this area occurs under the proposed CBD zoning, increased sidewalk width and appropriate landscaping, including street trees, can be implemented through the Plan approval process. In those areas where redevelopment is not anticipated in the short term, the businesses should be encouraged to reduce or eliminate the parking immediately in front of the establishment in favor of widened and landscaped sidewalks. This would not only reduce the traffic conflicts but would also provide increased access to all customers in this area.

The Plan anticipates that the majority of new development, in the short term, will occur on the east side of Georgia Avenue. The acquisition of land by METRO for the construction of the Wheaton Station will provide several large parcels suitable for immediate development upon completion of the station construction. Several other large parcels are in single ownership and either vacant or sufficiently underdeveloped to justify redevelopment. This new development is anticipated to be primarily of an office and commercial nature. Emphasis should be placed on developing a pedestrian spine along the frontage of Georgia Avenue from south of Reedie Drive to University Boulevard that would include a wide, attractively paved and landscaped sidewalk. Development of air rights over the station surface facilities should include provisions for a major civic space that might include fountains, seating and landscaping and be accessible to shoppers and the business community for relaxation and enjoyment.

Areas adjacent to the METRO Station are recommended for residential development. METRO will increase the ease of access from Wheaton to employment centers throughout the Washington region. The proposed transportation improvements and the convenient shopping and service already in place make the Wheaton area particularly suitable for a variety of housing types. In order to take advantage of METRO, and to encourage increased riderhip on the system, residential development should be encouraged in the vicinity, particularly in the underutilized parcel south of Reedie Drive and west of Amherst Avenue. This parcel should develop in a way which incorporates mixed-uses such as retail and service commercial in the total development.



MIXED USE AREAS

PREDOMINANTLY OFFICE

PREDOMINANTLY COMMERCIAL

PREDOMINANTLY RESIDENTIAL

WHEATON

---- PROPOSED CBD BOUNDARY

..... SECTOR PLAN BOUNDARY

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PLANNING AREA

Office Land Use

In addition to new office development within the METRO "Core," office development is recommended north of Blueridge Avenue, on the northern frontage of University Boulevard between East Avenue and Valleyview Avenue, and on the east side of Amherst Avenue south of University Boulevard.

The northern frontage of Blueridge Avenue contains several smaller office buildings. These are occupied largely by professional services such as architects, engineers, attorneys, insurance companies and banks. These functions are peripheral to the Wheaton business area and in close proximity to existing single and multi-family residential development. Future office development, in the same area, which abuts either single or multi-family residential areas, should be restricted to a height limit of 30 to 40 feet. These offices should serve as a transition between the residential areas to the north and the Central Business District south of Blueridge Avenue. The undeveloped property on both sides of Georgia Avenue also functions as the "entrance" to Wheaton from the north. The design of future development should take into consideration this "gateway" location and insure a maximum compatibility with surrounding uses.

The Plan indicates office use for the University Boulevard frontage between East Avenue and Valleyview Avenue. These residential structures front on a major artery with associated traffic noise and air pollution. The residential sensitivity to these problems is indicated by the deterioration of a number of the homes. The conversion of these houses to offices would tend to stabilize this frontage area and provide a buffer to the existing single-family community to the north. Future development should be similar in scale to the existing conversions that have taken place in the block between East Avenue and Midvale Road. This type of development is also recommended on Amherst Drive adjacent to the Central Business District.

Commercial Land Use

Throughout the United States, a major revolution in marketing has been taking place since World War II. The resulting changes and adjustments normally have a significant and disturbing effect upon the total urban picture. One of the most significant of these changes has been the steady trend to the supermarket replacing the small neighborhood grocery store. Another is the development of the "shopping center" as a planned and often syndicated group of shops and services. In some communities, the impact of the shopping center with its attractive new stores, pleasant pedestrian environment, and convenient parking, has dealt the older commercial areas a serious blow. Many observers have even forecast the complete demise of the old central business district.

The Sector Plan hopes to reverse the present trend and stabilize the Wheaton "marketplace." It is a rational attempt to relate various types of commercial uses to the size and type of market to be served and to the land use and traffic implications of various types of commercial activity, both retail and non-retail. The Plan also indicates those land uses which would support and strengthen the

commercial base by increasing the magnitude of purchasing power within the trade area. (The trade area is the geographic area from which customers are drawn.) Some types of commercial activity, such as gasoline stations or lumber yards, are much less compatible with residential areas than are pharmacies, variety stores, or baked goods shops. Within the Central Business District area, where land is at a premium and usually very costly, low density uses, such as auto sales lots or drive-in businesses, are not appropriate, whereas retailing, offices, and professional services, doing a high volume of business per square foot, would be most desirable. Likewise, some activities, such as automotive services and drive-in businesses, require direct access and generate fairly high volumes of traffic. These uses can often be located on the fringes of the business area, and sometimes in a more generalized commercial area which may not specifically fall into one of the categories discussed above.

An underlying principle of the Sector Plan is the proper grouping of various commercial uses by their primary functions and land use requirements. Wherever possible, they should be consolidated into compact areas so that retail strength would not be diluted by random spread. Concentration also facilitates the making of proper provisions for loading and off-street parking, which, by eliminating frequent curb cuts and curb parking, help to reduce traffic frictions along stretches of major arteries.

Commercial activities can generally be divided into two categories, convenience commercial--those which serve a direct, fairly frequent, repetitive demand generally placed upon them by nearby areas--and comparison commercial--those which service more specialized shopping demand, to which people travel some distance for relatively infrequent purchases, and for which customers generally "shop around." Convenience commercial establishments include food and grocery, produce, dairy, meat, and drug establishments, stationery stores, etc. Comparison commercial establishments include "pedestrian" establishments such as clothing, apparel, gift and department stores, and "non-pedestrian" establishments such as appliance, radio and TV, and automobile showrooms.

Convenience establishments usually serve nearby residential areas, and their number and size correspond to the size of the residential area. Comparison establishments tend to centralize and select locations based on regional transportation access. Even here there is some variation, since comparison establishments may be "local," i.e., serving a portion of a metropolitan area, or "regional" such as Wheaton Plaza, i.e., serving the entire metropolitan area. Specific types of establishments frequently cluster to create a pool of shops in which many customers can be attracted to compare; in such cases the drawing power of the cluster frequently is greater than the individual drawing powers of the component stores, which benefit from one another's proximity and the enlarged size of the total product selection. Locations are selected for ease of access to the regional market, for ease of service or any of several non-market reasons peculiar to the establishment.

Specialized uses generate their own demands. For example, shops need stationery, envelopes, wrapping paper, etc., generating demand for supply services; both employees and shoppers need or want meals, generating demand for personal

services such as restaurants. Office establishments generate demands for other business services, such as specialized printing activities, travel agencies, banking and brokerage functions, real estate activities, etc. In the case of an urban center, there are multiple and overlapping clusters with multiple and overlapping demands, resulting in a wide diversity of business establishments. Such establishments, particularly retail and many personal service establishments, have a common need for pedestrian access, requiring that they occupy ground floor locations in mixed use buildings where other uses occupy space on higher floors.

There are essentially two "marketplaces" in Wheaton. Wheaton Plaza is a regional shopping center serving a major market area and physically separate from the other business establishments in the Wheaton area. The second "marketplace" is local rather than regional. It consists of the many retail, service and specialty shops in the Triangle to the east of Georgia Avenue, and north of University Boulevard. The strength of this "marketplace" is being somewhat diminished by the age of most of the stores, physical unattractiveness, and growing traffic congestion in parking areas and on local streets. A Sector Plan can provide some impetus for redevelopment and for the creation of a more attractive environment. A major catalyst to upgrading Wheaton should be the METRO system and the related increase to the residential population and work force. Improvements in the shopping areas are linked to the increased purchasing power of a strong "downtown" population base within close proximity to commercial establishments. This Plan recommends the retention and revitalization of the existing retail area as a major "marketplace" in Montgomery County.

New commercial development within the high intensity multi-use development at the METRO Station should also be encouraged. Such development at these locations would complement the existing retail area and service local residents and workers.

There are a number of automotive uses located south of Prichard Road on Georgia Avenue, and north of University Boulevard on Veirs Mill Road. Those on Georgia Avenue are better served by access and are nearer to the METRO Station and METRO "Core." As redevelopment occurs, this area could be redeveloped as mixed use commercial development serving the adjacent residential development.

Commercial establishments north of University Boulevard on the east side of Amherst Avenue help to satisfy needs for local convenience stores. This retail area should continue to service the surrounding residential neighborhood.

Residential Land Use

This Sector Plan attempts rationally and intelligently to "exploit" the existing retail advantages and the potential of the METRO transit station in Wheaton. In attempting to capitalize on these assets, the Plan recommends the development of a strong supporting population base. A variety of housing types in close proximity to the Central Business District and the METRO Station would meet the needs of the residential housing market, would provide built-in purchasing power for the local retail "marketplace," would provide for an increase in the potential ridership

on the Glenmont Transit Route, and should not contribute to the demand for commuter parking in the station area since it would be within walking or short bus-ride distance.

The future development of various types of housing (single-family detached, townhouses, garden apartments, condominiums, etc.) to keep up with residential demand will be determined by a large number of interrelated factors. Land availability, price, zoning and building regulations, the cost of money, energy costs, material costs, access to transportation, utilities, municipal services, the level of taxes, and nearness to shopping and other community facilities are all important factors which will influence the nature of residential construction.

In Wheaton, many of these factors indicate an increasing rate of townhouse and multi-family construction. The resistance of most homeowners to multi-family and townhouse development can be traced in some measure to the uninspired character of most buildings, and the tendency of many speculative developers to crowd the land with buildings without providing suitable open space, play areas, and landscaping.

Recent trends in townhouse and apartment development, however, show encouraging signs that many developers have recognized the need to offer more attractive housing, which would be more compatible with the character of the areas into which they seek to build. Some of the multi-family development being built today, including those for middle income families, offer sophisticated architecture in attractively landscaped settings. It must be recognized that a proper ratio of multi-family housing is essential in order to provide adequately for the housing needs of all residents of the community. There are many types of multi-family units, ranging from the four unit apartment-house to mid-rise structures, whether of the rental, condominium, or cooperative type. Each serves a specific function and has a different effect upon the character and economy of the area.

Traditional zoning has tended to create a distinct compartmentalization based on the largely obsolete concept that the introduction of any two distinct types of residential uses into a given area creates automatic conflict. Newer thinking in this respect is beginning to encourage a less rigidly conceived diversity of housing types, including various necessary services as an integral part of the development. This serves to avoid area-wide segregation of people by age, family composition, and income. Under this concept, the fear of adverse effects upon property values usually associated with "multi-family" development would simply become irrelevant, since such development would be a designed part of the community to begin with. An ideal neighborhood would include an appropriate range of housing types designed to serve a well-balanced population structure. The use of the Planned Development concept is a major attempt to achieve this goal.

It must be acknowledged that multi-family housing will have a greater impact on its immediate neighborhood, and to some degree on the entire community as well, than single-family houses. The higher the density (and consequently population) the greater the traffic impact and the greater the demand on municipal facilities and services. The impact on schools and on recreation facilities depends upon the

"bedroom distribution," i.e., the proportion of all units with two or more bedrooms (indicative of the likelihood of their housing children or young people). Concurrently, in an area where many municipal facilities are in place already, higher density may provide more effective utilization of this existing "physical plant" at lower levels of land consumption.

The proposed residential areas are identified by the range of their densities in terms of dwelling units (DU's) per acre of land.

Residential Area	Density Range
Low Density	3 - 6 DU/acre
Medium Density	9 - 13 DU/acre
Medium/High Density	15 - 25 DU/acre

The proposed density for single-family residences remains at 3 to 6 dwelling units per acre. This is the existing density range in the single-family areas adjacent to the business district. The Medium Density of 9 to 13 DU's per acre, as proposed by the Sector Plan, would encourage the construction of various types of single-family detached and townhouse uses. The Medium/High Density range of 15 to 25 DU's per acre would encourage the development of a mixture of housing types such as townhouses and garden apartments. Higher density development is recommended closer to the business district and the METRO Station. Lower density development is recommended adjacent to existing single-family area.

The Sector Plan recommends the use of the Planned Development concept in Wheaton. This concept is neither a panacea for solving all of the area's housing problems, nor a radical departure from what has been considered orthodox planning. The major advantages of Planned Development lies in the following areas:

- A buffer of detached homes or undeveloped land adjacent to existing detached homes.

- A Greater Choice of Housing Types. Where conventional development tends to produce street after street of the same type of dwelling, the Planned Development encourages single-family houses, townhouses, garden apartments, and clustered homes, all of varying sizes, and built as part of the same development. This means a greater variety of family sizes, ages, and income levels in any given area, and allows families, if they so desire, to move from one type and size of house to another without leaving their old neighborhood.

- Preservation of Natural Features. Instead of developing a whole area with paved streets and fenced-in yards, the Planned Development would encourage a portion of the land to be left in its natural state, while housing the same number of families as conventional development. This means that natural features, such as streams, ponds, and trees, can be preserved near the places where people live, for their common enjoyment.

At the same time, all houses will continue to have their own private open space. The land saved for open space is land that would ordinarily have been devoted to unusable yards and unnecessary streets.

- Community Recreation. Open space created by Planned Developments can be used for recreation areas such as playing fields, swimming pools, and skating rinks, with easily provided extra space for schools and a community centers. Such facilities can be planned as an integral part of residential neighborhoods, rather than ending up in inconvenient, separate locations.

- Safe Pedestrian Ways, Bike-Ways, and Safer Streets. The open space created by Planned Developments can also be used to create pedestrian greenways and bike routes. Such greenways can be designed so that they cross few or no streets, provide safe routes for children to walk or bike ride, and serve as play areas. The intersection of two conventional "gridiron" streets creates as many as 16 potential points where vehicular accidents can take place. The street system possible in a Planned Development can have as few as three potential points of collision. In addition, the clear distinction between through traffic streets and neighborhood streets in a Planned Development provides a safer traffic pattern, with fewer cars, moving more slowly, in areas where people live.

The single-family areas to the north and west of the Central Business District are stable residential areas which are beginning to show signs of deterioration. It is recommended that the existing single-family character of these areas not be changed, and that County code enforcement and other neighborhood conservation programs (the Neighborhood Improvement Program, Community Development, Block Grant Funding, etc.) be used to assure the area's stability.

While many dwelling units in Wheaton are occupied by elderly residents, there are no existing facilities specifically for elderly and/or infirm residents. Many of the vacant or underdeveloped parcels in Wheaton can accommodate development of the type to meet this demand. The Planned Unit Development concept would allow this development to be mixed with "market" single-family, townhouse, and apartment development rather than being developed on an isolated parcel of land.

Housing for the elderly should be encouraged according to the following guidelines:

- Sites should be within easy access of transportation.
- Sites should be within easy access of shopping, service and recreational facilities.
- Such sites should not be cut off from such facilities by major traffic arteries.

THE TRANSPORTATION PLAN

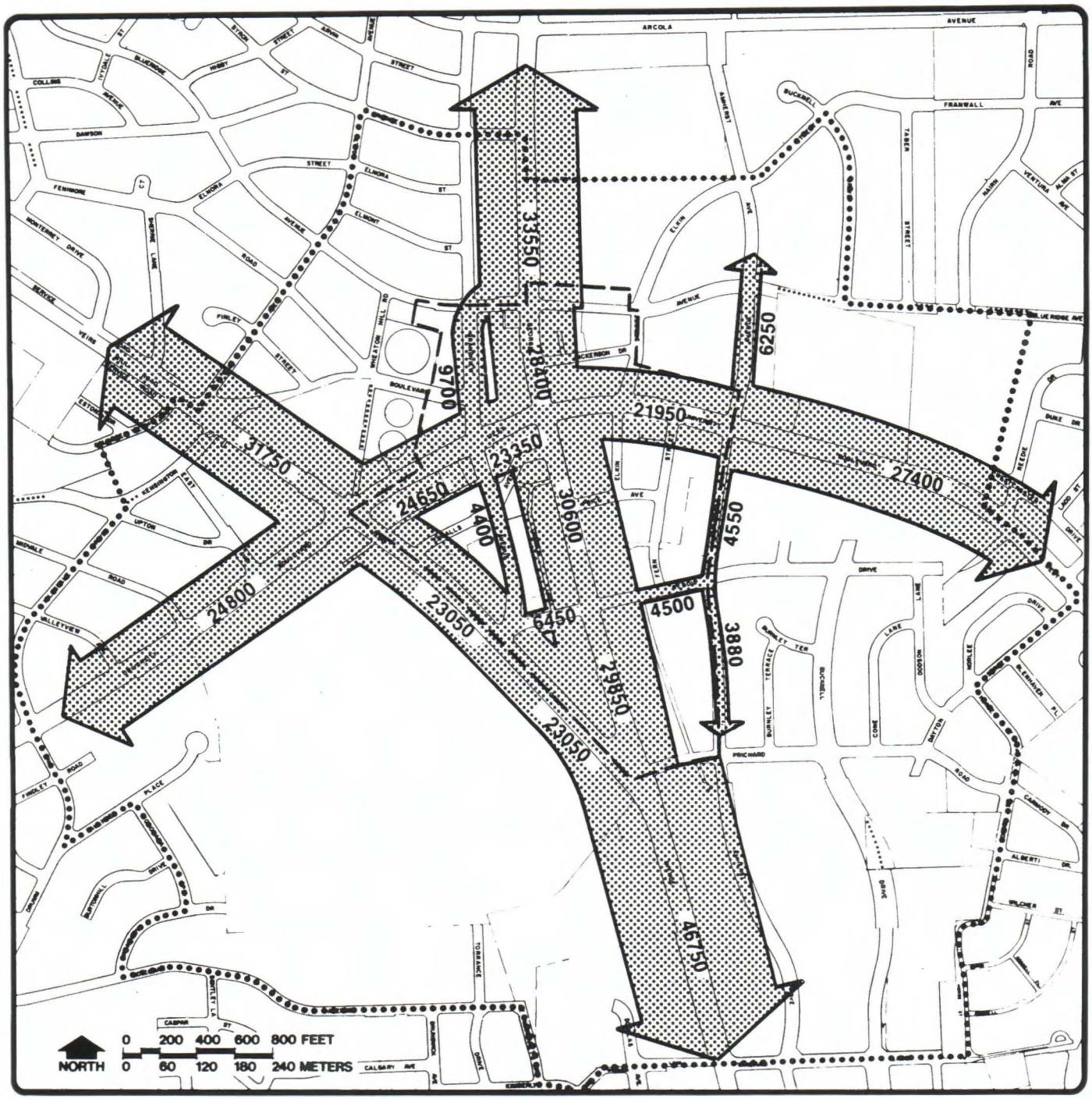
EXISTING TRANSPORTATION

Existing Highway System

The Wheaton Sector Plan area is traversed by three principal roadways--Georgia Avenue (Md. 97) and Veirs Mill Road (Md. 586), which runs north-south, and University Boulevard (Md. 193), which runs east-west. Georgia Avenue, a six-lane divided highway, is a major regional north-south radial extending from Howard County to Silver Spring and downtown Washington. Veirs Mill Road, a six-lane divided highway which tapers to a four-lane divided highway north of the Wheaton business area, is a major historic link extending from Wheaton to Rockville. University Boulevard, also a six-lane divided highway, is a major continuous east-west route extending from Connecticut Avenue in Kensington to beyond the University of Maryland campus in Prince George's County. Within the business district, these principal roadways are supplemented by Grandview Avenue and Amherst Avenue for north-south movements, and Reedie Drive and Blueridge Avenue for east-west movements. Average daily traffic (ADT) volumes for 1976 range between 28,400 and 46,750 vehicles per day on segments of Georgia Avenue, between 23,050 and 31,750 vehicles per day on segments of Veirs Mill Road, and between 21,950 and 27,400 vehicles per day on segments of University Boulevard. On the internal business district streets volumes range between 3,800 and 9,700 vehicles per day. Specific ADT volumes for these roadways are shown in Figure 12.

In addition to heavy daily traffic flows, the Wheaton area experiences substantial peak hour traffic demands. An analysis conducted of the traffic flows in the Wheaton area indicates that the PM peak hour demand is slightly higher than the AM peak hour demand, primarily due to shopping trips added to the traffic stream. However, during both the AM and PM periods, there is a steady two-hour peaking of traffic, as opposed to the more common one-hour peaking phenomenon. The existing PM peak hour traffic volumes are shown in Figure 13.

The Level of Service of a roadway system is a measure which describes its performance as a traffic carrier. Typically, level of service is measured by analysis of the peak hour traffic demands at critical intersections and expressed as an alphabetic scale from 'A' (best) to 'F' (worst). In Montgomery County, Level of Service 'D' is the established minimum service level used for planning purposes. Level of Service 'D' can be described as a predominantly stable traffic flow condition with an occasional instability of the flow. At this level of service, vehicle delays are moderate to heavy, signal time deficiencies are experienced for short duration within the total peak period, and drivers frequently find that several signal changes are required for them to pass through the critical intersection. However, the traffic flow is such that periodic "valleys" occur, thereby preventing unacceptable traffic backups and congestion. Based upon current PM peak hour volumes at principal intersections within the Wheaton Sector Plan area, calculations indicate the following Levels of Service:



1976 AVERAGE DAILY TRAFFIC

VEHICLES PER DAY (TWO DIRECTIONS)

WHEATON

---- PROPOSED CBD BOUNDARY

..... SECTOR PLAN BOUNDARY

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SECTOR PLAN

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PLANNING AREA

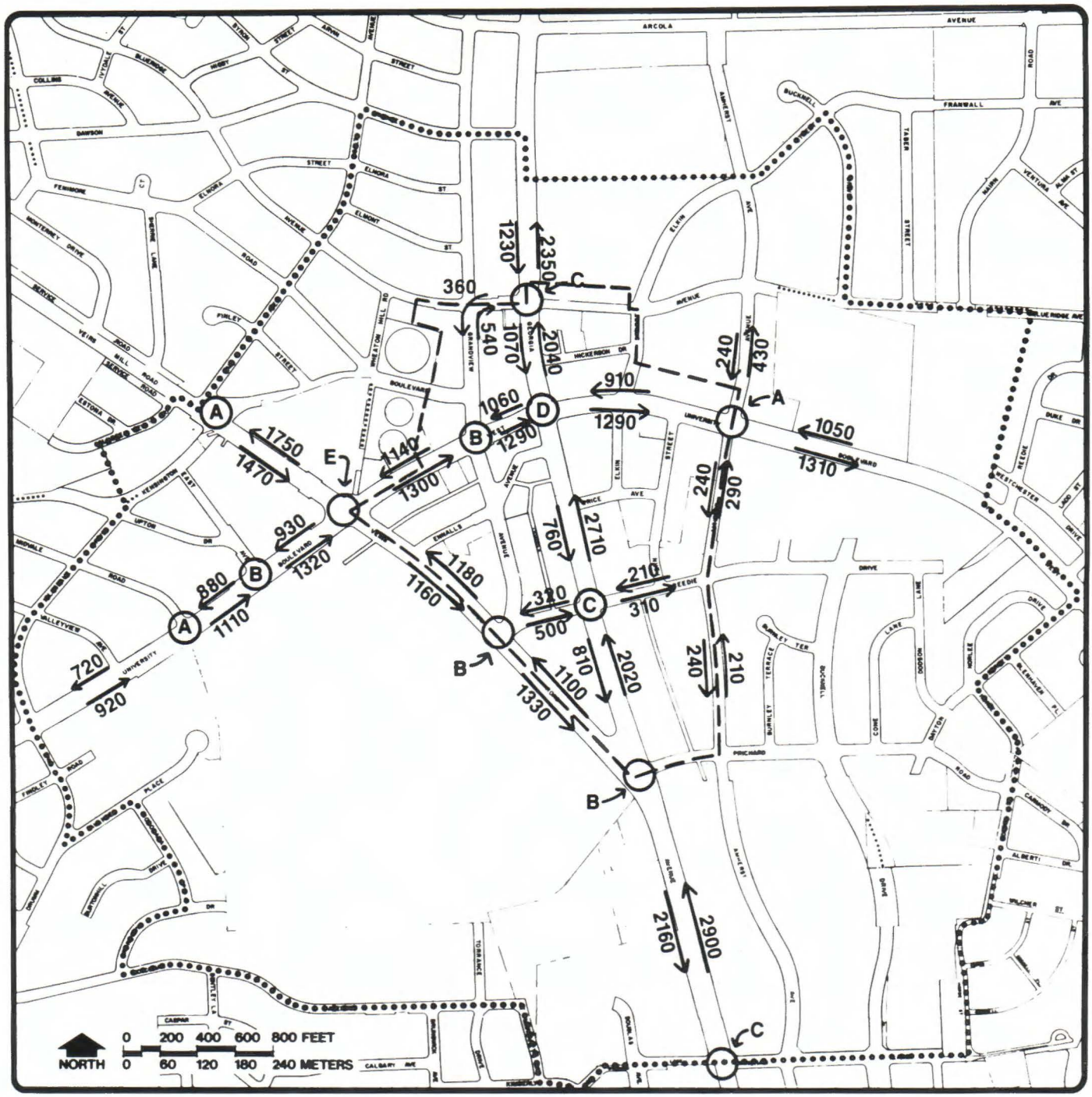
Intersection	Level of Service
Georgia Avenue - Windham Lane	C
Georgia Avenue - Veirs Mill Road	B
Georgia Avenue - Reedie Drive	C
Georgia Avenue - University Boulevard	D
Georgia Avenue - Blueridge Avenue	C
Veirs Mill Road - Reedie Drive	B
Veirs Mill Road - University Boulevard	E
Veirs Mill Road - Kensington Boulevard	A
University Boulevard - Midvale Road	A
University Boulevard - East Avenue	B
University Boulevard - Grandview Avenue	B
University Boulevard - Amherst Avenue	A

The remaining intersections within the business district operate at Level of Service 'A.'

The specific relationship between the traffic capacity of a road system and the level of development within an area that has an internal road network is based upon the traffic handling capabilities of roads leading to and from the area rather than the roads within the area. In the case of an activity center like Wheaton, traffic is generally highest at the gateways because of the internal distribution network available. Since the Sector Plan is predicated upon balancing development with traffic capacity, and upon limiting development so as to prevent adverse impacts upon adjacent communities, the traffic capacities at these gateways are the controlling factors of the development envelope. Only gateways along Georgia Avenue, Veirs Mill Road, and University Boulevard are calculated in determining the gateway capacity for Wheaton. The specific locations of these gateways are:

- Georgia Avenue between Blueridge Avenue and Dawson Avenue;
- University Boulevard between Amherst Avenue and Reedie Drive;
- Georgia Avenue between Windham Lane and Plyers Mill Road;
- University Boulevard between Midvale Road and Valleyview Avenue;
- Veirs Mill Road between Kensington Boulevard and College View Drive.

For the purposes of this analysis, the capacity at Level of Service 'D' during the PM peak period is used as the constraining factor. The total calculated capacity in the outbound direction is 13,940 vehicles per hour. Current traffic counts indicate that approximately 8,310 vehicles per hour leave the Wheaton Sector Plan area during the evening peak period. The traffic analysis conducted as part of the sector planning process indicates that 40 percent (3,220 vehicles per hour) of the 8,310 vehicles departing the area are locally generated, while 60 percent (5,090 vehicles per hour) originate outside the Sector Plan area and pass through the area in order to reach destinations elsewhere. These figures indicate that there is currently a reserve capacity of 5,630 outbound vehicles per hour at the major gateways.



1976 P.M. PEAK HOUR VOLUMES

920 VEHICLES PER HOUR (ONE DIRECTION)

(A) INTERSECTION LEVEL OF SERVICE

WHEATON

---- PROPOSED CBD BOUNDARY

..... SECTOR PLAN BOUNDARY

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JULY 1978

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SECTOR PLAN

KW

PLANNING AREA

Existing Transit System

Metrobus service currently operates in the Wheaton area on Georgia Avenue, Veirs Mill Road, and University Bouelvard. Major local and express lines operate from Rockville, Aspen Hill, and Olney, through Wheaton, into Silver Spring. Local and express routes operate also from Wheaton to Bethesda and downtown Washington via Kensington, and to Prince George's County via Four Corners. The local and express routes that operate in Wheaton produce an overall peak direction frequency of 18 buses per peak hour on Georgia Avenue at Windham Lane, 5 buses per peak hour on University Boulevard at Midvale Road, and 2 buses per peak hour on University Boulevard at Amherst Avenue.

In addition, Montgomery County provides local Ride-On service through surrounding neighborhoods linking the Wheaton area to Silver Spring via Forest Glen, Kemp Mill, and Four Corners. One of the Ride-On routes operates along Inwood Avenue and Forest Grove Drive, another parallels Sligo Creek Park along Tenbrook Drive, while a third operates along Arcola Avenue and University Boulevard. The Ride-On routes provide service on a 20 minute headway in the peak direction during peak hours.

A Metrobus fringe parking lot is located in the portion of the Wheaton Plaza parking lot adjacent to the intersection of Georgia Avenue and Veirs Mill Road. Recent surveys indicate that approximately 150-170 vehicles use this facility daily.

Existing Parking Facilities

Within the Wheaton business district there are currently 830 public parking spaces provided by the Division of Parking of the Montgomery County Department of Transportation. Approximately 450 spaces are located in five surface lots operated by the parking bureau, while 380 spaces are located at curbside along various streets within the parking district. The programmed development of Lot 45, a vacant tract adjacent to Amherst Avenue between Reedie Drive and University Boulevard, will add about 135 spaces to this supply.

Construction and operation of the Division of Parking facilities is funded through a special tax assessed on development within the Wheaton Parking District, supplemented by revenue received from parking fees. The tax is assessed based upon the number of spaces a given development could be required to provide under the Montgomery County Zoning Ordinance. Developers have the option of either paying the parking district tax or providing their own parking requirements directly. However, the tax must be paid unless 100 percent of the parking requirement is provided on site by a development.

PROPOSED TRANSPORTATION SYSTEM

A basic goal of a transportation plan is a balanced and coordinated network of transport facilities which improve mobility within the community and increase accessibility to and from regional activity centers. In conjunction with this goal are a series of specific objectives which form the basis for the Wheaton Sector Plan recommendations which follow. These objectives include:

- integrating the METRO rapid rail facilities into the existing community with a minimum of disruption;
- improving transit services to satisfy a wide range of local community needs;
- improving roadways, where necessary, to facilitate access to METRO and to the business area, and to assure the continuation of adequate traffic capacity and levels of service;
- modifying the street network to discourage non-local traffic from using local streets, and to provide access to future development;
- providing adequate and convenient off-street parking to satisfy the needs of current and future development;
- promoting policies to protect neighborhoods and business from intrusion of commuter parking; and
- developing a pedestrian and bicycle circulation network to encourage alternatives to the auto for short local trips.

Proposed Highway System

As previously indicated, there currently exists a reserve capacity of 5,630 outbound vehicles per hour at the major gateways of the Wheaton Sector Plan area. In determining the traffic capacity available for future development in 1985, various adjustments must be made. These adjustments include the growth in through traffic from 1976 to 1985, the traffic generated by the Wheaton METRO Station, and the traffic diverted from Wheaton roadways to the Glenmont Station located north of Wheaton.

Historically, the eastern part of Montgomery County has experienced a 2 percent annual growth rate in daily traffic. This rate, when applied to the current 5,090 through trips, results in an increase of 1,020 through trips in 1985. Ridership projections for the Wheaton METRO Station indicate that in 1985, 520 outbound vehicle trips will be generated during the PM peak hour. Of this total, approximately 250 are park-'n'-ride trips and 270 are kiss-'n'-ride trips. It is estimated that projected ridership at the Glenmont Station will result in a reduction of 660 outbound vehicle trips during the PM peak hour. This figure is based on various surveys taken of the Lindenwold Rapid Transit Line in suburban Philadelphia.

These adjustments reduce the existing reserve capacity (i.e., the total capacity less the sum of the local and through traffic) from 5,630 outbound vehicles per hour to 4,750 outbound vehicles per hour in 1985. Figure 14 indicates the individual 1985 reserve capacities projected at each of the major gateways calculated. Given that the existing development within Wheaton generates 3,220 outbound vehicles per hour, the total 1985 capacity is capable of accommodating locally generated traffic equivalent to 2.5 times that generated today.

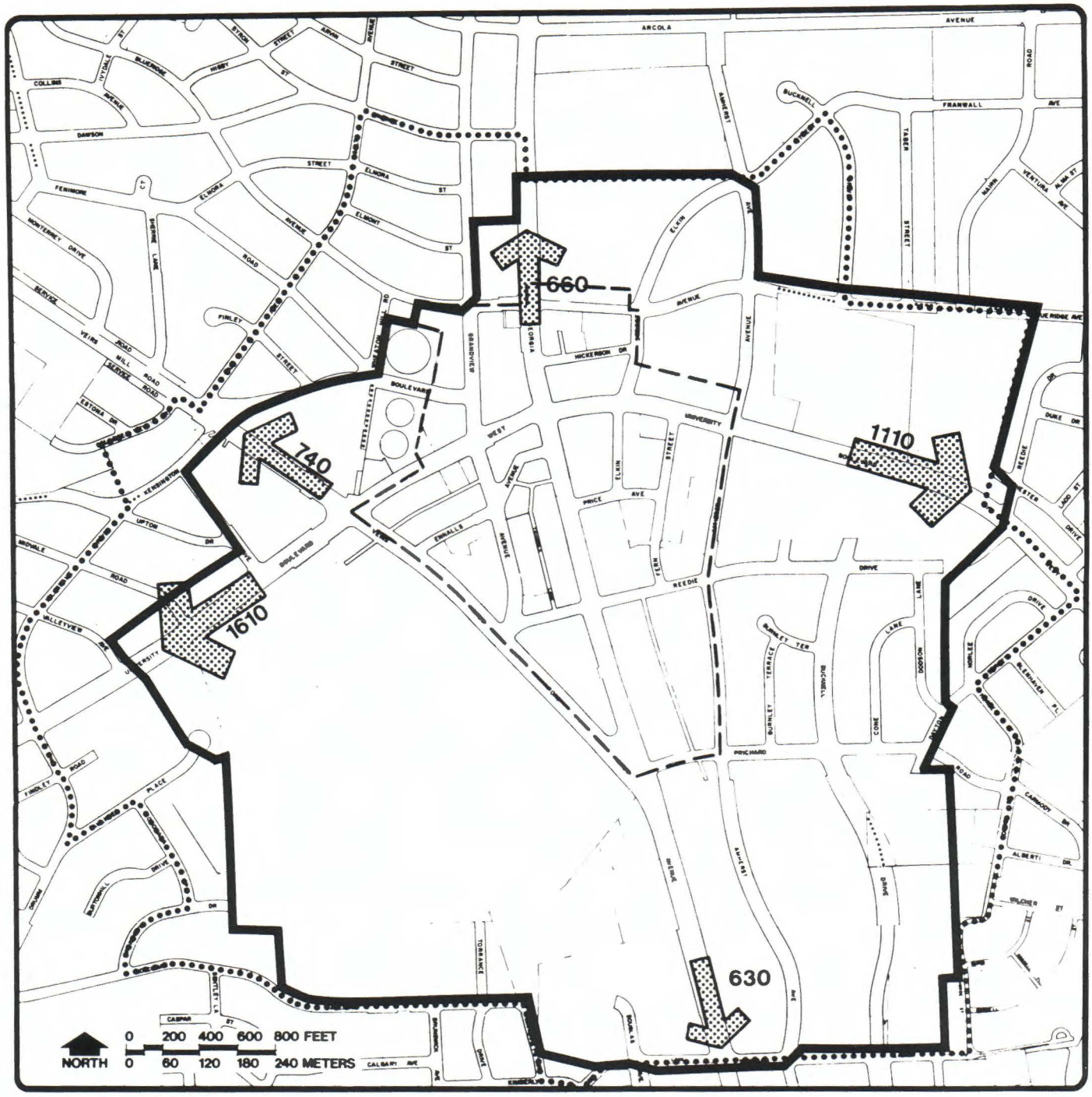
During the Wheaton planning process, staff investigated a number of traffic improvement alternatives designed to alleviate current deficiencies and accommodate projected travel demands. The analysis considered the level of service implications and examined the potential community impacts resulting from these improvements. Based upon that analysis, the previously cited transportation objectives, and comments received from the Task Force, the following roadway recommendations are made (see Figure 15).

- Reedie Drive, between Veirs Mill Road and Amherst Avenue, should be widened to minimize conflicts between through and turning vehicles and to insure efficient traffic circulation in the vicinity of the METRO Station. With a large number of buses projected to use this station, an expanded cross-section with improved intersection turning radii will be necessary to maintain acceptable vehicular operations. A business district street, 50 feet wide, with curb, gutter, sidewalks, and bikeway is recommended.

- The median breaks on Georgia Avenue at Ennalls Avenue and Hickerson Drive should be closed to eliminate mid-block conflicts and minimize exposure to potential accidents. In conjunction with these closures, the left turn storage lanes on Georgia Avenue at University Boulevard should be lengthened to improve traffic operations at this major intersection.

- Grandview Avenue, between Ennalls Avenue and Reedie Drive, should be converted to a 24-30 foot wide, one-way southbound street. This reconstruction will be necessary to accommodate the METRO bus terminal and the relocation of the County's public parking lot. In conjunction with this project, minor modifications at the Grandview Avenue-Ennalls Avenue intersection and the Grandview Avenue-Reedie Drive intersection will be necessary.

- Kensington Boulevard, between Veirs Mill Road and East Avenue, should be constructed to permit a by-pass of the critical Veirs Mill Road-University Boulevard intersection. It is estimated that based on current traffic volumes, the construction of this linkage would improve the level of service at the Veirs Mill Road-University Boulevard intersection from the current Level of Service 'E' to Level of Service 'C.' To minimize the impact of this road, it is recommended that a 36 foot wide street be constructed rather than a standard 48 foot wide business district street.



1985 PROJECTED GATEWAY CAPACITIES

TRAFFIC ANALYSIS CORDON LINE

MAJOR GATEWAY: RESERVE CAPACITY (OUTBOUND VEHICLES PER HOUR)

WHEATON

PROPOSED CBD BOUNDARY

SECTOR PLAN BOUNDARY

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SECTOR PLAN

KW

PLANNING AREA

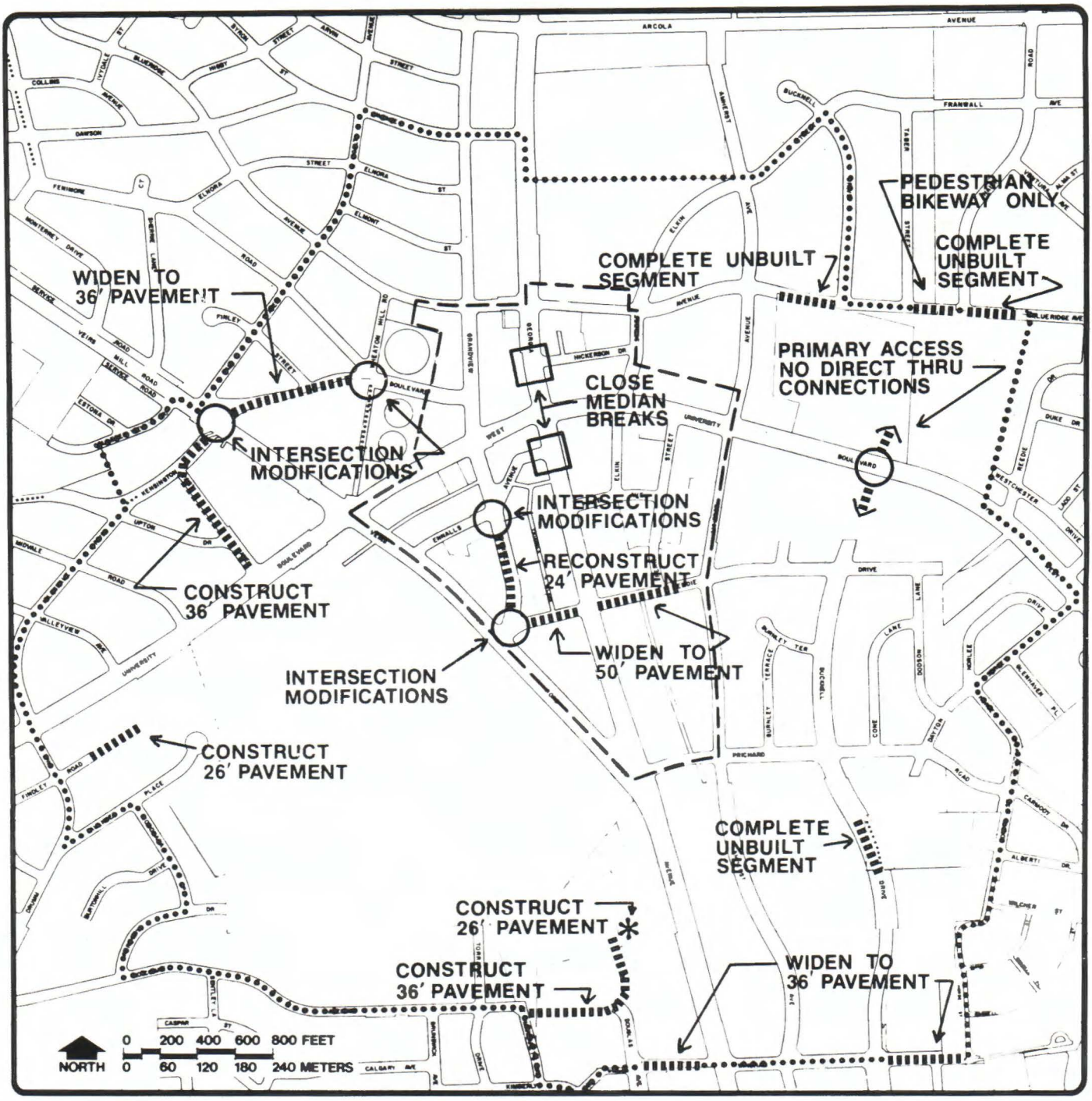
- Windham Lane, between Bucknell Drive and Horde Street, should be widened to accommodate increased traffic from the current redevelopment of the Glen Haven Army housing complex. A primary residential street, 36 feet wide, with curb, gutter, and sidewalks, is recommended.

- Kensington Boulevard, between Veirs Mill Road and Wheaton Hills Road, should be widened in conjunction with development of the properties along the south side of the street. The Sector Plan recommends that this widening be constructed entirely on the south side of the existing roadway. A primary residential street, 36 feet wide, with curb, gutter, and sidewalks, is recommended.

- Bucknell Drive should not be extended from Reedie Drive to University Boulevard or from Blueridge Avenue to University Boulevard. These extensions, which only marginally increase traffic capacity, would disrupt well established neighborhoods and encourage the intrusion of non-local traffic. Alternatively, it is recommended that the primary access for the residential development proposed on the vacant and underdeveloped properties in this area be to University Boulevard. A median break currently exists along University Boulevard which can accommodate these connections.

- Windham Lane, between Douglas Avenue and Georgia Avenue, and McComas Avenue, between Douglas Avenue and St. Margaret Way, should be constructed in conjunction with, and to provide access for, the proposed residential areas to the south of Wheaton Plaza. Construction of these linkages will mitigate any traffic impact on existing residential streets resulting from the proposed development. Primary residential streets, 36 feet wide, with curb, gutter, and sidewalks are recommended. Furthermore, it is recommended that the Douglas Avenue-Windham Lane intersection be designed with a traffic diverter which will prevent traffic on Windham Lane and the upper section of Douglas Avenue from using the lower section of Douglas Avenue.

- Blueridge Avenue, between Amherst Avenue and Bucknell Drive, should be constructed to provide a secondary access for residential development on the WTOP site and to assure adequate access for emergency vehicles. Between Nairn Road and the existing section of Blueridge Avenue 400' to the east, Blueridge Avenue should be completed to provide access for the ultimate development of the adjacent properties and to assure efficient traffic circulation for emergency and service vehicles. Secondary residential streets, 26 feet wide, with curb, gutter and sidewalks, are recommended. The construction of these two segments of Blueridge Avenue by the developers of the adjacent properties should be reevaluated as part of the subdivision process at such time as development occurs. The Sector Plan also recommends that the section of Blueridge Avenue between Taber Street and Nairn Road should remain a pedestrian pathway and should not be constructed as a vehicular roadway. Those portions of the currently dedicated right-of-way not needed for the pedestrian way could be abandoned by petition of the adjacent property owners.



PROPOSED HIGHWAY IMPROVEMENTS

* PUBLIC STREET OR RECIPROCAL EASEMENT

WHEATON

---- PROPOSED CBD BOUNDARY

..... SECTOR PLAN BOUNDARY

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SECTOR PLAN

KW

PLANNING AREA

- Finley Road should be extended eastward to provide access for the proposed residential development to the west of Wheaton Plaza. This extension will eliminate the need for additional curb cuts along University Boulevard and permit access to the site via the median break at Drumm Avenue. A secondary residential street, 26 feet wide, with curb and gutter, is recommended.

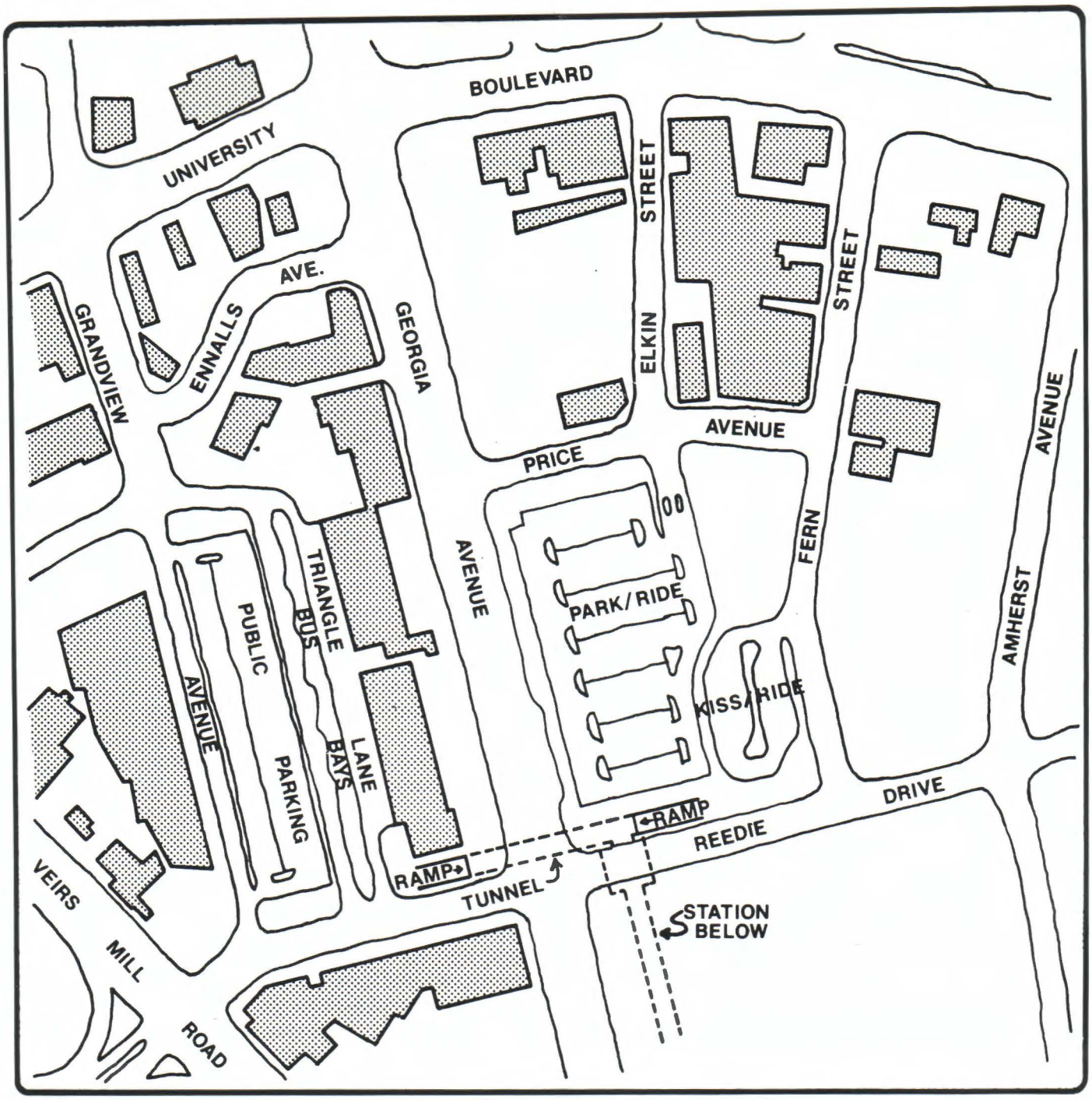
- Through the Wheaton Hills Neighborhood Improvement Program, minor design modifications to the Veirs Mill Road-Galt Avenue-Kensington Boulevard intersection and the Kensington Boulevard-Fenimore Road-Wheaton Hills Road intersection, have been developed. These modifications are intended to reduce traffic access and vehicular intrusion into the residential area north of the business district. The Wheaton Sector Plan supports these projects.

In addition to these improvements and proposals, the Plan recommends that when the METRO Station opens, MCDOT evaluate the need for a neighborhood parking permit system, particularly in that area within 2,000 feet of the station. The County parking permit system limits commuter parking on local public streets. These regulations, however, do not provide relief for private parking areas associated with apartment complexes or retail businesses. In the former case, permanent stickers could be assigned to all residents and temporary passes could be distributed to visitors and guests when necessary. For the retail businesses, a three hour parking limit is suggested to discourage all day commuter parking. Employees of the various establishments could be given stickers which exempt their vehicles from this restriction. Finally, long term public parking should be limited to nine hours, thereby discouraging METRO commuters from parking in these areas.

Proposed Transit System

The Wheaton METRO Station, currently scheduled to open for service in 1984 is to be located at the intersection of Georgia Avenue and Reedie Drive. Station surface facilities, according to plans developed by WMATA and approved by the Montgomery County Council, include 6 bus bays, 20 bicycle storage racks, 25 kiss-'n'-ride spaces and 250 park-'n'-ride spaces. (Recently, WMATA prepared a proposal to expand the Wheaton park-'n'-ride to 900 spaces in a multi-level parking garage. The Sector Plan recommends support for this proposal.) The bus bays are located on the west side of Georgia Avenue, between Triangle Lane and Grandview Avenue. The park-'n'-ride spaces, kiss-'n'-ride spaces, and bicycle racks are located on the east side of Georgia Avenue, between Reedie Drive and Price Avenue. A passageway beneath Georgia Avenue on the north side of Reedie Drive interconnects the surface facilities and the station entrance. (See Figure 16 for a diagram of the station layout.) An escalator system is included in the station design to transport patrons from the passageway to the station platform.

The primary service area of the Wheaton METRO Station extends from Plyers Mill Road on the south to Randolph Road on the north and from Rock Creek on the west to Northwest Branch on the east. Ridership projections indicate that about 12,600 persons per day will board METRO at this station, about 1,710 persons during the



METRO STATION PLAN

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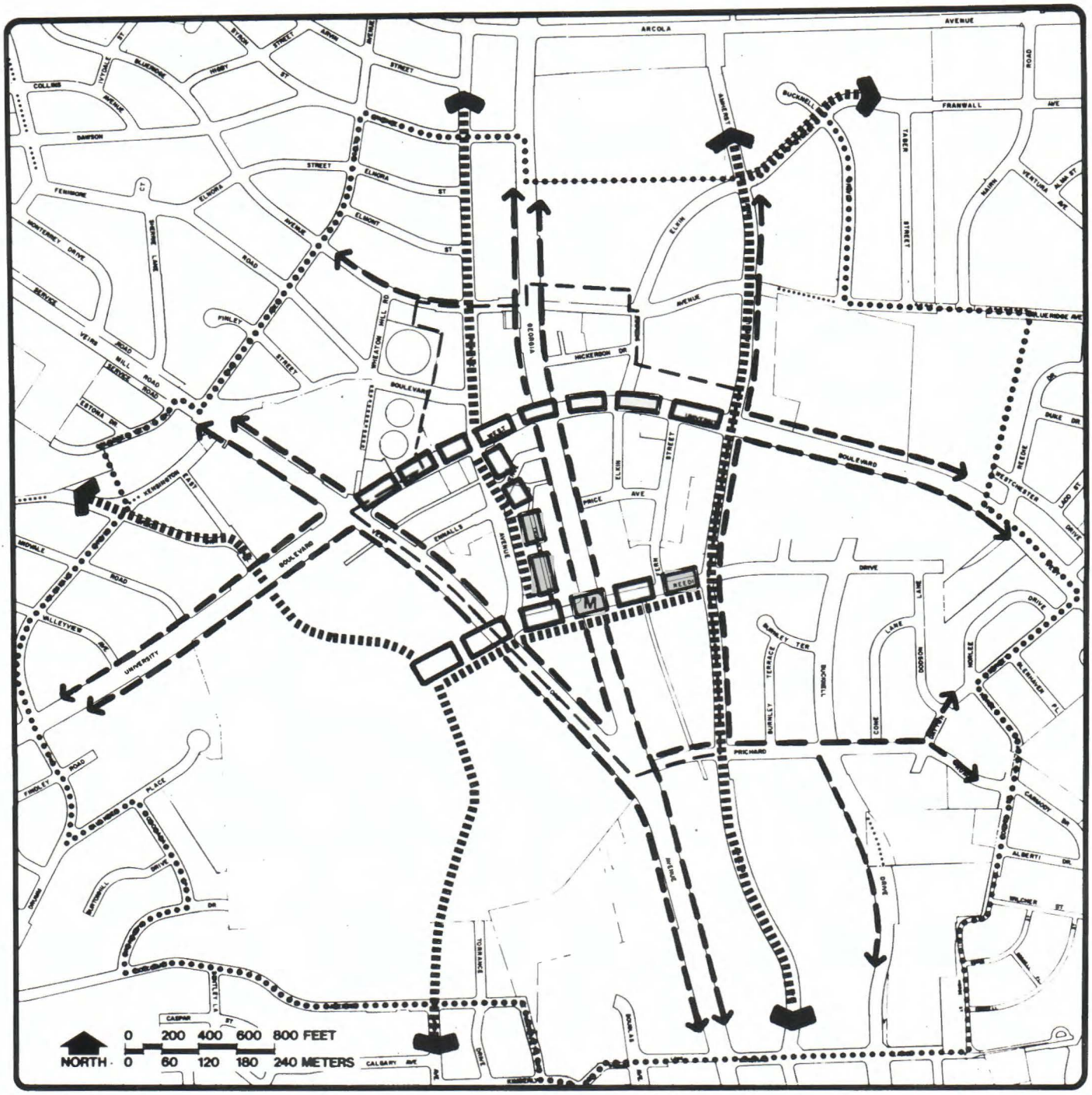
morning peak hour. It is estimated that 8 percent of the peak hour boarding passengers will walk to the station, 76 percent will use the feeder bus system, and 16 percent will use the kiss-'n'-ride facilities. Kiss-'n'-ride trips to the station will primarily use Georgia Avenue and Veirs Mill Road from the north and University Boulevard from both the east and west. The park-'n'-ride facilities at the station, due to the projected demand and the number of spaces provided, are expected to be filled before the start of the morning peak hour. Overall, METRO-related vehicular trips are estimated to comprise 4 percent of the peak hour traffic volumes in the Sector Plan Area.

In conjunction with the opening of each phase of METRO, the bus system is being restructured to complement and supplement the service provided by the rapid rail system. This reorganization is being designed to result in three distinct classes of bus service within the County. The first class, neighborhood bus service, will primarily operate on residential streets with small 20-25 seat mini-buses. This class will provide feeder service from nearby residential communities to transit stations and to other local activity centers. The next class, intermediate bus service, will operate on arterial and major highways with 35-45 seat buses. This class will provide a link between transit stations and between County activity centers. The final class, regional bus service, will primarily operate on major highways with standard 50-55 seat buses. This class will mainly serve non-rail corridors, provide continuous connections among County activity centers, or serve circumferential movements.

Over the next few years WMATA (Washington Metropolitan Area Transit Authority), MCDOT (Montgomery County Department of Transportation), and M-NCPPC (Maryland-National Capital Park and Planning Commission) will employ this three-class concept in the development of specific route proposals. The following guidelines should be incorporated in the particular service proposals for the Wheaton area.

- Regional bus service should be limited to Georgia Avenue, Veirs Mill Road, and University Boulevard;
- Intermediate bus service should be operated primarily on arterial streets such as Dennis Avenue, Plyers Mill Road, and Arcola Avenue to minimize intrusion into residential areas;
- Neighborhood bus service should be established to provide service to community focal points such as recreational centers, schools, libraries, churches, and shopping areas, in addition to the METRO Station;
- Restructuring of routes should be cognizant of the Wheaton Business Center and Wheaton Plaza as major trip destinations; and
- Bus shelters should be constructed at heavily used stops along all routes.



PROPOSED PEDESTRIAN/ BICYCLE NETWORK

MAJOR AND SECONDARY PEDESTRIAN LINKAGES

PEDESTRIANWAYS

BIKEWAYS

WHEATON

PROPOSED CBD BOUNDARY

SECTOR PLAN BOUNDARY

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Proposed Parking Facilities

Currently all of the facilities operated by the Division of Parking are surface lots. It is desirable that future public parking be structured to permit efficient use of the limited land within the business district, and to provide opportunities for multi-use development over parking garages. This objective also recognizes the benefits derived from the high aesthetic standards of the Bureau of Parking in facility design and construction.

In Wheaton, construction of efficient parking garages is severely constrained by the location and limited site area of the existing lots. The METRO Station surface facilities on the west side of Georgia Avenue are being designed to accommodate the possible construction of a parking structure above the bus terminal and relocated County parking lot. A parking facility at this location should accommodate future development needs adequately in the entire triangle area; therefore, the Sector Plan endorses this concept.

On the east side of Georgia Avenue, future land development may be constrained due to the lack of a major, centrally sited, public parking facility. To avoid this situation, the Sector Plan recommends that the METRO park-'n'-ride lot be designated as a site for a future parking garage. The structure should be located adjacent to Fern Street, between Reedie Drive and Price Avenue, and designed to accommodate both METRO and public parking, and to allow street-level air-rights development along the Georgia Avenue frontage as recommended in the Land Use Chapter. Parking provided in this way should accommodate future development needs adequately in the southeast sector of the business district.

In the northeast and northwest quadrants of the business area, staff analysis indicates that the existing public and private parking areas adequately satisfy current needs. The Division of Parking should, however, periodically re-evaluate the demand and the development in these areas to ensure that a sufficient public parking supply is maintained.

Proposed Pedestrian/Bicycle System

A major problem in the Wheaton Sector Plan Area is the difficulty in moving about on foot. Many areas do not have sidewalks; in other locations, sidewalks are discontinuous, very narrow, or obstructed by utility poles, sign posts, and other "street furniture." Since a major goal of the Plan is the development of a vibrant urban space and since an urban space is a place of intensive pedestrian activity, a comprehensive pedestrian system should be developed. This system should link the METRO Station and the major parking facilities with the retail business district, as well as provide continuous walkways throughout the area.

The pedestrian system proposed in the Plan is composed of two parts, namely, a primary network of grade-separated walkways and pedestrian malls within the core area and a secondary network of continuous sidewalks extending from the primary network to adjacent residential neighborhoods. (See Figure 17 for a schematic representation of this system.)

The proposed primary pedestrian network consists of a grade-separated walkway paralleling Reedie Drive and two pedestrian malls, the first along Triangle Lane and Grandview Avenue, and the second along University Boulevard. This network, which provides a primary linkage between the METRO Station, the retail "market-place," and Wheaton Plaza, is located in areas where the heaviest pedestrian movements are anticipated. A more detailed discussion of these elements of the pedestrian system can be found in the chapter entitled "Land Use Plan."

The proposed secondary pedestrian network consists of continuous at-grade sidewalks on both sides of all streets within the remainder of the Sector Plan Area. On major roadways such as Georgia Avenue, where vehicular traffic is heavy in volume and generally moving at relatively high speeds, it is important that sidewalks be designed to protect pedestrians and provide buffering from the adjacent traffic. Along these roadways it is recommended that a minimum 16 foot sidewalk width be established, so far as practical, given existing building locations. On other streets within the business district, where the vehicular buffer is less critical, an 8 foot sidewalk with an additional 4 foot landscaped buffer adjacent to the curb is recommended. In residential areas, a 4-6 foot sidewalk with a 6-8 foot buffer adjacent to the curb is adequate. At all locations, street signs and light standards should be placed as close to the curb as possible, consistent with vehicular safety. Further information regarding sidewalk design and dimensions is contained in the section entitled "Design."

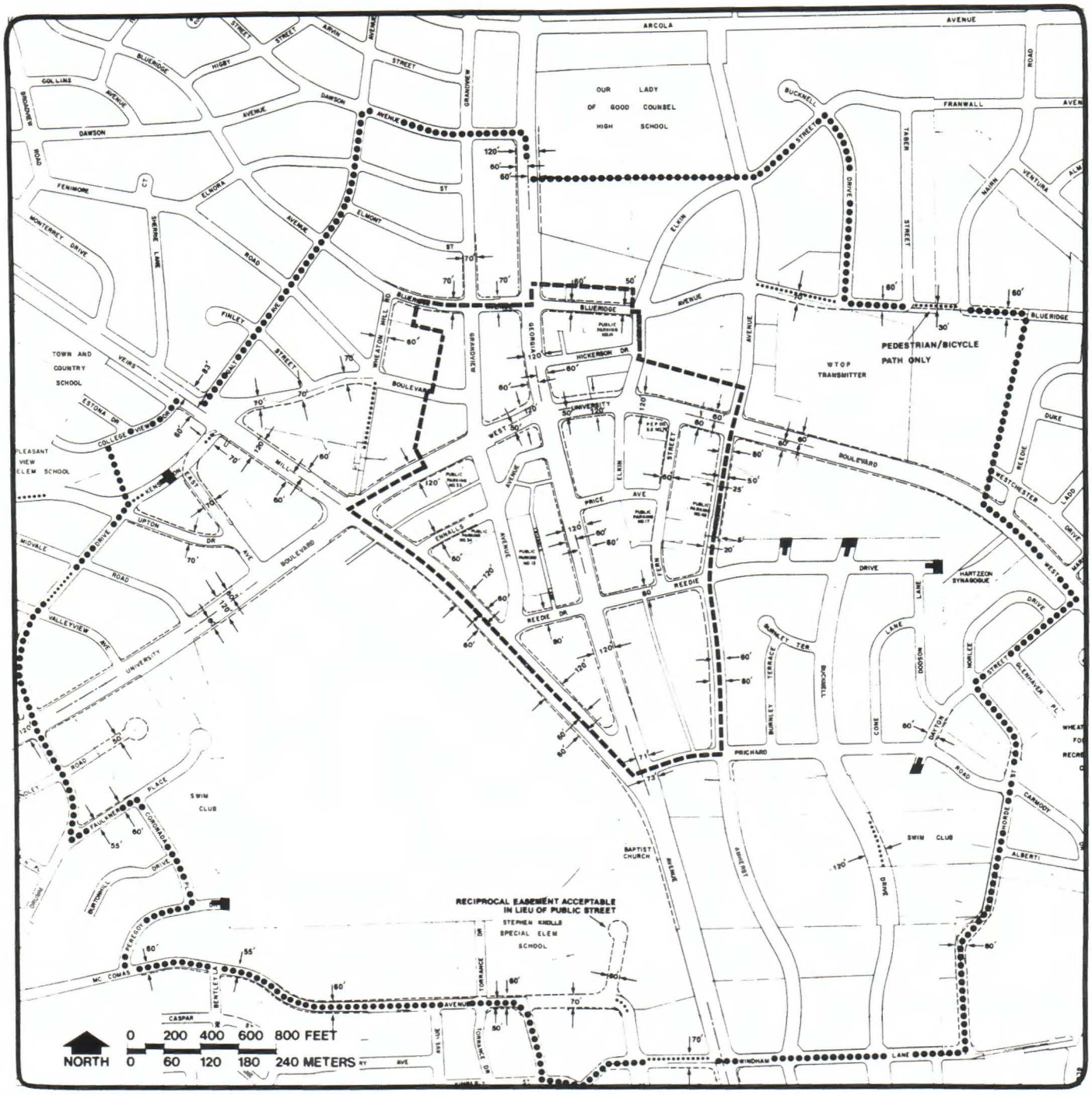
Bicycling has long been recognized as a desirable travel mode to METRO Stations and local activity centers. Conveniently located bicycle storage facilities will be provided at the Wheaton METRO Station to encourage the use of this mode. WMATA currently plans to install bicycle racks at the station, though they are studying the feasibility of bicycle lockers which offer superior security and weather protection. The plan recommends that bicycle lockers be installed at Wheaton and other stations located in high activity areas.

Beyond the immediate station area it is the responsibility of the County and State to expand and develop bicycle access to the station from adjacent neighborhoods. A proposed bicycle circulation network, providing access to the METRO Station, as well as serving recreational and other travel needs at Wheaton, has been developed (see Figure 17). These bicycle network proposals have been identified with the guidance of the Commission's Master Plan of Bikeways, July 1978. The principal elements of this bicycle system are:

- an east-west route from Kensington to Wheaton Plaza via Kensington Boulevard, Upton Drive, and East Avenue;
- a north-south route from Glenmont to Wheaton Plaza via Grandview Avenue;
- a north-south route from Silver Spring to Wheaton Plaza via Brunswick Avenue;
- a north-south route from Wheaton Regional Park to Forest Glen via Amherst Avenue; and

- a connector route from the existing Sligo Creek Trail to Amherst Avenue via Franwall Drive.

In addition, a short connector route along Reedie Drive, from Wheaton Plaza to Amherst Avenue, is proposed. This route will provide the critical interconnection of the major network elements with the Wheaton METRO Station. Local streets, where traffic is light and bicycle/vehicular conflicts are minimal, will serve as feeder routes to this network.



PROPOSED STREET AND HIGHWAY PLAN

100' EXISTING STREET RIGHT-OF-WAY

100' PROPOSED STREET RIGHT-OF-WAY

DEDICATED STREET NOT CONSTRUCTED

PROPOSED CUL-DE-SAC

NOTE: ALL STREET INTERSECTIONS SHALL HAVE TRUNCATED CORNERS TO PROVIDE FOR A MINIMUM OF 16' FOR SIDEWALKS

WHEATON

PROPOSED CBD BOUNDARY

SECTOR PLAN BOUNDARY

MNCPPC

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PLANNING AREA

COMMUNITY FACILITIES PLAN

A necessary part of the land use in the Wheaton Sector Plan area is the array of community facilities provided to the residents and employees who are the primary users of the area. Community facilities, such as parks, recreation, schools, fire and police stations, libraries and government buildings, are a major element in a community's ability to provide its residents with a desirable "quality of life."

An area which is predominantly built-up already has a wide range of community services. In such an area, the Sector Plan is primarily concerned with:

- The provision of expanded facilities in parts of the Sector Plan area that are deficient;
- The provision of new facilities where new or intensified growth is anticipated;
- The replacement of facilities that are obsolete or unable to meet future demands; and
- The broadening of the range of facilities provided to meet the demands of a varied population.

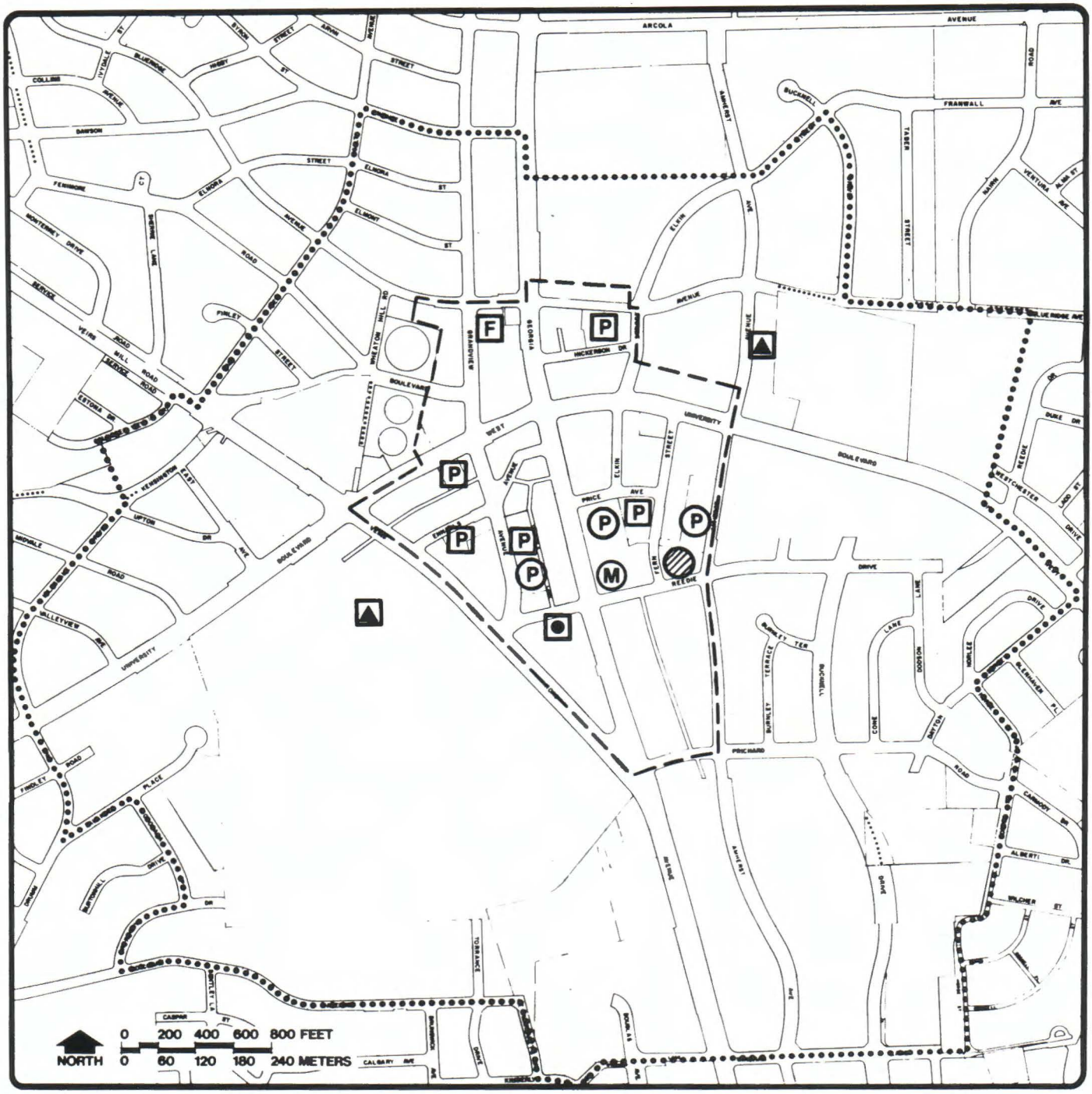
As new development occurs, some new or replacement facilities will come about, mandated by the site plan review provisions of the zones under which that development takes place. Other facilities, however, are within the range of responsibility of government.

Public Schools

The Wheaton area and its surrounding residential neighborhoods are serviced by 5 elementary schools, 2 junior high schools and 2 senior high schools. These facilities are located within the residential neighborhoods which surround the market core of Wheaton. At present, these schools are operating below capacity.

Projected development in the Wheaton Sector Plan area is expected to provide approximately 1,450 additional dwelling units. These will be comprised of a mixture of both detached and attached single-family units, and of multi-family units.

The Board of Education operates an extensive rehabilitation program which both improves the quality of existing school buildings and adds classrooms or additional spaces as required. It also has the flexibility to modify service areas, redistributing excess students to empty classrooms. Potential demand for additional school facilities can be accommodated within the existing structures and policy arrangement. As a result, no need for new school structures is seen as a result of the population growth anticipated in this Sector Plan.



COMMUNITY FACILITIES PLAN

	EXISTING	PROPOSED
COMMUNITY SERVICE CENTER	◉	
FIRE/RESCUE	F	
POST OFFICE	▲	
PUBLIC PARKING	P	Ⓟ
PUBLIC PARK	▨	▨
METRO		Ⓜ

WHEATON

---- PROPOSED CBD BOUNDARY

····· SECTOR PLAN BOUNDARY

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Fire-Rescue Services

Fire and rescue services are provided to the Wheaton Area from Fire Stations 5 (Kensington), 18 (Glenmont) and 19 (Montgomery Hills) and from the Wheaton Rescue Squad at 11435 Grandview Avenue. Renovation and expansion of the Squad's facility is under way, to provide additional facility and operational space for the Wheaton Rescue Squad. Kensington Fire Station No. 5 was recently improved, and design has been completed on a small expansion of Glenmont Station No. 18. The completion of this set of facilities will assure continuing adequate fire and rescue protection to the Wheaton area.

Police

Police protection is provided primarily from the Glenmont Police Station on Randolph Road. Police service provided to the Wheaton area is excellent. Renovation of the police station at Glenmont to ease operational difficulty in materials handling is programmed in the County budget.

Library

Wheaton is serviced by the Wheaton Library, on Georgia Avenue at Arcola Avenue. This library is a regional facility, with a total service area containing 48,000 persons. Recent improvements have been completed on the structure to upgrade interior lighting and exterior storm drainage. A renovation to the basement of the facility is programmed, to add 5,000 square feet of usable library space to house a science and technology collection in this branch.

With the addition of one or more new libraries to serve the heavy demand areas in Eastern Montgomery County, the Wheaton Library will remain adequate to serve the needs of the projected population of the Sector Plan area. However, considerable public sentiment supports its expansion.

In order to assure the adequacy of this facility, the quality of library services should be continually improved and supplemented by the policies of providing educational programs for children, youth and adults and by promoting the use of meeting rooms for civic functions.

Post Office Facilities

Two postal facilities are located in the Wheaton Business District. The main facility, on Amherst Avenue, provides basic postal services while a self-service facility at Wheaton Plaza provides additional and off-hour service to occasional patrons.

The Postal Service recently opened a new facility in Aspen Hill, which has provided some reduction in demand at the Wheaton facility. The Wheaton Post Office is expected to be able to handle new demand in Wheaton, as a result of the availability of the new station to the north.

Community Service Center

Wheaton Community Service Center is located on Reedie Drive, west of Georgia Avenue. The building is the second of the County's decentralized service centers, and is patterned after the successful facility at Silver Spring.

The facility contains approximately 29,000 square feet, and includes a range of government services, including information referral, complaint intake, basic health care, mental health services, general social services and general government office space. The center is designed to serve an area generally from the Beltway to Aspen Hill, between Rock Creek and Northwest Branch, a service area containing roughly 110,000 persons.

Parks, Open Space and Recreation

The Wheaton Sector Plan area is served by several facilities, most of which are outside the immediate sector plan area. These include regional parks, stream valley parks, recreation centers and urban parks, all of which are within immediate reach of residents of the Sector Plan area. The closest facilities are those in Sligo Stream Valley Park, which parallels Georgia Avenue about one mile to the east, in Wheaton Regional Park, at the foot of Shorefield Road, and at the Newport Mill and Pleasant View playgrounds and the Wheaton recreation center, on Newport Mill Road and on Claridge Road respectively.

To supplement these facilities with additional park space immediately within the Wheaton Central Business District, a new urban park is being developed. This park is located on a one-half± acre parcel at Reedie Drive and Amherst Avenue. As an urban park, its thrust will be to provide open space and visual relief to both nearby residents and users of the commercial areas of Wheaton, and to accommodate a range of generally small scale passive recreation opportunities for its users. The development of this park may include a lighted fountain, sitting area, walkways, and landscaping.

Additional facilities in the business area should be developed as small urban parks convenient to shoppers, workers, and the surrounding population. These urban parks could be sitting areas, places to walk and rest, or children's play areas. The Plan recommends that the Commission should actively look at possible locations for such urban parks, particularly as new development and redevelopment proceeds and establishes new patterns of pedestrian concentrations and movements.

Active recreational facilities such as tennis and handball courts could be located with other public uses, such as parking structures whose roof-tops provide special opportunities for recreational developments. Such an approach could involve joint funding by the Division of Parking and the Park and Planning Commission.

In addition, the optional form of development under the CBD zones requires the provision of 10 to 20 percent net lot area in amenity space. Site plan review provisions of other zones recommended in this Plan provide that recreation and open space be incorporated into new developments as part of their approval. This should provide private recreational facilities and open space to supplement those provided by the public sector. In certain areas, especially the office sector, some of the amenity space will be open to the public via an internal pedestrian network.

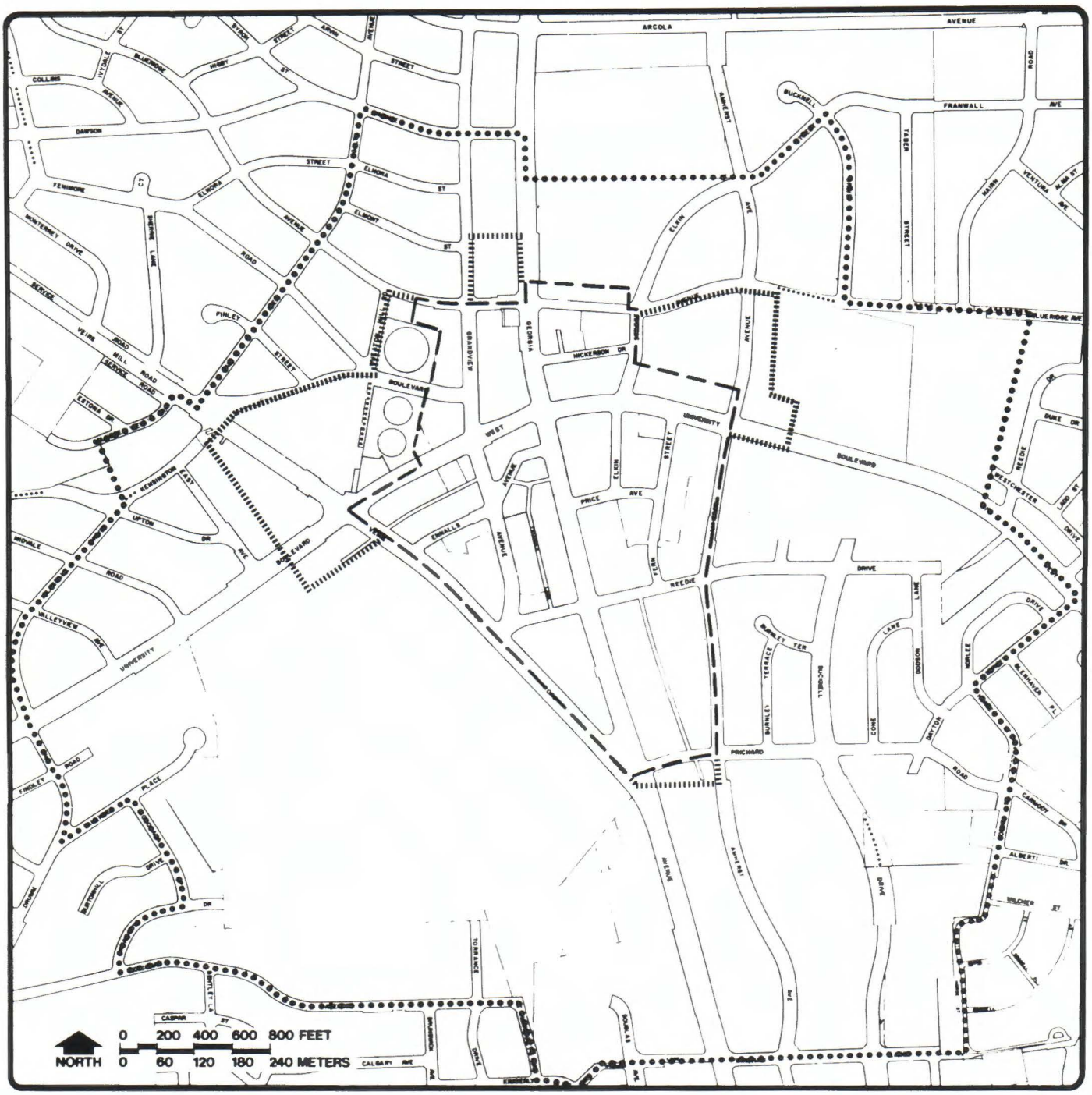
ZONING PLAN

THE CBD BOUNDARY

In order to channel and coordinate development within the County's Central Business Districts, the County Council adopted new zones for use within the CBD's. These zones, including CBD-0.5, CBD-R, CBD-1, CBD-2, and CBD-3, are intended to encourage development of a type and at a scale which can be supported by the METRO system in conjunction with other public facilities, existing and proposed.

The term "Central Business District" (CBD) has a legal meaning in that the Zoning Ordinance includes a description of its geographical boundaries. The CBD's were established for the purpose of limiting the application of particular zoning classifications. The CBD Zones can only be applied within CBD boundaries.

The Wheaton Sector Plan recommends a number of changes to the existing CBD boundaries (see Figure 20). These changes essentially contract the boundary to form a more compact "core" for future development and redevelopment. The boundary has also been removed from those areas where zoning other than CBD Zones are recommended, principally along Veirs Mill Road and Grandview Avenue.



CBD BOUNDARY CHANGES

..... EXISTING CBD BOUNDARY

– – – – PROPOSED CBD BOUNDARY

WHEATON

– – – – PROPOSED CBD BOUNDARY

••••••••• SECTOR PLAN BOUNDARY

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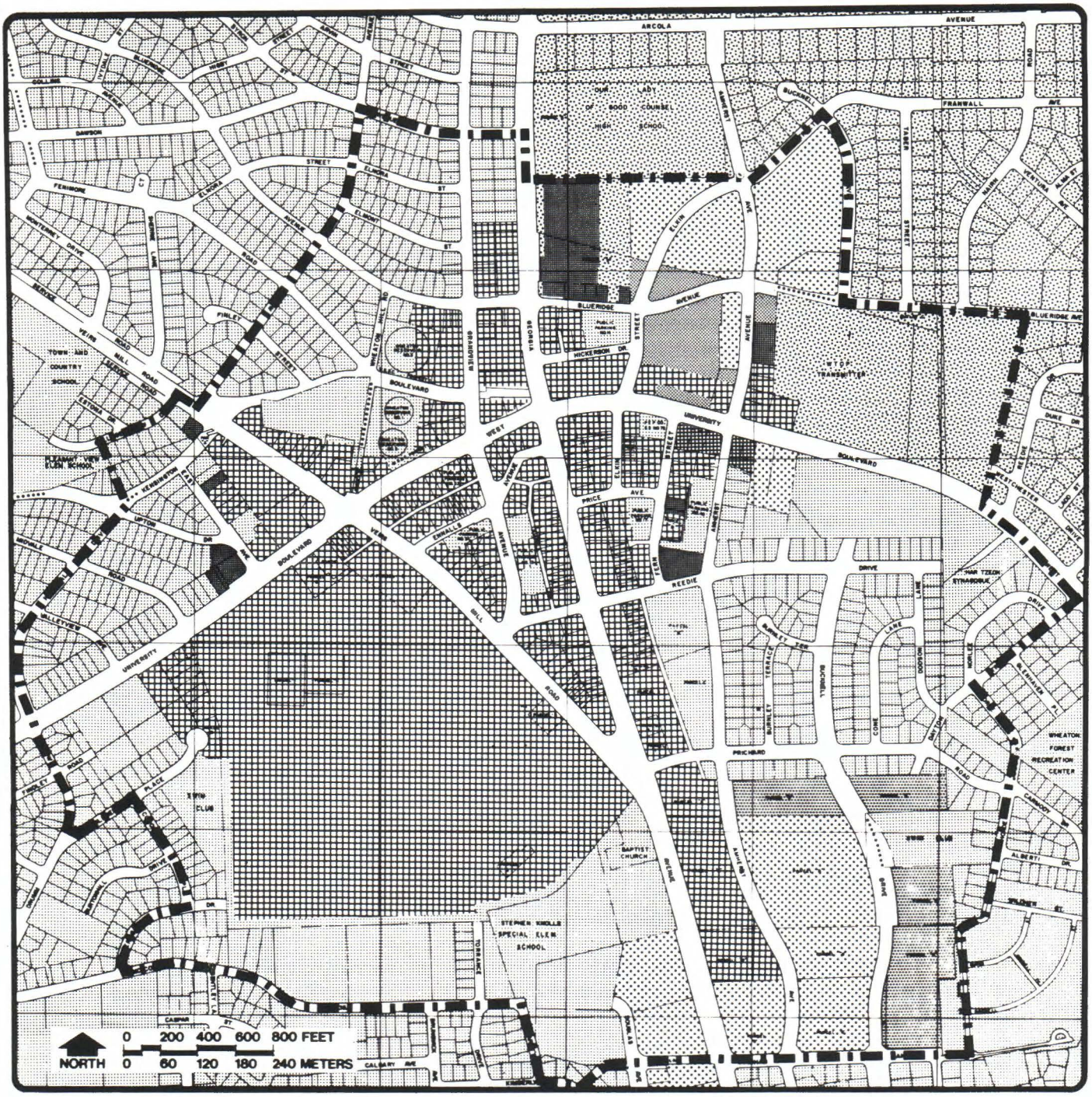
THE ZONING PLAN

Flexibility in zoning districts is highly desirable. However, if the range of uses permitted in a zone is too great, the development that results may not reflect a desirable pattern of activities. For example, normally an office building yields a higher return per unit of floor area than an apartment house. Unless there are incentives for a developer to do differently, he normally will choose to build the use which yields the highest economic return. Existing commercial and industrial zones permit almost the same intensity regarless of the type of use. Widely divergent uses, with substantially different land use and traffic characteristics, are permitted on the same site. In the general commercial C-2 Zone, which is currently the predominant zoning in the business core of the Wheaton Sector Plan area, no differentiation can be made between shopping or office areas since both are permitted uses.

The Central Business District zones (CBD-1, CBD-2, CBD-3) which are proposed in the Zoning Plan are intended to replace most of the existing zoning categories located within the proposed Central Business District. These zones are Euclidean in base, so that they may be applied by sectional map amendment. However, there is an optional method of development which permits higher densities than those allowed by right, in return for which the applicant must submit to site plan review by the Planning Board and its technical staff. In addition, these zones contain standards for different types of amenities such as open space, plazas, urban parks and pedestrian circulation systems. The zones are designed to encourage the maximum number of features that would benefit the general public within the economic limitations of the actual development that is proposed. These zones, and others contained in the zoning ordinance and used in this Plan, are intended to implement the recommendations of the Sector Plan by regulating private land development activities. The zoning controls will be initiated through the filing of a sectional map amendment for the Sector Plan area immediately following final approval of the Plan by the Montgomery County Council and adoption by The Maryland-National Capital Park and Planning Commission.

Within the context of this Plan, both designations of appropriate land uses and designations of densities, consistent with the densities allowable under the proposed zoning, are given.

It needs to be recognized that, if new development is to be encouraged within the Sector Plan area, and if that development is to be encouraged to flow into specific locations, several additional issues need to be addressed. Foremost among these is the achievement of a level of density sufficient to provide an economic yield which is attractive to the private market. The achievement of this level of density, however, must be scaled within the level of available public services (such as transportation) and within a desirable visual framework.



EXISTING ZONING

RESIDENTIAL

- R-200 One Family
- R-90 One Family
- R-60 One Family
- R-T Townhouse
- R-30 Low Density Apartment
- R-20 Med. Density Apartment
- R-10 High Density Apartment
- R-H High Rise Apartment

INDUSTRIAL

- I-1 Light Industrial

COMMERCIAL

- C-T Commercial Transition
- O-M Med. Density Office
- C-O High Density Office
- C-1 Local Commercial
- C-2 General Commercial

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SECTOR PLAN

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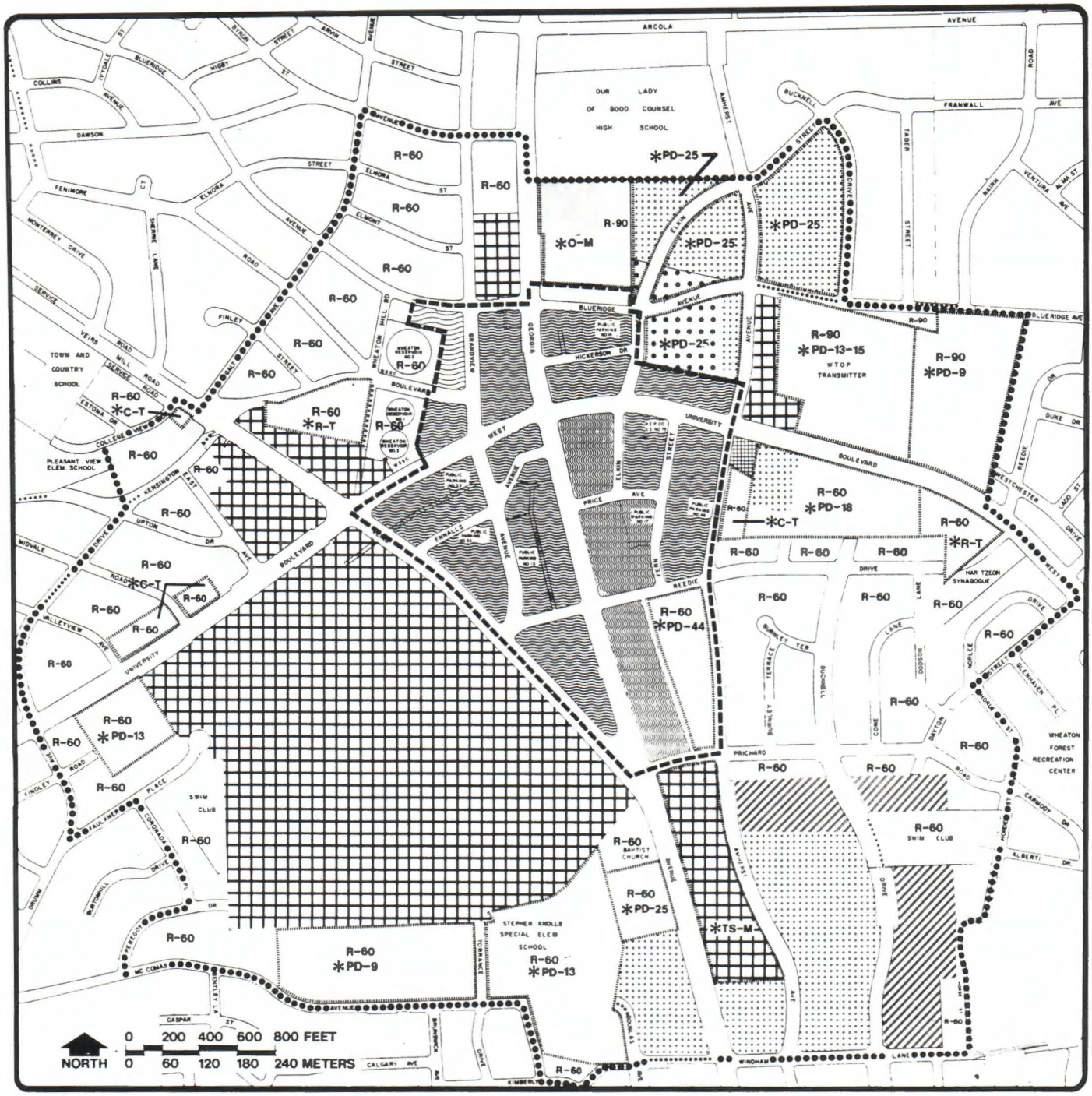
It should also be kept in mind that the zoning proposed in this Plan ought to be subject to review within the same time limits as the other elements of the Plan, namely, a period of six to ten years. Such a review would have several advantages, chief among them the opportunity to measure the actual closeness of fit and new development to zoning envelopes utilized in the CBD; the opportunity to review progress to redevelopment as it meshes with the contemplated redevelopment timetable inherent in this Plan; and the opportunity to review the impact of changes in the available transportation service as Metrobus improvements occur, as METROrail service expands in the region, as the construction of the Glenmont Route progresses, and as other changes in travel habits take place.

Figure 22 shows the zoning proposed for the Wheaton Sector Plan area. It is proposed that the existing single-family zoning in the Sector Plan area outside the proposed Central Business District be reaffirmed as it presently exists, with the exception of the areas discussed in this chapter.

Zoning within the proposed CBD should be changed to be in accordance with Figure 22. The proposed Zoning Plan designates the METRO "Core" area (roughly from University Boulevard to Prichard Road and from Georgia Avenue to Fern Street) as CBD-3. The retail "marketplace" (north and south of University Boulevard) is recommended for CBD-2 zoning. The Zoning Plan recommends CBD-1 along the Central Business District boundary which abuts single-family residential areas. The Plan provides for the retention of general commercial (C-2) zoning on Wheaton Plaza, on the automobile related uses on Veirs Mill Road, on automotive uses on Georgia Avenue south of Prichard Road, and on the shopping area north of University Boulevard east of Amherst Avenue. The Zoning Plan also recommends that the area presently zoned C-2 south of Prichard Road, that is currently being used by two automobile dealerships, be designated as suitable for the Transit Station-Mixed (TS-M) Zone and, therefore, be designated a "Transit Station Development Area." This would enable this area to redevelop, at some future date, with a mixture of commercial and service uses in close proximity to multi-family residential development.

The Sector Plan recommends extensive use of the Planned Development Zone. This zone would encourage the development of a variety of housing types on individual parcels. Higher density development, on each parcel, should be sited closer to the METRO Station, to the business district, and to major roads, while lower density development (primarily single-family homes) would be developed adjacent to existing single-family areas.

The Sector Plan recommends PD 13-15 on the "WTOP parcel," and PD-9 on the parcel to the east. The Plan recognizes, however, that higher densities on these two parcels may be suitable and acceptable when METROrail service is available in Wheaton. Therefore, the Plan recommends that, with METROrail assured, the "WTOP parcel" would be suitable for development under PD 15-22 and on the parcel to the east under PD 9-13. This alternative is recommended to be available at such time as the Urban Mass Transportation Administration approves construction funds for the Glenmont "B" Route. PD zoning allows better design of the subdivision and requires, as indicated in the Zoning Ordinance, Section 59-C-7.15 (a), that within 100 feet of adjacent pre-existent single family homes, only detached houses can be built. This area could also be used depending upon the specific plan submitted, as a "buffer" area to improve compatibility with, or transition to, the established neighborhoods.



PROPOSED ZONING PLAN

R-90	R-90 One Family	C-O	High Density Office	CBD-3	Central Business District
R-60	R-60 One Family	C-1	Local Commercial	*	Suitable for PD-9, PD-25, etc. See Approved and Adopted Sector Plan
R-T	Townhouse	C-2	General Commercial		Dedicated Street Not Constructed
R-30	Low Density Apartment	CBD-1	Central Business District		
R-20	Med. Density Apartment	CBD-2	Central Business District		

WHEATON

CENTRAL BUSINESS DISTRICT BOUNDARY

SECTOR PLAN BOUNDARY

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The Zoning Plan indicates the recommended Planned Development density category. The Sectional Map Amendment, to be filed in conjunction with this Sector Plan, will indicate and re-confirm the existing zoning. The owners of the individual properties would then apply for the Planned Development Zone recommended by the Sector Plan. Each application could then be reviewed in relation to such criteria as progress of METRO construction, proximity to METRO, variety of housing types contained, compatibility with existing community development, other development experienced in the Sector Plan area since Plan adoption, etc. In this way, the individual applications would be reviewed on their own merits and appropriateness, not only in terms of site development and location, but also in terms of timing in relation to METRO. An element of staging can then be introduced into the implementation of this Plan which is responsive both to the needs of the community, to the specific proposals for each parcel, and to the coming of METRO.

The Zoning Plan recommends low intensity office development for the northern frontages of University Boulevard between East Avenue and Valleyview Avenue and the east frontage of Amherst Avenue south of University Boulevard. A number of single-family structures along University Boulevard have already been converted to medical offices and a bank. While some of the existing houses are large enough to lend themselves to office conversion, a number of properties would be better developed as new low-intensity office development. New development should be limited to existing lots and should be discouraged on assemblages of more than one lot. Conversion, where appropriate, and low-intensity new development should be encouraged to buffer existing single-family residences from adverse effects associated with major traffic arteries or incompatible uses.

The Sector Plan recommends O-M zoning for a number of parcels north of Blueridge Avenue on the east side of Georgia Avenue. These parcels are vacant and are presently zoned a mixture of R-90 and C-O. The O-M zoning would enable the Planning Board to ensure that any future office development would be compatible with the adjacent residential areas.

The Sector Plan also recommends the re-confirmation of R-60, R-90, R-20, R-T, C-1, C-2, and C-O zoning in a number of areas.

ZONING AND DEVELOPMENT SCALE

In the Zoning Plan, a "reasonable" level of development is predicted, based largely upon the capacity constraint of the road system. This level of development is consistent with the concept of a development envelope, discussed earlier in this Plan.

In the Transportation Section, calculations indicated a reserve peak period outbound traffic capacity of 2.5 times the existing local trip generation, after adjusting for through trips and METRO Station generated traffic. This reserve capacity can be translated, by the application of appropriate factors, to volumes of

buildable space. The particular overall amount of buildable space will vary by the mix of uses into which that volume of space is divided, since different uses have different traffic generation characteristics. The Sector Plan identified approximately 80 acres of land that would become available for new development through METRO construction, or that would be likely locations for new development within the Sector Plan period because of their currently vacant or substantially underdeveloped character. In the Land Use Plan, appropriate uses were suggested for these areas.

Applying the trip generation characteristics of these uses to the land areas involved, and providing for the magnitude of development allowed by the zoning recommended for these parcels, probable trip generation resulting from new development on those 80± acres have been calculated. The magnitude of development contemplated within the Sector Plan period consists of approximately 1,400 dwelling units, approximatley 2 million square feet of office space and 330,000 square feet of retail space.

This development envelope is calculated on the theoretical total development capacility of the 80± acres identified as having the most development potential during the Sector Plan period. Realistically, the Plan recognizes that other factors will affect the timing and location of development and redevelopment in Wheaton. Because of the ownership patterns, age of structures, financing of existing development, profitability or unprofitability of existing businesses, the general economic and market climate, and other considerations, it is unrealistic to attempt to predict with certainty the exact location and configuration of new development. Obviously some of the vacant land will remain vacant; obviously there will be redevelopment interest in properties already occupied by buildings. The basic development envelope represents, however, a realistic measure of the ability of Wheaton to meet market absorption and market potential, within the Sector Plan period, and within the constraints and opportunities discussed in this Plan.

IMPLEMENTATION

The significance of a Plan is affected by the extent to which its recommendations will be implemented. A Plan serves as a guide for community development--a statement of objectives. If implemented, it will produce the kind of environment that the people of the community envision. The formulation of this Plan attempted to secure as broad a view of the problems confronting Wheaton and of desirable planning objectives for the immediate future as was possible. However, the Plan itself is not the end, but merely the beginning of the process of public involvement in the shaping of Wheaton's growth.

The "community" can actively participate in planning, using the Sector Plan as the starting point only if as many as possible of its members become thoroughly conversant with its proposals and recommendations. Communities and their governments have seldom maintained interest in a plan past the period of its formulation.

PLAN REVIEW

To remain useful, the adopted Sector Plan must be kept up-to-date and its objectives, policies and recommendations must be kept relevant to changing circumstances and to the needs of the community as they evolve in time. A Sector Plan is basically designed to guide development and the County's capital improvements and public services for a period of six to ten years. Its adequacy should be reviewed at least every six years, in conjunction with the Capital Improvements Program, zoning amendments and the availability of new programs or of new directions set by changes in political leadership at any level. The level of development achieved should be scrutinized in this review, to determine whether it is occurring faster or slower than anticipated, and if amendments to affect its speed are in order.

It should also be reviewed at points of major change in policy, and at points of major change in system capacity, such as the opening of METRO.

THE PUBLIC INVESTMENT PROGRAM

Fundamental to the creation of a vibrant, vital urban place in the Wheaton Sector Plan area is the combination of public and private investment already existing, currently programmed, and now, in this document, suggested to be planned for implementation. As in most areas, the predominant land ownership is by public agencies. The conscious manipulation and judicious direction of existing and new public investment is a primary means through which an effective and desirable redevelopment can be implemented.

Several elements of the public investment program have previously been mentioned and discussed, including roadway and sidewalk improvements and modifications, new and improved public parking structures, METRO, the expansion of public open space, and the creation of a public focal point in the heart of the Central Business District.

The METRO Station, Wheaton Urban Park and the County Service Center can be visualized as a public catalyst to both demonstrate a commitment by the various governmental agencies involved in the revitalization of Wheaton, and a new physical framework into which new private investment can be tied. Public and private investment must go hand in hand if vibrant environment is to be developed.

CAPITAL IMPROVEMENTS PROGRAM

	Funded By	Expenditures	Scheduled Completion
Community Facility Improvements			
Wheaton Urban Park	State and M-NCPPC	$ 58,000[1]	N/A
Triangle Lane Semi-Mall	County	110,000	FY 84
Transportation Improvements			
Reedie Drive Widen to a 50' business district street from Veirs Mill Road to Amherst Avenue	MCDOT	75,000[2]	FY 83
Georgia Avenue Close median breaker at Ennalls Avenue and Hickerson Drive, and extend left turn storage lanes at University Boulevard	MDDOT/ SHA	46,000	FY 81
Grandview Avenue Reconstruct two lane street from Ennalls Avenue to Reedie Drive including intersection modifications at both ends	WMATA/ MCDOT	29,000[3]	FY 83
Kensington Boulevard	MCDOT		
(1) Construct a 36' street from University Boulevard to Veirs Mill Road		487,000	FY 82
(2) Widen to a 36' primary residential street from Veirs Mill Road to Wheaton Hills Drive		300,000	FY 84
Windham Lane	MCDOT		
(1) Widen to a 36' primary residential street from Bucknell Drive to Horde Street		107,000[4]	FY 81
(2) Construct a 36' primary residential street from Georgia Avenue to Douglas Avenue		96,000[2]	FY 81
Bucknell Drive Construct a 36' primary residential along unbuilt section south of Prichard Road	MCDOT	144,000	FY 84

	Funded By	Expenditures	Scheduled Completion
Grandview Avenue Bike Route	MCDOT	N/A	N/A
Amherst Avenue Bike Route	MCDOT	N/A	N/A
Wheaton Plaza North Bike Route/Path	MCDOT	N/A	N/A
Wheaton Plaza South Bike Route/Path	MCDOT	N/A	N/A

(1) Acquisition expenditure has already been made for the purchase of this site costing $296,000.

(2) Estimates assumes no additional right-of-way will be required.

(3) Montgomery County Recommended Capital Improvement Program FY 79-84 PDF #1155. (Does not include WMATA share of project cost.)

(4) Montgomery County Recommended Capital Improvement Program FY 79-84 PDF #1152.

DESIGN AND "STREETSCAPE"

In order to help guide development in the near term future, a development concept for the core area was described in the previous chapter. This discussion attempted to address the many issues involved in densities appropriate in a Central Business District, adequacy of economic yield to foster private investment, the support requirements for parking, capabilities for handling traffic, and the proper containment of development in the Central Business District to minimize or prevent encroachment upon adjoining residential neighborhoods.

It has been noted in the general Land Use Plan that most intensive future development should be guided towards locations focusing upon the METRO Station site. The focus of public investment, including the proposed METRO facilities and Wheaton Urban Park, are integral to creating a setting for concentrated development in the immediate vicinity of the station. Concentration within a short walk can help to assure a substantial pedestrian-based METRO ridership, particularly from residential and intensive office development activities. Substantial development can further provide a population base for whom existing and future retail commercial and service activities will be convenient.

Commercial activities, especially retail commercial uses, have had varied experience, some showing limited growth, others moderate to substantial decline. The retail core has begun to show signs of increasing turnover in available stores, although vacant stores are still small in number. The Plan suggests that the retail core needs to be stabilized and improved; it is expected that the implementation of improved pedestrian access and better landscaping as suggested elsewhere in this Plan will be of substantial benefit to the core. The greatest benefit to the retail core, however, will come from new development within the Central Business District.

Within the business district there has been little attempt to provide grass, trees, shrubbery or other amenities which might add relief to a monotony of concrete paving and buildings.

What is needed is the creation of a streetscape. This requires an overall design to identify Wheaton as a place in itself and should include such features as a system of signs, street lighting, plantings and places to sit. These elements should be correlated with the hierarchy of street categories proposed for the street network.

Several elements combine to form the streetscape including the existing (or programmed) pavement width, cross-section design, dimension of sidewalks, and building masses and setbacks. These form the background or setting of the streetscape.

Concurrently there are numerous ambient factors or elements in the streetscape, including "active" elements such as vehicles and pedestrians, and "passive" factors such as weather, season, or time of day. With the background, these ambient factors and elements modulate the streetscape and create the variety characteristic of a living place. In combination with the background elements of the setting can be several "foreground" elements, generally consisting of street furniture including traffic signs and poles, building signs, benches, street trees, lights and light standards and the like. The relationship of the foreground elements with the background elements create the total setting, into which the ambient elements weave.

The foreground elements are important to the creation of scale within the streetscape since they are the elements to which people--as pedestrians, drivers, passengers, or whatever--relate to establish distance, size and perspective. They establish the parameters by which the individual persons detect a sense of "place."

The most readily modifiable elements of the streetscape are these foreground elements. This Plan recognizes a hierarchy of circulation. The foreground elements of the streetscape can be most readily related to this hierarchy of street users.

On the major through streets, emphasis needs to be placed upon ready identification of information by drivers for the safety of through traffic and, through it, the safety of others on or along the roadways. This suggests that primary emphasis needs to be placed on large, readable traffic signals and directional signs; adequate street lighting for safe vehicle movements; and the elimination of distracting extraneous signs and structures. It is, therefore, recommended that:

- Uniform, large, constant and readable traffic signals be installed in overhead configurations at each signalized intersection on Georgia Avenue within the Sector Plan area.

- Uniform, large, consistent and readable street signs be installed at and well in advance of each such street intersection.

- Consistent street lighting be installed.
- All directional signs should be standardized and mounted on street lighting poles, to minimize poles along streets.
- Utilities should be placed underground.
- A vertical "splash panel" should be placed along curbs to minimize splashing on pedestrians of rainwater and slush, to discourage midblock pickup and discharge of passengers, and to discourage midblock pedestrian street crossing.
- Signalized intersections should include a walk phase for pedestrians.
- A minimum 16 foot sidewalk width should be established, so far as practicable, given existing building locations.
- Curb bays should be provided for bus stops to avoid blocking traffic lanes.

The internal street system in contrast to the through road network is to be used primarily by local traffic. Substantial portions of it also serve for access to parking facilities. It can be expected that high pedestrian volumes are likely on these streets, since they provide the linkages between parking and final destinations and may frequently be used by pedestrians, in addition to use of the separate pedestrian networks where provided. Recommendations differ from those along through streets since the needs differ, and moreover, these roadways should look different to drivers and pedestrians. Recommendations for the internal road system are:

- Uniform, readable traffic signals should be installed at each signalized intersection.
- Uniform, readable street signs should be installed at and about one-half block in advance of each street intersection.
- A separate, preferably overhead sign should be placed at each approach on intersections with the through roads to indicate:
  Entrance to the internal street system
  Directions to parking facilities
- A consistent street lighting should be installed. Preference is given to high-intensity sodium-vapor (as opposed to mercury-vapor) lights because of enhanced lighting for pedestrians gained from such installations.
- Directional signs, except for parking facilities, should be mounted on street lighting poles, to minimize vertical elements in the streetscape.
- A minimum sidewalk width of 12 feet should be established, where practicable, with the 4 feet nearest the curb landscaped.

- All poles should be in the landscaped, rather than paved, sidewalk area, and all utilities eventually placed underground.
- Shelters should be placed at all bus stops.
- Benches should be located periodically along sidewalks.
- Use of decorative paving materials should be considered at selected locations on sidewalks. Decorative treatment of sidewalk concrete should also be considered.
- Use of street trees should be encouraged.

APPENDICES

APPENDIX 1

MONTGOMERY COUNTY COUNCIL METRO RESOLUTIONS

Resolution No. 8-494

Introduced: October 7, 1975
Adopted: October 7, 1975

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS A DISTRICT COUNCIL FOR THAT PORTION
OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT
WITHIN MONTGOMERY COUNTY

By County Council

Subject: Approval of the Alignment of the Metrorail Transit System from Evans Drive to Parker Avenue, and of the Station Location and Related Facilities Associated with the Wheaton Station

WHEREAS, the Adopted Regional System (ARS) of the Washington Metropolitan Area Transit Authority (WMATA) provides for alignment of the Glenmont Route within Montgomery County from Silver Spring to Glenmont; and

WHEREAS, on April 15, 1975, WMATA held a public hearing to receive comments on the General Plans for the proposed alignment, the station location, access and related facilities for that portion of the proposed Glenmont Route from Evans Drive to Parker Avenue including the Wheaton Station; and

WHEREAS, on July 1, 1975, the County Council received a WMATA staff briefing concerning the testimony given at the April 15, 1975, public hearing and recommendations of the WMATA staff resulting from analysis of the testimony presented at the hearing on the Wheaton Station; and

WHEREAS, on August 4, 1975, the County Council received the WMATA Staff Report containing comments upon the testimony given at the April 15, 1975, public hearing; and

WHEREAS, worksessions were held by the County Council on August 18, and September 24, 1975, to consider the recommendations of the County Executive, the Montgomery County Planning Board, and the WMATA staff concerning the proposed alignment and station location, and to examine concerns expressed by the Council over the potential displacement of business establishments required by various proposed station design plans; and

WHEREAS, specific guidance and direction from the Montgomery County Council is required by the WMATA Board of Directors and staff concerning the alignment, the station location, access and related facilities for that portion of the Glenmont Route from Evans Drive and to Parker Avenue.

NOW, THEREFORE, BE IT RESOLVED that the County Council for Montgomery County, Maryland, recommends -

1. that the Wheaton METRO Station be designed to minimize the taking of businesses, as generally described on the WMATA Wheaton Station Scheme No. 1, presented to the Council at the September 24, 1975, Wheaton Station Worksession; and

   a. that the Wheaton Station platform be located underground, immediately north of Reedie Drive and along the east side of Georgia Avenue, and be constructed by the cut and cover method; and

   b. that the surface facilities for the Wheaton Station be located generally between Reedie Drive and University Boulevard, and be designed on both sides of Georgia Avenue, with the 250 car parking facility on the east side and the bus and kiss and ride facilities on the west side; and

2. that Triangle Lane and Grandview Avenue south of Ennals Avenue be made one-way couplet to facilitate ingress and egress to the west side public parking and Metro facilities shown on Station Scheme #1; and

3. that west side public parking, bus, and kiss and ride facilities be designed to permit future expansion of public parking as may be desired by the County Department of Transportation and reflected in the Wheaton Sector Plan; and

4. that the east side Metro parking areas be made available for public parking on an interim basis while the west side parking facility is under construction and before the east side facilities are needed for Metro station use; and

5. that the design of the west side parking deck provide a landscape treatment or commercial use beneath the southernmost portion of the decked area at Grandview Avenue and Reedie Drive; and

6. that WMATA investigate the possibility of utilizing the Georgia Avenue frontage of the east side parking facility for private development purposes if such a private/public joint land use arrangement is determined to be feasible in the Sector Plan process; and

7. that WMATA examine the possibility of allowing non-Metro auto parking in the kiss and ride area during the off-peak hours; and

8. that WMATA investigate the possibility of assisting the relocation of displaced businesses by offering temporary location in property required for station construction purposes, but not necessarily needed immediately for METRO use.

AND BE IT FURTHER RESOLVED that -

WMATA further explore the possibility of avoiding the taking and disruption of the two businesses affected by the pedestrian underpass beneath Georgia Avenue.

A True Copy.
ATTEST:

_____
Anna P. Spates, Secretary
of the County Council for
Montgomery County, Maryland

Resolution No. 8-1600

Introduced: October 25, 1977
Adopted: October 25, 1977

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS A DISTRICT COUNCIL FOR THAT PORTION
OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT
WITHIN MONTGOMERY COUNTY

By: County Council

SUBJECT: Recommendation to the Washington Metropoltian Area Transit Authority Regarding the Glenmont (B) Route Engineering Analysis

WHEREAS, an engineering and architectural analysis of the Glenmont (B) Route was directed by the U.S. Secretary of Transportation and the Washington Metropolitan Area Transit Authority for the purpose of developing the lowest cost engineering solution for the construction of a rapid-rail transit facility between Silver Spring and Glenmont, in Montgomery County; and

WHEREAS, on October 17, 1977, the Montgomery County Council received a detailed presentation of the results of the engineering and architectural analysis of the Glenmont (B) Route, including a comparison of associated design impacts and costs estimates of the various alternatives examined; and

WHEREAS, the Montgomery County Planning Board and the County Executive have recommended to the County Council that Alternative No. 4, be endorsed as the least costly and least disruptive of the various alternatives, and as the preferred design for the Glenmont (B) Route; and

WHEREAS, on October 25, 1977, the Montgomery County Council further reviewed and considered the findings of the engineering and architectural analysis of the Glenmont (B) Route, and also reviewed the recommendations of the staff of the Washington Metropolitan Area Transit Authority; and

WHEREAS, the Montgomery County Council finds that Alternative No. 4 with a deep, rock tunnel alignment following Georgia Avenue with dual-chamber rock stations at Forest Glen and Wheaton, and a cut-and-cover station at Glenmont, will provide a high level of rapid rail transit service for the Glenmont corridor, minimize the social and environmental impacts associated with construction of such a facility, and reduce the expected capital costs for providing the desired service by approximatley $25 million.

NOW, THEREFORE, BE IT RESOLVED that the County Council for Montgomery County, Maryland, recommends to the Washington Metropolitan Area Transit Authority that -

Alternative No. 4, of the Glenmont (B) Route Engineering Analysis, with a deep, rock tunnel alignment following the previously approved alignment along Goergia Avenue with dual-chamber rock stations at Forest Glen and Wheaton, and a cut-and-cover station at Glenmont and with the previously approved surface facilities, be constructed as the preferred engineering solution and design for providing a rapid rail transit facility between Silver Spring and Glenmont, in Montgomery County; and

BE IT FURTHER RESOLVED that -

the Washington Metropolitan Transit Authority is requested to give immediate attention to the development of a financial plan and the necessary regional agreements to insure construction of the Glenmont (B) Route as a high priority segment beyond that portion of the system covered by the Interim Capital Contributions Agreement.

A True Copy.
ATTEST:

_____
Anna P. Spates, Clerk of
the County Council for
Montgomery County, Maryland

Resolution No. 8-1854

Introduced: March 21, 1978
Adopted: March 21, 1978

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS A DISTRICT COUNCIL FOR THAT PORTION
OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT
WITHIN MONTGOMERY COUNTY, MARYLAND

By: County Council

SUBJECT: Recommendation to the Washington Metropolitan Area Transit Authority Regarding the Glenmont (B) Route Engineering Analysis

WHEREAS, an engineering and architectural analysis of the Glenmont (B) Route was directed by the U.S. Secretary of Transportation for the purpose of developing the lowest cost engineering solution for the construction of a rapid-rail transit facility between Silver Spring and Glenmont in Montgomery County; and

WHEREAS, on October 17, the Montgomery County Council received a detailed presentation by the Washington Metropolitan Area Transit Authority of the results of the engineering and architectural analysis of the Glenmont (B) Route, including a comparison of associated design impacts and cost estimates of the various alternatives examined; and

WHEREAS, on October 25, 1977, by Resolution No. 8-1510, the County Council recommended to the Washington Metropolitan Area Transit Authority that Alternative No. 4 of the Glenmont (B) Route Engineering Analysis be constructed as the preferred engineering solution and design for providing a rapid rail transit facility between Silver Spring and Glenmont, in Montgomery County; and

WHEREAS, on March 7, 1978, the County Council received a further presentation by the Washington Metropolitan Area Transit Authority indicating that certain modifications would be necessary in the alignment through the Forest Glen area and in the arrangement of surface facilities at the Wheaton Station resulting from refinements in final design subsequent to the October 17 presentation; and

WHEREAS, in accordance with the legal opinion expressed by the Washington Metropolitan Area Transit Authority General Counsel that the final design modifications to the Glenmont (B) Route resulting from the Engineering Analysis do not require additional public hearings, the County Council understands that Washington Metropolitan Area Transit Authority will notify and meet with those individuals and organizations directly affected by the final design modifications; and

WHEREAS, the Montgomery County Planning Board and the County Executive have recommended to the County Council that Alternative No. 4, as modified subsequent to the October 17, 1977 presentation, be endorsed as the least costly

and least disruptive of the various alternatives, and as the preferred design for the Glenmont (B) Route; and

WHEREAS, the Montgomery County Council finds that Alternative No. 4, with a deep rock tunnel alignment generally following Georgia Avenue, with dual-chamber rock ("Stockholm" type) stations at Forest Glen and Wheaton, and a cut-cover station at Glenmont, including a Forest Glen station generally under the southwest quadrant of the intersection of Forest Glen Road and Georgia Avenue, serviced by elevators from the surface, by a below-grade passageway to the station from bus, kiss-and-ride, and park-and-ride facilities located along the north side of Forest Glen Road west of the Americana Finnmark Condominium Community, and a Wheaton station generally under the south quadrant of the intersection of Georgia Avenue and Reedie Drive and Triangle Lane on both kiss-and-ride and park-and-ride facilities in the block bounded by Georgia Avenue, Reedie Drive, Price Avenue and Fern Street, and a Glenmont station generally under the area west of Georgia Avenue between Urbana Drive and Denley Road, serviced by escalators from the surface from the bus, kiss-and-ride and park-and-ride facilities on the east side of Georgia Avenue and a storage yard as previously approved located generally within the area north and east of Georgia Avenue near its intersection with Ara Drive, will provide a high level of rapid rail transit service for the Glenmont corridor, minimize the social and environmental impacts associated with construction of such a facility, and reduce the expected capital costs for providing the desired service by approximately $25 million.

NOW, THEREFORE, BE IT RESOLVED that the County Council for Montgomery County, Maryland, recommends to the Washington Metropolitan Area Transit Authority that -

Alternative No. 4 of the Glenmont (B) Route Engineering Analysis, with a deep rock tunnel alignment generally following the previously approved alignment along Georgia Avenue except for a slight westerly realignment north and south of the Capital Beltway in the Vicinity of the Forest Glen Station, with dual-chamber rock stations at Forest Glen and Wheaton, and a cut-and-cover station at Glenmont, and a surface storage yard beyond the Glenmont station, and with the previously approved surface facilities at Forest Glen and Glenmont, and the surface facilities modified as described above at Wheaton, be constructed as the preferred engineering solution and design for providing a rapid rail transit between Silver Spring and Glenmont, in Montgomery County; and

BE IT FURTHER RESOLVED that -

Washington Metropolitan Area Transit Authority in conjunction with the Montgomery County Planning Board is requested to examine alternative sites for the possible relocation of the electric substation proposed adjacent to the Americana Finmark community, and in the event no alternative site can be found that meets the Washington Metropolitan Area Transit Authority established constraints for the spacing of substations then final design at the presently proposed site shall proceed forthwith; and

BE IT FURTHER RESOLVED that -

The Montgomery County Council restates its previous position that WMATA develop a financial plan and the necessary regional agreements to insure construction of the Glenmont (B) Route as a high priority segment beyond that portion of the system covered by the Interim Capital Contributions Agreement.

A True Copy.
ATTEST:

_____
Anna P. Spates, Secretary
of the County Council for
Montgomery County, Maryland

APPENDIX 2

DESIGN GUIDELINES WHEATON SECTOR PLAN

Air Pollution

In July 1976, Environmental Research and Technology, Inc., consultants to The Maryland-National Capital Park and Planning Commission, published Carbon Monoxide and Land Use Planning. Chapter One of the report dealt with "Qualitative Planning Guidelines to Minimize Exposure to Carbon Monoxide." The following design guidelines are taken from the 1976 report.

There are two major subcategories by which urban design can help minimize potential CO problems. The designer may either:

1) segregate the CO source from potential receptors, or
2) urban design may modify geometry such that hotspots are not created.

Segregation of Sources from Receptors

Since receptors are human activities, the means for segregation of CO sources from receptors are limited. Most commonly, this segregation is attempted simply by increasing the distance between pedestrians or buildings and major CO sources, generally arterials and their intersections. Two illustrative examples of effective means for segregation of receptors from CO sources are as follows:

1) Pedestrian Locations - Where possible, pedestrian (and bicycle) areas should be removed from auto flow zones. In highly urbanized areas, maximum protection may be afforded pedestrians through the provision of pedestrian walks or possible enclosed walkways with enclosed ventilation systems. Where costs or other design parameters preclude such total segregation of people from traffic, efforts should be made to maximize distances from auto travel lanes to pedestrian walkways. (Traditional sidewalk location adjacent to roadways represents a very adverse configuration.) The greater the buffer between auto flow and pedestrian flow, the greater the protection.

2) Building Setbacks - As a general rule, local CO concentrations (i.e., total concentrations minus background concentrations) decrease exponentially with distance from highways, major streets or intersections. However, a great number of anomalies exist due to turbulence and eddy effects resulting from building and topographical configurations such that one encompassing relationship is not possible. In general, however, the use of setbacks or buffers is beneficial in

decreasing pollutant concentrations by providing an opportunity for pollutants to be diluted or dispersed. Setbacks are specifically benefical in new developments where building locations may be selected at the design stage such that edifice-to-roadway distance are increased. This may be accomplished by either increasing setback requirements or by offering FAR (Floor-Area Ratio) incentives for taller buildings with less lot coverage (this may offer other geometric advantages, as well).

Modification of Geometry

Modification of urban geometry has the sole purpose of avoiding the creation of potential anomalies which block movements of prevailing winds, thus forming eddies of air which trap pollutants and increase concentrations. Examples of such anomalies are urban street canyon effects and building arrangements.

In certain areas, the natural environment may also cause entrapment of pollutants. This can occur in "valleys" of hilly or unevenly sloped regions where, during cold weather, a stratified body of air can block pollutants at the valley floor. For this natural phenomenon there is little the planner can do except to be aware of these areas, and, if possible, to limit development and maintain surveillance to see that standards are not violated. In the design and location of structures, however, the planner can constructively negate the adverse wind flow considerations. This may be done in several ways:

1) Height restrictions may be imposed such that the V/H ratio is kept below 0.333.

2) Lot coverage restrictions may be imposed to prevent the formation of block-long street canyons. Long linear blocks of structures without breaks should be avoided since they tend to block through movements of winds which help dilute the pollutants.

3) Efforts may be made to vary building heights and setbacks to preclude classical street canyon formation.

4) Non "cubical" architecture may be encouraged to prevent vortex formation. The rough aerodynamics of buildings of different sizes promote dilution of the pollutant.

5) Landscaping treatments may be applied to potential street canyon cross-sections to break up a potential vortex and, in non-street canyons, to help promote increased mixing. Although trees, shrubs and other landscape features have not,

in themselves, shown a significant effect in reducing pollutants in the air, they do affect wind speeds and the mixing of air. This induced turbulence tends to reduce the intensity of air pollution at ground level because of improved mixing.

The above techniques are not easily applied where land holdings are small and fragmented. Thus, assembly of large land buildings should be encouraged to provide land use agencies more flexibility in public control of site plans.

Indoor-Outdoor Pollutant Concentrations

Indoor pollutant concentrations will generally be below the standards if the outdoor concentrations are below the standards where there is no generation of CO within the building. However, if the planner/designer is interested in minimizing indoor pollutant concentrations by controlling the design and/or construction of the building, a few general findings from previous studies are important:

1) Gas cookstoves and attached garages contribute noticeably to the inside CO levels.

2) Indoor fluctuations of pollutant concentration follow outdoor fluctuations (which are proportional to traffic in the immediate vicinity to building) closely, with a time lag, and generally with lower peaks.

3) Open windows decrease the time lag between outdoor and indoor concentrations at a given floor and prevent the entrapment of pollutants within the building.

4) CO concentrations decrease exponentially from the bottom to top floors at the outdoor location. Indoor concentrations also decrease with height; however, these indoor CO levels reduce more slowly than outdoor concentrations.

5) When outdoor concentrations are high, indoor concentrations are normally lower than outdoor concentrations at all heights above the roadway. Conversely, when outdoor concentrations are low, indoor CO concentrations can be higher than outdoor concentrations on the high floors. This is because pollutants which enter the building at low elevation circulate within the building. Since pollutants disperse upward and outwards when the outdoor concentrations are lower, the indoor CO concentrations increase when the upward diffusion path is blocked.

Based on the above findings, the following guidelines can be applied by designers to decrease indoor CO concentrations:

- Where possible, major entrances to buildings should be located such that prevailing road winds blow parallel to them. Building sides which face major urban roadways should be as airtight as possible.

- Special attention should be given to seal the lower floors of new buildings to exclude traffic generated CO. Based on the predicted outdoor concentrations, it may be beneficial to avoid sealing the highest floors of a multi-story structure.

- Elevator control rooms at roof level should be force ventilated to the roof to reduce entrapment of pollutants in tall buildings.

- Internal pollutant sources, such as parking garages within or attached to the building should be force ventilated outside the building.

- For buildings with closed ventilation systems the placement of vent inlets has a significant impact on the resulting CO exposure of building occupants. Intake vents should be placed in positions remote from both traffic volumes and exhaust vent flows. Where possible, roof mounted intakes can minimize the intake of CO. Where roof mounted vents are impossible, intakes may face the side of the building exposed to least traffic volumes. Except in some street canyon situations (where roof mounted intakes are still preferred), vents may be located as high as possible upon a multi-story building.

NOISE

Acoustical site planning and building design should be provided for new development along Georgia Avenue and University Boulevard and Veirs Mill Road. Acoustical site planning should consider the use of appropriately landscaped earth berms or noise barrier walls to protect low profile buildings and outdoor activity areas as a means of minimizing personal noise exposure. Acoustical building design should specify sound attenuating construction materials including sealed double-glazed windows. The design objective for noise sensitive residential and medical land uses is to maintain interior noise levels at or below 45 decibels.

APPENDIX 3
MAXIMUM ALLOWABLE NOISE LEVELS BY ZONING CATEGORY - STATE AND COUNTY ORDINANCES

Regulations from the Maryland Environmental Noise Act of 1974 are included in this Plan, as required by State law. Construction limits, frequency of occurrence, and exemptions are provided for under the regulations. Maximum allowable levels are as follows:

Maximum Allowable Noise Levels by Zoning Category (dBA)

Effective Date	Day/Night	Industrial	Commercial	Residential
July 1, 1975	Day	80 dBA	72 dBA	65 dBA
July 1, 1975	Night	80 dBA	67 dBA	60 dBA
July 1, 1977	Day	75 dBA	67 dBA	60 dBA
July 1, 1977	Night	75 dBA	62 dBA	50 dBA

MONTGOMERY COUNTY CODE - CHAPTER 31B
NOISE CONTROL

Sec. 31B-5. Maximum permissible sound levels generally.

(a) Effective October 1, 1976, except as otherwise provided in sections 31B-6, 31B-8, 31B-9, 31B-12 and 31B-13 of this chapter, a sound level which emanates from any operation, activity or source and which exceeds the maximum permissible sound levels established by subsection (b) of this section is prohibited.

(b) The following maximum permissible sound levels are hereby established:

(1) If the sound emanates from sources located within a commercial or industrial zone, the maximum permissible sound level is:

a. 62 dB(A) at any point on the property line;
b. 55 dB(A) at any point on a boundary separating a commercial zone or industrial zone from a residential zone.

(2) If the sound emanates from sources located within a residential use zone, the maximum permissible sound level is 55 db(A) at any point on the property line of the residential use.
(1975 L.M.C., ch.31,p2.)

APPENDIX 4

RESOLUTIONS OF APPROVAL AND ADOPTION

Resolution No. 8-2090

Introduced: July 18, 1978
Adopted: July 18, 1978

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS A DISTRICT COUNCIL FOR THAT PORTION
OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT
WITHIN MONTGOMERY COUNTY, MARYLAND

By: District Council

SUBJECT: Final Approval of the Sector Plan for the Wheaton Central Business District

WHEREAS, In October, 1977, the County Council approved the alignment of the Glenmont Metrorail Route north of Silver Spring and the station location and related facilities associated with the Wheaton Station, and directed the Montgomery County Planning Board to begin preparation of a Sector Plan for the Wheaton Central Business District; and

WHEREAS, on February 28, 1978, the Montgomery County Planning Board transmitted to the County Council for review the Preliminary Draft Sector Plan for the Wheaton Central Business District; and

WHEREAS, the Council believes it to be in the public interest that the Sector Plan for the Wheaton Central Business District be approved and that the zoning recommendations of the sector plan be implemented during the Council's term of office; and

WHEREAS, said plan and comprehensive rezoning are believed to be essential for the protection of existing communities, to address transportation and other problems resulting from the construction and operation of Metro, and to guide future public and private land use decisions; and

WHEREAS, Section 85-78 of the Montgomery County Code provides that no amendment to the zoning regulations shall be made, in a year in which the Council is elected, after the thirty-first day of October and until the newly elected Council is duly qualified and has taken office; and

WHEREAS, in order to accomplish its objective to completing the planning process for the Wheaton Central Business District area during its term of office, the District Council jointly with the Montgomery County Planning Board conducted a public hearing, on April 12, 1978, on the Preliminary Draft Wheaton Central Business District Sector Plan; and

WHEREAS, on May 26, 1978, the District Council jointly with the Montgomery County Planning Board held a worksession at which time consideration was given to the public hearing testimony and the comments and concerns of the County Executive and other interested parties; and

WHEREAS, as a result of this process certain revisions were made to the Preliminary Draft Sector Plan, and on July 13, 1978, the Montgomery County Planning Board submitted to the Council and the County Executive the Final Draft Sector Plan for the Wheaton Central Business District; and

WHEREAS, the Montgomery County Executive has duly conveyed to the Montgomery County Council his comments and recommendations on the Sector Plan for the Wheaton Central Business District; and

WHEREAS, the County Council has reviewed the Final Draft Sector Plan and is satisfied that it includes all revisions requested by the Council as a result of the Council's participation in the preliminary sector planning process, and therefore did not conduct a public hearing on the Final Draft Sector Plan.

NOW, THEREFORE, BE IT RESOLVED that the County Council for Montgomery County, Maryland, as a District Council for that portion of the Maryland-Washington Regional District located within Montgomery County, Maryland, that -

The Final Draft Sector Plan for the Wheaton Central Business District and Vicinity, dated July 1978, is hereby APPROVED.

A True Copy.
ATTEST:

_____
Kathleen A. Freedman, Deputy Secretary
of the County Council for
Montgomery County, Maryland

MCPB 78-55
MNCPPC 78-16

RESOLUTION

WHEREAS, The Maryland-National Capital Park and Planning Commission, by virtue of Article 66D, Section 7-108, of the Annotated Code of Maryland, 1976 Cumulative Supplement, is authorized and empowered to make and adopt, and from time to time, amend, extend, or add to the General Plan for the Physical Development of the Maryland-Washington Regional District; and

WHEREAS, the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, pursuant to said laws, held a duly advertised public hearing on April 12, 1978, on a Preliminary Draft Sector Plan for Wheaton Central Business District and Vicinity, being also a proposed amendment to the Adopted Master Plan, Kensington-Wheaton Planning Area VII, 1959, as amended; the General Plan for the Physical Development of the Maryland-Washington Regional District; and the Master Plan of Highways within Montgomery County, Maryland; and

WHEREAS, following the public hearing, the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission did prepare a Final Draft Sector Plan for Wheaton Central Business District and Vicinity; and

WHEREAS, the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, upon due deliberation and consideration did approve said Final Draft Sector Plan for submittal to the Montgomery County Council, with the recommendation that Council approve said Final Draft Sector Plan; and

WHEREAS, such Final Draft Sector Plan, dated July 1978, was transmitted to the Montgomery County Council on July 13, 1978; and

WHEREAS, the Montgomery County Council, sitting as the District Council for that portion of the Maryland-Washington Regional District, lying within Montgomery County, on July 18, 1978, approved said Sector Plan for Wheaton Central Business District and Vicinity by Resolution Number 8-2090.

NOW, THEREFORE BE IT RESOLVED, that The Maryland-National Capital Park and Planning Commission does hereby adopt said Sector Plan for Wheaton Central Business District and Vicinity, consistent with County Council Resolution Number 8-2090, said Sector Plan consisting of maps and descriptive material and being an amendment to the Adopted Master Plan for the Kensington-Wheaton Planning Area VII, 1959, as amended; being also an amendment to the General Plan for the Physical Development of the Maryland-Washington Regional District; and to the Master Plan of Highways within Montgomery County, Maryland; and

BE IT FURTHER RESOLVED, that these amendments and appropriate certificate of adoption shall be recorded on the maps, Plan, and descriptive material; said certificate shall contain the signature of the Chairman, Vice Chairman, and Secretary-Treasurer of this Commission; and

BE IT FURTHER RESOLVED, that an attested copy of the Plan and all parts thereof shall be certified by the Commission and filed with the Clerks of the Circuit Court of each of Montgomery and Prince George's Counties, Maryland as required by law.

* * * * * * * * *

This is to certify that the foregoing is a true and correct copy of a resolution adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, on motion of Commissioner Kephart, seconded by Commissioner Granke, with Commissioners Granke, Kephart and Scharf voting in favor of the motion, and with Commissioners Hanson and Keeney being temporarily absent, at its regular meeting held on Thursday, July 20, 1978, in Silver Spring, Maryland.

Ruth M. Roberts
Acting Executive Director

* * * * * * * * *

This is to certify that the foregoing is a true and correct copy of a resolution adopted by The Maryland-National Capital Park and Planning Commission on motion of Commissioner Keeney, seconded by Commissioner Churchill, with Commissioners Brown, Churcill, Dutton, Hanson, Hopper, Keeney and Scharf voting in favor of the motion, and with Commissioners Granke, Kephart and LaPlaca being absent, at its regular meeting held on Wednesday, September 20, 1978 in Riverdale, Maryland.

Ruth M. Roberts
Acting Executive Director

PLANNING STAFF

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Donald R. Spivack, Chief
Community Planning East Division

Project Staff

William R. Barron, Planning Coordinator
Community Planning East Division

Dennis Ream, Principal Urban Designer
Urban Design Division

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Environmental Planning Division

COMMUNITY RELATIONS

Pat Plunkett, Community Relations Specialist

Cover Photo: Blue Ridge Aerial Survey

THE MARYLAND · NATIONAL CAPITAL PARK AND PLANNING COMMISSION