



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
Item #
9/10/07

August 30, 2007

MEMORANDUM

TO: Montgomery County Planning Board

VIA: John A. Carter, Chief *JAC*
Community-Based Planning Division

Judy Daniel, Team Leader, Bethesda-Chevy Chase/North Bethesda Team
Community-Based Planning Division *JD*

Dan Hardy, Supervisor, Transportation Planning Section
Countywide Planning Division

FROM: Claudia Kousoulas, Senior Planner (301-495-4558)
Community-Based Planning Division *CK*

David Paine, Planner Coordinator, Transportation Planning Section
Countywide Planning Division

SUBJECT: Twinbrook Sector Plan Worksession

INTRODUCTION

On July 26, 2007, the Planning Board discussed the role of the Twinbrook area and its relation to the County, the City of Rockville, and the I-270 Technology Corridor. The Planning Board also discussed the Parklawn Building, and the area's street grid and green spaces.

During the last worksession, the Planning Board expressed an interest in exploring the impacts of proposed redevelopment. In response, this staff report covers the following items:

- Land Use Character
 - Twinbrook's Role
 - Relationship to the City of Rockville
- Redevelopment Scenarios
- Transportation System Capacity
- School Capacity

This packet includes an outline and map of the Planning Board's tour of the Sector Plan area. The driving tour is scheduled for Monday, September 10, 2007 at 4:00 p.m. This tour will start at the Twinbrook Recreation Center (12920 Twinbrook Parkway). The Planning Board will complete the tour with dinner at the Amalfi Restaurant (12307 Wilkins Avenue). Maps and information are attached (Attachment 4).

The Planning Board worksession will begin at 7:00 p.m. at the Twinbrook Recreation Center (12920 Twinbrook Parkway) just north of the Sector Plan area.

LAND USE CHARACTER – TWINBROOK'S ROLE IN THE I-270 TECHNOLOGY CORRIDOR AND THE COUNTY

Staff Recommendation

The Staff Draft recommendations fit into the I-270 Technology Corridor's economic profile by creating a mix of employment uses combined with the opportunity for locating housing near transit. The role of the Twinbrook area includes the following:

- Zoning to enhance Twinbrook as an advanced technology cluster important to the basic economy in Montgomery County and the I-270 Technology Corridor.
- Providing housing options that contribute to the balance of jobs and housing in the Corridor and encourage the use of transferable development rights (TDRs).
- Providing opportunities for incubator space and small businesses that support both the basic industries (high technology) and non-basic industries (services).
- Serving as a transit center for the surrounding neighborhood.
- Providing transit connections to the NIH Campus and beyond, establishing bicycle and pedestrian connections to transit and to the regional park system, and improving the local pedestrian and bicycle access.

Twinbrook's mix of high technology uses, including office, laboratory, and incubator space combined with retail and residential uses will be unique in the Washington region (see Attachment 5, July 26, 2007 PowerPoint presentation).

Analysis – Jobs/Housing Balance and Redevelopment Scenarios

As part of a policy to direct growth and establish sustainable communities, Montgomery County has encouraged mixed-use development with transit access and a balance of jobs and housing.

In 2005, the Transportation Policy Report (TPR) mapped the overall pattern of jobs and housing and examined the jobs/housing balance throughout Montgomery County. To help achieve the desired balance, the report found that more jobs should be located in eastern Montgomery County and more housing in the I-270 Corridor.

Working within existing patterns of development that have often segregated housing and employment uses, the TPR committee developed the concept of mixed-use communities that would place jobs near housing in patterns that could reduce commutes, provide employment and housing options, and use existing infrastructure. Individual plans were to determine the appropriate balance, pattern, density, and mix of uses for each master plan area. The Metro station areas in the I-270 Technology Corridor have the potential to foster the creation of mixed-use communities.

In Twinbrook, the existing mix of employment uses – high technology and traditional service industrial uses – provide the basis for a technology cluster that will be complemented with a significant component of housing. The approved and recommended housing proposed to be located adjacent to the Twinbrook Metro Station in Montgomery County and the City of Rockville will change the area’s character and function.

The proposed Sector Plan recommends an increase in the range of housing options surrounding the Twinbrook Plan area in locations close to the Metro station. A significant number of housing units have been approved in the Twinbrook area, and the master plans in Montgomery County and the City of Rockville will provide the opportunity for even more housing, changing both the function and character of the Twinbrook Metro Station area.

The land use and rezoning recommendations in the Staff Draft of the Twinbrook Sector Plan introduces additional housing. The estimates in the table on the next page are based on past development trends and on the floor area recommended in the Sector Plan.

The TPR also recognized, as does the Twinbrook Sector Plan, that mixed and dense land uses should be supported by “streets for people” that accommodate pedestrians and cyclists in addition to cars. The Sector Plan’s recommendations of layered transportation options make local and regional connections to jobs, parks, and other community facilities.

Existing and Potential Dwelling Units within One-Half Mile of the Twinbrook Metro Station

Location	Existing	Staff Draft Potential	Totals
City of Rockville			
Twinbrook Neighborhood Plan	4,689 (primarily sfd)	NA	4,689
Twinbrook Station Project	0	1,595 (mid-rise, high-rise)	1,595
Metro Performance Area	0	3,700 (mid-rise, high-rise)	3,700
Montgomery County			
Twinbrook Sector Plan Area	0	1,217* (townhouses, mid-rise, and high-rise)	1,217*
Midtown Project	230 (high-rise)	NA	230
Area Apartment Projects	930 (garden/mid-rise)	NA	930
Totals	5,849	6,512	12,361

Note: *The redevelopment of the existing Parklawn Building could generate a substantial reduction in commercial space and an increase in dwelling units. As an example, a reduction of commercial space by 65 percent or 875,000 square feet could increase the total dwelling units by 700.

Relationship to the City of Rockville

During the last worksession, the Planning Board also discussed the relationship of the recommendations in the Twinbrook Sector Plan to the planning efforts in the City of Rockville. The Staff Draft of the Sector Plan recommends development in scale with the densities and land uses proposed in the City of Rockville. In the Metro Core Area, the land use and zoning continues the main street, mixed-use pattern of the Twinbrook Station project located in the City of Rockville and originally included in Montgomery County. Recommendations for the Technology Employment Area and the Light Industrial Area maintain and develop a mix of complementary uses and densities. The following table compares the density and land uses proposed in the adjacent areas in the City of Rockville to the sites in the Metro Core Area in the Staff Draft.

Comparison of Twinbrook Area Plans – City of Rockville and Montgomery County

Plan	Dwelling Units	Commercial	FAR
City of Rockville			
Twinbrook Station Project	Multi-family units	Neighborhood retail and office space including a grocery store	2.6 FAR maximum
West of CSX Tracks: Rockville Pike Corridor	Multi-family units	Office and retail	2.6 FAR (1.4 FAR commercial and 60 DUs/Acre)
East of the CSX Tracks: Twinbrook Neighborhood	Townhouses and single family detached units	Office uses along Ardennes Avenue and industrial uses along the CSX Tracks	1.5 FAR for commercial uses
Montgomery County Planning Department			
Staff Draft Sector Plan: Metro Core Area, sites 1 and 2	Multi-family	Office and retail	Up to 2.64 FAR with TDRs with an affordable housing bonus
Staff Draft Sector Plan: Metro Core Area, site 3	Mixed use, primarily office	Office and retail	1.5 FAR for commercial uses

The City of Rockville and the Montgomery County Planning Department have worked closely to coordinate the land use and zoning recommendations. As indicated in the above table, the density and mix of uses in both jurisdictions represent a similar approach to planning in the North Bethesda and City of Rockville areas (see Attachment 5, July 26, 2007 PowerPoint presentation).

Community Comment

The concept of a mixed-use growth pattern was developed with the community in the 2000 Charrette, and the first phase of development will be the Twinbrook Station project. Through the planning process, the community has supported the vision for mixed-use redevelopment with transit connections and an improved public realm. A few property owners have questioned whether the proposed densities provide adequate incentive for redevelopment.

Conclusions

In combination, the potential housing approved and planned adjacent and within the Sector Plan area will create a significant housing resource with options for single-family attached units, townhouses, and multi-family units, all with Metro and transit access. This Sector Plan moves closer toward the desired mixed-use community with a significant increase in housing, while encouraging the evolution of employment uses, meeting the TPR stated goal to "...increase the opportunities for housing concurrently with employment." TDRs will reduce the development pressure on the agricultural areas. The proposed zoning will also ensure that a significant amount of moderately priced dwelling units and workforce housing will also be constructed as development occurs.

REDEVELOPMENT SCENARIOS

Staff Recommendation

The Staff Draft of the Twinbrook Sector Plan recommends redevelopment with a mix of retail, office, high technology employment, limited industrial uses, and significant residential uses. The recommendations can create significantly more housing than the 1992 Master Plan. The density and mix of uses are in scale with recommendations proposed by the City of Rockville in adjacent areas.

Analysis of Land Use Scenarios

Staff examined the transportation and community impacts of five land use scenarios that compared existing and planned development with proposed patterns of land use. These scenarios were evaluated for their impacts on land use, transportation capacity, and school capacity.

The scenarios were shaped by research into existing development and staff familiarity with the area, the pattern and vibrancy of existing and future businesses, land owners' expressed intentions, and land uses and densities appropriate to the area.

The first scenario reflects existing and approved development. The second scenario represents the 1992 Master Plan build-out as baselines for comparison with redevelopment options. These figures are based on tax records and field knowledge that can only be kept up to date to reflect a point in time.

Staff then developed employment and housing focused development scenarios. The employment scenario increased the area's retail, office, and laboratory uses. The housing focused scenario limited industrial and office zoning and increased the residential areas to create about 2,200 more dwelling units than the 1992 Master Plan.

The purpose of creating alternative scenarios is to understand more clearly the impact of redevelopment on the transportation system and the existing schools that serve the Twinbrook area. The scenarios are described below.

Existing and Approved Development

(commercial: 4.1 million square feet, residential: 1,236 dwelling units)

Based on the 2000 Census data, parcel file data, development approvals, and field observations, existing development is estimated at about four million commercial square feet. This scenario includes the portion, approximately 1,236 housing units, of the Twinbrook Station project located east of the CSX tracks that were located in Montgomery County. The entire project has since been annexed by the City of Rockville, but the area located east of the CSX tracks will directly impact the transportation system in the Twinbrook Sector Plan area.

1992 North Bethesda/Garrett Park Master Plan

(commercial: 5.4 million square feet, residential: 1,255 dwelling units)

The 1992 Master Plan anticipated a total of 1,255 dwelling units, no change to light industrial uses south of Parklawn Drive, and O-M, I-1, TS-M, and TS-R zoning on the remaining sites. It also anticipated no change to the Parklawn Building. Since the Plan's approval, U.S. Pharmacopeia has completed its headquarters at the corner of Fishers Lane and Parklawn Drive, and JBG developed sites along Fishers Lane including office and laboratory uses.

Employment-Focused Scenario – Office, High Technology and Biotechnology

(commercial: 6.5 million square feet, residential: 1,236 dwelling units)

Twinbrook's established identity for high technology and biotechnology employment uses creates an opportunity to expand office and laboratory uses to serve these basic industries. This scenario adds new uses, more commercial square footage, and a substantial number of jobs to the planning area. It also reduces the amount of light industrial land in Montgomery County and offers less opportunity for residential redevelopment than the housing-focused scenario.

Housing-Focused Scenario

(commercial: 4.4 million square feet, residential: 3,450 dwelling units)

The housing-focused scenario examines a significant expansion at multi-family housing in the Twinbrook Sector Plan area. The scenario also substantially reduces the commercial land uses. It would require the rezoning of the technology employment area and the light industrial area to residential use. This scenario would expand the pedestrian oriented residential pattern in the Twinbrook Station project.

Staff Draft Recommendation

(commercial: 5.4 million square feet, residential: 2,453 dwelling units)

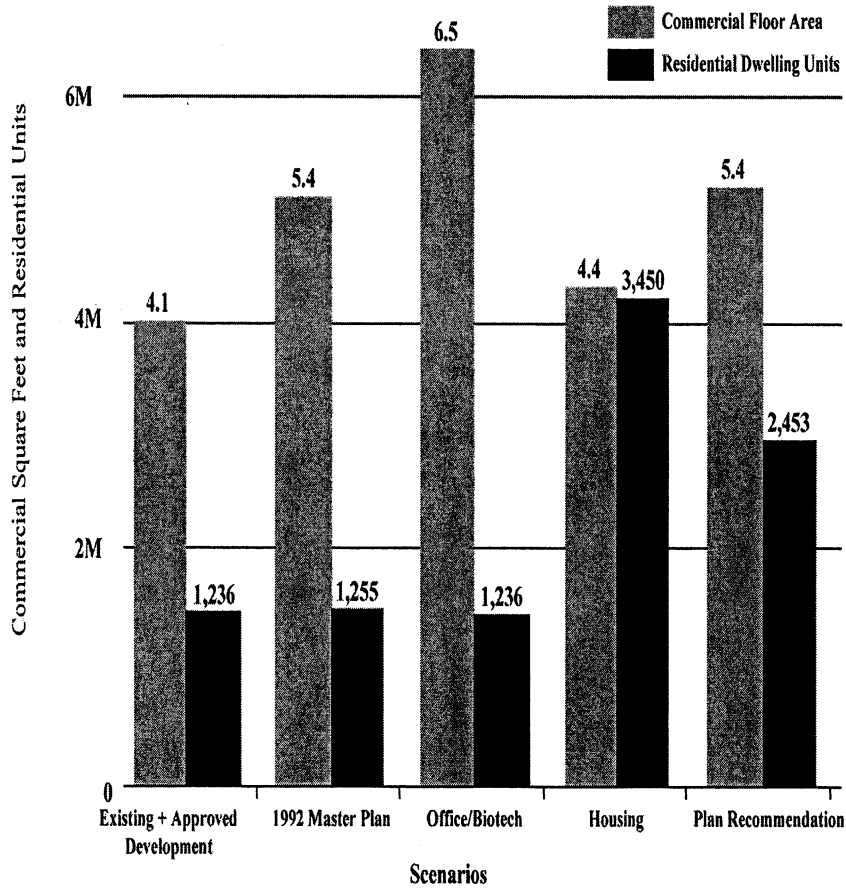
The recommendation in the Staff Draft of the Twinbrook Sector Plan increases the potential for housing, provides for office and advanced technology uses to serve the basic economy, and maintains some existing industrial uses. This scenario is intended to balance the land uses within the capacity of the transportation and school systems.

Comparison of Land Use Scenarios

Scenario	Commercial S.F.	Dwelling Units*
Existing and Approved Development	4.1 million	1,236
1992 North Bethesda/Garrett Park Master Plan	5.4 million	1,255
Employment-Focused	6.5 million	1,236
Housing-Focused	4.4 million	3,450
Staff Draft Recommendation	5.4 million	2,453

Note: *All calculations include 1,236 additional dwelling units from the Twinbrook Station Project located east of the CSX tracks.

Twinbrook Sector Plan Land Use Scenarios



Residential estimates include the east side Twinbrook Station project since annexed by the City of Rockville

Conclusions

The Staff Draft Sector Plan's recommended land use scenario can be accommodated within the capacity of the improved transportation system, and the capacity of the nearby schools. This balanced land use scenario also meets several of Montgomery County's goals: increasing housing at Metro stations, fostering the innovative high-technology industry, and supporting those uses with services and retail in convenient proximity.

TRANSPORTATION SYSTEM CAPACITY

Staff Recommendation

The transportation recommendations in the Staff Draft of the Twinbrook Sector Plan are intended to accommodate future growth by balancing land uses and providing a complete network of transportation options, consistent with Montgomery County policies for an adequate transportation system.

The Staff Draft Sector Plan's recommendations meet the following objectives:

- Provide a balance between travel demand generated by planned land use and the capacity of the planned transportation system.
- Create a connected street system that offers vehicle and pedestrian route alternatives.
- Create a multi-modal system that makes safe and direct connections for pedestrians and cyclists within and through the Sector Plan area.
- Increase transit ridership through transit accessible land uses and patterns, and through a connected system.

Assumptions

The models used to illustrate the impact of land use and transportation options for each scenario were based on the following assumptions:

- **Horizon Year of 2030** - This Sector Plan's forecast assumes a horizon year of 2030, the most distant year for which coordinated land use and transportation assumptions are developed for all jurisdictions in the Washington, D.C. metropolitan area. Regional transportation assumptions are described in the Constrained Long Range Plan.
- **County Council Ten-Year Transportation Plan** - Staff assumes that any facility in the County Council's 2006 Ten-Year Transportation Plan will be in place by 2030. Transportation facilities in the Twinbrook vicinity include the Montrose Parkway, Nebel Street Extended, and the widening of Veirs Mill Road to incorporate six lanes and bus-rapid transit facilities.
- **Transportation Management Goal of 39 Percent** - The transportation model assumes that in the future, a higher percentage of people will ride transit, walk and ride bikes to their destination, in line with Montgomery County's travel demand management (TDM) goals for the North Bethesda Transportation Management District. The goal for the Twinbrook Sector Plan is 39 percent. Transit use is a function of many variables, including proximity to transit services, job opportunities and residences, housing unit type, household income, and auto

ownership. Effective travel demand management is an integral component of all scenarios. The different modes of travel, or mode split, are reflected in the trip generation for the proposed land uses. The model used for each scenario encourages TDM through mixed-use development near transit, pedestrian connections to the station, and Montgomery County policies that discourage auto use. Current TDM programs include ridesharing, flexible hours, telecommuting, fare share programs, charging for parking, free shuttles, training, and on-site daycare facilities.

Analysis

In Twinbrook, travel demand forecasting included two levels of analysis. First, a regional travel demand model was used to reflect planned land use and transportation changes outside the Twinbrook Plan area. This tool is also used to assess the overall balance between land use and transportation from a policy area perspective as described in the Planning Board's growth policy recommendations. The recommendations for each scenario retain the long-range adequate policy area mobility for the North Bethesda policy area described in the Planning Board's May 21, 2007 report to the County Council.

Second, a local model, yielding intersection and cordon line information, was used to evaluate the more detailed land use and transportation options within the Plan area.

- Cordon line analysis draws a line on the plan boundary to track trips in and out of the area, describing the amount and mix of local and through travel entering and leaving the Twinbrook Plan area. Several iterations of this step allowed staff to determine upper limits for land use density with the existing and programmed network. The cordon line analysis provides two summary findings, illustrated in the chart on page 12.
 - The amount of traffic in the Sector Plan area is forecast to increase by approximately 20 percent as land uses in the MD 355 Corridor approach buildout.
 - The amount of traffic in the Sector Plan area for the recommended alternative is comparable to the traffic generated by the 1992 Master Plan.
- Intersection analysis uses the critical lane volume (CLV) technique and describes the level of congestion at individual intersections in the Twinbrook Sector Plan area. The results of a modeled scenarios resemble the intersection test from the Local Area Transportation Review Guidelines, where intersections are evaluated using the CLV technique. The CLV values are converted to a volume-to-capacity, or V/C ratio, by dividing the current or forecast CLV values by the applicable congestion standard. When the value exceeds 1.0, the intersection is considered unacceptably congested by AGP standards. If the standards are not met, then the scenario is not considered balanced.

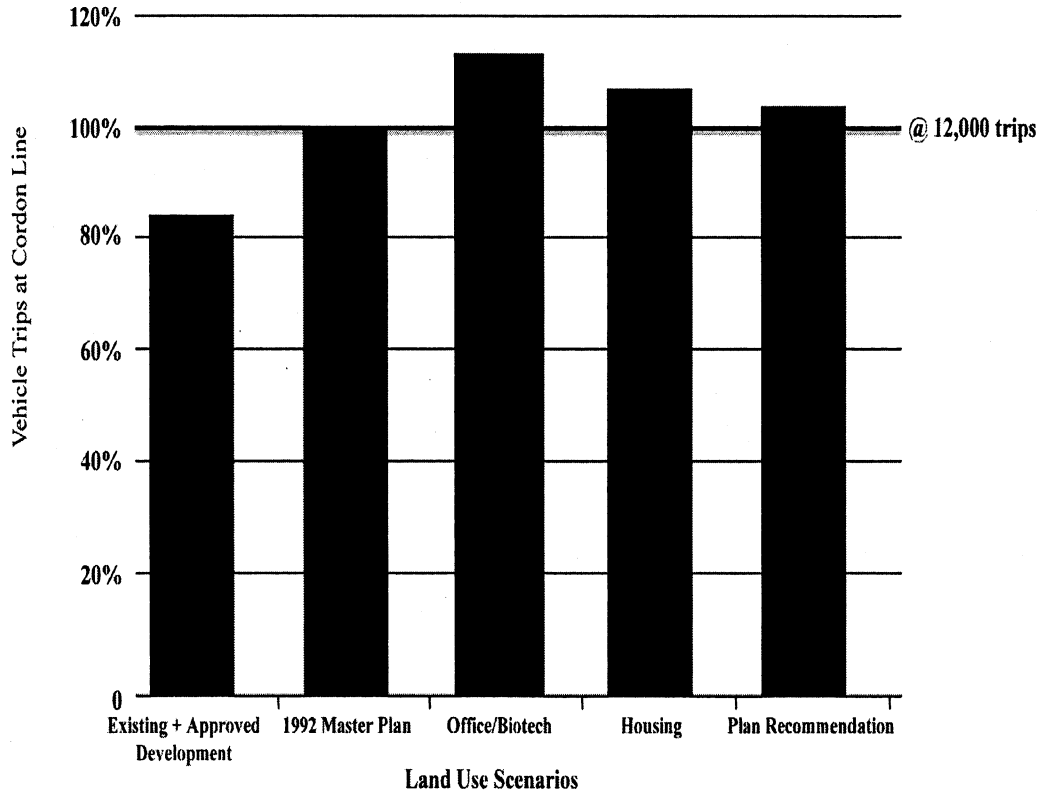
- The intersection analysis provided four summary findings, illustrated on the Intersection Volume to Capacity Ratios map (Attachment 3).
 - In general, introducing housing to the Sector Plan area helps balance the flow of trips into and out of the area. When the area has only jobs, morning trips flow in and evening trips flow out. When housing is introduced, home based trips flow out, balancing flow at intersections.
 - Three intersections in the Plan area serve as pinch points for vehicle traffic: Twinbrook Parkway and Parklawn Drive, Parklawn Drive and Montrose Parkway, and Veirs Mill Road and Twinbrook Parkway, which is outside the Plan area. Nonetheless, the recommended land uses can be accommodated with existing, planned, and programmed infrastructure with two exceptions: the intersection of Parklawn Drive and Montrose Parkway, and the intersection of Twinbrook Parkway and Parklawn Drive.
 - The intersection of Parklawn Drive with Montrose Parkway will need to be grade separated to provide for the high volume of vehicles and turning movements at that location. This is being accommodated in the DPWT facility plan for Montrose Parkway East.
 - The intersection of Twinbrook Parkway and Parklawn Drive will either need to be widened or an alternative path created. To maintain a pedestrian environment along Twinbrook Parkway, the Staff Draft of the Sector Plan recommends that Wilkins Avenue be extended north to Twinbrook Parkway as an alternate route. This new two-lane road east of the Parklawn Building would serve as a relief valve for local and through auto trips and create an alternate route for bikes, transit vehicles, and pedestrians. Construction of this road must include water quality mitigation to protect the nearby streams.

Conclusions

The transportation analysis also considered the impacts of other land use scenarios as previously described. The analysis of peak hour traffic entering and leaving the Plan area (crossing the cordon line) provided a relative comparison of the alternative land use scenarios.

Scenarios with high office, laboratory and housing generate 15 percent more trips than the 1992 Master Plan buildout. When those scenarios are also tested at the intersection level, they result in congestion levels beyond current standards that would require additional roadway capacity out of character with the Sector Plan concept.

**Twinbrook Sector Plan
Forecast Cordon Line Totals**



** Results shown are a percentage of the 1992 Master Plan trip estimates.*

The Staff Draft Sector Plan’s recommended land uses do not significantly increase the vehicle trip generation above the levels in the 1992 Master Plan for two reasons. First, from an area wide perspective, the balance between land use and transportation is based on the Planning Board’s Policy Area Mobility Review process. If the County Council finds that this process is not suitable as a policy objective, the North Bethesda Plan area would not be found in balance. In such a case, staff would recommend that the planned land uses not increase vehicle trip use (a “do no harm” posture supported by both the Planning Board and the County Council for similar circumstances in the 2006 Shady Grove Sector Plan).

SCHOOL CAPACITY

Staff Recommendation

The Staff Draft Plan recommends housing types and amounts that can be accommodated by existing school facilities and planned upgrades. The Staff Draft Sector Plan's land use proposals do not require designation of a new school site.

Analysis

Future residents of the Twinbrook Plan area will be served by two school clusters, Walter Johnson and Richard Montgomery, though the majority of the Sector Plan area falls within the Walter Johnson cluster.

In estimating the impacts of redevelopment, staff considered the possible pattern and mix of uses as well as planned school improvements and expansions.

The staff recommends the mixed-use TOMX Zone for about 44 acres of the Sector Plan area and encourages housing through the use of transfer of development rights. TOMX is a mixed-use zone and offers flexibility to develop to meet market demands. A substantial number of dwelling units could be generated through redevelopment. The units would be in mid-rise and high-rise buildings, which tend to generate fewer students than attached or detached single-family dwellings. With the estimated different factors for elementary, middle and high schools from Montgomery County Public Schools, approximately 330 potential new students would be generated by the recommended land use scenario. The scenario with more housing would generate more students, and the scenario with additional employment uses would generate fewer students.

The school system's FY 2008 Educational Facilities Master Plan indicates that modernization of Richard Montgomery High School will be completed in January 2008, at which time it will have adequate capacity. The cluster's middle school, Julius West has available space, and the elementary school, Twinbrook Elementary, is functioning at capacity, though some projections show it may be slightly over capacity in the six-year CIP period.

Walter Johnson High School is in the second phase of a modernization project, which will be completed in August 2009 at which time space will be adequate. The cluster's middle school, Tilden, has adequate capacity and the elementary school, Garrett Park, is slated for a modernization in 2012 that will provide adequate capacity.

Community Comment

There has been no specific comment on the impact of Twinbrook redevelopment on local schools, though communities are always alert to the potential for overcrowding.

Table of Student Generation Estimates

Housing Estimates	Number of Units	Elem., Middle, and High School Factors	Number of Students	Total Students
Employment Focus	1,236	.068	84	167
		.023	29	
		.043	54	
Housing Focus	3,450	.068	235	464
		.023	80	
		.043	149	
Staff Draft Housing	2,453	.068	167	330
		.023	57	
		.043	106	

- Notes: 1. Estimating factors are based on the 2005 Census Update Survey.
 2. The approved units in Twinbrook Station Project (1,236) have been included in the totals.

Conclusions

The Staff Draft Housing and the Housing Focus estimates of housing, depending on the timing, may warrant an expansion of existing schools. None of the scenarios warrant setting aside a new school site.

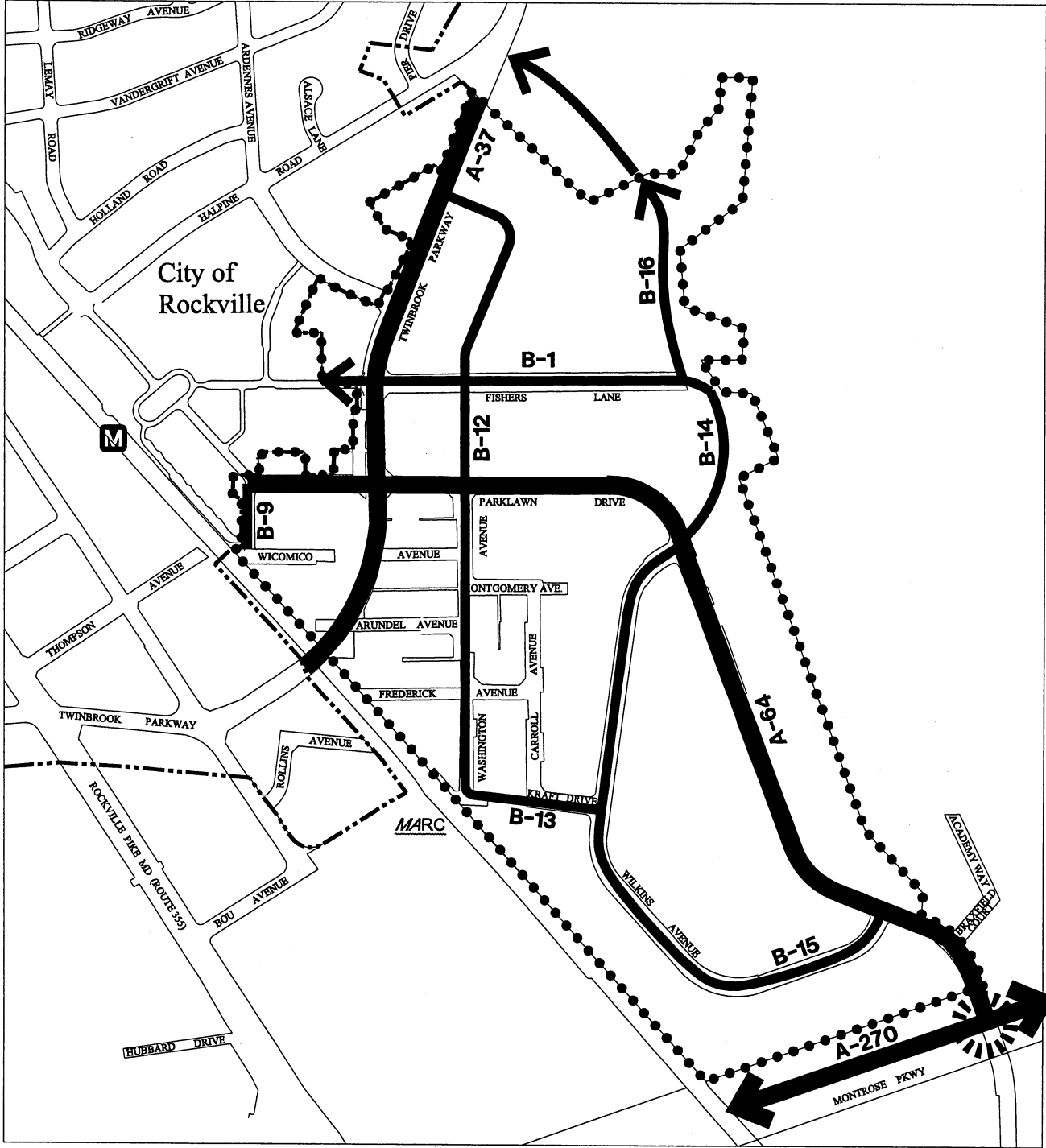
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Attachments:

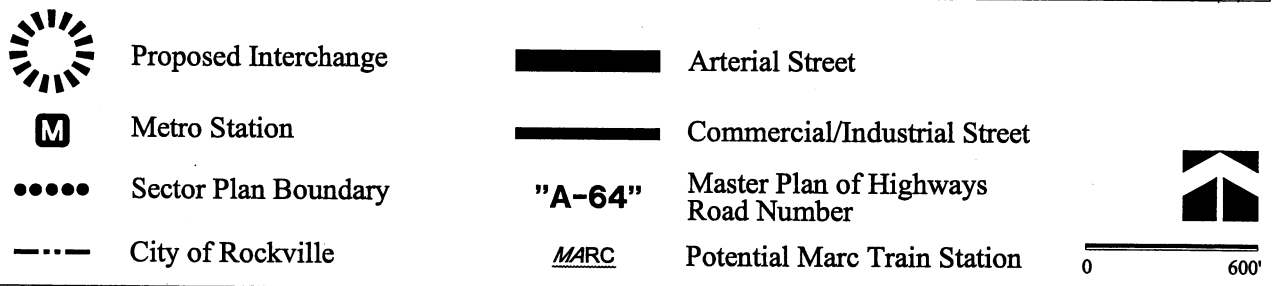
1. Street Classifications
2. Bike and Pedestrian Network
3. Intersection Volume to Capacity Ratios
4. Twinbrook Sector Plan Tour
5. PowerPoint Presentation, July 26, 2007

ATTACHMENT 1

Street Classifications

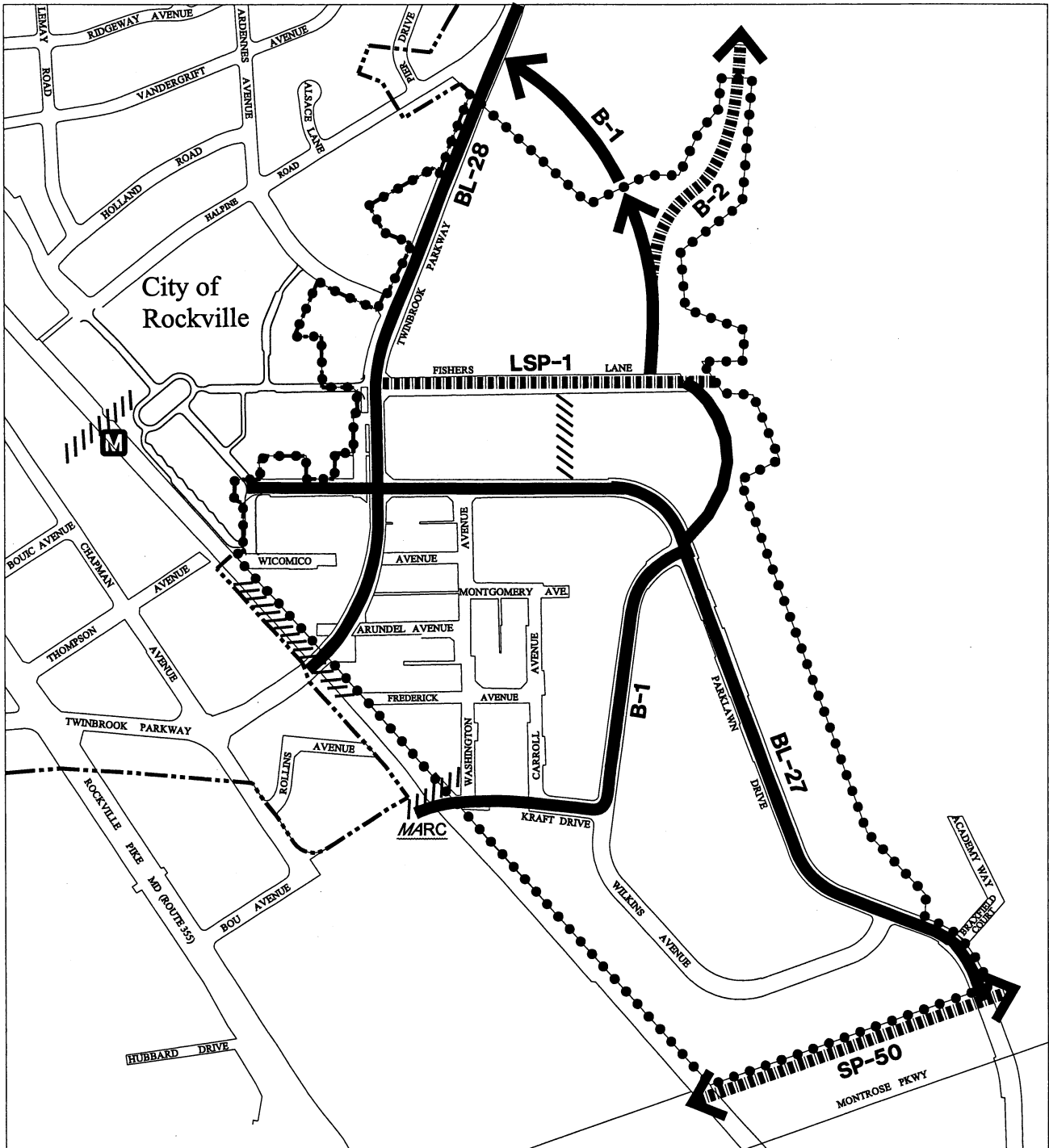


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ATTACHMENT 2

Bike and Pedestrian Network



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"SP-50" Bikeway Functional Master Plan Number

M Metro Station

..... Sector Plan Boundary

- - - - City of Rockville

|||| Shared Use Path

———— Bike Lanes or Signed/Shared Roadways

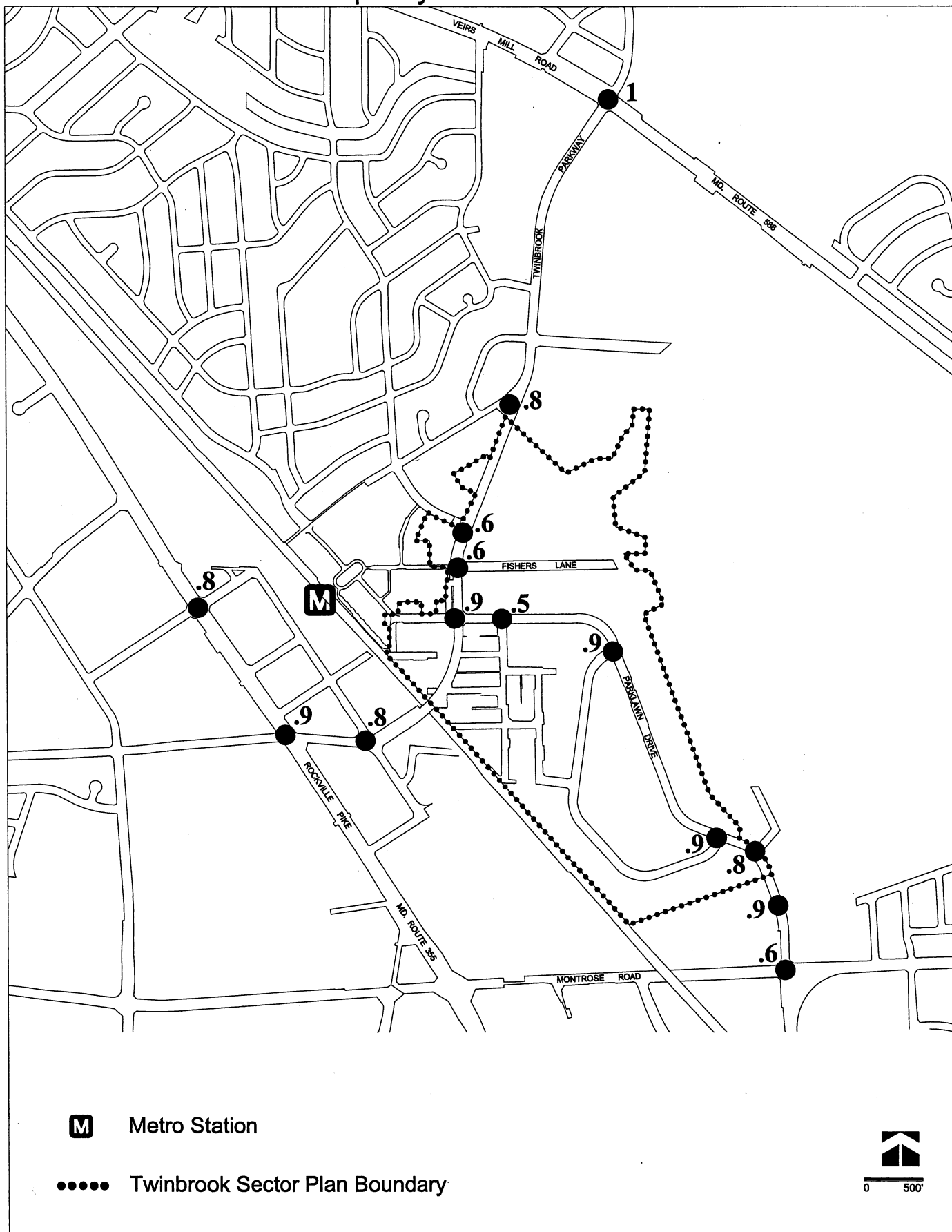
//// Pedestrian Way

MARC Potential MARC Train Station

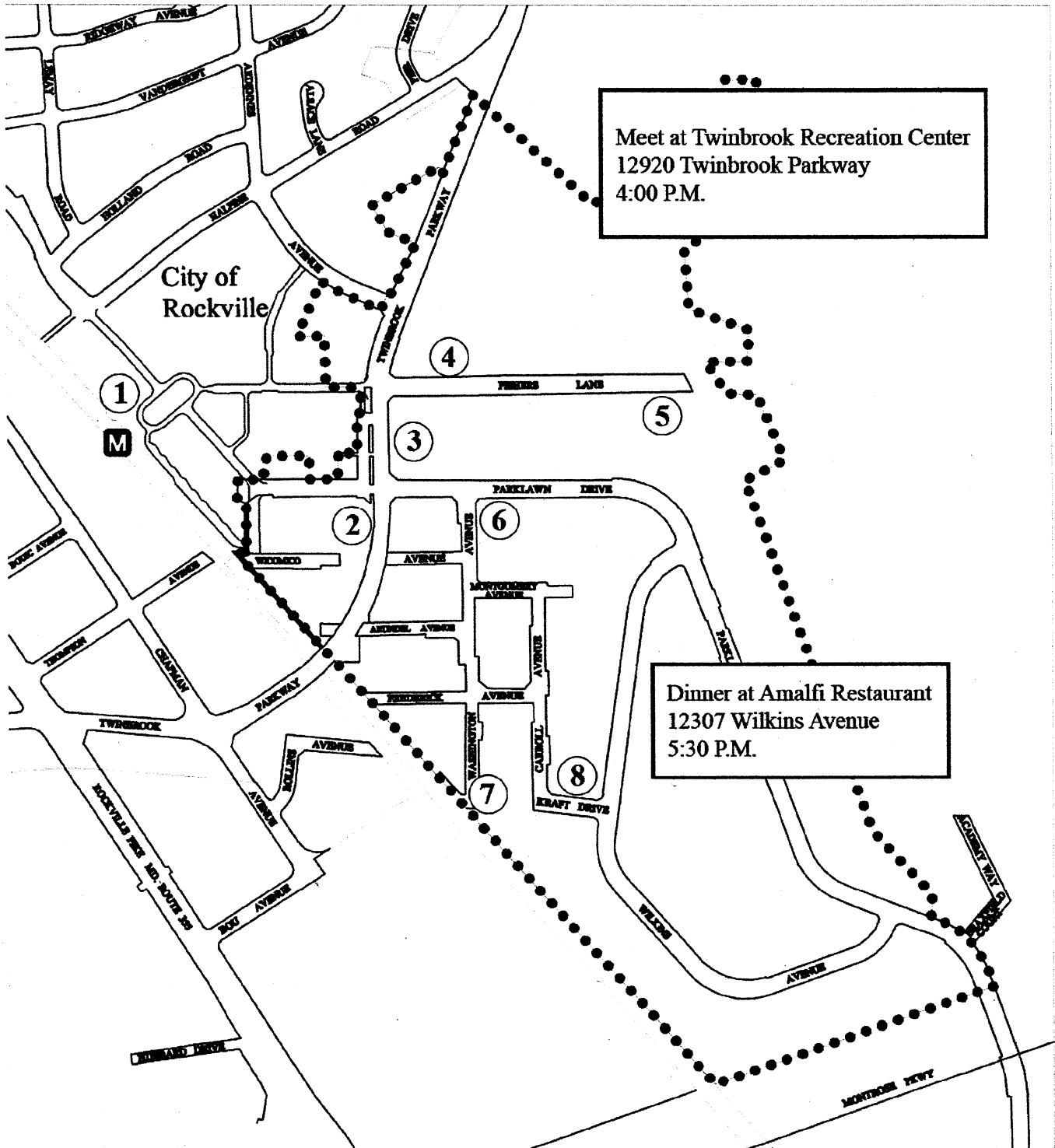


ATTACHMENT 3

Intersection Volume to Capacity Ratios



Twinbrook Sector Plan Tour




Meet at Twinbrook Recreation Center
12920 Twinbrook Parkway
4:00 P.M.

Dinner at Amalfi Restaurant
12307 Wilkins Avenue
5:30 P.M.

M Metro Station

..... 2005 Twinbrook Sector Plan Boundary

 City of Rockville



Twinbrook Plan Area

Planning Board Tour

September 10, 2007

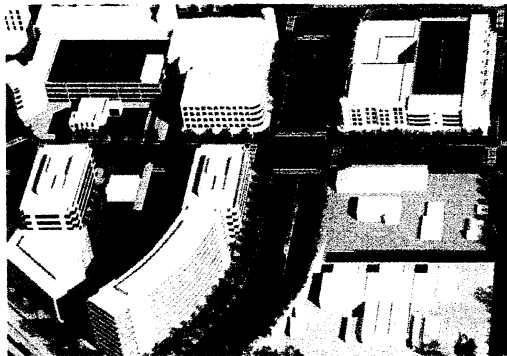
1. Twinbrook Metro Station

The joint JBG/WMATA redevelopment project, Twinbrook Station will include 1,595 housing units, 220,000 sf of ground floor retail, and 325,000 sf of office space, transforming surface parking lots into a mixed-use community focused on Metro access.



2. Site One – Wicomico Avenue and Twinbrook Parkway

This is the largest site in the Plan's Metro Core Area and, along with sites to the north, offers the opportunity to fill out the pattern of dense mixed-use development established by Twinbrook Station.



3. Twinbrook Parkway between Fishers Lane and Parklawn Drive

The east side of this central block through the Plan area will be fronted with street-oriented retail development. The Plan proposes a similar streetfront treatment on remaining lots and along the facing west side. A pedestrian oriented pattern on both sides of the street will create a strong visual image of Twinbrook and encourage drivers to slow down.



4. US Pharmacopeia and Fishers Place

Developed under the C-O and I-1 zones, these two projects create a base for future high-tech development that would take place under the proposed TOMX Zone.



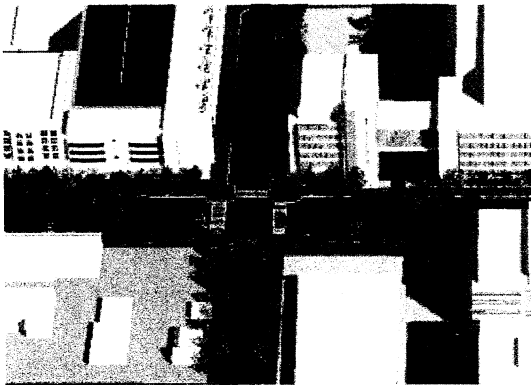
5. The Parklawn Building

This building has considerable redevelopment potential. Fully tenanted, it will house potential Metro users, redeveloped with mixed-uses, it will contribute to a lively atmosphere, and renovated, it will provide a large component of public amenities.



6. Parklawn Drive and Washington Avenue

As one of two parallel streets through the Plan area, redevelopment along Parklawn Drive should contribute to the high-tech and high quality public environment of the Technology Employment Area. Washington Avenue is the entry to the Light Industrial Area's mix of useful businesses. The line between the areas is drawn to focus redevelopment along Parklawn Drive and maintain an enclave of light industrial service uses.



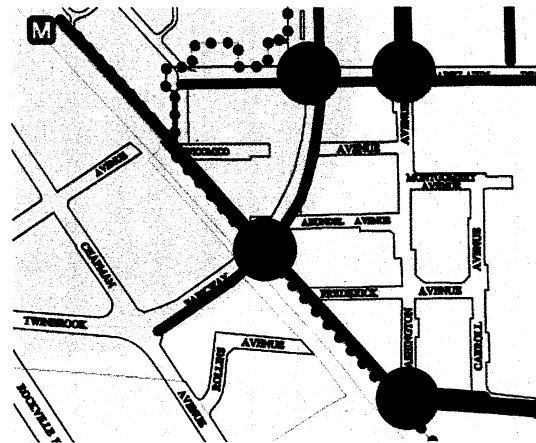
7. Washington Avenue to CSX Tracks

The tracks bring the Metro to Twinbrook, but also present a barrier to pedestrian connections. The Plan proposes a pedestrian route under the Twinbrook Parkway right-of-way that would replace the unsafe desire line path crossing the Parkway.

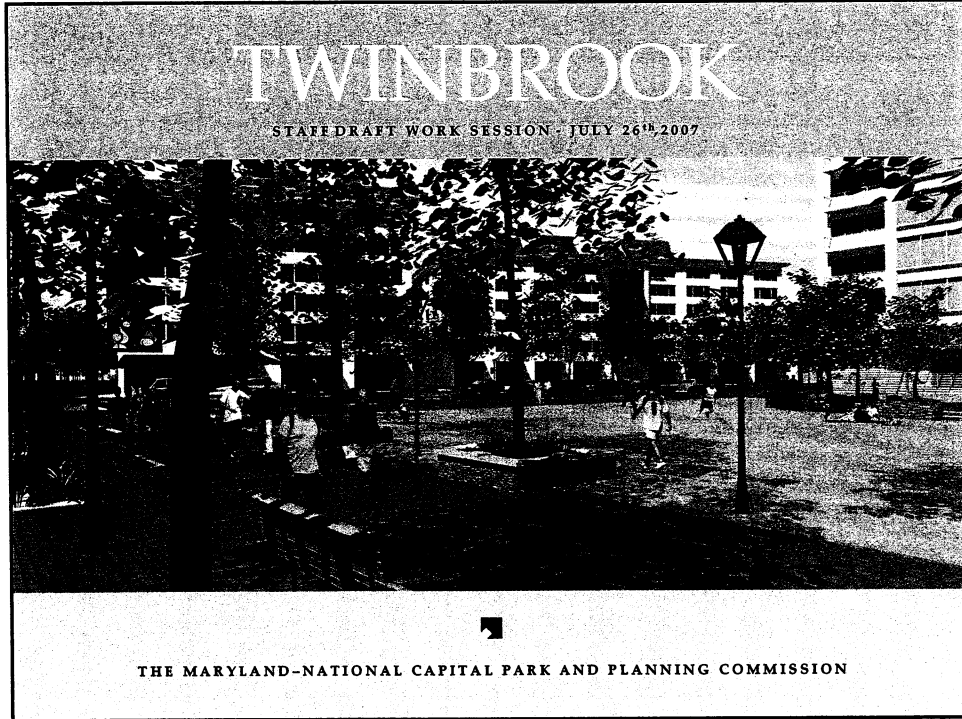


8. Kraft Drive to Parklawn Drive Connection

The Plan proposes making a vehicle and pedestrian connection by extending Kraft Drive to Washington Avenue, a track crossing at a future MARC station, and a path through the Wilkins block to connect pedestrians to Parklawn bus stops.



ATTACHMENT 5



Twinbrook Sector Plan Worksession

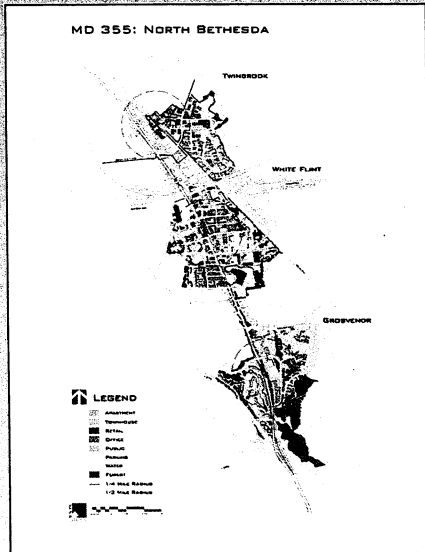
STAFF DRAFT June 2007
Twinbrook Sector Plan
A New Community in the Technology Corridor

- Twinbrook's role in the I-270 Technology Corridor and in the county
- Relationship to the City of Rockville
- Industrial land in Twinbrook and county

Montgomery County Department of Planning
The Maryland-National Capital Park and Planning Commission

The cover page of the 'Twinbrook Sector Plan' features a collage of images including a starburst diagram, a map, and various architectural and landscape photos. The text on the cover includes 'STAFF DRAFT June 2007', 'Twinbrook Sector Plan', and 'A New Community in the Technology Corridor'. At the bottom, it lists the 'Montgomery County Department of Planning' and 'The Maryland-National Capital Park and Planning Commission'.

Role in the MD-355 Corridor



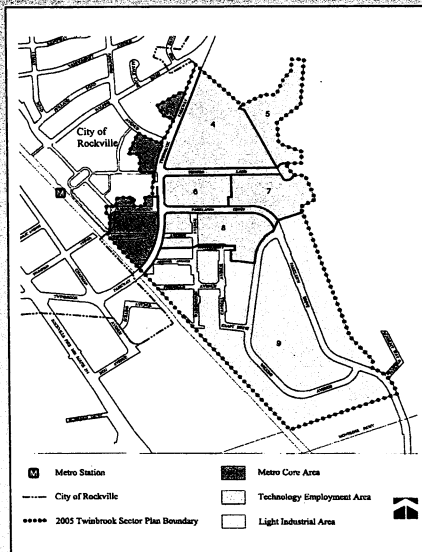
Along Metro Red Line,
Twinbrook is:

- Convenient space for NIH, clients, and related agencies
- Spin-offs in Light Industrial Area

and should become:

- Housing resource
- Technology cluster
- Incubator and small business space
- Transit center
- Connected community

Role in the MD-355 Corridor



Examined:

- Housing and high-technology redevelopment considering capacity and character
- Compatible development in Rockville
- Property values, community concerns, and other Metro stations

Propose:

- Twinbrook as a technology cluster with a balance of complementary uses.

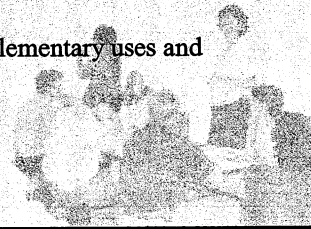
Relationship to the City of Rockville



2000 Charrette established a shared vision:

- Mixed uses and density focused on the station
- Eventual development and annexation of the Twinbrook Station Project
- Continuing focus on Rockville Pike and Metro station area

Create complementary uses and connections



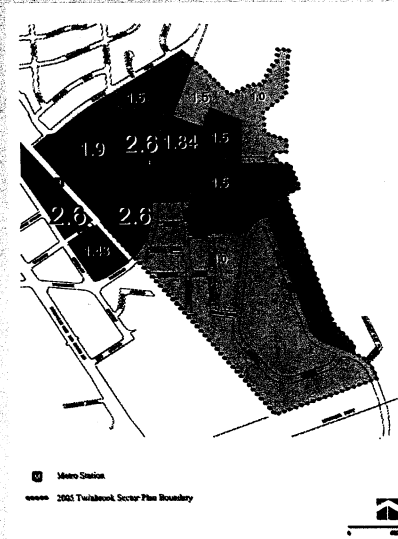
Relationship to the City of Rockville

Examined:

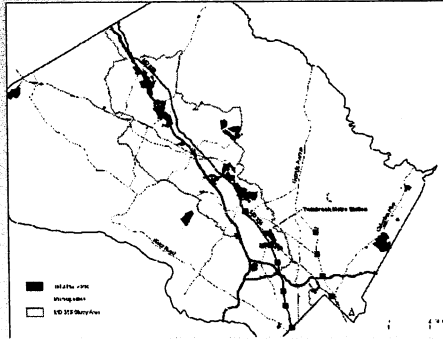
- Patterns of density and a variety of proposed uses
- Complementary uses and densities
- Connections

Propose:

- Density and mixed uses focused at the Metro station with connections to surrounding communities



Industrial Land in the County



I-1 Light Industrial:

- Area of offices and laboratories

I-2 Heavy Industrial:

- More than half devoted to Dickerson

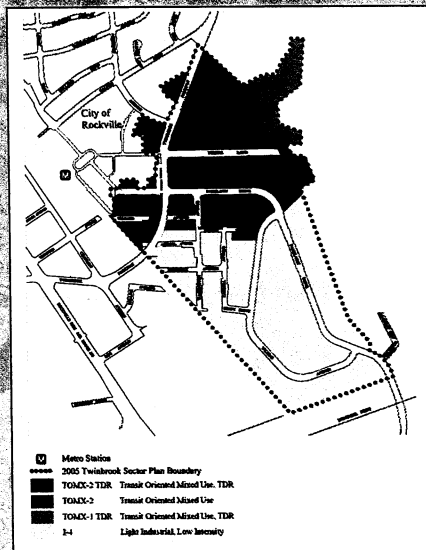
I-3 Technology and Business Park:

- Medium-density, park-like, high-technology, corporate offices

I-4 Low-Intensity, Light Industrial:

- Traditional industrial goods and services

Industrial Land in Twinbrook



I-1 Zone:

- No FAR limit, heights up to 120 feet, no amenities or review
- Rezoning to TOMX allows the mixed uses and amenities that will create a technology cluster

I-4 Zone:

- Large lot requirements, traditional industrial goods and services
- Amending I-4 allows mix of uses convenient to customers

Create an area of complementary uses

Industrial Land in Twinbrook

Examined national trends

A Seattle survey found:

- Industrial uses are changing
- Can no longer compete with increasing land demands for housing and institutional uses
- Provide “good” skilled jobs
- Communities are developing strategies to retain and enhance industrial land

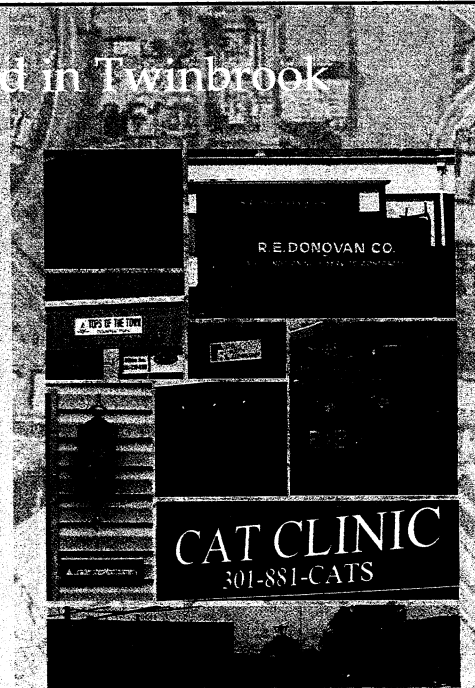


Industrial Land in Twinbrook

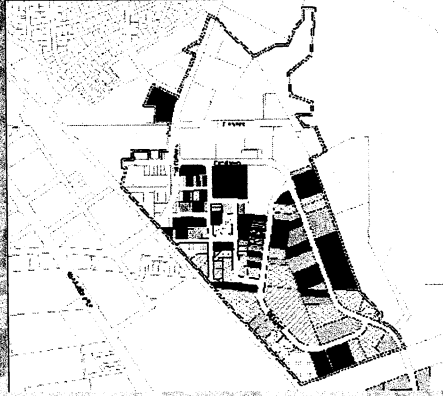
Examined:

- Existing Conditions
 - Convenient to customers
 - Metro accessible to employees
 - Available for start-up space
 - Serve residents and business

Smart Growth includes industrial uses



Industrial Land in Twinbrook



The same characteristics are in Twinbrook:

- Flexible and varied uses
- Ownership and rental opportunities
- Varied jobs accessible to Metro
- Convenient to residential and business customers

Propose:

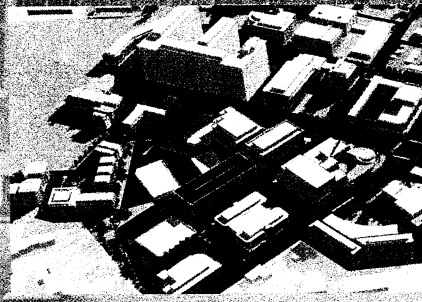
- Amending the I-4 Zone to an urban industrial zone of small lots, and flexible uses at 1 FAR

The Parklawn Building

- Density and height are grandfathered
- Building has value to owner as it stands



The Parklawn Building



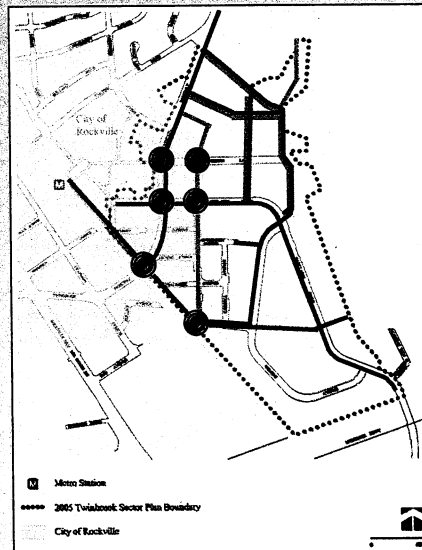
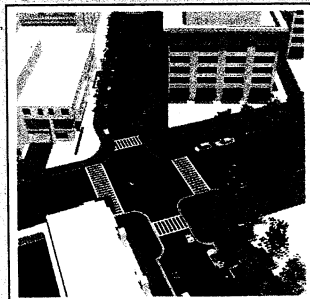
Plan proposals ensure value for the community:

- Fully tenanted building adds an active population near the Metro station
- Renovated building adds potential for mixed uses, including housing
- Renovated building under TOMX generates:
 - pedestrian/bike/trail connections
 - park space
 - streetscape
 - retail frontage
 - road connections

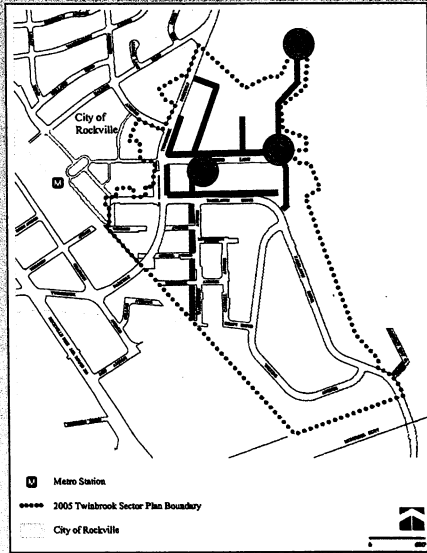
Grid of Streets

Redevelopment Opportunities

- Streetscape
- Connections
 - new streets and sidewalks
 - bike routes
 - paths
 - crossings



Green Areas and Public Use Space



Redevelopment Opportunities

- Fishers Lane
- Parklawn Drive
- site trail
- streetscape
- 20% open space

A linked system of green spaces and pedestrian routes