



December 6, 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

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

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Community-Based Planning Division

**SUBJECT:** Twinbrook Sector Plan Worksession

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**INTRODUCTION**

On November 15, 2007, the Planning Board heard testimony from interested parties on the recommendations of the Twinbrook Sector Plan. To address the comments generated from the public hearing, the staff recommends two worksessions.

The packet today covers the following issues that were raised at the Public Hearing:

- Redevelopment Sites
- Transportation
- Public Facilities
- Environment

The second worksession, scheduled for December 20, 2007 will cover remaining land use and zoning issues, including the recommended modifications to the TOMX, TMX/TDR, and the I-4 Zones. It will conclude with a review and confirmation of the Planning Board's decisions on the Sector Plan recommendations, which will be reflected in a revised document that will become the Planning Board Draft for transmittal to the County Council.

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**Attachments:**

Twinbrook Sector Plan Testimony

Transportation System Capacity

## **REDEVELOPMENT SITES**

### **Park Path Connection through Site 5**

#### ***Plan Recommendation***

The Sector Plan recommends a path connection through the northeast corner of Site 5 to connect the area's anticipated residents and employees to the regional Rock Creek Park and create a pedestrian-bike connection to the Twinbrook Metro Station from the residential communities across Veirs Mill Road. This connection is referenced in the Plan text on pages 13, 48, 61, 75, and 85, and on maps on pages 14, 62, and 74.

#### ***Testimony***

Cal Pierce, Elsevier Company, Environmental Task Force spoke as a bicycle commuter and a representative of his fellow employees in support of the trail, noting that many employees now use the Parklawn Cemetery as a connection to Veirs Mill Road and as a park facility.

#### ***Discussion***

A field visit with Parks staff revealed that reaching the park trail will require a bridge to cross Rock Creek and as the trail leaves the park, it would require new sidewalks to reach the bridge over Veirs Mill Road, creating environmental and financial implications. But, this trail would serve many proposed and existing communities and would serve transportation and recreation functions.

In meetings with the owner of Site 5, this trail and park facility has been discussed and identified as a potential redevelopment amenity.

#### ***Recommendation***

Given the support expressed for the path, the staff recommends strengthening the language to more specifically identify the elements of this amenity that might be contributed by the developer.

### **Adjust the TOMX Zoning Line to Include Sites South of Montgomery Avenue**

#### ***Plan Recommendation***

The Plan recommends drawing the zoning line between TOMX-2 and I-4 to focus redevelopment on Parklawn Drive, and so draws the southern line of TOMX roughly along Montgomery Avenue. This zoning is referenced in Plan text on page 30, as Area 8 and on page 33 as part of Area 9, and on maps and illustrations on pages 26, 27, 31, and 32.

#### ***Testimony***

Greg Trimmer, representing JBG, the sites' owner requested that the zoning line be shifted south to include their sites across Montgomery Avenue, allowing a more cohesive development with their site north of Montgomery Avenue.

Mr. Tony Puglisi, representing his family who owns a piece of property at the corner of Montgomery and Carroll Avenues spoke in support of the Plan's recommended amended I-4 zoning on his site.

Mr. Neng-Hsiang Wang testified on behalf of the Taiwanese Presbyterian Church and the Bethesda Presbyterian Church which own property on Arundel Avenue. They would like the TOMX-2 Zoning line shifted south to include their property, which is close to Metro and should extend the vision of the Plan for high-technology and redevelopment.

***Discussion***

The sites represented by Mr. Puglisi and Mr. Wang would be allowed development at 0.5 FAR under Standard Method using the TOMX-2 Zone. They could not develop under the Optional Method TOMX-2 Zone because neither site is large enough. Under I-4, both zones would be allowed to develop up to 1.0 FAR.

***Recommendation***

Staff agrees that shifting the zoning line south to include the JBG properties will best serve the area. Since the Puglisi property is on the edge of the area, the I-4 Zone or the TOMX Zone is appropriate.

Staff does not support shifting the line farther south to include the church property. Even though it is within the one quarter mile radius of the Metro station, it is separated by a significant grade change and Twinbrook Parkway. Shifting the zoning line south would limit their industrial services operations of neighboring properties, contrary to the Plan's goal to maintain a light industrial district. As noted above, the church site is too small to develop under the full TOMX-2 density and it would be limited to 0.5 FAR. The proposed amended I-4 Zone would allow a 1.0 FAR.

The Plan's maps and text will be amended accordingly.

**Building Heights along Twinbrook Parkway**

***Plan Recommendation***

The Plan's Urban Design chapter addresses Buildings and the Public Realm (page 47), recommending "Building heights ranging from four and five stories to ten and twelve stories" in the Metro Core, the area west of Twinbrook Parkway. In the Technology Employment Area, west of Twinbrook Parkway, the Plan specifies only "varied building heights."

***Testimony***

Greg Trimmer, representing the JBG Companies, testified that the Plan should not predetermine building heights, leaving those decisions for the site plan process. He pointed out that there are no single-family homes that need to be buffered and the width of Twinbrook Parkway would be in scale with taller buildings.

### ***Discussion***

The TOMX-2 Zone is designed to allow flexibility of use and create a defined public realm for a working and living environment. The zone requires public amenities, but leaves the specifics of those amenities to each plan. The Twinbrook Sector Plan recommendations focus the most density and height on sites closest to transit in the Metro Core. The range of heights in the Plan, from four to twelve stories, is in keeping with the heights planned for JBG's Twinbrook Station project immediately adjacent, seeking to create a seamless community, while buffering existing residential communities in Rockville with stepped down heights. Building heights in the Technology Employment area are recommended to be varied to allow flexibility for varied uses allowed in the zone and recognizing that there are no adjacent existing residential communities to buffer.

### ***Recommendation***

The Plan language should be modified to clarify that though building heights are not predetermined, they should be compatible with adjacent development to create a seamless community, allow flexible market responses, and create an active street and complementary design.

## **Housing Potential Generated by Redevelopment**

### ***Plan Recommendation***

On page 9, the Plan identifies the provision of housing an issue and a goal, recognizing that redevelopment at Twinbrook plays a role in balancing the County's jobs/housing ratio in the I-270 Corridor.

### ***Testimony***

Pam Lindstrom, representing the Sierra Club, testified that the Plan does not achieve the "right mix of uses" for Smart Growth and that the mix of uses "proposed is not conducive to sustainable living."

Robert Dalrymple of Linowes and Blocher, representing the Somerset Company, owners of the Parklawn Building, testified that the Plan language should be clarified to indicate that the density caps for residential development do not include the units that would be generated by MPDUs and Workforce Housing, but that the affect of those units have been included in the analysis of transportation and school capacity.

### ***Discussion***

The jobs/housing balance recommended by the Planning Board and County Council in the Transportation Policy Report (TPR) is a guideline to shape the development of balanced communities in the I-270 Corridor. The report pointed out that the corridor had fewer houses than jobs, but left the shape of individual communities to be determined in master and sector plans.

The TPR numbers are used as a guide. Since the TPR was completed, the Planning Department has updated regional jobs and housing estimates. This Plan also draws

Twinbrook's boundaries differently, making a comparison with the original TPR jobs housing estimates difficult.

There is no housing in the Twinbrook Plan area currently and this Plan creates a significant increase in opportunities and change in character. Since the TOMX Zone is designed to allow a mix of uses, estimating the exact or final number of residential units created through redevelopment is difficult. The 500 to 1,200 range estimated by the Plan reflects that flexibility and supports the goal of creating a mixed-use community.

But that range is an estimate, and does not include the units that could be created through MPDUs and Workforce Housing.

**Comparison of Jobs and Housing Potential**

	Jobs	Housing	J/H Ratio
1992 Plan	12,087	1,642	7.4
Proposed Plan	9,084	3,082	2.9

Includes: 350 MPDUs at 12.5 percent  
 280 Workforce Housing Units  
 170 TDRs (508/3)

To further encourage housing, the maximum zoning density can only be reached on some sites through the use of residential TDRs. Nonetheless, the zone does not require a mix and a site could develop with 100 percent housing. In most of the Plan, the TOMX-2 Zone will replace I-1 zoning, reducing the jobs potential and increasing housing. The Parklawn Building in particular will likely be redeveloped for mixed-use, a further increase in housing.

The Plan does not recommend expanding housing and mixed uses into the Light Industrial Area because these uses provide varied jobs and services in a convenient location, forestalling long drives and maintaining a balanced economy. The Plan does recommend amending the I-4 Zone to encourage more intense use of the existing industrial sites.

**Recommendation**

The staff recommends maintaining the proposed mix of TOMX and I-4 zoning, and the existing level of incentives for housing opportunities, that encourages varied both housing and job opportunities in a pedestrian friendly environment with transit access. These recommendations will build the type of strong, mixed-use community that is environmentally and economically sustainable over time.

Plan language should be modified to clearly define the amount of jobs and housing likely to be generated by the recommended zoning and to note that density caps do not include bonus MPDU and Workforce Housing units, which have been figured into capacity analyses.

## **Include the Pike Center in the Twinbrook Sector Plan**

### ***Plan Recommendation***

This property is outside the Twinbrook Plan area, and would be addressed in the *North Bethesda/Garrett Park Master Plan*.

### ***Testimony***

Greg Trimmer, representing JBG Companies, testified that the JBG plan to redevelop the Pike Center as a mixed-use project makes sense given its location near Metro and City and County goals for pedestrian-oriented development. The site is outside both the Twinbrook and White Flint Plans, but it is closer to Metro than many properties in those areas and should be added to the Twinbrook Plan as a "satellite property."

### ***Recommendation***

Staff agrees that this site is well-located to continue the uses and character of Twinbrook Station and the City's and County's plans. The owner's proposal for a mixed-use project would forestall strip style development, would further connect the area to transit, would resolve non-conforming uses on the site, and would be compatible with surrounding residential and mixed-use projects.

But, rather than proposing an extension of the Twinbrook Plan's boundaries at this late stage of the master plan process, the staff recommends addressing this site through a future amendment to the *North Bethesda/Garrett Park Master Plan*.

## **TRANSPORTATION**

### **Road Code Implementation in the Twinbrook Plan**

#### ***Plan Recommendation***

On page 63, the Plan states that street design “should include pedestrian amenities and green design features.”

#### ***Discussion***

The revised Road Code requires consideration of pedestrian mobility in master plans and implementation. Each transportation facility in the County must be planned and designed to:

- Maximize the choice, safety, convenience and mobility of all users
- Respect and maintain the particular character of the community where it is located
- Minimize stormwater runoff and otherwise preserve the natural environment.

The Plan anticipates changes to the Road Code by including a specific description of path and sidewalk routes and character in the Transportation section (pages 40-47) and by identifying the area as a Transit Station Development Area (page 5) and suitable for urban street standards. The Code’s attention to stormwater runoff supports the Plan’s goal of using redevelopment in the urban environment to support the functions of the natural environment.

In the chart on page 65, the Plan identifies a number of roads as Commercial/Industrial Streets, but these designations are no longer included in the Road Code. These streets should be identified as Business District Streets to be in line with the Road Code standards and to achieve the desired function and character.

#### ***Recommendation***

Edit text and chart on pages 64 and 65 for clarity and to reflect the revised Road Code standards.

### **At-Grade Pedestrian and Bicycle Crossing of the CSX Tracks**

#### ***Plan Recommendation***

The Plan recommends a pedestrian-bicycle crossing of the CSX tracks on a map on page 14, and in text on page 59, “...either at-grade or elevated, between Washington Avenue and Bou Avenue...”.

#### ***Testimony***

Representing the County Executive, Gary Erenrich testified in opposition of an at-grade crossing, citing safety concerns. Furthermore, he pointed out that this would be the third crossing within a half-mile stretch, perhaps more than is necessary.

### ***Discussion***

Staff agrees with the Executive's comments that an at-grade crossing would present safety concerns and that a pedestrian bridge crossing is preferable, even given cost implications. As the Executive points out, the tracks are a significant pedestrian barrier between commercial properties along Rockville Pike and the community. In addition, the City of Rockville has stated a desire to make as many connections as possible. To make the area an effective pedestrian oriented community, multiple links should be completed.

A MARC station at this location will be a key factor in completing a pedestrian crossing.

### ***Recommendation***

Revise the Plan language to eliminate the at-grade crossing and maintain the above-grade crossing given the importance of making pedestrian connections in this area.

## **Parking Districts**

### ***Plan Recommendation***

The Twinbrook Plan does not recommend the creation of a new parking district for the Twinbrook area. On page 63, the Transportation Demand Management section supports the existing North Bethesda Transportation Management District through transit-oriented land use and zoning recommendations, and by supporting the use of parking credits, waivers, and reductions as allowed in the Zoning Ordinance. The Plan also recommends expansion of feeder and shuttle bus routes to the Metro station, especially buses that use alternative fuels and technology.

On page 65, the Plan recommends a variety of transit-friendly options that minimize parking, including zip cars, shared parking, parking waivers allowed by Section 59-E of the Zoning Ordinance, and garages located to not interrupt pedestrian and street activity.

### ***Testimony***

A parking district for the Twinbrook area was raised by the Planning Board.

### ***Discussion***

The Zoning Ordinance requires new development to provide sufficient off-street parking. In urban areas designated as Parking Lot Districts (PLDs), parking is provided partially by the public sector using funds generated by a property tax and user fees collected from those who use the public parking facilities.

Chapter 60 of the County Code permits development in the County's PLDs to pay a tax instead of providing parking on site. There are currently four PLDs (in Bethesda, Silver Spring, Wheaton, and Montgomery Hills). Building, maintenance, and operation are funded by tax revenues, parking facility fees, and revenues from fines and managed by the Department of Public Works and Transportation (DPWT). PLD funds may also be used to support other County activities, such as mass transit. Each PLD is a system to itself, with the County Council individually setting the parking rates and PLD tax rates.



Approximately every five years, a supply and demand analysis inventories the privately and publicly provided parking in a PLD (including on-street spaces), and analyzes their turnover and utilization rates. With this data, and by evaluating existing, approved, and proposed development; master plan recommendations; and other economic indicators, DPWT projects the five-year demand for parking. DPWT compares anticipated parking demand to the existing supply and determines whether and where additional facilities are needed.

Despite this planning, the ability of each PLD to provide the parking needed to satisfy demand is usually limited because potential sites for new public parking facilities are scarce and expensive, building new facilities is expensive, and the PLDs face pressure to divert funds for other purposes.

DPWT staff has reported that PLD provision of public parking at relatively low rates tends to discourage both the construction of private parking garages and the provision of parking in new projects in excess of Code requirements (that could be used for rental parking). Thus, the County's policies are constraining the total supply of parking, but encouraging transit use by constraining parking.

The reliance on shared-use public parking to support mixed-use urban environments is considered more efficient than requiring every developer to provide on-site parking for every project. This is particularly important for smaller developments in urban areas.

### ***Recommendation***

The staff does not recommend the creation of a PLD in Twinbrook. The area is small and a significant part of the affected area, including the Metro station, is in the City of Rockville and could not be taxed to support the PLD. Also, the Twinbrook Station project will incorporate the existing 1,200 public parking spaces and redevelopment throughout the Plan area will meet parking standards and be encouraged to share parking.

Instead, the Plan text should be amended to encourage a strong role for the North Bethesda Transportation Demand Management District in monitoring parking needs. Text should also be modified to encourage the development of private parking facilities that could meet parking demand in the area.

## **Right-of-Way Widths – Twinbrook Parkway and Wilkins Avenue Extended**

### ***Plan Recommendation***

In a table on page 65, the Plan recommends that the Twinbrook Parkway right-of-way be expanded from 104 feet and six lanes in the 1992 Plan to 120 feet with six divided lanes between the southern Rockville city limits and Ardennes Avenue. From Ardennes north to the city limits, the Plan now recommends 120 feet, with four lanes, divided.

For the new proposed road, Wilkins Avenue Extended, the Plan recommends a 70-foot right-of-way with two lanes.

In the Urban Design chapter's section on Street Character (page 44), the Plan points out that Twinbrook Parkway must serve through traffic as well as pedestrians, particularly at its crossings with Parklawn Drive and Fishers Lane.

### ***Testimony***

Greg Trimmer, representing the JBG Companies, testified that providing pedestrian connections across Twinbrook Parkway is "a critical component" of an integrated community and that the Plan, rather than increasing pavement, the right-of-way should emphasize traffic calming measures, including non-rush hour on-street parking.

Robert Dalrymple of Linowes and Blocher, representing Somerset Development testified in favor of extending Wilkins Avenue, but stated that its final disposition must remain flexible to respond to the many variables that exist in redeveloping the site including security and environmental issues. A predetermined 70 foot right-of-way may preclude desired development options.

### ***Discussion***

The Plan recommendations seek to balance two goals of connecting through traffic routes and serving pedestrians. Right-of-way designations accommodate not only travel lanes, but all features of the roadway, including parking, landscaping, and sidewalks. The proposed right-of-way widths, coupled with lane limitation will allow for all those facilities.

The lane limitations reflect current conditions. Twinbrook Parkway already shifts from four to six lanes to accommodate turning movements at Fishers Lane and Parklawn Drive. The existing Wilkins Avenue is two travel lanes with parking on both sides, a profile that should continue through its extension. Furthermore, Wilkins is viewed as completing an alternative route, and should be public, though its width might vary, given field conditions.

On-street parking is the decision of DPWT, and they have been reluctant to allow it on streets that are classified as Major Highways or Arterials, if the parking function is considered to impede traffic movement (the Plan classifies Twinbrook Parkway as an Arterial). Furthermore, the Plan recommends bike lanes on Twinbrook Parkway that would be in the street, on both sides of the street, which could conflict with on-street parking.

### ***Recommendation***

Plan language and illustrations will be amended to indicate the full and detailed scope of the pedestrian environment that will be created in the proposed rights-of-way and to reflect revised Road Code standards.

The text should reflect the desirability of non-rush hour on street parking on the block of Twinbrook Parkway between Fishers Lane and Parklawn Drive, in support of the area's growing pedestrian character.

The text should also indicate that Wilkins should be a public road, but remain flexible on its final location and the right-of-way width at its intersection with Twinbrook Parkway.

## **MARC Station Location**

### ***Plan Recommendation***

On page 63, the Plan recommends considering “a new MARC station to serve the Twinbrook area.” The station would be located near the southern end of Washington Street, as marked on maps throughout the Plan.

### ***Testimony***

Representing the County Executive, Gary Erenrich testified that this recommendation is “vague and offers little guidance in the need, the relationship to the proposed land use, how the MARC station would relate to the Metrorail, Metrobus, and Ride On transit services, and the MARC system impacts with respect to other existing and proposed stations.”

### ***Discussion***

The Plan carries over the recommendation for this station from the 1992 Plan, reserving an opportunity to expand transit options in the area.

In determining this Plan’s recommendations, staff explored the following options for the MARC Station.

- Continue the 1992 Plan recommendation for a new station at the southern end of Washington Avenue.

This option continues the existing recommendation that allows future consideration of a station when population and demand warrant it. At this location, a new station would require a bicycle and pedestrian crossing of the CSX tracks that could serve the larger community crossing needs.

- Recommend a new MARC station that could be co-located with the Twinbrook Metro Station.

Combining Metrorail and MARC service at one station would allow a convenient commuter transfer, but one that might not be necessary given low ridership of MARC in this area. The route of both lines is similar, and transfers are already available one stop north in Rockville.

While each option has costs and benefits, staff believes that reserving the possibility for a new station will allow future service improvements.

***Recommendation***

Add language to the Plan recommendation that indicates the MARC location noted is an option that should be considered in the larger context of creating interconnected and complete transit systems. Coordinate this recommendation with the White Flint Plan.

**Transportation Analysis**

***Plan Recommendation***

On pages 57 and 58, the Plan provides a summary analysis of existing conditions and the impacts of proposed development compared to development proposed in the 1992 plan.

***Testimony***

Representing the County Executive, Gary Erenrich testified that the full transportation analysis should be included in the Plan or its appendix to allow a complete evaluation of the recommendations.

***Discussion***

The transportation analysis presented to the Planning Board on September 10, 2007 is attached to this staff report.

***Recommendation***

Include the transportation analysis in an appendix to the Plan.

**Pedestrian Path along the CSX Tracks**

***Plan Recommendation***

On page 59, and on a map on page 60, the plan recommends a pedestrian route beneath Twinbrook Parkway that would connect through Area 1 to the Metro station. The Plan identifies two potential routes, one along Frederick Avenue and one along Arundel Avenue.

***Testimony***

Jennifer Thompson, owner of the site and business, Cheerio Printing at 5725 Frederick Avenue testified in writing to her concern that the Plan's recommendation for a path here would negatively impact her business operations, deter potential purchasers, constitute a taking, and leave her liable for pedestrian safety.

***Discussion***

The path recommended is part of an effort to thread pedestrian connections throughout the plan area, making the entire area Metro accessible. It is also the route of a currently used, but unsafe desire line path, up the embankment and across the roadway at a point that is not marked for pedestrian crossing. At the same time, the proposed path could impact the industrial operations of businesses along Frederick Avenue, as pointed out by Ms. Thompson. Another Plan goal is to maintain a functioning industrial area, and staff recommends the following changes to meet both goals.

### ***Recommendation***

- Remove the asterisk between Frederick and Arundel Avenues from the map on page 14. The historic cemetery is not a public space and there is no intention of creating a park in that area.
- Maintain the two options for a pedestrian route in the text on page 59, but add text clarifying that the path on the east side of Twinbrook Parkway will not be pursued until the properties defined in the Plan as Area 1 on the west side of Twinbrook Parkway undergo redevelopment, and that any proposed route must not impinge on the function of this site for existing industrial uses.
- Add the alternative route along Arundel Avenue to relevant maps.
- Add language to the Plan that recommends a land swap or easement with Site 12 to the north of the Cheerio Printing property to provide room for a path and for the printing company operations.
- Add language to the Plan that clarifies public responsibility for maintaining the path and the entire length of Frederick Avenue.

## **PUBLIC FACILITIES**

### ***Plan Recommendations***

The Plan Goals on page 12 commit to encouraging high quality design features and an upgraded public environment that incorporates urban scale parks, streetscaping, public open spaces, and connections between these features.

The public facilities recommendations on pages 75-77 include public and private open spaces, parks, and connections. The Plan also supports the construction of the CIP planned recreation center in the Rock Spring area and addresses the potential need for added emergency services.

### ***Testimony***

Richard Gottfried, the Outreach Chair of the Twinbrook Citizens Association expressed concern that the Plan does not provide sufficient public facilities, including usable green space, active recreation facilities, a new recreation center, an adequate library, and a commitment to improved fire and rescue services.

### ***Discussion***

The Plan does not recommend a new recreation center, as the existing Twinbrook Recreation Center is nearby. In considering the Plan recommendations, the County Executive did not suggest the need for an expanded Twinbrook Library, though library service may be a consideration in the White Flint Sector Plan.

### ***Recommendation***

Staff worked with County agencies and Parks staff to determine the need and character of public facilities in this proposed urban style neighborhood and believes that the Plan's recommendations for parks, open space, and emergency services are sufficient.

The Plan recommends a network of urban scaled public and private recreation facilities that connect to regional facilities including the Rock Creek Stream Valley Park and its recreational facilities. The Plan also recommends a component of private recreational facilities that can serve new residents and employees.

Text should be amended to specifically encourage support for new recreational resources. The following could be added to the recommendations for the Community Recreation Centers (page 76):

- Ensure that new development provides exercise and recreation facilities for employees and area residents.
- Continue coordination with the City of Rockville Recreation Department regarding future needs for the Twinbrook Recreation Center when new development is proposed.

## **ENVIRONMENT**

### **Air Quality**

#### ***Plan Recommendation***

On page 52, the Plan identifies Montgomery County as an area that does not meet minimum air quality standards and notes that the EPA “recently downgraded the County’s air quality from serious to severe air pollution, due in large part to heavy automobile use.” The Plan also states that the EPA has also issued six air emissions permits in the Twinbrook Plan area, which allow monitoring and mitigation of local air pollution sources.

#### ***Testimony***

Representing the County Executive, Gary Erenrich testified that the Plan’s discussion of air quality was misleading and that the County is meeting minimum air quality standards.

#### ***Discussion***

Air quality is a regional issue and the Twinbrook Plan recommendations will contribute generally to improving air quality by relocating housing from the Agricultural Reserve through TDRs, thereby shortening auto trips. Maintaining a component of industrial services will also contribute to shorter auto trips. Through redevelopment, more land area in Twinbrook will become pervious and add landscaping that can contribute to moderating the microclimate.

The Plan’s language discussing air quality was accurate when written, but should be updated with information from the May 23, 2007 *State Implementation Plan (SIP) to Improve Air Quality in the Washington DC-MD-VA Region*.

Although Montgomery County, along with the rest of the Washington Metropolitan region, was designated a severe non-attainment area for one-hour ozone levels in 2003, compliance was achieved in November 2005. In 2004, new eight-hour ozone standards replaced the one-hour standard. The new standards are designed to protect public health for longer exposure periods (eight hours instead of one hour), but at a lower threshold. The Washington Metropolitan region was identified by the EPA as a moderate non-attainment area for eight-hour ozone levels in 2005. Since then, the Washington Metropolitan Area Water Quality Committee (WMWAQC) has been working through the Washington Metropolitan Council of Governments (WMCOG) to develop a SIP to meet federal requirements for reducing ground-level ozone by 2009.

The May 2007 SIP estimates that control measures in the Washington region can achieve a 15 percent emissions reduction by 2008 and attainment by 2009. According to the plan, between the base year 2002 and the attainment year 2009, volatile organic compound emissions will decrease by 22.2 percent and emissions of nitrogen oxide will decrease by 39.4 percent. The EPA does not consider this plan complete, but MWCOG anticipates that the EPA will approve it shortly.

### ***Recommendation***

Revise Plan language as follows:

Precursors of ozone and fine particles are declining in the Washington Metropolitan area and will probably continue to do so until 2030. This decline comes from a combination of better emission controls on new automobiles and 2004 federal regulations placed on power plants in the mid-west. The EPA is reviewing the State Implementation Plan to bring this region into compliance with eight-hour ozone air quality standards, and WMCOG is currently working on a SIP to meet annual and daily particulate matter standards.

Although the region has improved air quality with respect to ozone, carbon dioxide emissions are still of great concern. WMCOG believes that unless action is taken, carbon dioxide emissions from added population will increase 48 percent by 2030.

### **Green Building**

#### ***Plan Recommendation***

In the Plan, page 35 outlines a green building objective to "Encourage urban design improvements that generate benefits for the natural environment." Also, on pages 54 and 55, the Plan outlines the environmental recommendations. The Plan encourages "on-site building and site design solutions to hold and filter stormwater" and "building and site features such as green roofs, reflective pavement, water features, and pervious surfaces that can modulate heat island effects." The Plan "encourages redevelopment projects to incorporate site design features that promote energy efficiency.

#### ***Testimony***

Representing the Twinbrook Citizens Association, Christina Ginsberg testified that the buildings in the Twinbrook planning area should be built to LEED standards.

#### ***Discussion***

The Montgomery County Council passed a Green Building Law in November 2006 requiring all commercial and multifamily residential buildings over 10,000 square feet to meet LEED standards. The law will take effect when specific regulations are passed or in September 2008, whichever comes first. The County Council is expected to act on the regulations at their December 4 meeting.

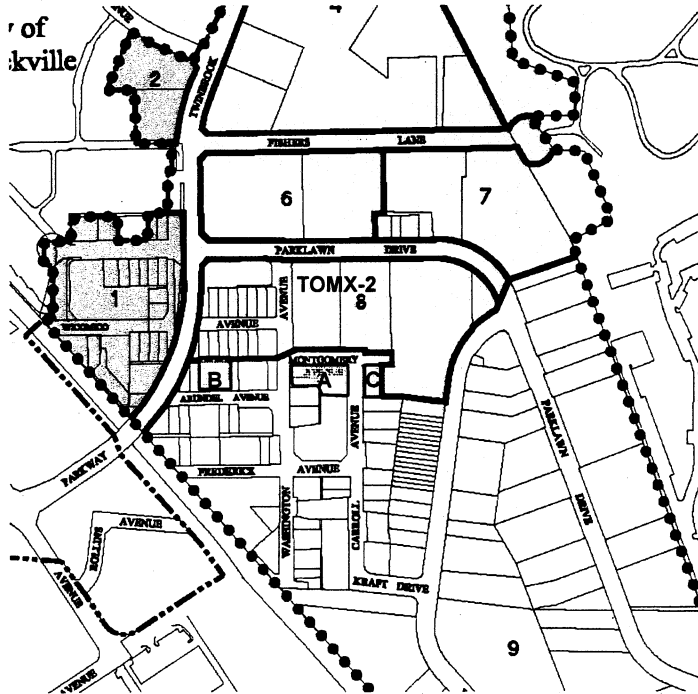
The language on pages 54 and 55 is intended to guide staff during site plan reviews and highlight the most environmentally beneficial actions that developers can take to accrue the required LEED points. The Plan does not specifically reference LEED as there are many different ways to incorporate green design without achieving LEED certification. Since Twinbrook is 80 percent impervious surface, stormwater management and reducing heat island effect will be important as redevelopment occurs.



***Recommendation***

Maintain the Plan's language that directs land redevelopment to pursue green design approaches and meet the standards of the Green Building law and encourage the use of LEED standards.

## Proposed Zoning Line



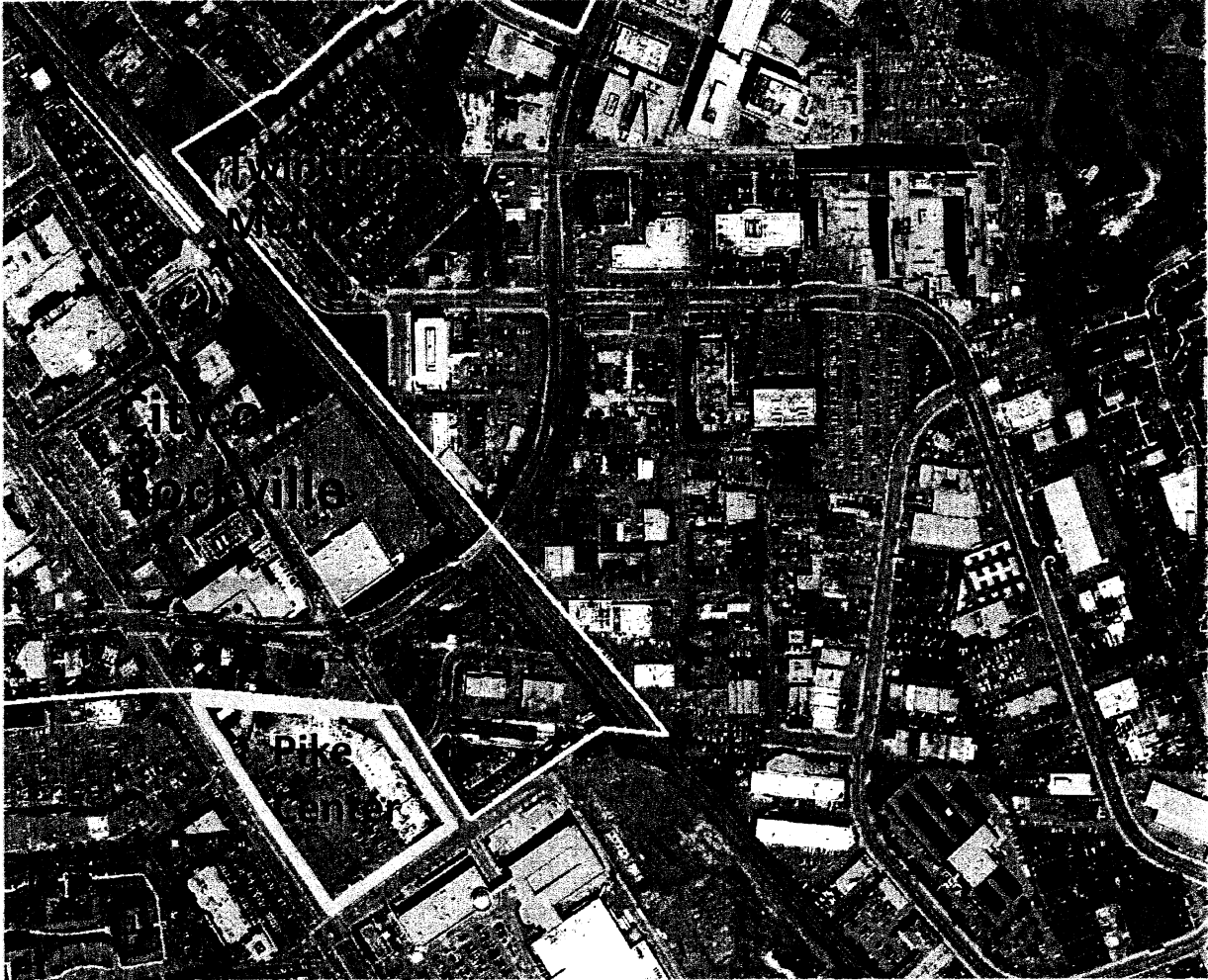
**Parcel A: JBG**  
24,000 sf  
I-4 to TOMX-2

**Parcel B: Taiwanese Church**  
14,400 sf  
I-4 to TOMX-2\*

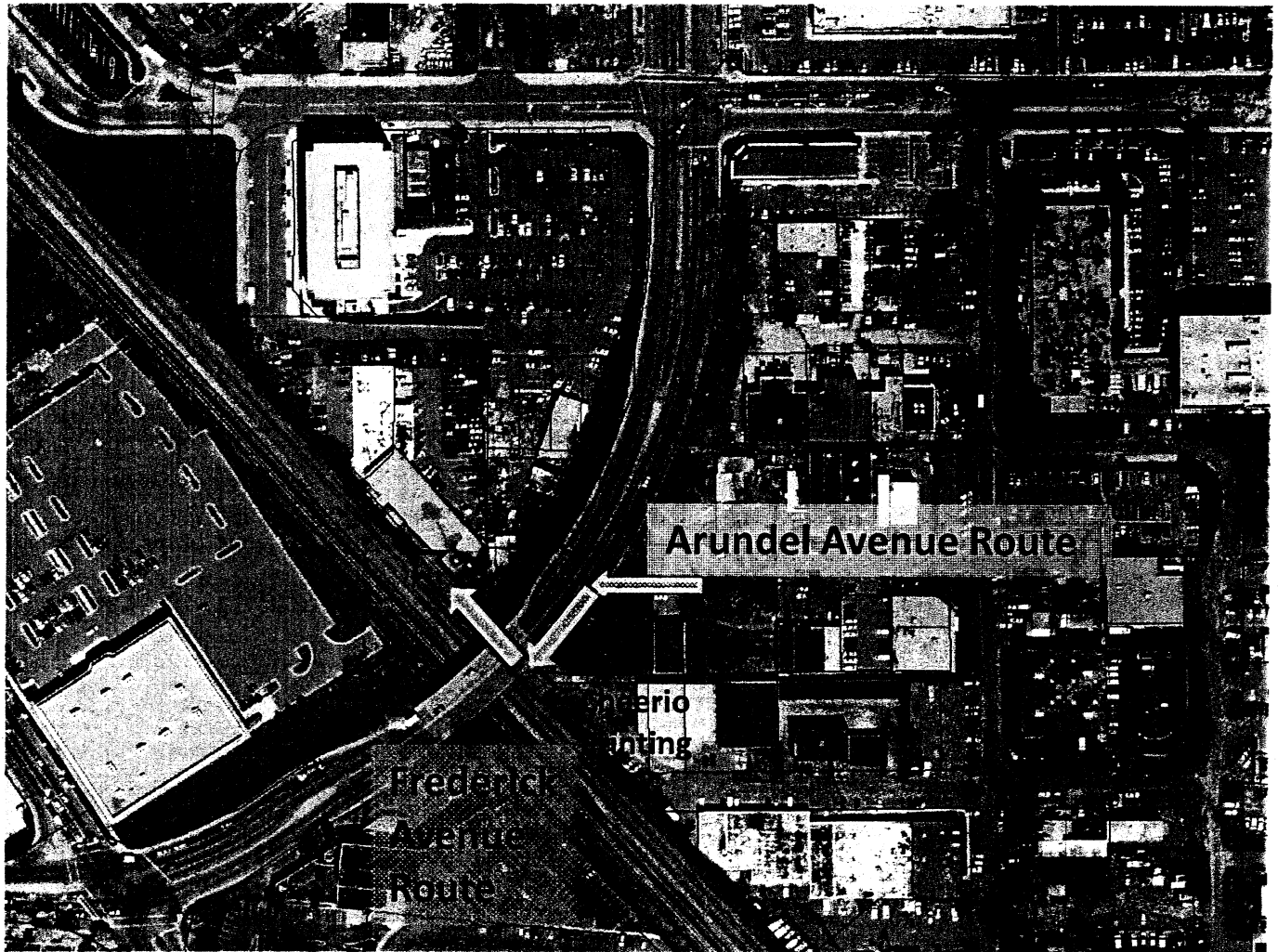
**Parcel C: Puglisi**  
9,600 sf  
retain I-4

\* Parcel B can develop at .5 FAR standard method with TOMX-2 zoning. Under the current I-4 Zoning, the property can develop at 1.0 FAR.

# Pike Center on MD-355



# Twinbrook Metro Pedestrian Routes



**Twinbrook Sector Plan Testimony (as of Nov 27, 2007)**  
**Speaker comments from the Planning Board Public Hearing on 11/15/07**  
**and incoming letters**

	<b>Name</b>	<b>Representing</b>	<b>Comments</b>	<b>Worksession Topic</b>
1	Gary Erenrich	County Executive	<ol style="list-style-type: none"> <li>1) Transportation analysis should be included in the Plan text and/or appendix to allow evaluation of recommendations</li> <li>2) The recommendation for a new MARC station is too vague with no justification for need and system impacts, need to hear from MARC.</li> <li>3) Oppose an at-grade crossing of the CSX tracks for peds and bikes; can support a bridge.</li> <li>4) Discussion of air quality is misleading. County is meeting minimum air quality standards.</li> <li>5) Inconsistencies in the number of TDRs throughout the Plan.</li> </ol> <p>(Also submitted page notes for copyediting and clarity)</p>	Transportation Environment Land Use/Zoning
2	Greg Trimmer for Rod Lawrence	The JBG Companies	<ol style="list-style-type: none"> <li>1) Relocate the TOMX zoning line to include the JBG-owned lots just south of Montgomery Avenue to allow holistic redevelopment.</li> <li>2) Building heights along TBP should not be predetermined in the Plan, but established at site plan. No sfh to buffer and the width of TBP can handle the height.</li> <li>3) Oppose increasing the TBP r.o.w. from 100' to 120'. Instead, should encourage safe ped crossings and reduced speeds to create a single area.</li> <li>4) Establish a streamlined and simplified parking waiver process to encourage transit focus and reduce parking spaces.</li> <li>5) Consider the Pike Center (on 355, south of Rollins) as part of this plan area, to allow its redevelopment as a mixed use center.</li> </ol> <p>GL: Q. How do you feel about a parking district? Near Metro best location AB: Q. How to expedite waivers? A. Nothing specific, just more certain process.</p>	Land Use Transportation

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			JR: Q. Does TOMX go to project plan then to prelim plan? JR: Q. Building height? 12711 TBP is the only property JBG is concerned with.	
3	Cal Pierce	Elsevier Company, Environmental Task Force	<ol style="list-style-type: none"> <li>1) Support alternative forms of transportation and ped access across TBP</li> <li>2) As a bike commuter, will use the future overpass with Veirs Mill</li> <li>3) Support hiker/biker trail to connect area to eastern residential areas and Rock Creek Park.</li> <li>4) Support opportunities for retail and restaurants</li> <li>5) Support housing options</li> </ol>	Transportation
4	Tony Puglisi	landowner	<ol style="list-style-type: none"> <li>1) Supports I-4 zoning for their property corner, currently an empty lot, at the corner of Montgomery Avenue and Carroll Avenue (pg. 21, area 9).</li> </ol> <p>AB: Q. Why keep a vacant prop I-4? A. I-4 is less restrictive. Small property owners have fewer options in TOMX. RH: Need to look at ways in which industrial zones can be flexible, maybe floating zone JR: More convenient to be in one zone.</p>	Land Use/Zoning
5	Robert Dalrymple, Linowes and Blocher,	Somerset, Parklawn Building	<p>Supports the flexibility of the TOMX Zone</p> <ol style="list-style-type: none"> <li>1) Clarify that density caps for residential use do not include density bonuses but that those units have been figured in to schools and transportation analysis.</li> <li>2) Oppose 70' r.o.w. for Wilkins Avenue extended, given security and environmental impacts. Plan language should be general.</li> <li>3) Technology Employment area should be clarified (map, pg. 19), includes residential uses.</li> </ol> <p>JR: Need more clarity in the maps, the draft seems to lean towards lab, office... staff should add language for housing. AB: Q. When does fed lease expire? 2010 GL: Q. Parking district? A. Depends on tenant.</p>	Land Use/Zoning

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6	Neng-Hsiang Wang	Taiwanese Presbyterian Church and Bethesda Presbyterian Church property at 5715 Arundel Avenue	<p>1) Property should be rezoned TOMX. Property is in ¼ mile radius of the Metro station, meets growth policy for metro station development. Site was leased to a construction equipment company and is currently unoccupied.</p> <p>JR: Q: Located on the north side of Arundel?        JR: Why did staff not draw TOMX zoning along Washington Ave?        Staff response: Grade change over TBP, value of light industrial land, focus redevelopment along TBP, square footage not enough for TOMX        GL: Consider zoning transition area, giving property owners flexibility        JR: Q. Are we preserving I-4? Q. Are the owners finding tenants?        Staff: Tonight’s testimony is from vacant sites, no buildings. Vacancy rates are otherwise very low.        RH: Don’t want to use old zones that can’t deal with new uses. Need to be ped-friendly and profitable</p>	
7	Christina Ginsberg	President, Twinbrook Citizens Association	<p>In response to JBG, a 5-story building already exists on their property; 10 stories would be out of character.</p> <ol style="list-style-type: none"> <li>1) Should not choke off the Metro system with too many parking waivers. Need to consider existing density and the system’s design to function with parking.</li> <li>2) Pedestrian picture on p.46 has no relationship to the text, which describes work environment.</li> <li>3) Agree with Erenrich that there is no value added with another MARC station. Would like to see traffic studies for that recommendation.</li> <li>4) Concerned about impact on existing schools.</li> <li>5) Housing should create community, not just luxury apartments</li> <li>6) Buildings should be built to LEED standards</li> <li>7) TOMX 20% open space should not count sidewalks.</li> <li>8) Labs should not be built in mixed-use</li> </ol>	

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			<p>buildings</p> <p>9) Pike Plaza is in the plan; it is in the Rockville Urban Growth area</p> <p>10) Don't count the Higgins Cemetery as a recreation site or towards green space percentages.</p> <p>AB: Described King Farm development.</p>	
8	Pamela Lindstrom	Sierra Club	<p>1) In the I-270 Corridor, the Plan should be considered a Smart Growth area and a sustainable place to live with jobs/housing in the right proportion. Plan proposed mix is not an efficient use of land.</p> <p>2) Need to account for jobs and housing in the I-270 corridor. The WF plan gives better data than the Twinbrook Plan. Something doesn't add up. Need to achieve more housing relative to the jobs.</p> <p>3) Too much land is proposed to remain I-4. No need to preserve 60 of the 100 acres of I-4 land. Instead allow industrial uses in the TOMX zone.</p> <p>4) Transportation goals are good but improbable. Should include a staging element like the Shady Grove Plan that requires amenities before development.</p> <p>5) Should require TDRs for commercial redevelopment.</p> <p>RH: Q. How do you reconcile greater density without transit facilities? Housing may be beneficial to the analysis. A: Plea for a staging plan not for lower density.</p> <p>GL: Q. What is the right amount of housing? A: Pam said that staff is using an arbitrary housing number. Should be about 2,800 units and fewer jobs.</p> <p>JR: Questioned the methodology in the jobs analysis (TPR?)</p>	
9	Richard Gottfried	Twinbrook Citizens Association, Outreach Chair	<p>1) Keep Twinbrook a neighborhood</p> <p>2) TB already has the JBG Metro project, don't plan any more mixed use projects.</p> <p>3) If mixed use projects are proposed, please provide more uses than shopping.</p>	Land Use Transportation Public Facilities



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			<ul style="list-style-type: none"> <li>4) Incorporate usable green space, build active recreation facilities and a new recreation center</li> <li>5) Increase the size of the Twinbrook library</li> <li>6) Build a road/ped/bikeway from Syms over tracks to the VOB body shop</li> <li>7) Do road studies for Halpine and Ardennes</li> <li>8) Build bus shelters, improve crosswalks</li> <li>9) Commit to improved fire and rescue services</li> <li>10) Have developers pay upfront, don't subsidize redevelopment</li> </ul>	
Jennifer Thompson	Cheerio Printing		The Plan proposal for a pedestrian route along the CSX tracks and her property would negatively impact her operations and property value. Concerned with liability and compensation.	Transportation
Stephanie Martins	Director, Land Use Planning and Analysis, Maryland Department of Planning		From letter: "...an excellent guide to achieving a well-planned mixed-use urban environment..." Included page referenced edits for substance and clarity	Land Use/Zoning
David Hauck	Chair, Sierra Club Montgomery County		From letter: "...very concerned that the draft plan does not fulfill" goals of intense infill and redevelopment that uses scarce access to Metro and balancing jobs and housing to limit auto commutes.	Land Use/Zoning
	City of Rockville			
Julia Koster, Director, Planning, Research, and Policy Division	National Capital Planning Commission		<p>"Strongly support the co-location of housing accessible to transit, and housing in close proximity to federal worksites..."</p> <p>The Plan accurately represents HHS' options for the Parklawn Building and encourages continued coordination if HHS stays to meet federal security needs and creates a transit accessible workplace.</p>	
	Halpine View Apts., Grady Management			
RH: Record will be kept open until December 7,				

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	2007 for all testimony			
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## 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.

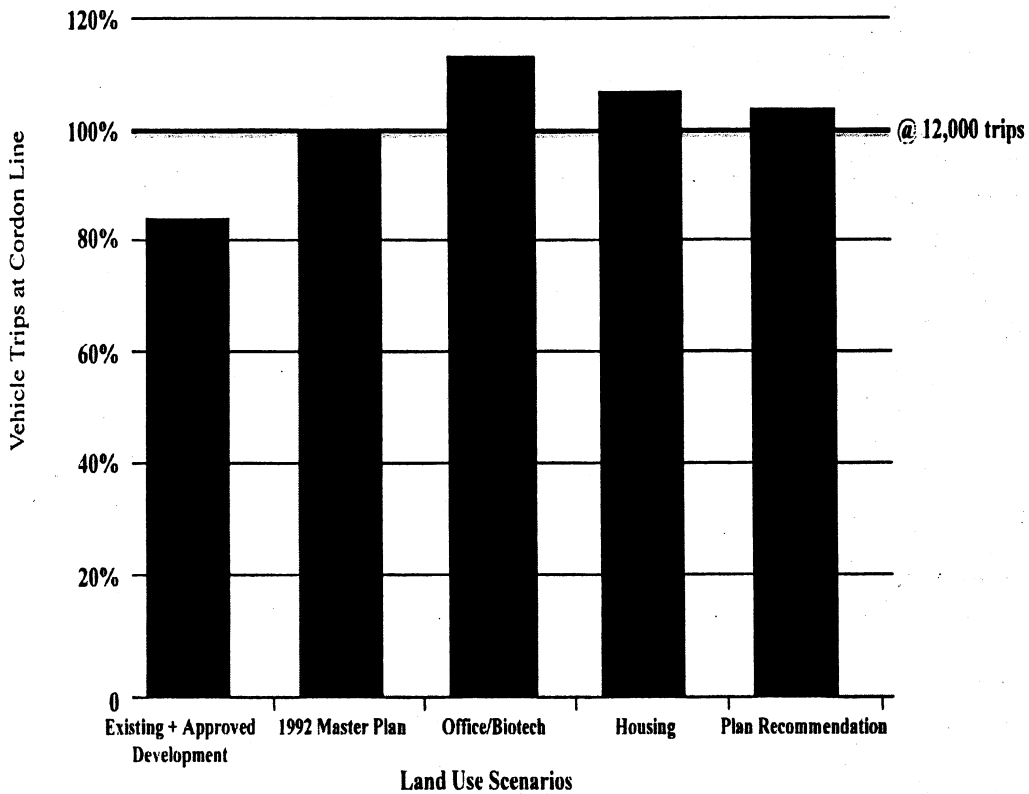
- The intersection analysis provided four summary findings, illustrated on the Intersection Volume to Capacity Ratios map (Attachment 3).
  - In general, introducing housing to the Sector Plan area helps balance the flow of trips into and out of the area. When the area has only jobs, morning trips flow 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).

Second, from a local intersection perspective, the recommended land uses would require modest change to the Montrose Parkway and Parklawn Drive interchange currently being developed in the DPWT facility planning process. A substantial increase in Twinbrook area trip generation would likely result in increased local property impacts to accommodate interchange traffic at current policy area congestion standards.

In summary, the Staff Draft recommendations would create a mix of residential and employment uses near a Metro station and would generate traffic within a range manageable by existing infrastructure, TDM goals, and new infrastructure. The housing recommended in the Staff Draft Sector Plan helps moderate traffic generation by balancing traffic flow and reducing vehicle trips within an active mixed-use environment.

# ATTACHMENT 3

## Intersection Volume to Capacity Ratios

