

Chapter 2

BACKGROUND

2.1 AREA HISTORY

For much of its history, North Bethesda has been a passageway between Georgetown (and later the District of Columbia) and Rockville, and points north and west. The Rockville-Georgetown Pike was at one time an Indian trail and in the 1750's was used by General Braddock's army to move against the French and Indians in western Pennsylvania. By 1800, the Pike carried a stage line twice a week between Frederick and Georgetown. During the War of 1812, the Pike was used by government officials fleeing the British invasion of Washington.

In 1806, the Washington Turnpike Company received Montgomery County's first toll road charter for the Rockville Turnpike, improvements being completed in 1828. In 1829, toll booths were erected, with one booth located at the present Strathmore Avenue. In 1887 the toll booths were abandoned, the toll at the time being five cents.

The land encompassed by the present North Bethesda-Garrett Park Planning Area was settled in the early eighteenth century. Tobacco was a staple crop and traces of the area's early farming and plantation history can still be seen. The memoirs of Josiah Henson, a former slave on the Riley Plantation, inspired Harriet Beecher Stowe's novel, *Uncle Tom's Cabin*. The Riley Plantation was located on Old Georgetown Road, near the present Tilden Lane. Josiah Henson's former sleeping quarters, a one-room log cabin, is still in existence, attached to an eighteenth century house at 11420 Old Georgetown Road.

In 1873, the Metropolitan Branch of the Baltimore and Ohio (B&O) Railroad was completed through North Bethesda, with stations at Halpine (Twinbrook), Randolph and Garrett Park. The railroad increased farming prosperity by improving accessibility to fertilizers and farm machinery.

Garrett Park, named after Robert Garrett, founder of the B&O Railroad and built on 154 acres, is one of the County's earliest and most significant railroad communities. Trains still stop at Garrett Park, and the town's layout is distinctly different from surrounding suburban patterns, retaining much of the ambience of a nineteenth century community.

In the early 1890's, a trolley line was extended from Bethesda on Old Georgetown Road and then via a private right-of-way, passing along the west boundary of what is now Georgetown Preparatory School and emerging on Rockville Pike in the vicinity of its present intersection with Old Georgetown Road. From that point, it continued to the City of Rockville on Rockville Pike. In the 1930's, streetcar service was discontinued, the tracks removed, and bus service instituted.



BACKGROUND

NORTH BETHESDA

By the early 1900's, North Bethesda was still sparsely settled, and Rockville Pike was still a two-lane road bordered by large estates. The only vestige that remains of the Montrose community, located at the intersection of Old Georgetown Road and Rockville Pike, is the two-room Montrose School, located at 5721 Randolph Road.

In 1919, Georgetown Prep School was moved to its present location from its original site in Old Georgetown Heights where it had been established in 1789. In 1920, the present Strathmore Hall Arts Center was constructed as the estate house for Charles Corby, who was prominent in the baking industry at the time. Much of the Corby estate became the site of the Holy Cross Academy in 1960.

During the 1960's the area developed slowly and then with increasing rapidity in the 1970's. The number of dwelling units and total population in 1960 was 8,859 and 32,875 respectively. It is startling to note that the January 1990 household population of North Bethesda was virtually unchanged at 33,450 persons, but the number of households was 15,000, indicating a steep decline in persons per household. In Garrett Park, U.S. Census Population counts indicate that the population peaked in 1970 at 1,276, falling to 884 in 1990.

2.2 PLANNING FRAMEWORK

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A. THE GENERAL PLAN

The General Plan provides broad policy guidance for development patterns and for transportation and environmental issues in Montgomery County. This comprehensive and strategic plan was approved by the County Council in 1969 as a modification of the Montgomery County portion of ...On Wedges and Corridors: A General Plan for the Development of the Maryland-Washington Regional District, adopted by the Maryland-National Capital Park and Planning Commission in 1964.

The basic concept of the *General Plan* is a system of wedges and corridors, with employment and residential nodes concentrated in corridors served by rail transit and major highways. Figure 4 depicts the North Bethesda-Garrett Park Planning Area located in the context of the *General Plan* concept.

The General Plan made the following broad recommendations:

- Growth should be channeled into corridor cities located along the I-270 corridor and into existing established down-County activity centers.
- Transportation needs should be met through the development of a rapid rail transit system supported by an extensive network of local bus routes.
- Rapid transit stations should be located in areas conducive to multi-use development in close proximity to stations.

• New development should be planned to minimize impacts on existing development.

B. THE 1970 NORTH BETHESDA-GARRETT PARK MASTER PLAN

In terms of the "wedges and corridors" concept, the 1970 *Master Plan* envisaged the Planning Area as the base of a corridor extending through Bethesda, Rockville, Gaithersburg, and Germantown. The spine of the corridor was Interstate 70-S (now I-270), combined with a proposed rapid transit line (Metro).

For areas it defined as 'committed,' the 1970 Master Plan was essentially silent. These areas included single-family residential areas and the Davis Tract (Rock Spring Park). However, for 'uncommitted' areas, the Master Plan proposed two new zones: a Planned Residential Development Zone in the Timberlawn area that would be predominantly residential with a variety of housing types and some ancillary retail uses, and a Transit Impact Zone for the three Metro station areas. The objective of the latter zone was to encourage a mixture of offices, retail uses and multi-family dwellings within convenient walking distance of rapid transit stations.

C. THE 1978 NORTH BETHESDA SECTOR PLANS

These Sector Plans refined and amended the 1970 Master Plan. In the case of each Sector Plan, the scale of development proposed by the 1970 Master Plan was reduced considerably. For example, the 1970 Master Plan recommended significant amounts of C-2 zoning in the Rockville Pike corridor, particularly at White Flint. At that time, the C-2 Zone permitted a net FAR of 12.2 (excluding parking). The C-2 standards were reduced in 1976 to permit a maximum FAR of 1.5.

D. ENVISIONING OUR FUTURE

In 1988 the Commission on the Future of Montgomery County submitted their final report entitled 'Envisioning Our Future.' This informative and thought provoking document provided a basis for addressing many complex issues and policy decisions. The report addressed several major themes in the framing of specific recommendations, including a sense of community, a moderate course on growth, demographic change, and education.

E. COMPREHENSIVE GROWTH POLICY STUDY (CGPS)

Recognizing the importance of long-range planning, the Montgomery County Council assigned to the Planning Board a technical study, termed the Comprehensive Growth Policy Study (CGPS). The CGPS technical analysis of current trends and forces that affect urban growth was intended to provide a contextual frame of reference for individual master plans, including that for North Bethesda-Garrett Park. The CGPS suggests directions for a policy response, but it is important to recognize that the CGPS is a study, and not a Plan.

The CGPS states that in order for Montgomery County to grow without excessive congestion, the average auto driver share of work trips should be reduced from 75 percent to 50 percent.

"To accomplish such a goal, we would need to:

- a. Introduce new travel networks (e.g., trolley, van, and hiker/biker trails);
- b. Cluster land uses at points along these networks (e.g., urban village centers); and
- c. Take actions to help people break the automobile habit (e.g., auto/transit pricing and pedestrian friendly design)."

The study also concluded that, in terms of the adequacy of management tools, the following could be candidates for exploration and action:

- "a. A new travel network plan (to preserve rights-of-way for trolley, van, and hiker/biker trails); . . .
- b. Revision of master plans and zoning over time to further reduce sprawl and increase strategic concentration (urban village centers)."

Land use patterns are identified by the CGPS as significant in influencing congestion:

"It seems clear that, from a long-term perspective, the pattern of urban growth is much more important than either the pace of growth... or the jobs to housing proportion of growth.... Although control over the timing of growth is important (especially from a fiscal perspective), control over the spatial and infrastructure pattern is far more important in the long run. Ultimately, zoning and facility location are more important than staging, insofar as traffic congestion is concerned."

It has been argued elsewhere that the emergence of suburban workplaces with densities equivalent to small downtowns, alternative transportation strategies, rich mixtures of clustered land uses, pedestrian friendly environments, and nearby affordable housing could do much to mitigate suburban congestion.

The CGPS argues cogently that:

"Inserting new transportation infrastructure to serve the urban envelope designated by the General Plan will not be enough by itself. Unless new growth is clustered at nodal points convenient to the new travel network, people will not use the new network enough to justify its cost. To accomplish this land use concentration, zoning patterns will need to be adjusted. This will not be an easy task."

The Comprehensive Growth Policy Study analysis demonstrates a somewhat different context for land use and transportation planning in North Bethesda than that which pertained during preparation of the existing Master Plan in 1970. That context is evolving on several fronts, described in the following section under 'Concurrent Activities.'

2.3 CONCURRENT PLANNING ACTIVITIES

The following is a summary of concurrent studies and activities, all of which affect North Bethesda to varying degrees. They include studies of growth, transportation and zoning, together with alternative approaches to congestion, and examples of area-wide transportation strategies.

A. THE METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS JOINT TASK FORCE ON GROWTH AND TRANSPORTATION

The January 1991 Summary Report of the Joint Task Force defined a new vision for the 21st century, including the following elements:

- Concentrated, balanced growth of both jobs and housing in transportation corridors, with greenbelts and open spaces confining urban growth concentrations.
- Well designed regional and sub-regional centers with downtown densities and improved transit services.
- A coordinated regional system of greenways, high occupancy vehicle (HOV) and transit services to provide an alternative to the private automobile and to link regional and subregional centers.
- Selected road widenings and new alignments designed to support the growth and goals
 of the vision and provide for the efficient movement of people and goods within and
 through the region.

B. TRANSPORTATION NETWORK STUDY

The Comprehensive Growth Policy Study advocated the need for new travel networks in order to achieve growth without excessive congestion. The purpose of the Transportation Network Study is to recommend additional rights-of-way to be preserved in master plans for future exclusive transit or HOV facilities.

The study focuses on the more densely populated down-county section of Montgomery County where land available for transit facility rights-of-way is already scarce. North Bethesda is at the heart of the study area. The study included progressively more detailed levels of analysis in step with the Master Plan schedule.

The Phase One Analysis recommended the former Rockville Facility reservation within North Bethesda, and a link between Montgomery Mall to Grosvenor Metro, via Rock Spring Park, for further evaluation.

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C. MARYLAND STATEWIDE COMMUTER ASSISTANCE STUDY - MARYLAND DEPARTMENT OF TRANSPORTATION

This recently completed study is currently under review. It identified the range and general staging of highway and transit capital improvements anticipated to be needed in major transportation corridors over the next 20 years. Two of the corridors, Corridor 9 - Capital Beltway, and Corridor 10 - Frederick to Washington, D.C., (I-270) are of significance to North Bethesda.

Findings and recommendations include the following:

Corridor 9

High occupancy vehicle lanes during peak periods on the Washington Beltway, I-95 to the American Legion Bridge.

Corridor 10

High occupancy vehicle lanes on I-270, MD 118 to I-270 Spurs:

- Widen I-270 Spurs for high occupancy vehicle lanes.
- Expand rail service on MARC commuter line.
- Expand existing commuter transit services.

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D. CIRCUMFERENTIAL TRANSIT ACCESSIBILITY STUDY METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

A draft of this study, dated January 1991, describes the potential impact that a light rail service operating across the Potomac River between Montgomery and Fairfax Counties might have on improving the accessibility to regional employment. The analysis was performed for the year 2010 and assumed a light rail service connecting Grosvenor Metrorail station in Montgomery County with Dunn Loring Metrorail station in Fairfax County.

The analysis concluded that no change in accessibility to regional employment using transit occurred when applying a 45 minute travel time limit. However, by using a 70 to 80 minute travel time limit, the study noted dramatic increases in accessibility to regional employment. Residences within walking or cycling distance of most Metrorail stations in both Red Line corridors and the Virginia portion of the Orange Line achieved access to over 2.5 million jobs, almost three quarters of projected 2010 employment in the region, and a figure which exceeds today's total employment.

E. NORTH BETHESDA TRANSITWAY FEASIBILITY STUDY - MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

The purpose of this study is to determine the feasibility of a transitway connecting Grosvenor Metrorail station and Montgomery Mall, via Rock Spring Park.

The Final Report of the Feasibility Study, dated April 1991, outlined the following key conclusions and findings.

- A two-track elevated monorail shuttle could be constructed for \$64 million (excluding right-of-way acquisition and any utility relocation). Annual operating and maintenance costs would be \$1.7 million. Trains would run every 7 minutes with a terminal-to-terminal travel time of 7 minutes.
- The proposed alignment uses existing public rights-of-way for most of its length with moderate environmental impact. Passage of the alignment through the stream valley between Tuckerman Lane and I-270 represents the most sensitive environmental area with possible floodplain, wetland, stream valley, aesthetic and noise impacts.
- The proposed transitway would alleviate traffic congestion and improve air quality by diverting 4,600 persons a day from automobiles. This would remove 45,000 vehicle miles a day from area streets and roads or 11.4 million vehicle miles a year. It would reduce the need for parking in Rock Spring Park by 2,086 parking spaces.

F. METRORAIL/METROBUS STRATEGIC PLAN - WMATA

The Washington Metropolitan Transit Authority (WMATA) has prepared a draft strategic plan as a framework for addressing policy issues and program challenges through the period of build-out of the Metrorail system. The plan does not set out specific program proposals. However, it does identify many concerns that face the Authority, including completion of the rail construction program, operating cost increases, replacement and rehabilitation programs as facilities and equipment deteriorate, productivity and revenue generation, and coordination with other transit systems.

G. MARC RAIL STRATEGIC PLAN STUDY

The Maryland State Railroad Administration (SRA) is planning to improve commuter rail service (MARC) through North Bethesda. The first part of this study identified improvements which include:

- Increasing the frequency of train service by increasing the number of trains operating during the peak hours.
- Providing trains traveling in the off-peak direction.
- Providing a number of improvements at selected stations.

A second phase of the study will examine the potential for adding new stations to the system. A North Bethesda station, north of Randolph Road on the Montrose Crossing property, is being considered. Resources permitting, the SRA anticipates that the study will be followed with the programming of design and right-of-way funding. This Plan supports improvements to the MARC service.

H. TRANSIT- AND PEDESTRIAN-ORIENTED NEIGHBORHOODS STUDY

This study, currently underway, attempts to identify planning principles by the analysis of prototypical neighborhoods. Precedents set by historic neighborhoods, local neighborhoods — including Garrett Park — and contemporary neighborhoods have been analyzed.

Elements which encourage the use of transit and reduce dependence on the automobile have been identified. These elements are intended to establish a set of planning principles that would foster the creation of neighborhoods that provide an identifiable center for community life, improve pedestrian circulation and increase access to transit. These transit and pedestrian-oriented planning principles include the following:

1. Create an Identifiable Sense of Place for Each Neighborhood

An identifiable center and a legible system of streets are components that create a sense of place.

2. Provide a Mix of Uses

Retail shops, offices, residences, and community facilities such as parks and schools are elements that foster a sense of community and encourage interaction among workers and residents. Locating this mix of uses within walking distance of all portions of a neighborhood will reduce dependence on the automobile.

3. Establish an Interconnected System of Streets

An interconnected system of streets will provide more direct access for pedestrians, bicyclists, and vehicles to all areas of the neighborhood including transit stops, civic spaces, employment areas and residences. Major arterials should not pass through the center of a neighborhood to reduce conflicts between pedestrians and high speed vehicular traffic.

4. Provide a Diversity of Housing Types

A wide range of housing types within each neighborhood should be encouraged to avoid large concentrations of any single type and increase the potential for pedestrian connection between diverse housing types.

5. Provide a Mix of Active and Passive Open Spaces

To foster the creation of transit and pedestrian-oriented neighborhoods with a strong sense of place, a mix of active and passive open space areas should be provided within walking distance of all users to reduce dependence on the automobile. Active open spaces include large open play fields, local parks, civic spaces, and small recreation areas. Civic spaces should be located near transit stops. Passive open spaces should be located near the boundaries of neighborhoods to preserve natural features.

6. Street Oriented Buildings and Pedestrian Ways

Buildings should be clustered along streets. This approach will facilitate pedestrian movement between buildings, and reduce the walking distance between buildings and transit stops located along streets. A safe and attractive neighborhood environment along streets that encourages pedestrian travel along the sidewalk will also be established.

The pedestrian system should not rely upon internal pathways through parking areas or rear yards to improve safety and reinforce street oriented development.

7. Locate Transit Stops Within Walking Distance

Transit stops should be located within a 1/4 mile walking distance of all portions of mixed use neighborhoods.

8. Design the Public Right-of-Way for Streets to Accommodate a Variety of Transportation Modes

The public right-of-way for streets in transit- and pedestrian-oriented neighborhoods should accommodate pedestrians, bicyclists, and transit vehicles in addition to automobiles. Streets should also provide a sense of place and increase opportunities for social interaction.

I. ACTIONS RECOMMENDED TO INCREASE THE USE OF HIGH OCCUPANCY VEHICLES IN NORTH BETHESDA AND ROCKVILLE - THE TRANSPORTATION ACTION PARTNERSHIP, INC.

This consortium of public and private officials provides a forum within which potential transportation-related policies can be developed, and a mechanism through which potential solutions can be implemented within the private sector.

In a report dated September 1990, the Transportation Action Partnership's High Occupancy Vehicle (HOV) panel identified possible HOV facilities for further review by county and state planning authorities. Recommendations for HOV facilities at specific locations in North Bethesda and Rockville were divided into primary and supplementary facilities as follows:

HOV Lanes on Roads

Primary

• I-270 and I-495

• Ritchie Parkway

Supplementary

- Rockville Facility Right-of-Way
- East Jefferson Street Extension
- Veirs Mill Road

HOV Priority Ramps

Primary

- Ritchie Parkway at I-270 (HOV only)
- Democracy Boulevard at I-270, I-495
- Old Georgetown Road at I-270, I-495

Supplementary

- Montrose Road (Rockville Facility ROW to I-270)
- Fernwood Road Bridge

HOV Destination Parking Garages

Primary

Rock Spring Park

Supplementary

• Washington Science Center

Transit-Ridesharing Transfer Centers

Primary

- Ritchie Parkway at I-270
- Rock Spring Park
- Montgomery Mall

Supplementary

- Montrose Crossing (Gourmet Giant site between Twinbrook and White Flint Metros)
- Randolph and Veirs Mill Road (shuttle to Metrorail and employment)

J. NUCLEAR REGULATORY COMMISSION (NRC) TRAFFIC MITIGATION

The Nuclear Regulatory Commission's headquarters facility, located immediately south of White Flint Metro station, opened in 1986. An innovative program of transit fare subsidies, ridesharing promotion, and parking charges was implemented to encourage employees to use alternative transportation modes. Monitoring shows that almost 30 percent of the employees at the facility use public transportation to commute to work, and over 25 percent use cars or vanpools. These percentages are higher than at most suburban office locations, including all previous NRC locations, and have attracted widespread interest. For the location distribution of NRC employee residences see Figure 6. The NRC program has resulted in removal of sufficient peak hour trips to facilitate approval of a second headquarters building to consolidate all remaining offices of the agency.

K. ROCK SPRING PARK AND MONTROSE AND EXECUTIVE COMMUTER SERVICE CENTERS

Since 1987, these two Commuter Service Centers have achieved substantial trip reduction in the North Bethesda Planning Area. Working in cooperation with employers, the programs have offered a wide range of alternative transportation services, including car/vanpool matching, information and incentives for transit use, and emergency ride home taxi service.

L. SILVER SPRING TRANSPORTATION SYSTEM MANAGEMENT DISTRICT (TMD)

The Silver Spring TMD was established by County law in 1987 as a coordinated transportation program to maximize the capacity of the existing road network and to encourage the use of alternative transportation options. The TMD has achieved significant results, including substantial increases in transit use and numbers of carpools, and a more than 10 percent reduction in the number of drive-alone commuters. The success of the Silver Spring TMD indicates that, with appropriate incentives and disincentives, area-wide transportation management strategies can reduce single occupant commuting. This type of institutional arrangement may be particularly applicable in the North Bethesda-Rockville area.

M. ROCKVILLE PIKE CORRIDOR SHUTTLE STUDY

As part of a "Private Transit Optional Study" funded by the Federal Transit Administration, the Metropolitan Washington Council of Governments retained the Urban Mobility Corporation to conduct a study of the feasibility of operating shuttles linking Metro stations and other destinations along Rockville Pike. The study concluded that shuttle service could increase use of the Metrorail system in the corridor, thus enhancing mobility and reducing congestion. A technical, financial, and institutional plan was devised for a shuttle bus program in which the private sector would play a significant role.

One of the routes recommended by the study has been implemented by the Nuclear Regulatory Commission and others are under consideration by various private interests.

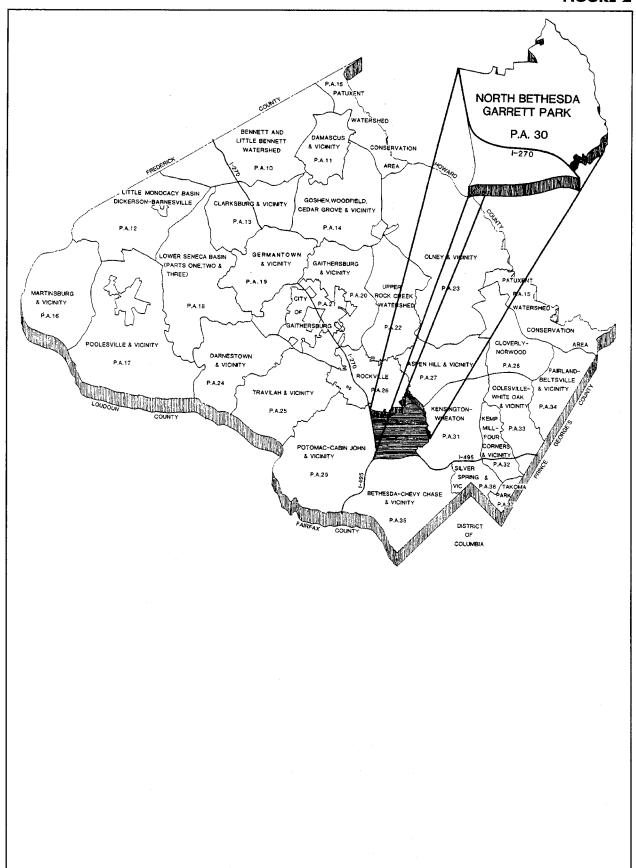
2.4 DEVELOPMENT PROFILE

The North Bethesda-Garrett Park Master Plan encompasses the area defined as Planning Area 30 by the Maryland-National Capital Park and Planning Commission (Figure 2). It is bordered on the west by Interstate Highway I-270, on the north by the existing limits of the City of Rockville, on the east by Rock Creek, and on the south by Interstate Highway I-495 (Capital Beltway).

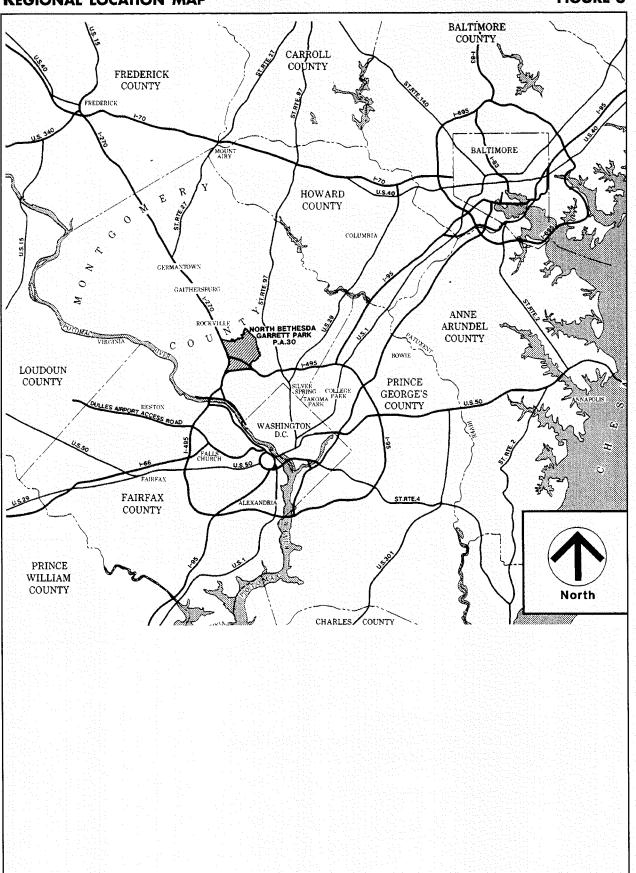
Figure 3 illustrates the strategic location of North Bethesda at the confluence of the two interstates and at the threshold of the I-270 corridor. Figure 4 shows the relationship of the North Bethesda-Garrett Park area vis-a-vis the General Plan and the "wedges and corridors" concept.

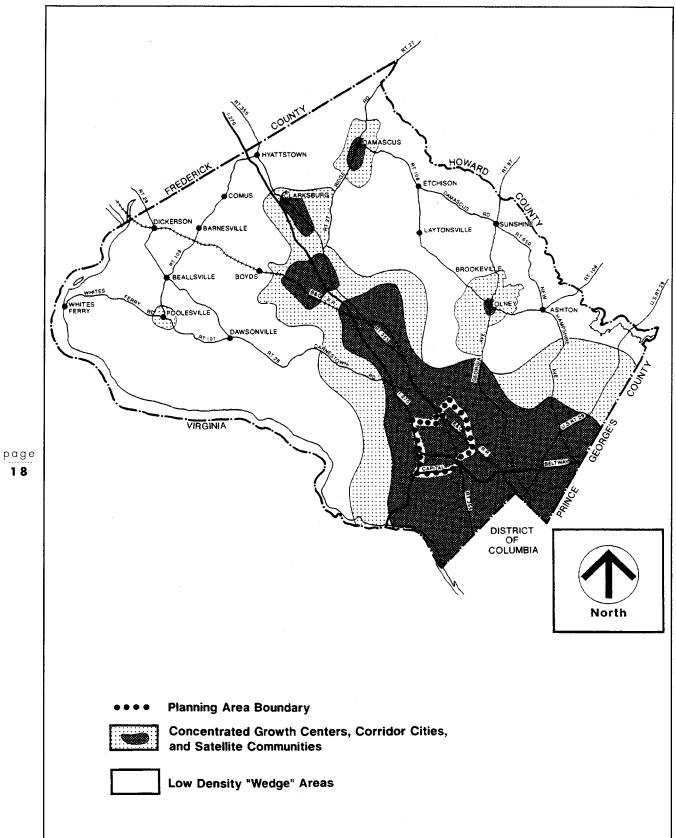
In terms of highway facilities, the Planning Area is served by Montrose Road, a six-lane undivided road connecting I-270 on the west with Rockville Pike in the center of the Planning Area, then continuing east as Randolph Road. Major north-south highways that provide internal service are Rockville Pike (MD 355) and Old Georgetown Road (MD 187), both of which are six-lane undivided roads that provide connections with I-270 and I-495 to the south. While access to the north and south is adequate, as is access to the west, via Montrose Road, Tuckerman Lane and Democracy Boulevard, access to the east is restricted, due to the natural barrier imposed by Rock Creek Park. The only connectors through this barrier are Randolph Road, a four-lane undivided facility, and Strathmore Avenue, a two-lane winding road.

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NORTH BETHESDA/GARRETT PARK APPROVED & ADOPTED





A. TRANSIT SYSTEM

The regional Metrorail system operates through three stations in North Bethesda (Twinbrook, White Flint and Grosvenor). The stations constitute gateways for regional traffic and are factors in how much North Bethesda can develop. Passenger boardings increased steadily to 1990 and have subsequently declined, possibly due to a number of factors, including the current recession and the major widening of I-270. (See Table 1.)

TABLE 1

DAILY PASSENGER BOARDINGS BY METRO STATION

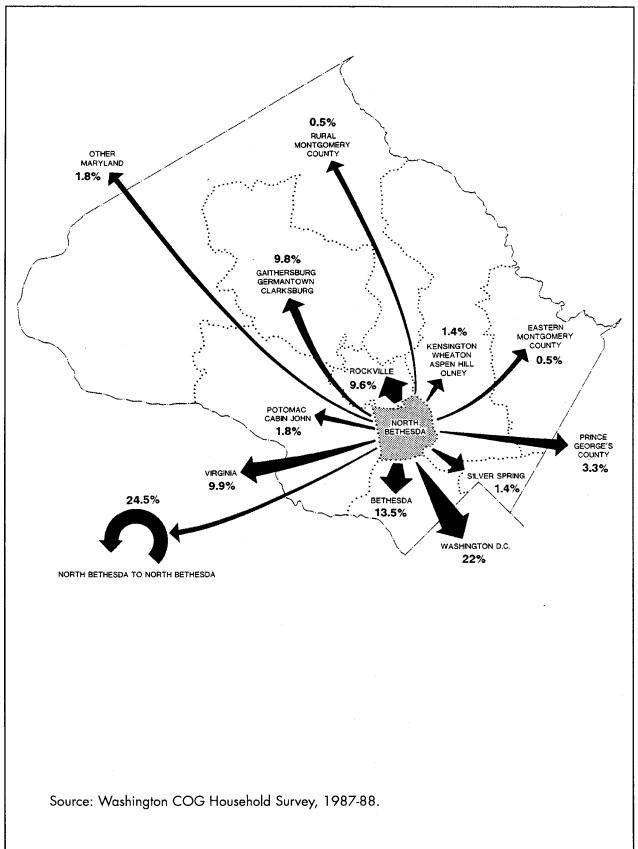
Station	May 1985	May May May May Apr. Nov. 1986 1987 1988 1989 1990 1991 1991
Grosvenor	2618	2946 3161 3310 3638 3794 3434 3442
White Flint	2199	3077 3775 4109 4074 4333 3988 3710
Twinbrook	2354	3264 3662 4330 4516 4515 4446 3955
Source:	Metroi	ail Passenger Surveys

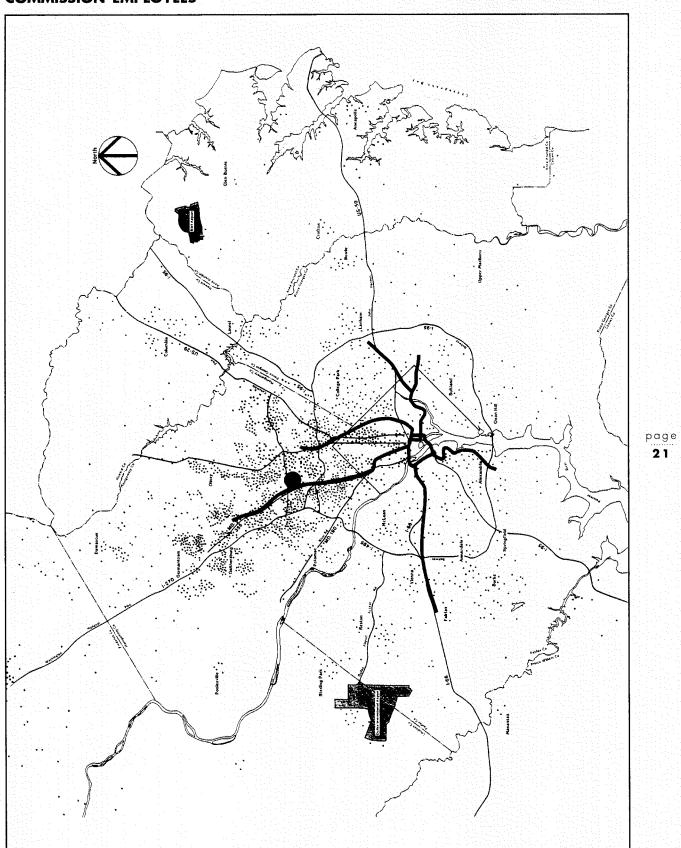
The area is also served by the MARC commuter train service between Martinsburg or Brunswick and Washington, D.C. Three morning trains stop at Garrett Park while four do so in the evening. The annual ridership on the line has increased steadily from a total of 761,127 in 1987 to 1,262,783 in 1991.

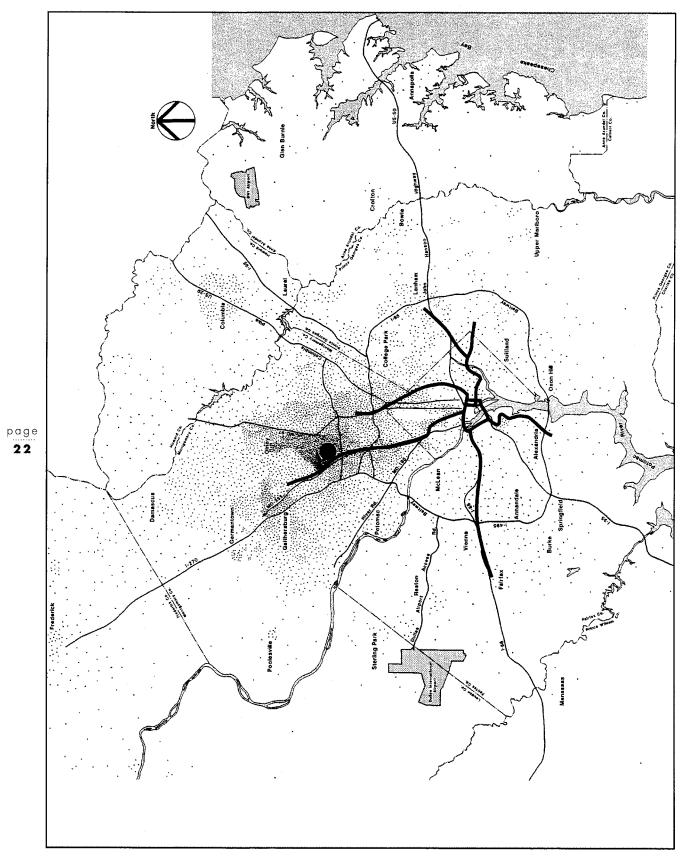
Other transit services, including conventional fixed-route bus service, are supplied by WMATA and the County's Ride-On service. Most of these are scheduled services, with thirty-minute frequencies, designed to serve as feeder routes to and from Metrorail. The current bus service constitutes an integrated system designed primarily to serve Metrorail.

Twenty-two percent of North Bethesda's employed residents commute to Washington, D.C., while 16.2 percent use Metrorail for all work destinations (Figure 5).

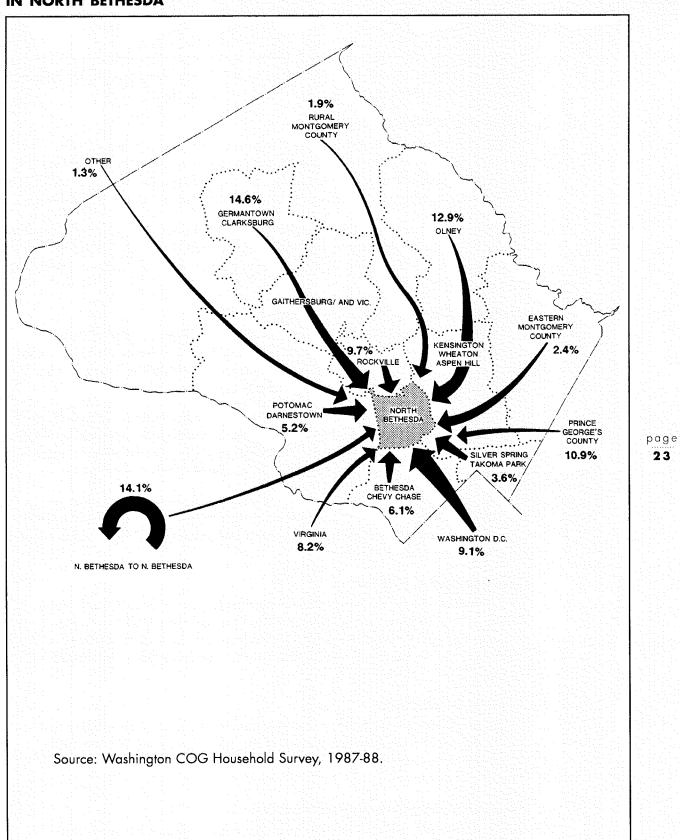
Figure 6 illustrates the residence distribution of 1300 employees at the Nuclear Regulatory Commission at White Flint. Figure 7 illustrates the distribution for 5365 employees of the Department of Health and Human Services at Twinbrook who choose to drive to work. The distribution for the latter includes homes in Prince William, Charles, and Calvert Counties, Annapolis, Chesapeake Beach, Poolesville and Frederick. Five hundred and thirty-one residence locations are beyond the area shown on the map, including Hagerstown, Brunswick, Martinsburg, and some in Pennsylvania. The fact that the complex of federal buildings at Twinbrook is located within 2500 feet of a Metro







DISTRIBUTION OF COMMUTERS TO JOBS IN NORTH BETHESDA



station and within three miles of a MARC station, yet such an extraordinary percentage of employees (approximately 84%) choose to drive, says a great deal regarding the influence of cheap gasoline and unlimited free parking on commuter choice.

B. SUMMARY PROFILE

The North Bethesda Planning Area extends to nine square miles and has a 1990 household population of approximately 35,000 people living in 15,700 households. The number of jobs, as of January 31, 1992, is estimated at 66,000 with an additional 13,316 in the current pipeline. The current profile of North Bethesda is illustrated in Table 2.

In its existing configuration, the North Bethesda Policy Area has a negative transportation capacity for employment and is in subdivision moratorium. The current deficit, as of January 31, 1992, is 8,125 jobs. The net remaining housing capacity, as of the same date, is 1,324 dwelling units.

C. NON-RESIDENTIAL BUILDING COMPLETIONS

In 1990, non-residential building completions in North Bethesda totaled 597,016 square feet, almost 24 percent of the County total (see Table 3). North Bethesda ranked first in total non-residential completions in the County for 1990, with office developments representing over 47 percent of the area's completions.

The 1990 total was comprised of a 249,000-square-foot office in Rock Spring Park and a 31,652-square-foot extension to the American Speech, Language and Hearing Association building on Rockville Pike. Since 1980, 5,406,038 square feet of new office space has been constructed in North Bethesda, more than in any other area of the County.

In 1990, retail development contributed 84,900 square feet of new development to the area with the completion of two retail centers on Rockville Pike at White Flint. In 1990, the only non-residential completion in the 'other' category was the 249,000-square-foot Marriott Hotel in Rock Spring Park.

Non-Residental Pipeline

The major office sites in the non-residential pipeline (Figure 9) are IBM (Rock Spring Park) at 1,384,430 square feet, Rock Spring Plaza (Rock Spring Park) at 183,990 square feet, NRC Phase II (Rockville Pike) at 357,900 square feet, Tri-Rock (Hubbard) at 275,000 square feet, and Washington Science Center Parcel E (Executive Boulevard) at 225,386 square feet.

Pipeline Employment

Pipeline employment, as of January 31, 1992, numbered 13,316. It should be noted that the effect on the development pipeline of site plan approval for IBM, a partially exempt 'loophole' property, has been to substantially increase North Bethesda's employment deficit.

Residential Completions and Pipeline

There were approximately 230 acres of vacant land zoned residential use in North Bethesda in 1989. The 5-year, 1984-1988 average for housing completions in North

DATA FROM 1987 CENSUS UPDATE SURVEY	HIGH- RISE	GARDEN APT.	TOWN- HOUSE	SINGLE- FAMILY DET.	ALL TYPES
% Housing Units by Type	16.2%	28.8%	8.5%	46.5%	100%
Household Population	3,122	7,507	3,372	18,119	32,120
Average Household Size	1.38	1.87	2.84	2.79	2.3
Number of 0-4 Year Olds	*	477	288	694	1,473
Number of 5-17 Year Olds	*	582	589	3,044	4,253
%<20 Year Olds	2.4%	14.8%	28.3%	23.2%	19.7%
%>64 Year Olds	43.3%	7.3%	1.3%	14.2%	14.1%
Average Age of Household Head	60	40	41	53	49
Tenure - % Rental	47.9%	71.0%	17.8%	8.4%	33.6%
% in Same Home 5 Years Ago	57.5%	18.7%	12.2%	69.8%	50.8%
Average Years in Same Home	7.1	3.7	2.7	14.7	9.3
% Non-White-Household Head	3.2%	14.6%	11.4%	7.2%	9.1%
% Spanish Origin-Household Head	3.3%	6.1%	6.1%	4.6%	5.0%
Average Years Education Age >24	15.0	15.6	16.4	15.5	15.6
% With Graduate Degrees	26.0%	28.4%	48.8%	29.4%	30.7%
1986 Median Household Income	\$36,157	\$37,108	\$75,987	\$64,166	\$48,977
Number of Workers	1,563	5,529	2,070	9,915	19.077
Female Work Force Partic. %	45.2%	84.0%	72.0%	60.7%	65.6%
% Women with Children < 6 Years Olds, Working FT% Full-Time or Part-Time PT%	*	62.2% 15.0%	*	59.3% 33.2%	56.8% 29.7%
Work Location: % MC in Beltway % MC Out Beltway % to D.C.	20.8% 44.9% 26.5%	27.3% 36.6% 25.8%	20.1% 23.0% 43.8%	26.3% 38.1% 26.4%	25.4% 36.6% 28.1%
Work Trip: % Driving % Public Transit or Ra	69.0% ail 25.1%	74.7% 18.3%	75.21% 23.1%	79.6% 11.7%	76.8% 16.0%

Source: Montgomery County Planning Department, Research and Information Systems Divisions: January, 1991.

^{*} Insufficient data for reliable estimates.

NEW NON-RESIDENTIAL BUILDING COMPLETIONS BY TYPE, 1980-1990 IN SQUARE FEET

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NORTH BETHESDA	THESDA										
Office	427,852	707,783	2,257	20,753	282,656	1,349,333	1,153,035	567,073	112,994	501,650	280,652
Retail	42,098	2,062	0	201,919	97,224	21,239	6,372	0	31,402	3,510	84,900
Industrial	10,497	85,886	37,560	129,935	119,383	89,949	720	0	130,243	0	7,954
Other	29,160	0	0	0	0	0	0	0	0	40,425	223,510
Total	209,605	795,731	39,817	352,607	499,263	1,460,521	1,160,127	567,073	274,639	545,585	597,016
Office	83.96%	88.95%	2.67%	5.89%	56.61%	92.39%	99.39%	100.00%	41.14%	91.95%	47.01%
Retail	8.26%	0.26%	%00.0	57.26%	19.47%	1.45%	0.55%	0.00%	11.43%	0.64%	14.22%
Industrial	2.06%	10.79%	94.33%	36.85%	23.91%	6.16%	%90.0	0.00%	47.42%	0.00%	1.33%
Other	5.72%	%00.0	%00'0	%00.0	%00.0	%00.0	0.00%	%00.0	%00.0	7.41%	37.44%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Research Division, Montgomery County Planning Department, Building Completion File. Compiled from data provided by the State Department of Assessment and Taxation. Bethesda was 346 units per year. The 3-year pipeline forecast, 1989-1991, indicated an annual completion rate of 491 housing units per year. However, it appears that the downturn in the economy will reduce that number substantially.

As of January 31, 1992, the North Bethesda area had 1,343 housing units in the pipeline (265 single-family, 20 percent, and 1,078 multi-family, 80 percent). The Wisconsin, a 755-unit, two-building high-rise condominium, is the largest development, with 203 units scheduled for completion by mid-1992. South of the Washington Suburban Sanitary Commission (WSSC) water tower, and west of Woodglen Avenue, construction work on the 132-unit Fallstone townhouse project is currently constrained by the current financial climate.

An elderly housing project of 123 units to be constructed on the south side of Tuckerman appears to have been delayed by Marriott's internal difficulties. Other projects that have been delayed by the state of the economy include a 40-unit single-family detached subdivision on Fleming Avenue and the 200-unit apartment building associated with the White Flint North subdivision.

2.5 PENDING DEVELOPMENT CONTIGUOUS TO NORTH BETHESDA

Immediately adjacent to North Bethesda, significant pending development includes the 2-million square feet of office and 300 room hotel proposed within the Tower Oaks development in Rockville, in the northwest quadrant of I-270 and Montrose Road (Figure 9).

The City of Rockville has granted two significant approvals within the Twinbrook Metro Performance District (Figure 9). The first is a mixed-use project (Chapman Place) on a 5.6-acre block on the northeast corner of Chapman Avenue and Twinbrook Parkway.

The project is comprised of the following major elements: six floors (75 feet) of office space containing 320,800 square feet; two, 11-story residential towers (110 feet) containing 335 rental apartments; ground level retail space containing 44,200 square feet; and 1,261 parking spaces located on two levels below the building.

This is the first project to be approved under the optional method of development provisions of the Rockville Pike Corridor Plan and zoning requirements. It represents the maximum density (office/retail and residential) and building heights permitted in the Pike corridor. The project is to be constructed in a single phase, and with almost 700,000 square feet of usable floor area (excluding structured parking) will be the largest building in Rockville.

The second significant project is Twinbrook Mall and Towers, a mixed-use development including 212,000 square feet of retail space and 231 apartments to be located on a 3.86-acre site bounded by Rockville Pike, and Thompson, Chapman and Bouic Avenues. This site is also within the Twinbrook Metro Performance District.

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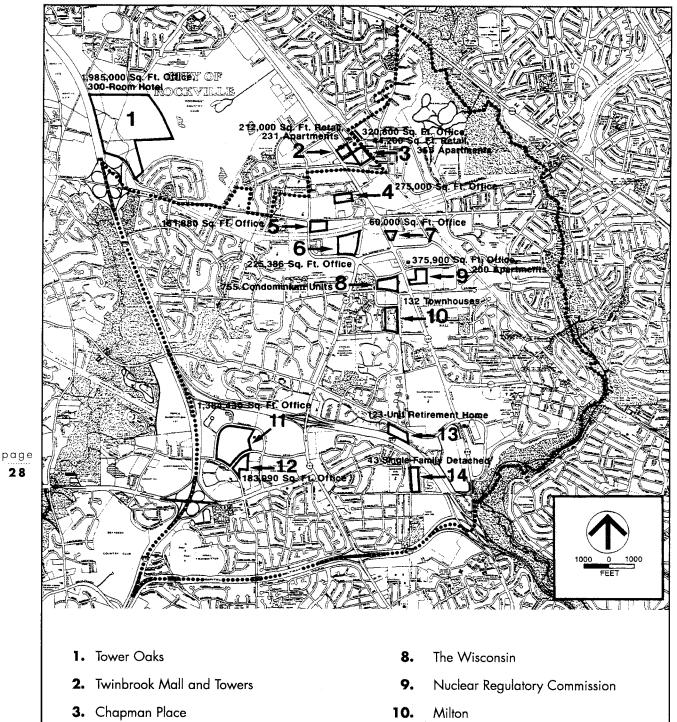
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Tri-Rock

5. Wilgus Tract

6. Washington Science Center, Parcel E

7. State Highway Administration



11.

12.

13.

14.

IBM

Marriott

Ward

Rock Spring Plaza

A. PREVIOUSLY RECORDED LOTS ("LOOPHOLE" PROPERTIES)

The Annual Growth Policy (AGP) provides guidelines to implement the Adequate Public Facilities Ordinance (APFO), which is part of the County's subdivision regulations. Since previously recorded lots have already received subdivision approval, they had previously been exempt from new AGP requirements. In 1989, due to increasing concern that these "loophole" properties, lots recorded prior to 1982 or recorded in conformance with a preliminary plan approved prior to 1982, had been approved under a less stringent APFO transportation test (or none at all), the Council passed Bill 25-89. This Bill requires non-residential lots approved prior to 1982 to pass Local Area Transportation Review prior to building permit, but exempts them from Policy Area Transportation Review until July 2001, if they registered with the Planning Board before July 1, 1990. There are 226 registered "loophole" properties covered by Bill 25-89 in North Bethesda. (See Figure 10.)

Tables 5 and 6 illustrate the development potential of these properties under seventy-fifth percentile density yield and maximum theoretical yield scenarios. The former is considered more realistic and indicates an unbuilt potential of 6.6-million square feet, of which the net additional square footage approved for IBM constitutes approximately 21 percent.

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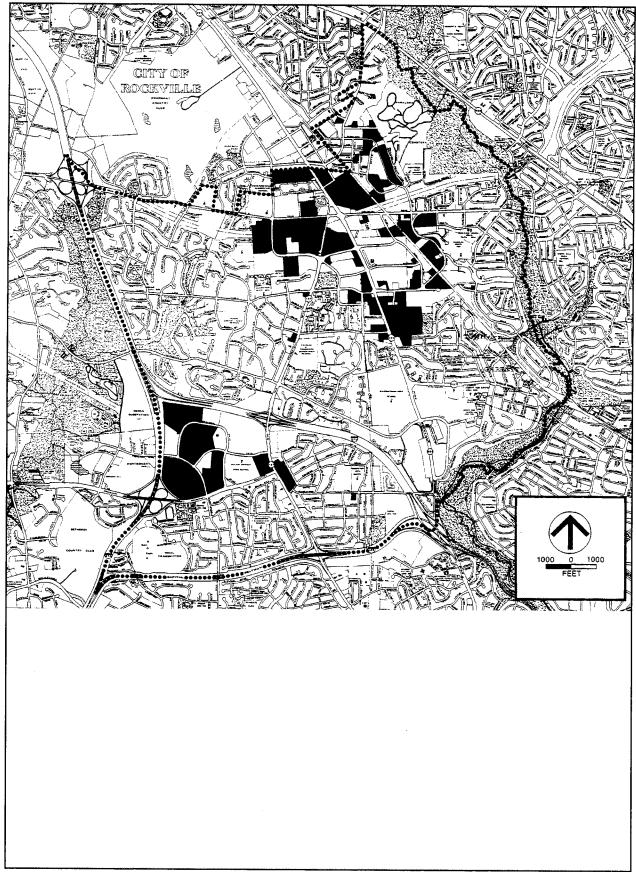


TABLE 4

NORTH BETHESDA LOOPHOLE REGISTRANT DEVELOPMENT POTENTIAL SEVENTY-FIFTH PERCENTILE DENSITY YIELD

Zone	Acres	Existing GFA (Sq. Ft.)	Potential FAR Per Zone	Potential GFA (Sq. Ft.)	Unbuilt Potential (Sq. Ft.)
C-1	32.05	300,065	0.36	502,535	202,470
C-2	137.52	1,987,848	0.58	3,474,499	1,486,651
C-0	36.7	175,809	1.50*	2,397,978	2,222,169
C-P	26.51	241,071	1.00	1,154,776	913,705
C-T	7.06	33,600	0.37	113,787	80,197
I-1	98.56	2,778,133	0.69	2,962,303	184,170
I-3	105.55	2,752,057	0.60	2,758,655	6,598
I-3**	40.02	250,750	0.85*	1,634,180	1,383,430
O-M	13.34	356,644	0.82	476,614	119,970
TOTAL	497.32	8,875,977		15,475,327	6,599,350

Notes:

- Seventy-fifth percentile yields are based on the actual FARs of non-residential completions throughout the down-County area. This means that 75 percent of the completed projects were at or below this yield. The FARs marked * are in zones where there is not enough experience to calculate the 75th percentile. The maxium practical yield has been used instead.
- The row marked I-3** reflects special provisions of the I-3 Zone allowing certain properties to develop to an FAR of .85 under certain circumstances. See Section 59-C-5.438 (c) of the Montgomery County Zoning Ordinance. The potential gross floor area represents the square footage approved at site plan for IBM, the only North Bethesda property to apply under this provision thus far.
- An additional 26.1 acres of residentially zoned land are registered for nonresidential uses. These properties contain almost 74,000 square feet of space. Their potential is not regulated by the zone and cannot be estimated at this time.

Source:

Montgomery County Planning Department, Research Division, Maryland State Tax Assessor's Parcel File, Loophole Registration File, April 1990.

GFA - Gross Floor Area

FAR - Floor Area Ratio

TABLE 5 NORTH BETHESDA LOOPHOLE REGISTRANT DEVELOPMENT POTENTIAL MAXIMUM THEORETICAL YIELD

Existing Zone	Acres	Existing GFA (Sq. Ft.)	Potential FAR Per Zone	Potential GFA (Sq. Ft.)	Unbuilt Potential (Sq. Ft.)
C-1	32.05	300,065	0.50	697,965	397,900
C-2	137.52	1,987,848	1.50	8,985,774	6,997,926
C-0	36.70	175,809	1.50	2,397,978	2,222,169
C-P	26.51	241,071	1.25	1,443,470	1,202,399
C-T	7.06	33,600	0.50	153,767	120,167
I-1	98.56	2,778,133	1.50	6,439,789	3,661,656
I-3	105.55	2,752,057	0.60	2,758,655	6,598
I-3*	40.02	250,750	0.85	1,634,180	1,383,430
O-M	13.34	356,644	1.50	871,855	515,211
TOTAL	497.32	8,875,977	MANAGEMENT OF THE PROPERTY OF	25,383,432	16,507,455

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Notes:

- The row marked I-3* reflects special provisions of the I-3 Zone allowing certain properties to develop to an FAR of 0.85 under certain circumstances. See Section 59-C-5.438 (c) of the Montgomery County Zoning Ordinance. The potential gross floor area represents the square footage approved at site plan for IBM, the only North Bethesda property to apply under this provision thus far.
- Several of the properties in the Davis tract and the Washington Science Center could be eligible for an FAR of 0.85 under the special provisions of the new I-3 Zone. If all developed at this density, the resulting additional floor space would be 1,149,440 square feet more than is shown above for I-3. The 5 year time limit and stringent traffic mitigation requirements, however, make any significant development at this density, other than IBM, unlikely.
- An additional 26.1 acres of residentially zoned land are registered for nonresidential
 uses under the loophole. These properties contain almost 74,000 square feet of space.
 Their potential development density is not regulated by the zone and cannot be
 estimated at this time.

Source

Montgomery County Planning Department, Research Division, Maryland State Tax Assessor's Parcel File, Loophole Registration File, April 1990.

2.6 PLAN OBJECTIVES

A. LAND USE

- 1. Protect and reinforce the integrity of existing residential neighborhoods.
- 2. Direct future development to land nearest to Metro stops and new transit stations, and to areas best served by transportation infrastructure.
- 3. Preserve and increase the variety of housing stock, including affordable housing.
- 4. Encourage a mixture of land uses in redeveloping areas to promote variety and vitality.
- 5. Encourage a land use pattern that provides opportunities for housing and employment.
- 6. Maintain and enhance the area's regional employment centers.
- 7. Preserve and enhance a spectrum of retail facilities ranging from regional to neighborhood shopping.
- 8. Preserve and expand green areas and greenways, including institutional open space, for environmental protection, wildlife sanctuary, recreation and visual relief.

B. TRANSPORTATION

- 1. Provide a safe, attractive and efficient transportation system to serve the recommended land use pattern for the Planning Area.
- 2. Reduce dependence on the automobile by expanding the availability of transit services throughout the Planning Area. Increase transit service to major employment and retail centers and for non-work trips, including recreation, and to meet the mobility needs of the elderly and handicapped.
- 3. Provide a comprehensive, safe, and more pleasant bicycle and pedestrian network as part of the transportation system.

C. URBAN DESIGN

- 1. Improve the appearance and the pedestrian environment of Rockville Pike.
- 2. Enhance the vitality and variety of the visual environment and provide an improved pedestrian experience at Rock Spring Park.

D. HISTORIC RESOURCES

1. Protect and enhance North Bethesda's historic and architectural heritage for the benefit of present and future County residents.

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BACKGROUND

NORTH BETHESDA

E. COMMUNITY FACILITIES

1. Provide public facilities to meet the recreational, social and human service needs of the community, particularly the elderly and handicapped.

F. ENVIRONMENT

- 1. Preserve existing woodland and encourage reforestation throughout the Planning Area.
- 2. Adopt land use and transportation policies that will help improve air quality and minimize exposure to air pollution.
- 3. Adopt land use and transportation policies and implement noise attenuation measures to reduce the impact of noise on residential neighborhoods.
- 4. Adopt stormwater management and erosion control policies to minimize flooding, reduce erosion and improve water quality in the streams flowing through the Planning Area.

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