

Appendix

Glenmont Sector Plan

December 2013

Appendix B: Transportation Analysis

For more information, call the Area 2 Division at
(301) 495-4500



Montgomery County Planning Department

M-NCPPC

MontgomeryPlanning.org

**GLENMONT SECTOR PLAN
TRANSPORTATION APPENDIX
November 8, 2013**

Contents

Purpose

Transportation Plan Recommendations

- Transit System

- Street Network

- Bicycle and Pedestrian Systems

Transportation Land Use Balance

- Measures of Effectiveness

- Policy Area Mobility Review (PAMR)

- Transportation Policy Area Review (TPAR)

- Local Area Transportation Review (LATR)

- Cordon Line Analysis

- Travel Demand Forecasting Process and Assumptions

- Local Area Modeling Process and Assumptions

PURPOSE

The Plan's vision and the proposed level of future growth are supported by Metrorail, future Bus Rapid Transit (BRT), local bus service, and a network of major and local streets that connect Glenmont neighborhoods to services and amenities within Glenmont and to the region at large. The overall transportation approach consists of the following key elements:

- High quality transit service;
- Expanded network of walkable streets; and
- Improved bicycle and pedestrian connections throughout the Glenmont area.

TRANSIT SYSTEM

Metrorail

The number of passengers boarding trains at Glenmont has increase about 3.5 percent per year since the station opened in 1998. In 2011, approximately 5,850 riders boarded trains at Glenmont on an average weekday, a 42 percent increase over the 4,096 average boardings in 1999, the first full year of operation for the Glenmont Metro Station.

Compared to other stations, however, Glenmont's ridership is not high. Glenmont serves fewer boarders than all but one of Metro's end of line stations in the region. Within the County, Glenmont's average weekday boardings in 2011 ranked 7th out of 12. The new parking garage on the west side of Georgia Avenue is expected to increase ridership.

WMATA Metro Station Access Study

The Washington Metropolitan Area Transit Authority (WMATA) has investigated additional below grade station access points. This Plan does not recommend any specific additional station access points. However, as Glenmont redevelops additional access points may prove beneficial for pedestrian access and safety.

Since Glenmont is an end of the line station, it has a high percentage of riders who drive to the Metrorail station. According to the 2007 Metrorail Passenger Survey by WMATA, approximately 50 percent of passengers drove to the station and parked in the garage. An additional 18 percent of the total weekday riders used the Kiss-&-Ride area. About 20 percent arrived via Metro or Ride-On buses and another 13 percent arrived by walking or biking to the station.

There are two station entrances – one on the east side and another on the west side of Georgia Avenue. A recent WMATA field review of the utilization of each entrance indicates that during the peak periods, 70 percent of those walking to the station used the entrance on the east side of Georgia Avenue.

Metrobus

As stated earlier, about 20 percent of Metro passengers arrive via bus (either Metrobus or Ride-On). The Glenmont Metro Station has a significant amount of bus service, with a total of 11 Metrobus and Ride-On routes serving the station. The Glenmont Metro Station has a bus loop on the east side of Georgia Avenue that accommodates nine (9) Montgomery County Ride-on buses and two (2) WMATA Metro buses (Table 1). There are two (2) additional bus drop-off locations located on Georgia Avenue adjacent to the bus loop.

Route	Peak Period Frequency (Min.)	Peak Period Service Only	Daily Ridership (2011)	Major Roadways Served
Ride On Routes				
Ride On 10	30	No	2,252	Randolph Road/Columbia Pike/New Hampshire Ave
Ride On 26	15-20	No	3,181	Layhill Rd/Georgetown Pike/Aspen Hill Rd.
Ride On 31	30	Yes	116	Georgia Avenue/Randolph Rd./Kemp Mill Rd
Ride On 33	25	Yes	341	Georgia Ave/Kensington Pkwy
Ride On 39	30	Yes	223	Layhill Rd/Bonifant/Briggs Chaney
Ride On 41	30	No	677	Georgia Ave/Connecticut Avenue
Ride On 49	15-30	No	2,210	Layhill Rd/Norbeck Rd/Bel Pre Rd
Ride On 51	20-25	Yes	267	Georgia Ave/Layhill Rd/Norbeck Rd
Ride On 53	30	Yes	292	Georgia Ave/Redland Rd/Bowie Mill Rd
Metrobus Routes				
Y5, Y7, Y8, Y9	15-20	No	6,819	Georgia Avenue
C8	20-30	No	2,200	Randolph Rd/New Hampshire Rd

In a typical weekday, on average, 34 buses depart the Glenmont Metro station during the peak hours, and approximately 285 Metrobus passengers and 573 Ride-On passengers transfer to Metro. 439 passengers leave the station and transfer to Metrobuses and another 871 transfer to Ride-On buses. Based on the ridership of both Metrobuses and Ride-On buses, there is adequate capacity for additional ridership resulting from redevelopment proposed in the draft Sector Plan.

WMATA's Priority Corridor Network (PCN) program looks at selected high ridership bus corridors throughout the Washington metropolitan region for improvements that can be implemented quickly and efficiently. The overall objective is to increase average bus speeds, service reliability, capacity, ridership, and access to the system. Georgia Avenue within the Glenmont Sector Plan area is included in the PCN program.

WMATA's *Final Recommendations – Y5, 7, 8, 9 Metrobus – Georgia Avenue MD Lines Study* contain the following recommendations, which may have an impact on the Sector Plan area:

- Starting in the Fall of 2012, the Y bus line will have additional time allotted between the beginning and the end of the route.
- Estimated to be implemented in the short-term (1-2 years), an “Express Bus Service” will operate parallel to the existing Y Bus routes between the ICC Park-and-Ride Lot and the Wheaton Metro Station. This new service would operate only for two hours each during the AM (6:00 a.m. to 8:00 a.m.) and PM (4:30 p.m. to 6:30 p.m.) Peak Periods.
- Bus Stop Consolidation- some bus stops are located within less than a quarter mile of other bus stops, which may necessitate consolidation of bus stops within the sector plan area.

Georgia Avenue Busway Study (April 1999)

The Glenmont Sector Plan area is the southern terminus of the long-planned Georgia Avenue Busway, which extends from Olney to the Glenmont Metro Station. The Planning Department’s Georgia Avenue Busway study provides useful guidance in establishing necessary right-of-way (ROW) for BRT. It recommended a two-way median operation from Olney to the Glenmont Metro Station. The typical section south of Norbeck Road included three general purpose lanes in each direction plus a two-way busway in the median. The recommended minimum ROW is between 150 and 163 feet.

BUS RAPID TRANSIT (BRT)

There are two possible BRT corridors in the Sector Plan area: Georgia Avenue, and Randolph Road. A summary of completed and ongoing BRT studies is listed below:

Maryland Department of Transportation (MDOT)/ Montgomery County Department of Transportation (MCDOT) Georgia Avenue BRT Study (Underway)

MDOT and the MCDOT initiated this joint study in 2011. Its purpose was to study BRT service in the Georgia Avenue corridor from Olney to Wheaton in a greater detail than has previously been done. This Phase II Facility Planning work is expected to eventually lead to the submittal of an application to the Federal Transit Administration (FTA) for capital funding to support the construction of a Georgia Avenue BRT.

Countywide BRT Study (July 2011)

In July 2011, MCDOT completed a feasibility study of a network of BRT corridors that included Georgia Avenue and Randolph Road. The study initially examined a route on Randolph Road from White Flint to Glenmont with an extension east of Glenmont to the Prince George’s County line via Cherry Hill Road. The extended segment was not carried forward to the final set of routes evaluated because of the lower (relative to other areas) population and employment densities east of Glenmont.

The study found that a BRT network was feasible, with estimated weekday ridership between 165,000 to 207,000 riders in 2040. The study assumed that no additional ROW would be needed beyond the existing (not Master Planned) ROW, and that buses would travel in mixed traffic along segments where there was not enough room to provide exclusive lanes.

County Executive's Rapid Transit Task Force (May 2012)

In March of 2011, the Montgomery County Executive appointed a Rapid Transit Task Force to follow up on the Countywide BRT Study. The Task Force developed a Concept Plan that included additional details on the attributes and features of selected BRT corridors (including Georgia Avenue and Randolph Road). At the direction of the Task Force, this concept plan was limited to what could be accomplished within the existing ROW. There was a general acknowledgment that additional ROW would be needed in certain areas.

Countywide Transit Corridors Functional Master Plan (Underway)

Following the County Executive's Task Force's Concept Plan, in September of 2011, the Planning Department initiated an amendment of the Countywide Master Plan of Highways (the Countywide Transit Corridors Functional Master Plan or Transit Corridors Plan) to identify the minimum master plan ROW necessary to implement a countywide BRT network in selected corridors (including Georgia Avenue and Randolph Road). The Planning Board Draft of the Transit Corridors Plan is currently scheduled to be transmittal to the County Council in mid-2013.

Three technical papers, prepared by consultants as part of the Transit Corridors Plan work, provide preliminary recommendations on BRT in the Glenmont Sector Plan area:

- Network and Methodology Report (December 2011)
- BRT Corridor Functional Assessment (Draft - March 29, 2012)
- BRT Typical Sections – Update (Final Draft - April 18, 2012)

These papers provide the following findings that will influence the ultimate ROW and alignment recommendations for both Georgia Avenue and Randolph Road in Glenmont.

Georgia Avenue Corridor

The Georgia Avenue Corridor is classified as a commuter corridor based on the *BRT Corridor Functional Assessment*. A commuter corridor could have a dedicated one-way reversible BRT alignment, which would require a smaller ROW than a two-way BRT alignment, and could operate within a dedicated curb lane or an exclusive median lane in the peak direction only. In general, dedicated lanes are turn-only curb lanes that allow BRT vehicles to use them. Exclusive lanes mean a median busway where the only vehicles using it are the buses.

Key findings are:

- A significant number of the BRT peak period trips within the corridor will start and end in or near the corridor's southern terminus in Wheaton.
- About 42 percent of the land uses in the corridor are residential, with a large concentration of commercial land uses located at the southern terminus of the corridor in Wheaton.
- Sixteen percent of the corridor meets the minimum BRT standard of population density while 12 percent meets the minimum BRT standard for employment density.
- A BRT typical section for a reversible one-way alignment on Georgia Avenue varies from 120 to 141 feet, not including additional ROW needed for stations.

There is generally adequate master plan ROW for a typical BRT section (one-lane reversible) on Georgia Avenue from the northern boundary of the Glenmont Sector Plan to the Glenmont Metro Station. Between the Glenmont and the Wheaton Metro Stations, a dedicated BRT lane would require additional ROW, which would impact the adjoining commercial and residential properties along Georgia Avenue .

Randolph Road Corridor

Randolph Road has also been mentioned in previous BRT studies as a potential east-west BRT corridor extending from the White Flint/Twinbrook area to Glenmont and potentially further east to Prince George's County. ROW recommendations for the Georgia Avenue and Randolph Road BRT Corridors will be determined by several different factors.

Similar to Georgia Avenue, the Randolph Road Corridor, between White Flint and the County line is the east is classified as a commuter corridor based on the *BRT Corridor Functional Assessment*.. Key findings are:

- A significant number of the BRT peak period trips within the corridor will start and end within the White Flint area.
- Almost 40 percent of the land uses in the corridor are residential, and about nine percent are commercial.
- Twenty percent of the corridor meets the minimum BRT standard for population density while 41 percent meets the minimum BRT standard for employment density. The White Flint area contains most of the BRT supportive population and employment densities for this corridor.
- A BRT typical section for a reversible one-way alignment on Randolph Road varies from 120 to 141 feet, not including additional ROW needed for stations.

There is generally adequate master plan ROW for a typical BRT section (one-lane reversible) on Randolph Road within the Glenmont Sector Plan area.

The above referenced technical reports, and prior studies also noted above, form the basis for the preliminary BRT recommendations for the Glenmont Sector Plan. More specifically, the prior work helps identify the individual corridor characteristics and constraints, and also helps confirm a "default" ROW of 120 feet for a dedicated curb lane or an exclusive median lane in a six-lane roadway.

The specific preliminary recommendations for each corridor are presented in Tables 2 and 3 below:

Table 2		Georgia Avenue Busway or BRT Corridor						
Roadway	From	To	MP ROW	Existing ROW	Recommended	Distance (Mi.)	AVG. Speed	Time (Minutes)
Prince Philip Drive	Montgomery General Hospital	Sandy Spring Road	80	80	Mixed Traffic	0.3	10	2
Sandy Spring Drive	Prince Philip Drive	Georgia Avenue	150	140-150	Mixed Traffic	0.6	14	3
Georgia Avenue	Sandy Spring Road	Hines Road	150	110-150	Reversible Median	0.8	24	2
Georgia Avenue	Hines Road	Norbeck Road	150	125-255	Reversible Median	2.4	24	6
Georgia Avenue	Norbeck Road	Hewitt Avenue	150	145-250	Reversible Median	2.4	18	8
Georgia Avenue	Hewitt Avenue	Weller Road	120	115-160	Reversible Median	1	24	3
Georgia Avenue*	Weller Road	Denley Road	135	105-115	Mixed Traffic	0.3	14	1
Georgia Avenue*	Denley Road	Layhill Road	145	100-120	Mixed Traffic	0.4	10	2
Georgia Avenue*	Layhill Road	Glenmont Circle	170	105-110	Mixed Traffic	0.3	10	2
Georgia Avenue	Glenmont Circle	Wheaton Metro	120	100-125	Mixed Traffic	1.3	12	6
Total						9.6	16	35
Mixed Traffic						3		
Reversible Median						6.6		

* Segments located within the Sector Plan boundaries.

The above configuration for the Georgia Avenue corridor (Olney to Wheaton) predicts an estimated average speed of 16 mph – compared to 23 mph in the Countywide BRT Study. The slower average speed is because of BRT having to operate in mixed traffic between the Glenmont Metro Station and the Wheaton Metrorail Station in order to avoid additional ROW impacts on adjacent properties.

Table 3		Randolph Road BRT Corridor						
Roadway	From	To	MP ROW	Existing ROW	Recommended	Distance (Mi.)	AVG. Speed	Time (Minutes)
Randolph Road	Rockville Pike	Rock Creek	100	80-110	Mixed Traffic	1.3	12	7
Randolph Road*	Rock Creek	Judson Road	120	95-110	Reversible Median	2.3	18	8
Randolph Road*	Judson Road	400' W of Glenallan	140	120	Reversible Median	0.4	8	3
Randolph Road*	400' W of Glenallan	Fairland Road	120	110-145	Reversible Median	3.1	22	8
Randolph Road	Fairland Road	Colesvill Road	80	70-80	Mixed Traffic	3.3	16	12
Total						10.4	15	38
Mixed Traffic						4.6		
Reversible Median						5.8		

* Segments located within the Sector Plan boundaries.

The above configuration for the Randolph Road corridor predicts an estimated average speed of 15 mph compared to 14 mph in the Countywide BRT Study.

STREET NETWORK

Glenmont has a significant amount of transportation infrastructure in place and planned (e.g., the new Georgia Avenue/Randolph Road interchange). With the proposed new growth in the Plan, the intersections are expected to operate within the congestion standards for the Glenmont Sector Plan area. Map 1 shows the existing and proposed street network. Table 4 describes the classification and function of each master-planned roadway in the Sector Plan area.

Georgia Avenue / Randolph Road Interchange

The 1997 Sector Plan recommended a grade-separated interchange for Georgia Avenue and Randolph Road to reduce congestion at the intersection, improve the flow of through traffic on both roads, help reduce cut-through traffic, and add development capacity to support mixed-use development. This Plan continues to support the proposed interchange and recommends that adequate vehicular access to the Glenmont Shopping Center from all points be provided to support the future redevelopment of the shopping center.

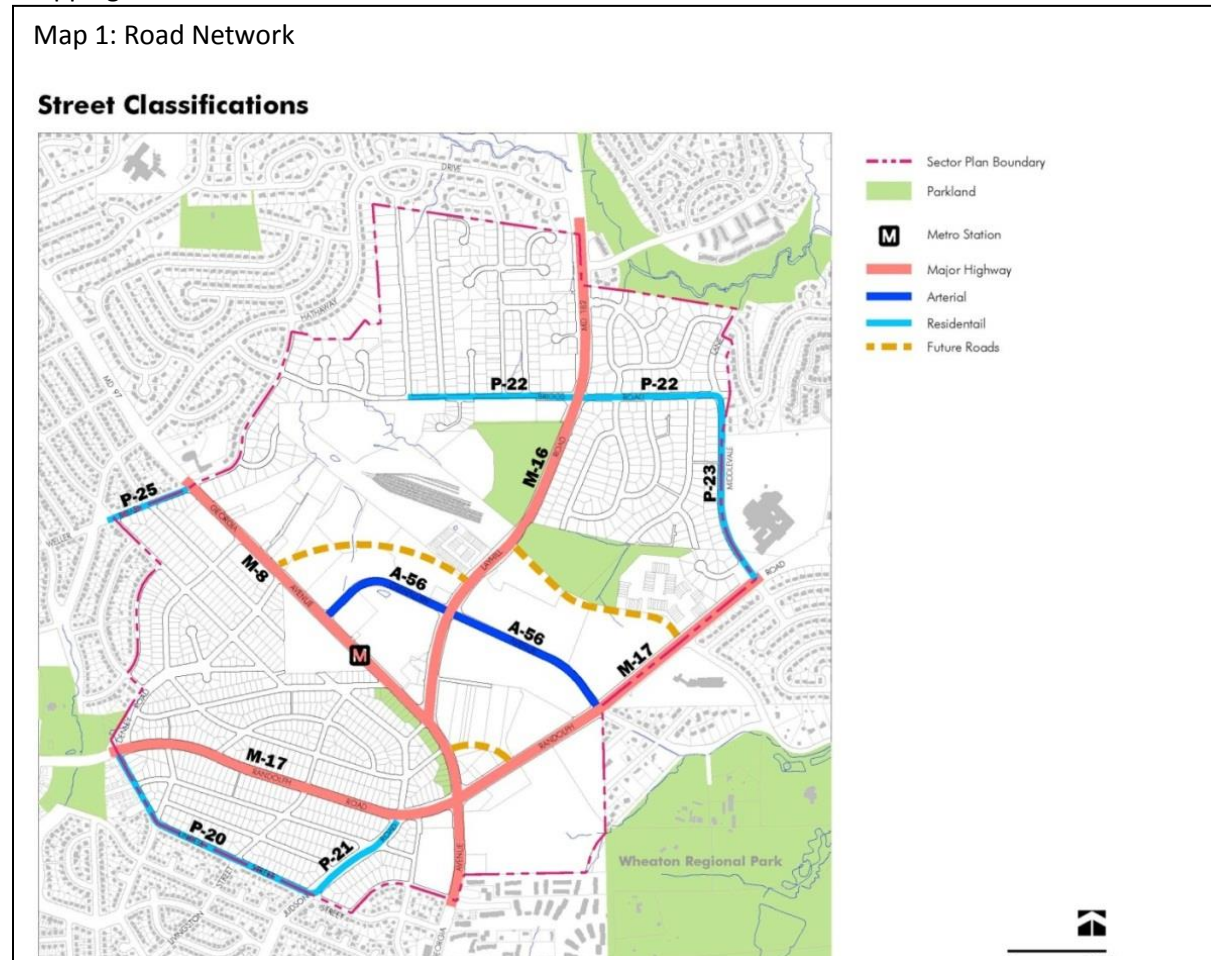


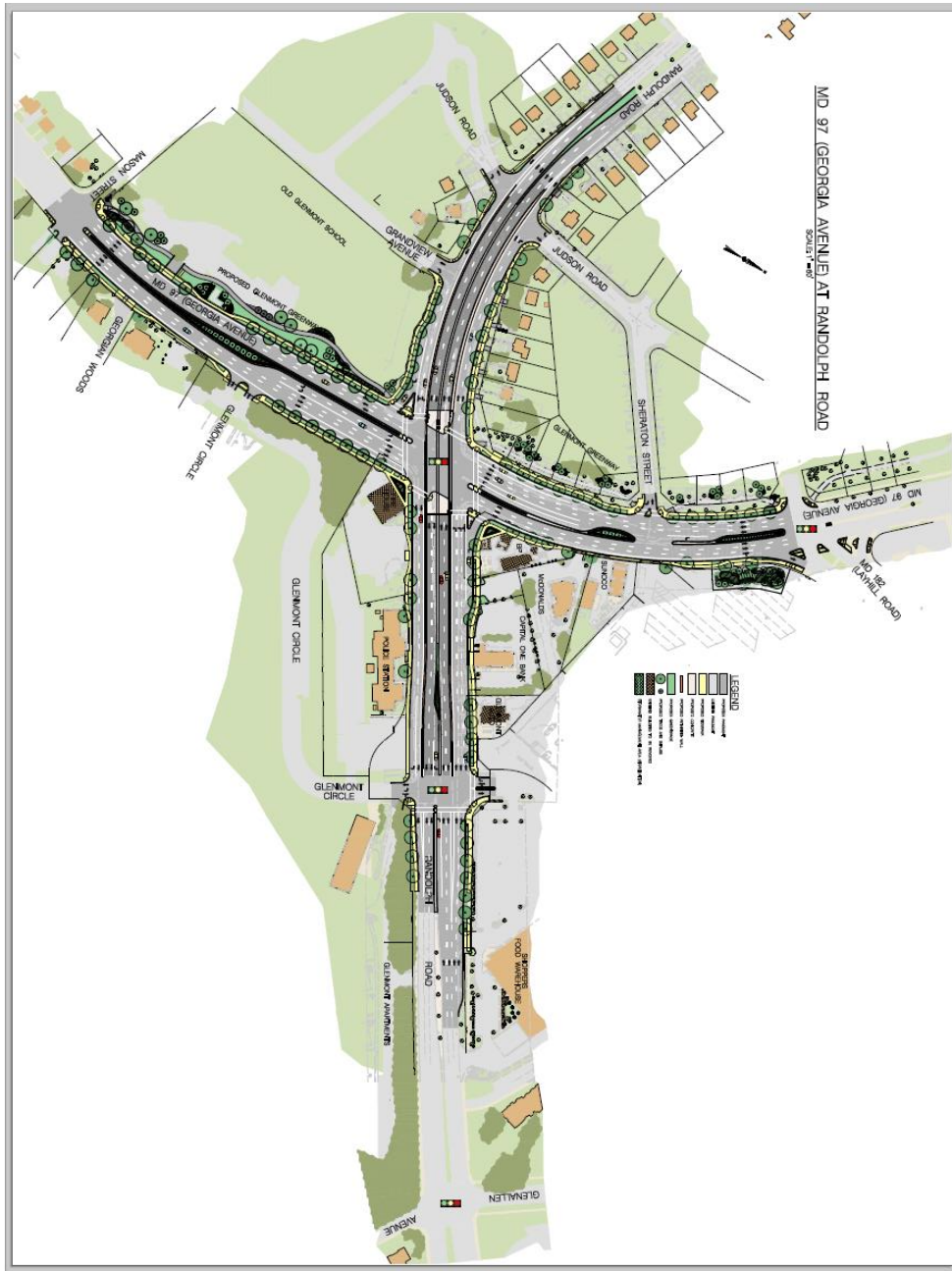
Table 4		Street Classification				
Master Planned Streets	From	To	Master Plan of Highways No.	Minimum ROW ¹	Number of Through Travel Lanes ²	Design Standard ²
Major Highways						
Georgia Avenue (MD 97)	Weller Road	Denley Road	M-8	135	6-Divided	Mod. 2008.02
	Denley Road	Layhill Road	M-8	145	6-Divided	Mod. 2008.02
	Layhill Road	Randolph Road	M-8	170	6-Divided	Mod. 2008.02
	Randolph Road	500' South of Randolph	M-8	170	6-Divided	Mod. 2008.02
	500' South of Randolph	Mason Street	M-8	120	6-Divided	Mod. 2008.02
Layhill Road (MD 182)	Hathaway Drive	Glenallan Avenue	M-16	120	4-Divided	2004.16
	Glenallan Avenue	Georgia Avenue	M-16	140	[6] 4-Divided	Mod. 2008.01
Randolph Road	Lindell Street / Denley Road	Judson Road	M-17	120	6-Divided	Mod. 2008.01
	Judson Road	400' West of Glenallan Avenue	M-17	140	6-Divided	Mod. 2008.01
	400' West of Glenallan Avenue	Middlevale Road	M-17	120	6-Divided	Mod. 2008.01
Arterials					Pavement Width	
Glenallan Avenue	Georgia Avenue	Layhill Road	A-56	90	48 feet	Mod. 2004.12
	Layhill Road	450' North of Randolph Road	A-56	80	48 feet	Mod. 2004.22
	450' North of Randolph Road	Randolph Road	A-56	95	48 feet	Mod. 2004.22
Primary Residential Streets					Pavement Width	
Denley Road	Georgia Avenue	Randolph Road	P-15	70	36 Feet	2002.03
Lindell Street	Randolph Road	Mason Street	P-20	70	36 Feet	2002.03
Judson Road	Randolph Road	Lindell Street	P-21	70	36 Feet	Mod. 2002.03
Briggs Road	Lutes Drive	Layhill Road	P-22	80	36 Feet	Mod. 2002.03
	Layhill Road	Middlevale Lane	P-22	70	36 Feet	Mod. 2002.03
Middlevale Lane	Briggs Road	Randolph Road	P-23	70	36 Feet	Mod. 2002.03
Weller Road	Holdridge Road	Georgia Avenue	P-25	70	36 Feet	Mod. 2002.03
New Internal Roads					Number of Through Travel Lanes²	
New Street (MetroCenter Drive)	Georgia Avenue	Layhill Road	P-26	70	2	2003.12
New Street (Winexburg Manor)	Layhill Road	Randolph Road	P-27	70	2	Mod. 2003.11
New Road (Glenmont Shopping Center)	Layhill Road	Randolph Road	B-1	70	2	2005.02
New Road (Glenmont Shopping Center)	Georgia Avenue	Randolph Road	B-2	70	2	2005.02
Erskin Avenue extended		Glenallan Avenue		70	2	2002.03
Wallace Avenue extended		Glenallan Avenue		70	2	2002.03

¹ Reflects minimum right-of-way, and may not include lanes for turning, parking, acceleration, deceleration, or other purposes. Rights-of-way are generally measured symmetrically from the ROW centerline.

² Reflects the most representative roadway cross-section.

- New streets B-1, B-2, P-26 and P-27 may be constructed as private streets subject to use easements meeting the requirements described in the Plan text.
- The target speed

The interchange



As part of the interchange project, the Maryland State Highway Administration (SHA) prepared several design alternatives for a left-turn from the east bound service road along the south side of Randolph Road into the shopping center. The final seven alternatives included four different variations of a “jug-handle” option, and three other alternatives (see Figure 1 to 7). While this Plan does not specifically endorse the final design and operational details of the selected alternative, one of the jug-handle alternatives (Alternative 1) best supports the goals of this Plan including adequate access into the shopping center from Randolph Road. This Plan defers to the SHA and MCDOT to select the appropriate Alternative for the shopping center access.

Figure 1: Alternative 1

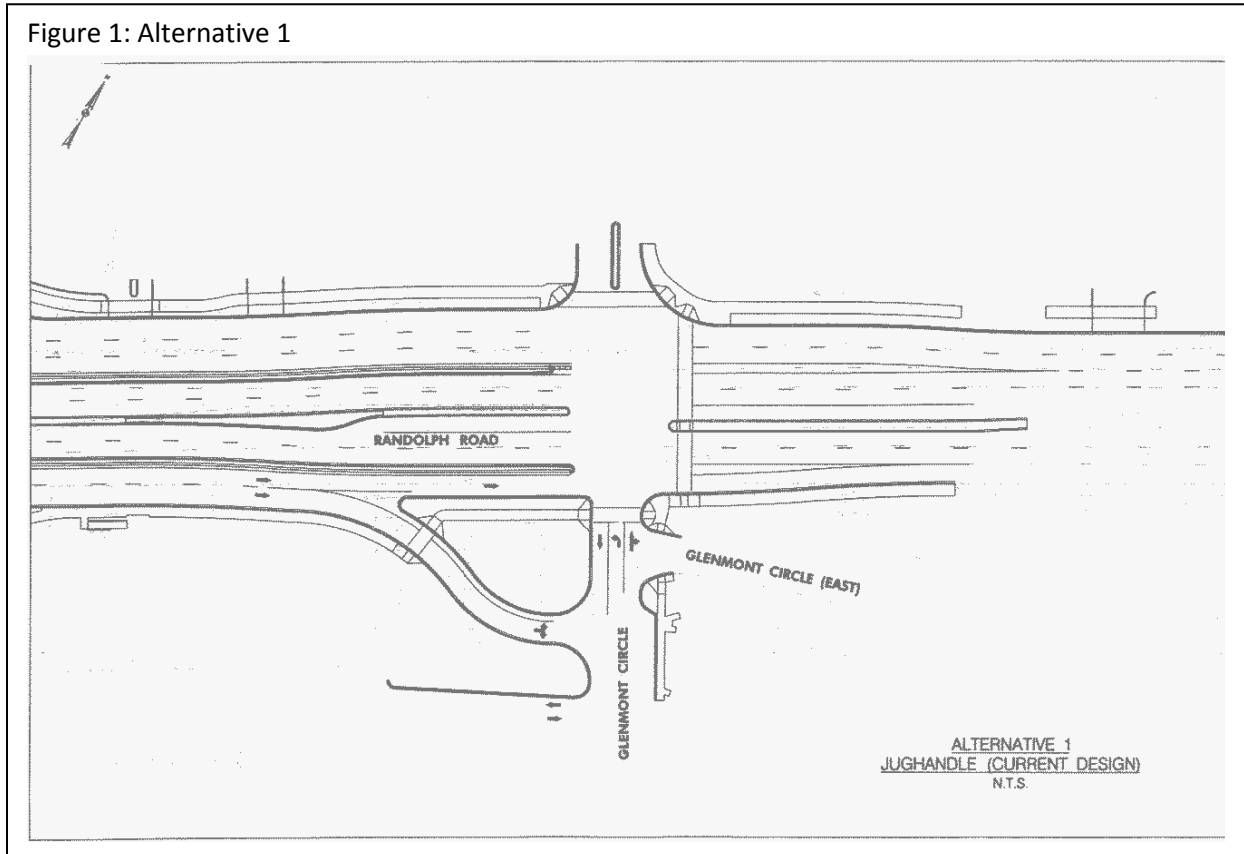


Figure 2: Alternative 2A

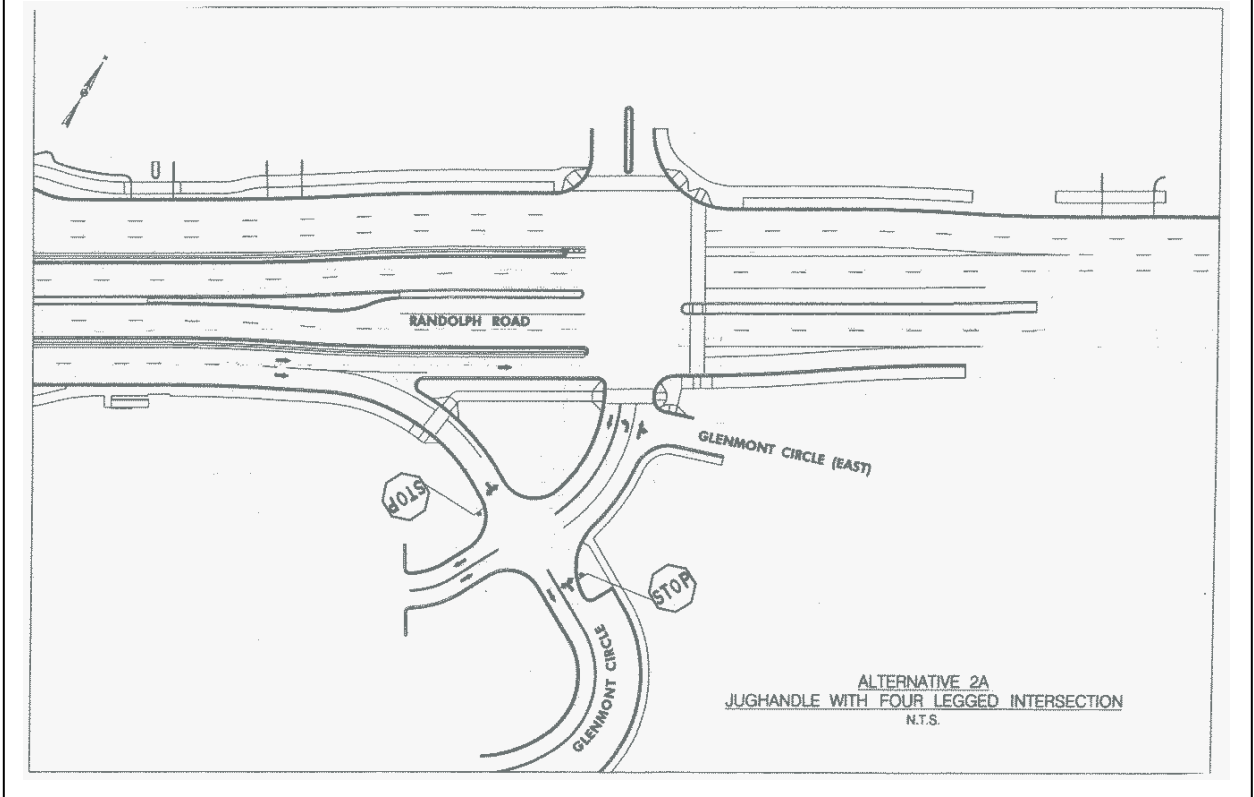


Figure 3: Alternative 2B

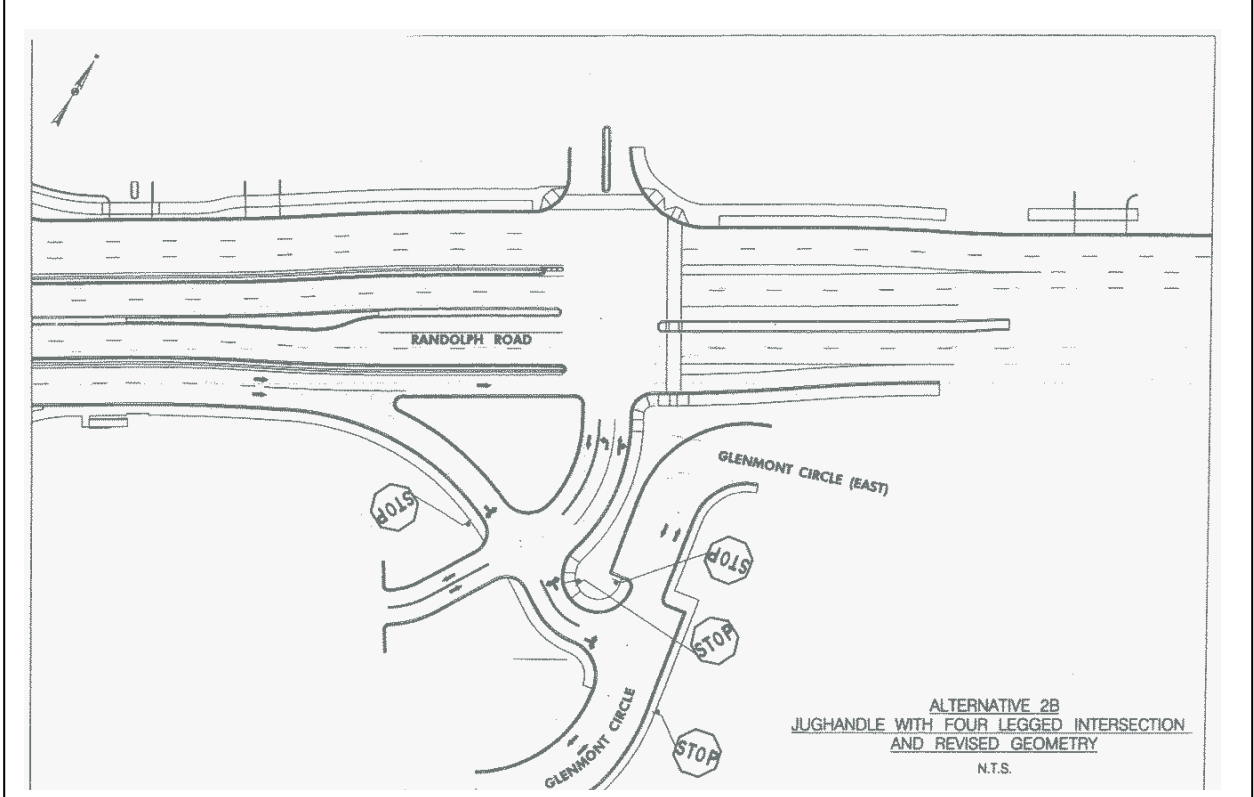


Figure 4: Alternative 3

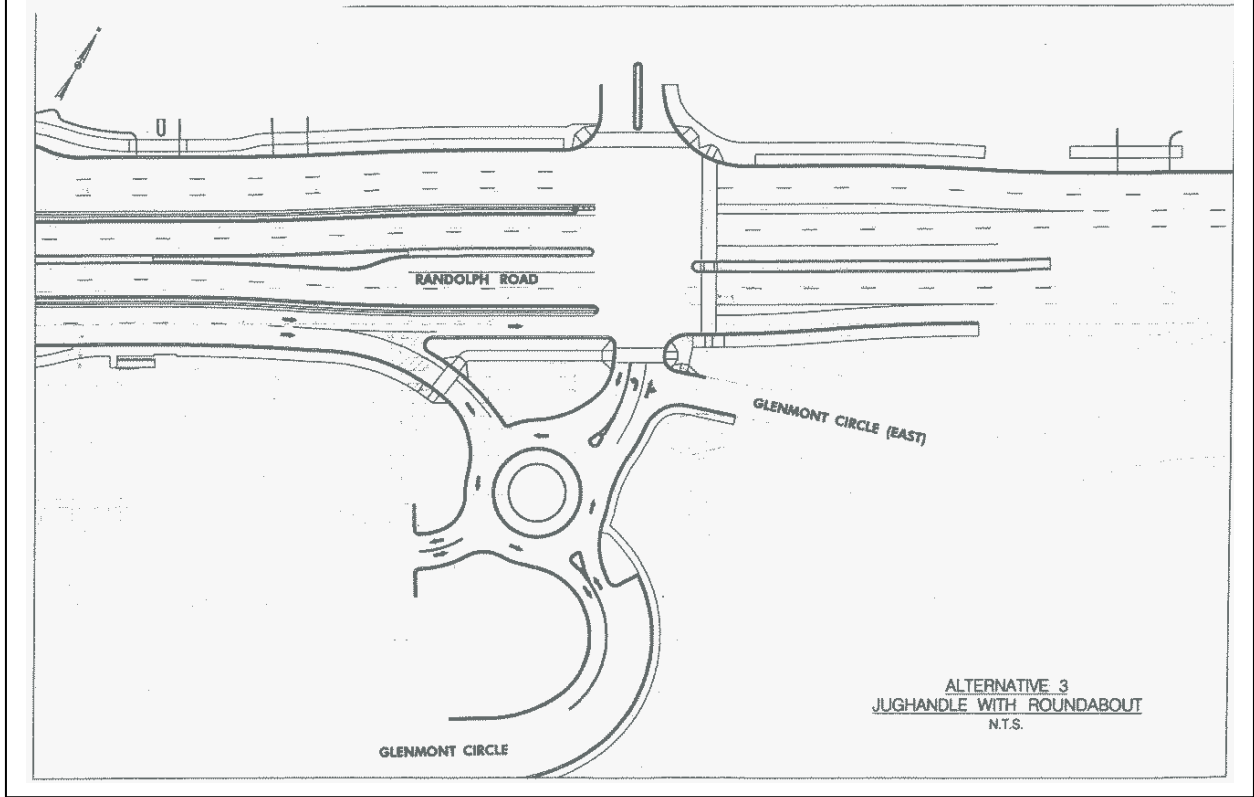


Figure 5: Alternative 4

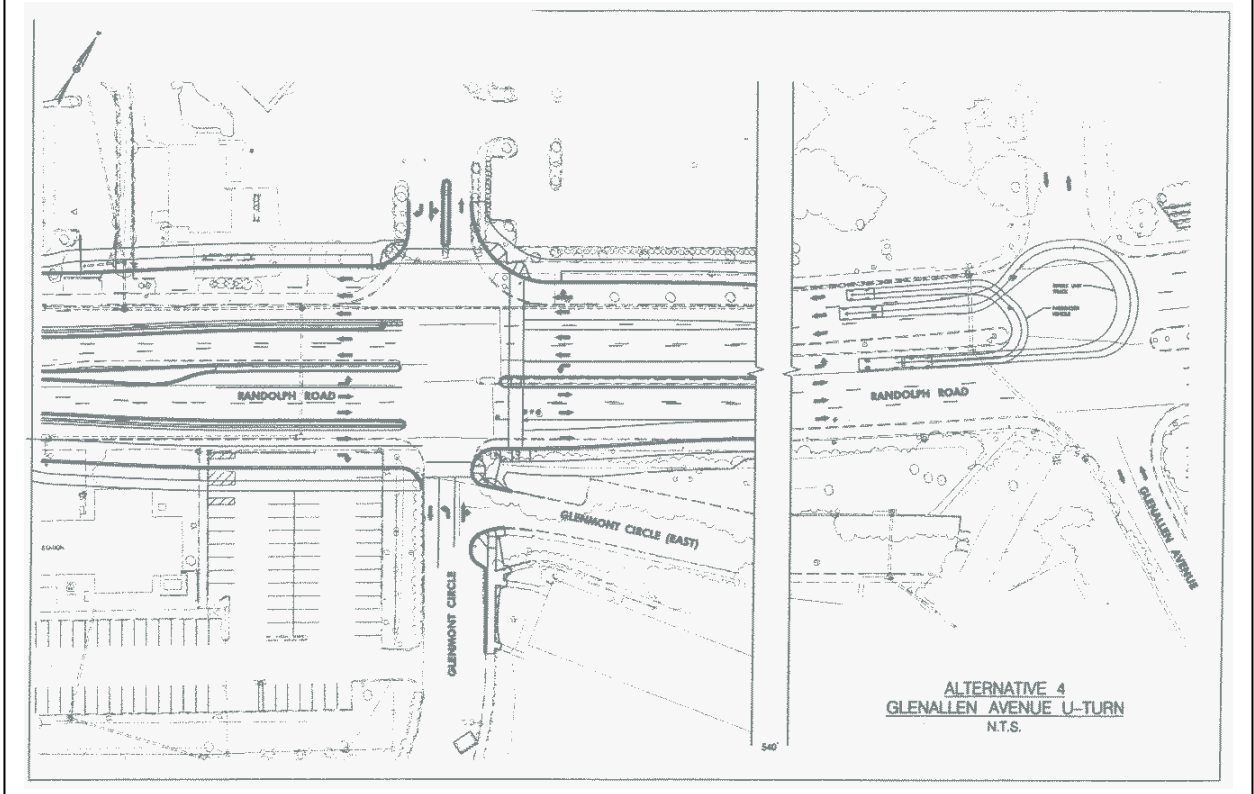


Figure 6: Alternative 5A

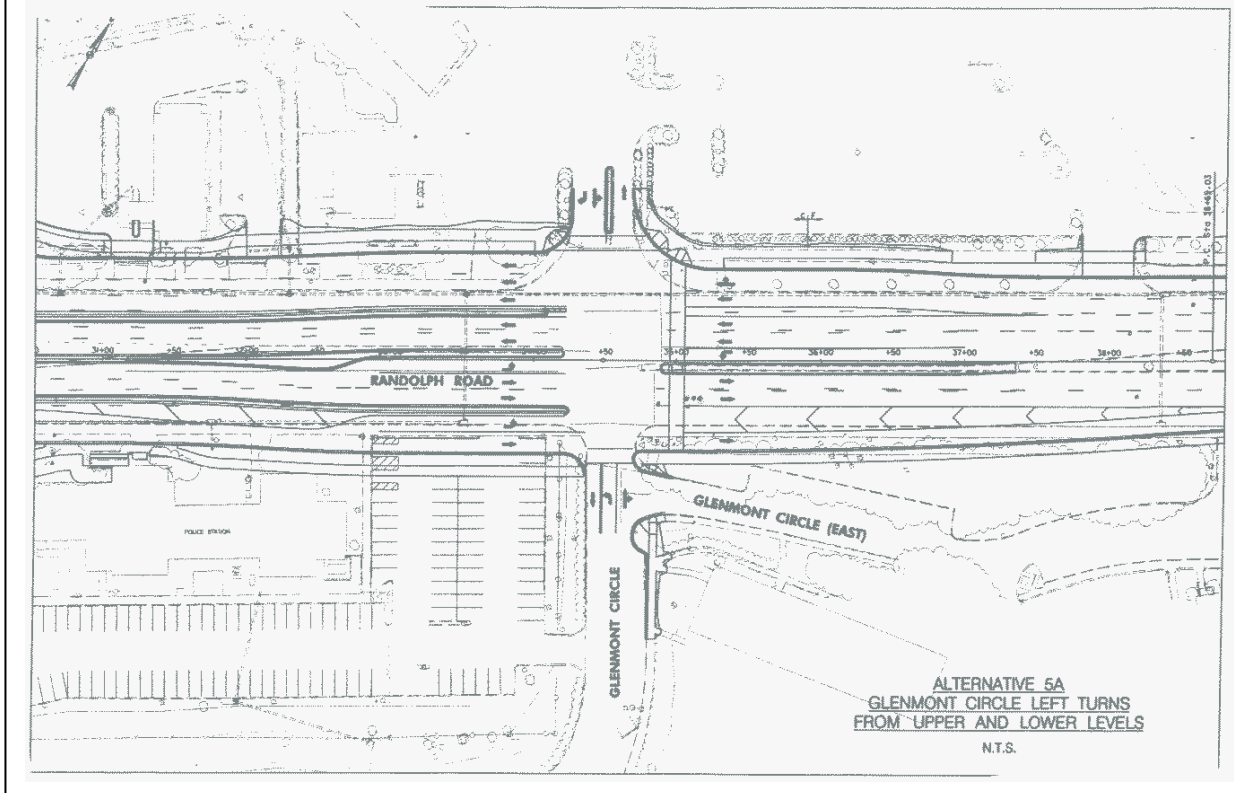
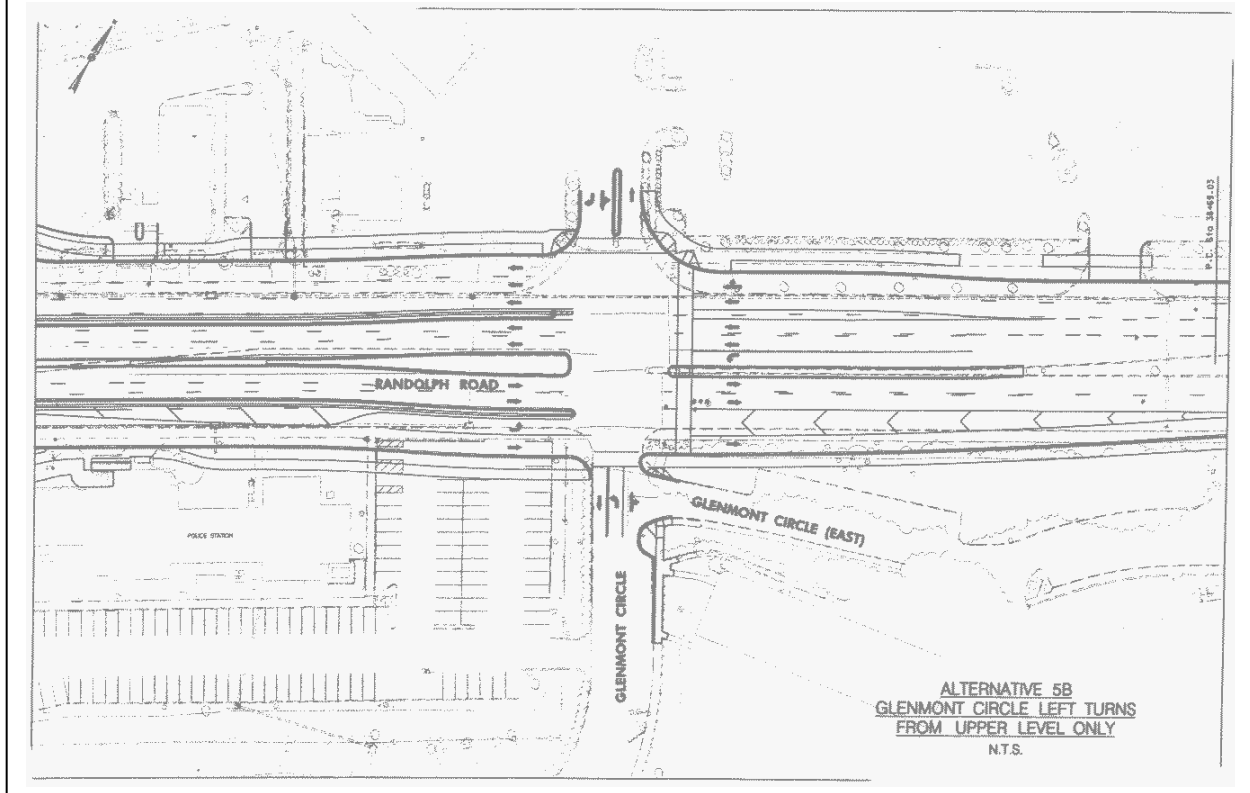


Figure 7: Alternative 5B



Layhill Road Improvements

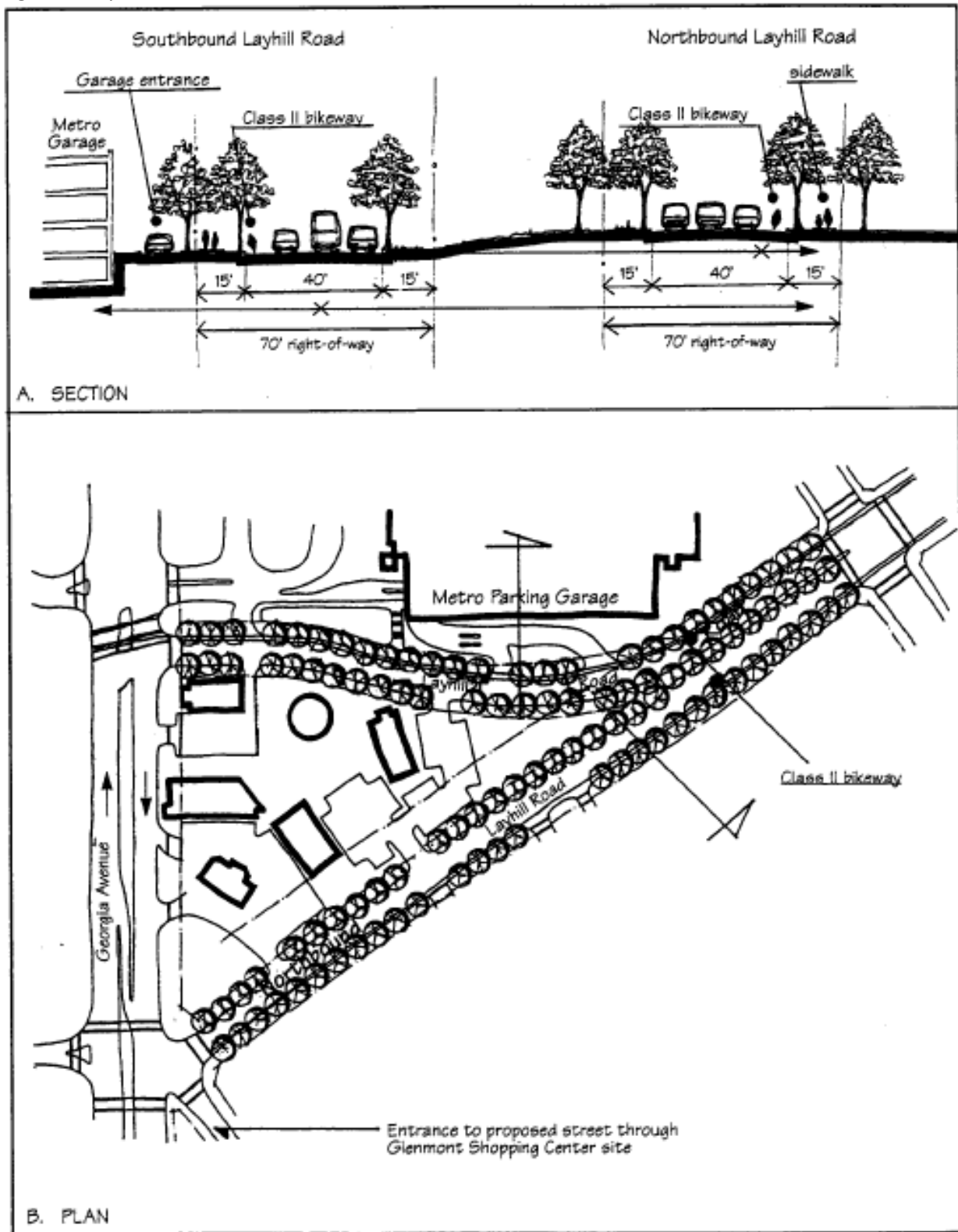
Residents and Planning staff have identified a need for pedestrian safety improvements at the intersection of Layhill Road and Georgia Avenue. The 1997 Glenmont Plan recommended a bifurcation of Layhill Road stating that the bifurcation would “improve access from Georgia Avenue and Layhill Road to the Glenmont Shopping Center, reduce pedestrian and vehicular conflicts, improve the level of service at the intersection of Georgia Avenue/Layhill Road, and improve the flow of through traffic along Georgia Avenue.” (Page 53).

Planning staff investigated if the bifurcation was still the best way to achieve the goal of increasing pedestrian safety at Layhill Road and Georgia Avenue. Staff studied the following five (5) different alternatives, including the bifurcation (Figure 8).

Option 1. Layhill Road Bifurcation ('97 Sector Plan Recommended Option, Figure 8). The bifurcation would consist of maintaining the northbound leg of Layhill Road in its existing location, but relocate the southbound lane and place it between the existing Metro parking garage and the existing businesses in the Layhill Triangle. It would create two separate intersections of Layhill Road with Georgia Avenue and would be expected to reduce pedestrian and vehicular conflicts at the current intersection of Georgia Avenue and Layhill Road. The 1997 Sector Plan recommended a 70-foot ROW for each bifurcated segment, including three travel lanes. It recommended a clearly marked bikeway on each leg of the bifurcated roadway, and a 15-foot-wide sidewalk along each one-way segment of the street, including a tree panel along the curb, a sidewalk and pedestrian lighting. The Plan recognized that bifurcation may require Judson Road to become right-in, right-out only.

The bifurcation may allow existing businesses on Layhill Road to expand their parcels to the south via the abandonment of the existing southbound lanes of the existing roadway.

Figure 8: Layhill Bifurcation—1997 Glenmont Sector Plan



Option 2. Layhill Road Realignment This option builds upon the idea of Layhill Road bifurcation but realigns the entire Layhill Road between Glenallan Avenue and Georgia Avenue and connects it with Georgia Avenue at Urbana Drive. The realigned road would have the same characteristics as existing Layhill Road: 120-foot ROW and 15-foot-wide sidewalks with green panels on both sides of the street. However, this realignment would require the relocation of the Washington Suburban Sanitary Commission (WSSC) water tower located on the Layhill Triangle, and it would have major impacts on the properties located in the Layhill Triangle.

Option 3. Partial Layhill Road Realignment. In this option, Layhill Road would continue along its current alignment and transition at some point west of the WSSC water tower to make a “T-intersection with Georgia Avenue. Although this option does not have any impacts on the water tower property, it would have major impacts on the properties located in the Layhill Triangle, and would require major changes to the traffic signals in the area.

Option 4. Road diet and spot improvements. This option would retain the current alignment of Layhill Road between Glenallan Avenue and Georgia Avenue, but it would modify the Layhill Road intersection with Georgia Avenue to create a more defined T-intersection that would eliminate the free-rights at the existing intersection. And it would reduce the Layhill Road width from the existing six lanes to four lanes (road diet). Reducing Layhill to four-lanes would provide a shorter distance for pedestrians crossing the road, and it would have two bicycle/pedestrian benefits: 1) it would allow the widening of the sidewalks on Layhill Road and include tree panels; and 2) it would allow the installation of bike lanes on Layhill Road. These improvements are consistent with Road Code No. 2004.16; Divided Suburban Arterial Road – 4 lanes – open section with bike lanes. Based on intersection congestion standards established in the Local Area Transportation Review and Policy Area Mobility Review Guidelines (*LATR & PAMR*), the reduction in travel lanes from six to four is not expected exceed acceptable congestion standards.

Option 5. Spot Improvements. This option would eliminate the free-rights at the Georgia/Layhill intersection but maintain Layhill Road as a six-lane divided road. As with Option 4, the existing intersection with free-rights would be reconfigured to create a better T-intersection.

After reviewing the property impacts, impacts on traffic congestion, and the time and costs associated with each Option, Staff decided that the bifurcation recommendation from the 1997 Sector Plan should not be continued. Instead, staff is recommending Option 4, Road diet and spot improvements. This Option would allow pedestrians to cross a narrower section of Layhill Road than they do today, which will improve pedestrian circulation and safety at the Layhill/Georgia intersection and it will not require any acquisition of ROW from property owners in the Layhill Triangle . Figure 9 below compares the five options:

Figure 9: Layhill Road Improvement Alternatives



Existing Conditions



Option 1: Layhill Road Bifurcation



Option 2: Layhill Road Realignment



Option 3: Partial Layhill Road Realignment



Option 4: Road diet and spot improvements



Option 5: Spot Improvements

BICYCLE AND PEDESTRIAN SYSTEM

The Bicycle Network

This Plan seeks to improve upon the existing and proposed bikeway network based on the 2005 *Countywide Bikeways Functional Master Plan*, and provides guidance for implementing the proposed network with future redevelopments.

Currently, there is a 10-foot wide shared use (walking, biking) path (SP-29) along the west side of Georgia Avenue from Randolph Road north to Glenallan Avenue. This Sector Plan is confirming the '97 Plan's recommendation of a shared use path, SP-29, south to Mason Street. The Plan also confirms the planned shared use path (SP-26) along Randolph Road through the limits of this Sector Plan.

Layhill Road is designated as having bike lanes (BL-18) between Georgia Avenue and Matthew Henson State Park. Within the Sector Plan Area, the bike lanes already exist and are currently stripped from Middlebridge Drive south to just north of Glenallan Avenue.

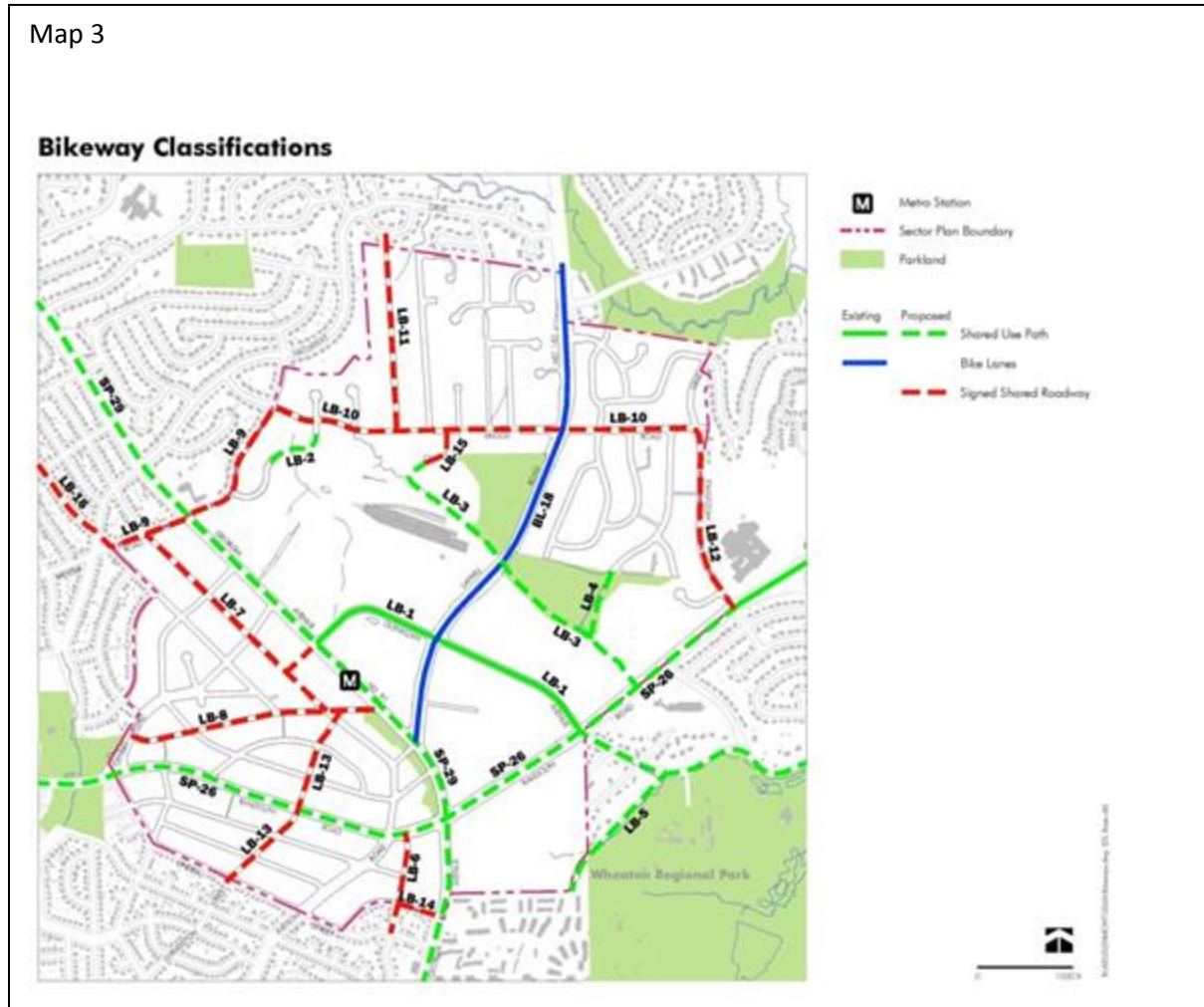
The remaining planned bikeways are detailed in Table 5 and Map 3.

Table 5		Countywide and Local Bikeways	
Master Planned Bikeways	From	To	Master Plan of Bikeways No.
Bike Lane			
Layhill Road (MD 182)	Georgia Avenue (MD 97)	Hathaway Drive	BL-18
Shared Use Paths			
Georgia Avenue (MD 97)	Weller Road	Denley Road	SP-29
Glenmont Greenway	Denley Road	Mason Street	SP-29
Glenallan Avenue	Georgia Avenue (MD 97)	Randolph Road	SP-24
	Randolph Road	Kemp Mill Road	SP-24
Randolph Road	Denley Road	Middlevale Lane	SP-26
Jingle Connector	Jingle Lane	Jingle Lane	LB-1
Saddlebrook Connector	Acorn Hollow Lane	Randolph Road	LB-2
Saddlebrook Drive Extension	Saddlebrook Drive	Saddlebrook Connector	LB-3
Glenmont Forest Connector	Randolph Road	Wheaton Regional Off Road Path (PB-46)	LB-4
Flack Connector	Flack Street	Glenmont Greenway	LB-5
Briggs Road	Briggs Court	Lutes Drive	LB-8
Signed Shared Roadways			
Flack Street	Weller Road	Flack Connector	LB-6
Briggs Road	Weller Road	Briggs Court	LB-7
Briggs Road	Lutes Drive	Middlevale Lane	LB-9
Grandview	Randolph Road	Mason Road	SR-20
Urbana Drive	Denley Road	Georgia Avenue (MD 97)	LB-10
Weller Road	Holdridge Road	Briggs Road	LB-11
Lutes Drive	Dressler Lane	Briggs Road	LB-12
Middlevale Lane	Briggs Road	Randolph Road	LB-13
Livingston Street	Lindell Street	Urbana Drive	LB-14
Mason Street	Georgia Avenue (MD 97)	Grandview Avenue	LB-15
Acorn Hollow Lane	Briggs Road	Saddlebrook Connector	LB-16

Bicycle and Pedestrian Priority Area

One of the Plan's goals is to transform Georgia Avenue (MD 97), Randolph Road, and Layhill Road (MD 182) into boulevards with enhanced medians, wider sidewalks, tree panels, bikeway improvements and better pedestrian crossings. The State's Bicycle-Pedestrian Priority Area designation is one of the tools to accomplish this goal.

Map 3



In accordance with Access 2000 legislation passed in 1995, this designation will require the State to prioritize pedestrian and bicycle improvements and allow changes to State highways (Georgia Avenue and Layhill Road in this Plan) to improve safety for pedestrians and bicyclists. It could, where appropriate, affect the construction, design and maintenance of State roads. This designation is part of the County Executive's 2008 Pedestrian Safety Initiative and has been suggested for several master plan areas including White Flint, Germantown, and Kensington. State agreement is required before the designation can be implemented. This designation will enable complementary bikeway improvements on these two roads. Therefore, this Plan is recommending that Glenmont be designated as a Bicycle and Pedestrian Priority Area.

Bicycle Connections to Parks

Glenmont is near two of the most heavily used parks in Montgomery County: Wheaton Regional Park and Brookside Gardens. Although bikeway connections between Glenmont and these facilities exist along Glenallan Avenue within the sector Plan boundary at Randolph Road, the proposed extension of this connection in the larger K/W Plan would help achieve the goal of improving bicycle connections in the Sector Plan. In addition, this Plan is recommending a new bikeway connection to Brookside Gardens via the Glenmont Forest property if it redevelops.

Secure Bike Parking at Metrorail

Metro has recently opened and begun testing a new Bike-&-Ride facility on the first floor of the College Park Metro station. It is a secure, enclosed 2,400-square-foot parking structure with space for more than 100 bikes. WMATA should explore if Glenmont is an appropriate location for a new Bike & Ride facility.

The Pedestrian Network

The Plan proposes improving the pedestrian experience in Glenmont through redevelopment. This will occur as wider new sidewalks with tree panels are constructed as part of redevelopment of properties.

Table 6 shows accident data between 2009 and 2011 for eight intersections in Glenmont:

Intersection	Georgia Avenue and Randolph Road	Georgia Avenue and Layhill Road	Georgia Avenue and Glenallan Road	Georgia Avenue and Hathaway Road	Glenallan Road and Layhill Road	Georgia Avenue and Urbana Drive	Randolph Road and Glenmont Circle	Glenallan and Randolph Road
Total Crashes (2009-2011)	67	19	14	27	22	6	28	18
Pedestrian Involved accidents	5	1	2	0	0	0	3	0
AADT	47,400	44,140	11,700	37,350	17,850	30,500	31,950	35,962

Transportation/Land Use Balance

Since the early 1980s, every master plan has considered the balance between land use and transportation by assessing area-wide conditions forecasted for end-state conditions of the plan. This assessment indicates whether or not the proposed development will be supported by the existing and proposed transportation infrastructure (roads and transit service). The transportation/land use balance is measured by using a computer model, which predicts the adequacy of future traffic conditions based on proposed changes to housing, jobs and transportation infrastructure in the area. A Plan is considered to be in balance if the results of the modeling effort demonstrate that the proposed infrastructure will support the planned growth in accordance with the standards of maximum allowed road congestion established for the planning area.

Measures of Effectiveness

The analysis of the Plan's transportation/land use balance uses three measures:

- Area-wide mobility is measured by standards established in the Local Area Transportation Review (LATR) and Policy Area Mobility Review (PAMR) Guidelines. PAMR indicates the degree to which the proposed development would be supported by the proposed transportation infrastructure (roads and transit) on a policy area wide basis. This analysis uses a regional model and covers a much larger area than the Glenmont Sector Plan.
- Intersection congestion is also measured by standards established in the LATR and PAMR Guidelines. For intersection congestion analysis, the LATR guidelines specify the use of Critical Lane Volume (CLV) as the measure of levels of congestion at certain key intersections in the Plan area.
- A cordon-line analysis compares the amount of traffic generated by changes to local land uses and their effect on regional traffic within a defined area (cordon).

Policy Area Mobility Review (PAMR)

PAMR, introduced into the County Growth Policy in 2007, measures the transportation system's adequacy by comparing Relative Transit Mobility and Relative Arterial Mobility for each of the County's 21 policy areas. It continues a long-standing County policy that higher levels of roadway congestion are appropriate in areas with higher quality transit service (Metrorail), such as Glenmont. This policy provides multimodal equity across the County and facilitates the development of pedestrian-oriented, rather than auto-oriented, improvements in Metro Station Policy Areas (MSPAs).

The Glenmont Sector Plan area is located within the Kensington/Wheaton Policy Area. Figure 10 shows the forecasted PAMR conditions for all County policy areas for 2040. For the K/W Policy Area forecast in this figure, the standard Round 8.0, 2040 forecast was modified to include a high scenario for Glenmont, which was an extremely aggressive estimate of a theoretical worst case (from a traffic standpoint) development scenario, much higher than the proposed Plan's build-out scenario listed in the Staff Draft Sector Plan. Table 7, also based on the modified 2040 estimate for the K/W Policy Area, summarizes the supporting travel data, including vehicle miles of travel (VMT) and vehicle hours of travel (VHT) for both free-flow and congested conditions. .

The modeling result indicated that, with the high scenario of development in Glenmont, the Kensington/Wheaton Policy Area would operate at:

- Relative Transit Mobility of 91 percent (Level of Service (LOS) B – between 75 percent and 100 percent)
- Relative Arterial Mobility of 42 percent (LOS D – between 40 percent and 55 percent).

The current Subdivision Staging Policy requires that all policy areas have a Relative Arterial Mobility of at least 40 percent, or LOS D conditions, regardless of the level of transit service. The PAMR analysis for the high development scenario in Glenmont meets this threshold, and therefore, the Plan is considered to be in balance.

Figure 10: Forecast (2040) PAMR for Glenmont Sector Plan

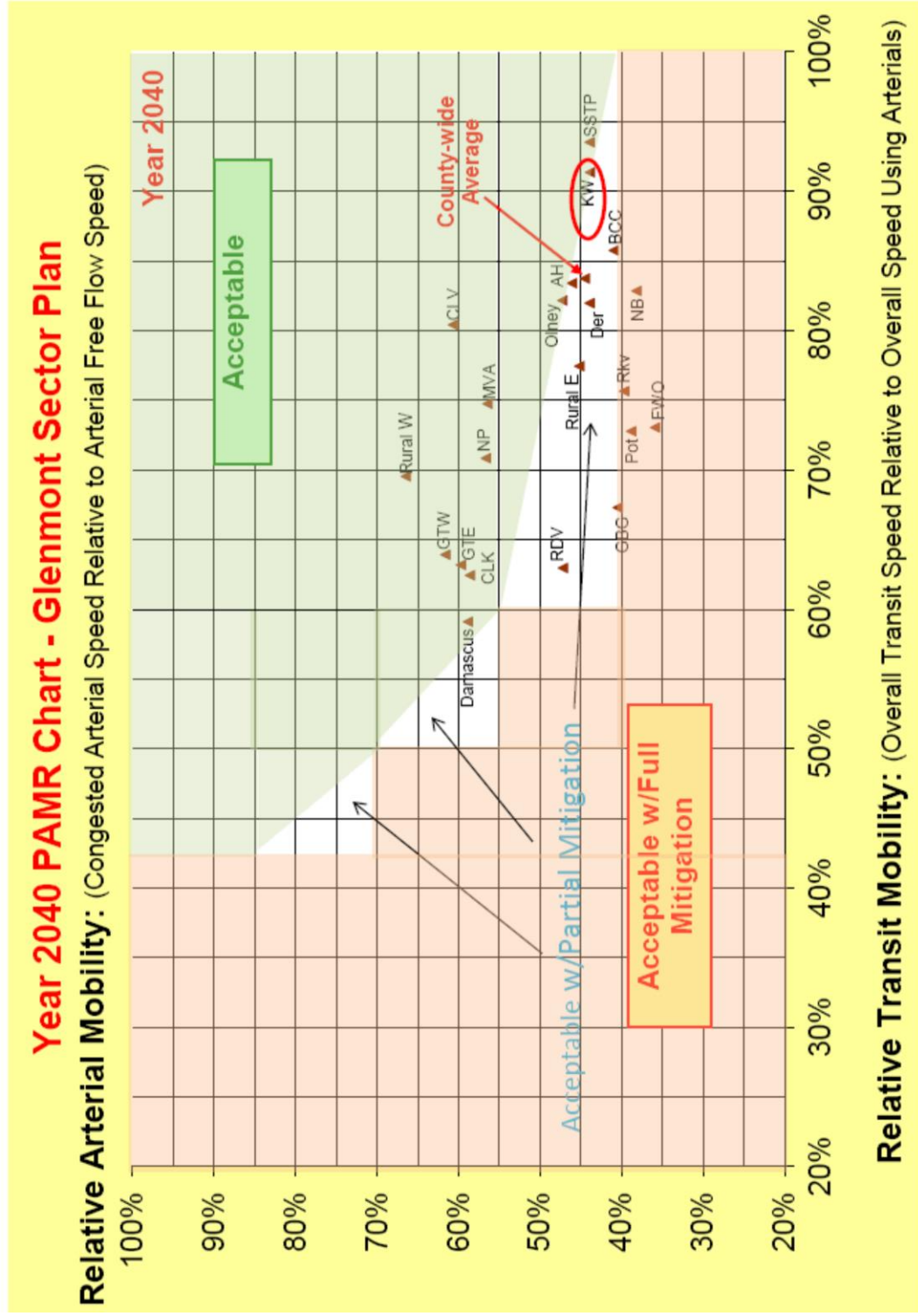


Table7: Policy Area Mobility Review Table – 2040
 2040 PAMR Results by Policy Area – Glenmont Sector Plan

Policy Area	Relative Arterial Mobility					Relative Transit Mobility				
	VMT	VHT (free-flow)	VHT (congested)	Free-Flow Speeds	Congested Speeds	Relative Arterial Mobility	Average Arterial Travel Time	Average Transit Travel Time	Relative Transit Mobility	
Aspen Hill	193,049	5,893	12,785	32.8	15.1	46%	43.6	52.2	84%	
Bethesda/Chevy Chase	396,700	15,673	38,243	25.3	10.4	41%	33.3	38.8	86%	
Clarksburg	119,805	3,950	6,739	30.3	17.8	59%	41.0	65.7	62%	
Cloverly	99,620	2,418	3,983	41.2	25.0	61%	46.5	57.8	80%	
Damascus	92,187	2,305	3,918	40.0	23.5	59%	50.9	86.1	59%	
Derwood	145,085	5,041	11,473	28.8	12.6	44%	38.6	47.1	82%	
Fairland/White Oak	386,159	10,926	30,421	35.3	12.7	36%	42.2	57.7	73%	
Gaithersburg City	264,187	9,678	23,889	27.3	11.1	41%	34.9	51.8	67%	
Germentown East	109,792	4,071	6,819	27.0	16.1	60%	37.6	59.6	63%	
Germentown West	181,925	5,807	9,421	31.3	19.3	62%	37.4	58.5	64%	
Kensington/Wheaton	473,636	15,153	34,521	31.3	13.7	44%	39.6	43.3	91%	
Montgomery Village/Airpark	133,068	4,373	7,743	30.4	17.2	56%	42.6	56.9	75%	
North Bethesda	239,922	10,548	27,609	22.7	8.7	38%	32.9	39.7	83%	
North Potomac	74,462	2,620	4,624	28.4	16.1	57%	41.2	58.2	71%	
Olney	178,822	4,905	10,371	36.5	17.2	47%	49.7	60.5	82%	
Potomac	202,979	5,974	15,380	34.0	13.2	39%	40.3	55.4	73%	
R & D Village	75,776	3,201	6,781	23.7	11.2	47%	31.9	50.6	63%	
Rockville City	291,926	11,961	30,124	24.4	9.7	40%	34.0	44.9	76%	
Silver Spring/Takoma Park	266,609	10,542	23,985	25.3	11.1	44%	35.4	37.9	93%	
Rural East	612,448	15,755	34,864	38.9	17.6	45%	49.4	63.8	77%	
Rural West	251,407	6,815	10,253	36.9	24.5	66%	49.1	70.7	69%	
Montgomery County Total	4,789,564	157,609	353,946	30.4	13.5	45%	39.6	47.3	84%	

Relative Arterial Mobility measures total PM Peak Period vehicular travel on arterial roadways within each policy area

Relative Transit Mobility measures AM Peak Period travel times for journey-to-work trips originating within each policy area

VMT = Vehicle Miles of Travel

VHT = Vehicle Hours of Travel

Local Area Transportation Review

The Local Area Transportation Review (LATR) measures congestion at intersections by applying the Critical Lane Volume (CLV) method as described in the Planning Department's LATR guidelines. Calculated CLV values are converted to a volume-to-capacity measurement (V/C ratio) by dividing the current or forecasted CLV values by the applicable congestion standard.

The use of the Critical Lane Volume (CLV) in support of the Sector Plan is consistent with the 2012-2016 Subdivision Staging Policy. Maximum acceptable congestion standards for each policy area are determined based on the degree to which alternative modes of transportation are available in each area. In rural policy areas, where few alternatives to auto exist, the congestion standard is maximum 1,350 CLV (the middle range of LOS D). In metro station policy areas, where multiple modes of travel are available, the congestion standard is maximum 1,800 CLV. Currently, intersections in the Glenmont Plan area have a congestion standard of 1,800 CLV. The Plan area is surrounded by the Kensington/Wheaton Policy Area, which has a lower CLV standard of 1,600. The availability of Metrorail service in Glenmont helped reduce the additional vehicular trips generated by the new development proposed in the Draft Sector Plan by 18 percent.

Table 7 summarizes three sets of V/C ratios: 1) existing (observed), 2) the 1997 Plan buildout, and 3) the proposed Sector Plan buildout (including Layhill Road improvements discussed above) for certain critical intersections in Glenmont. The existing CLV ratios are from the M-NCPPC Intersection Analysis Application taken in 2008 and 2009. Future CLV results include the construction of the fully funded interchange at the intersection of Georgia Avenue and Randolph Road.

Results in Table 7 indicate that intersection volumes remain below their permitted maximum standards despite the higher densities proposed in the Draft Sector Plan. Intersection results are color-coded:

- red intersections have a V/C ratio above 100 percent of the maximum allowed standard (**bold and italic**)
- orange intersections have a V/C ratio between 81 and 100 percent of the maximum allowed standard (**bold**)
- yellow intersections have a V/C ratio between 61 and 80 percent of the maximum allowed standard (*italic*)
- green intersections have a V/C ratio up to 60 percent of the maximum allowed standard.

The intersection of Georgia Avenue at Hathaway Drive is actually outside of the Plan area boundaries and therefore has a lower LATR standard of 1600 CLV. V/C results depicted in Table 7 below indicate that the Glenmont road network is well equipped to handle the Plan's proposed level of growth.

Table 7: Volume to Capacity Ratios for Glenmont Intersections

Intersection	LATR Standard (CLV)	Observed		1997 Sector Plan Buildout ¹		Proposed Sector Plan Buildout ²	
		AM CLV	PM CLV	AM CLV	PM CLV	AM CLV	PM CLV
Georgia Avenue & Hathaway	1600	1097	858	984	1167	1262	1537
Georgia Avenue & Glenallan	1800	867	1120	1197	1416	1225	1737
Georgia Ave & Urbana Dr/Metro	1800	674	681	633	761	753	890
Georgia Ave & Layhill Rd	1800	1114	1062	1152	1295	1294 ³	1553 ³
Georgia Ave & Randolph Rd	1800	1281	1657	1214	1247	1364	1563
Layhill Rd & Glenallan Ave	1800	875	898	936	1027	1394	1386
Randolph Rd & Glenallan Ave	1800	1320	1065	1579 ⁴	1229 ⁴	1760 ⁴	1532 ⁴
Randolph Rd & Glenmont Circle	1800	939	915	873	894	1308	1293

V/C ratio = maximum CLV standard ÷ actual or projected CLV

¹20 to 30-year estimate of development in the 1997 Sector Plan buildout

² Used to test the capacity of infrastructure including road network and school enrollment

³ Georgia Avenue and Layhill Road future CLV values assume a 4-lane road diet section and spot improvements.

Synchro Analysis

The 2012-2016 Subdivision Staging Policy (SSP) directed the Park and Planning Commission to use Synchro or other Highway Capacity Manual (HCM) software to determine queuing and delay. As a result, the 2013 *Local Area Transportation Review and Transportation Policy Area Review Guidelines* directed the Park and Planning Commission to use the Synchro Volume/Capacity (V/C) ratio for any intersection operating above a CLV of 1600.

County Council Policy has been that every Master Plan must be in transportation balance. This means that all of the designated intersections must operate at an acceptable LOS (CLV and V/C). In a Metro Station Policy Area such as Glenmont that means a CLV of 1800 or below and a V/C ratio of 1.13 or below.

Using the modeling results stated in the Local Area Transportation Review section noted above, a Synchro analysis was undertaken looking at four scenarios: 1) existing conditions, 2) Year 2040 but without the proposed land use in Glenmont and the Georgia /Randolph interchange; 3) Year 2040 with the proposed land use and the interchange; and 4) Year 2040 with the proposed land use, the interchange, and reducing Layhill Road to 4 lanes between Georgia and Glenallan Avenues. Table 9 below shows the levels of intersection congestion in both the AM and PM peak hour.

Under the scenario with the Sector Plan's proposed land use and programmed interchange, the only intersections that are projected to fail are 1) Randolph Road/Glenallan Avenue and 2) Georgia Avenue and Layhill Road. However, under future conditions, there are ways that these two intersections can be improved and achieve an acceptable LOS.

For Randolph Road and Glenallan Avenue, there are currently two lanes on southbound Glenallan Avenue; an exclusive left turn lane and a combined left-through-right lane. At this intersection, the addition of an exclusive right turn lane from southbound Glenallan Avenue to westbound Randolph Road would improve the LOS at that intersection to a V/C ratio of 1.12 in the AM peak hour and 0.91 in the PM peak hour, both within acceptable standards.

For the intersection of Georgia Avenue and Layhill Road, as discussed on page 16, there is a desire for improvements to this intersection to improve pedestrian safety. On northbound Georgia Avenue, there are currently four lanes approaching Layhill Road (three through lanes and one exclusive channelized right turn lane). The idea of eliminating the channelized right lane would admittedly cause a delay for vehicles, but would improve conditions for pedestrians. The Synchro analysis found that if you maintained the existing four lanes and changed the right turn lane to a signal controlled right turn lane, the resulting intersection would result in a V/C ratio of 0.82 in the AM peak hour and 1.00 in the PM peak hour, both within acceptable standards.

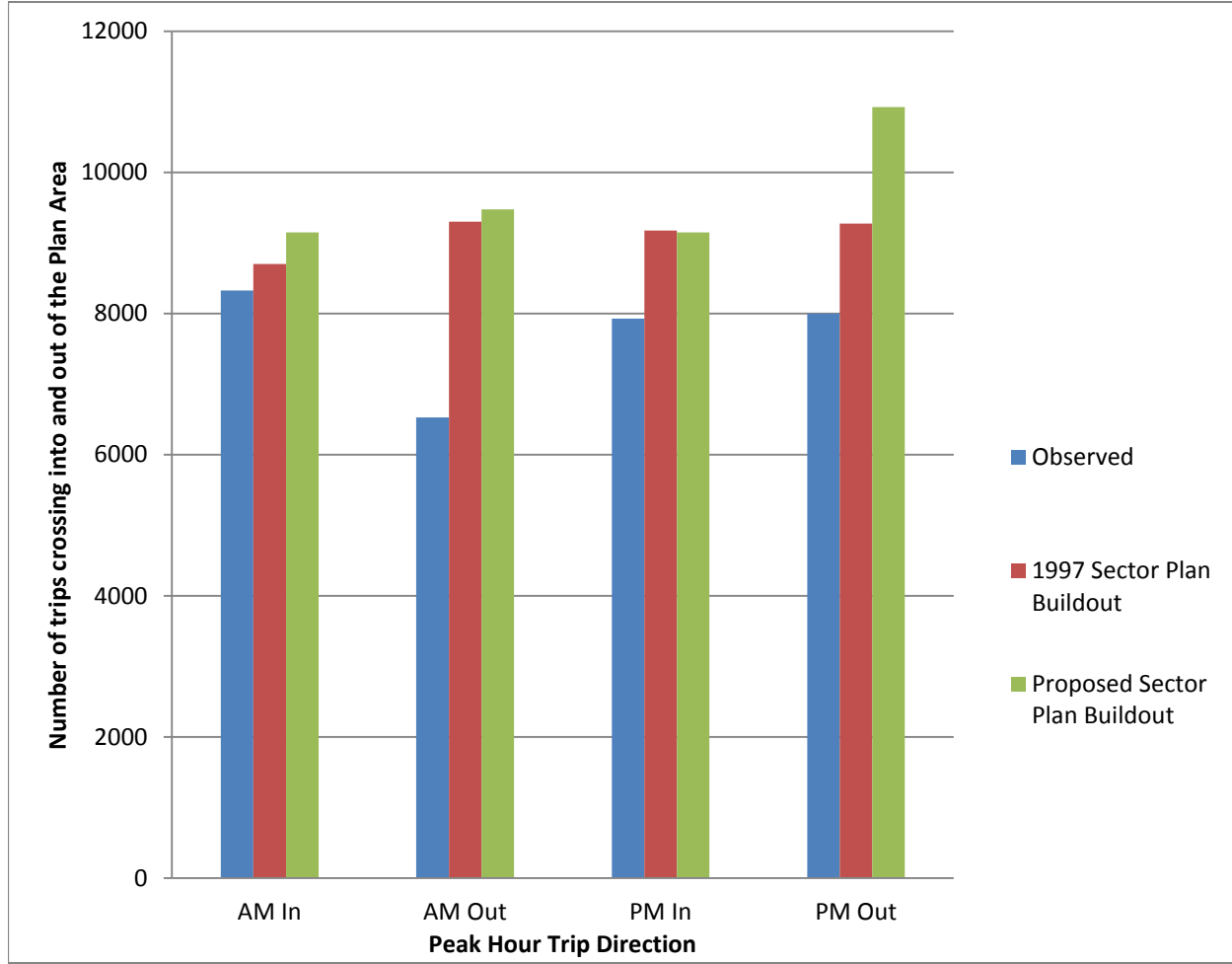
Intersection	Synchro V/C standard	Existing		2040 Volumes without Added land Use and existing transportation network		2040 Volumes without Added land Use and Georgia / Randolph Interchange		2040 Volumes without Added land Use and Georgia / Randolph Interchange & 4-lane Layhill Road	
		V/C Ratio (AM)	V/C Ratio (PM)	V/C Ratio (AM)	V/C Ratio (PM)	V/C Ratio (AM)	V/C Ratio (PM)	V/C Ratio (AM)	V/C Ratio (PM)
Georgia Avenue & Glenallan	1.13	0.57	0.70	0.65	0.75	0.91	1.07	0.94	1.08
Georgia Ave & Layhill Rd	1.13	0.75	0.72	0.73	0.81	0.80	0.91	0.82 ¹	1.00 ¹
Randolph Rd & Glenallan Ave	1.13	0.91	0.71	1.08	0.80	1.29	1.13	1.12 ²	0.91 ²
Layhill Rd & Glenallan Ave	1.13	0.60	0.60	0.60	0.70	0.66	0.84	0.94	0.91

¹Road diet on Layhill Road maintaining northbound right-turn lane from Georgia Avenue to Layhill Road as a controlled right turn; Judson Road one lane outbound.
²Randolph Road/Glenallan Avenue with an exclusive southbound right turn lane on Glenallan Avenue.

Cordon Line Analysis

A cordon line analysis gives a picture of traffic entering and exiting a defined area. It includes both through and local trips, and there is no maximum acceptable congestion standard or threshold in this analysis. It only shows the projected increase in number of vehicles passing through a defined area based on the proposed level of growth. Figure 10 compares peak hour trips crossing into and out of the Plan area for existing conditions, estimated '97 Plan buildout, and the proposed Plan's build-out scenario. .

Figure 10: Draft Plan Trip Generation Comparison



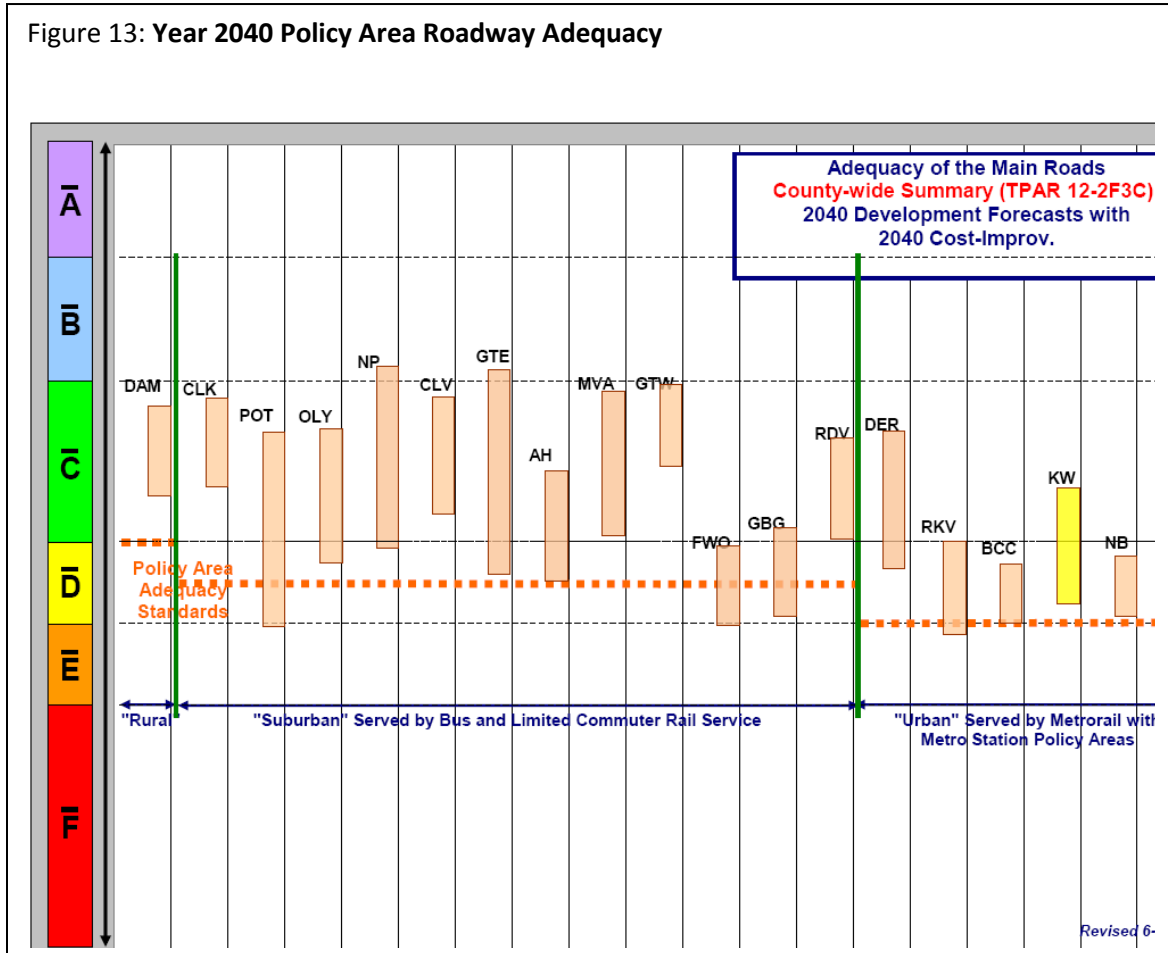
Transportation Policy Area Review (TPAR)

In 2012, the County Council replaced PAMR with a new area-wide transportation test called TPAR. TPAR analyzes roadway and transit levels of service in each policy area and compares the results to a service standard for a particular policy area.

The TPAR analysis performed in support of the 2012 Subdivision Staging Policy (which modeled the adopted master plans yield forecasts for 2040) is sufficient for the proposed Glenmont Sector Plan because the results for the broader Kensington/Wheaton Policy Area fall well within the acceptable roadway adequacy threshold. Compared to the larger K/W Policy area, the proposed changes in the Glenmont Sector Plan Area are relatively small, and therefore would not create an imbalance under TPAR.

Figure 13 shows the TPAR adequacy of main roads in Montgomery County, sorted by Policy Areas, for the Year 2040. The ratio of peak-direction congested speeds to free-flow speeds in the K/W Policy Area (highlighted in yellow) is forecasted to be 42%. This measure is above the 40 percent adequacy standard for the policy area.

Figure 13: Year 2040 Policy Area Roadway Adequacy

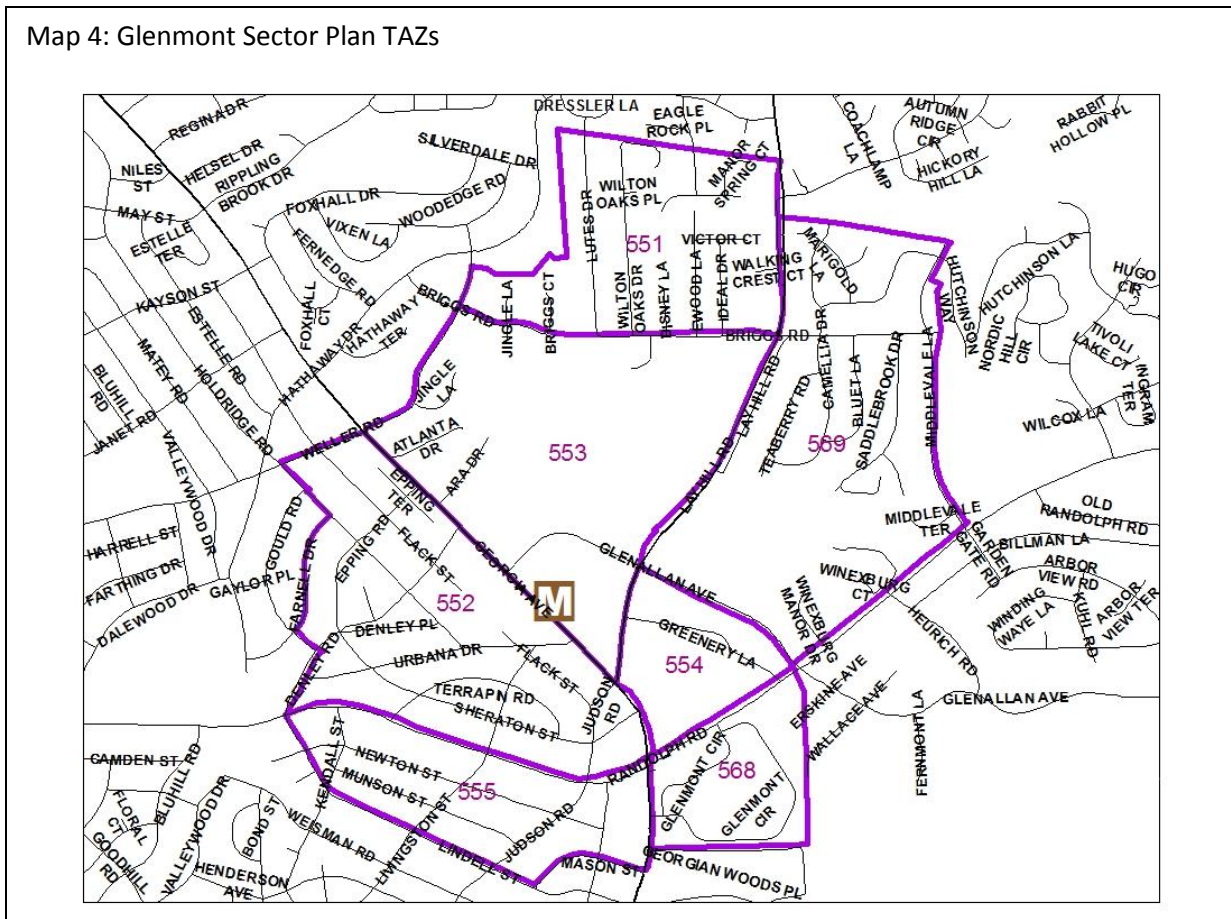


Travel Demand Forecasting Process and Local Area Modeling Process Assumptions

The specific computer modeling techniques used in the PAMR, LATR and Cordon line analyses described in this Appendix are described below:

The first step in determining the policy-wide PAMR results is to use the TRAVEL/3 model analysis, which incorporates region-wide land use and transportation assumptions provided by the Metropolitan Washington Council of Governments (MWCOG). The TRAVEL/3 forecasting assumptions include: 1) A 2040 horizon year (the most distant horizon year for which forecast land use and transportation system development is available); and 2) Regional growth per the MWCOG Cooperative Forecasting Process. For the Washington Metropolitan region, the Round 8.0 forecasts include an increase from three million jobs and 1.9 million households in 2005 to 4.2 million jobs and 2.5 million households in 2040. And for Montgomery County, the Round 8.0 forecasts include an increase from 500,000 jobs and 347,000 households in 2005 to 670,000 jobs and 441,300 households in 2040. The TRAVEL/3 model for the Glenmont Plan and surrounding area comprised seven (7) Transportation Analysis Zones TAZs (Map 4).

Map 4: Glenmont Sector Plan TAZs



TRAVEL/3 is a standard four-step model consisting of:

- trip generation: person trips generated by land use type and density within each Transportation Analysis Zone (TAZ)
- trip distribution: person trips generated in each TAZ that travel to each of the other TAZs within the metropolitan area
- mode split: travel mode of the person trips, including single-occupant auto, multiple-occupant auto, transit, or non-motorized mode such as walking or bicycling
- traffic assignment: roadways used for vehicular travel between TAZs.

The next level of analysis in deterring producing the cordon line analysis, consists of using industry standard techniques described in the National Cooperative Highway Research Project (NCHRP) Report 255 to modify the TRAVEL/3 outputs. These modifications include refining the morning and evening peak hour forecasts to reflect a finer grain of land use and network assumptions than included in the regional model.

The third and final level of analysis used to determine the CLV values includes intersection congestion, described in the PAMR /LATR Guidelines. A “quick response” technical analysis method was used to forecast intersection performance in the Glenmont area. The Department’s Local Area Modeling (LAM) process applied in the Glenmont Plan analyses used NCHRP Report 255 techniques to convert the TRAVEL/3 system level forecasts to intersection-level forecasts (CLVs).

The LAM process uses customized trip generation rates that reflect both existing conditions and future changes, considering both the land use types and changes in travel behavior. Table 9 shows the trip generation rates used in the LAM.

Table 9: Local Area Model Peak Hour Trip Generation			
Land Use	Units	AM	PM
Office	1000 Square Feet	2.22	8.90
Retail	1000 Square feet	0.95	1.11
Multifamily residential	Dwelling unit	0.40	0.47

These trip generation rates reflect a combination of LATR rates for development similar to that envisioned for Glenmont, and were calibrated so that LAM-simulated traffic volumes match observed traffic counts in the Glenmont area. The calibration process considered the amount of through traffic on the roadway network so that the LAM volumes at the network cordon line are within one percent of observed count data for both morning and evening peak hours.

The trip generation rates shown in Table 9 are generally lower than those found in the Institute of Transportation Engineers (ITE) trip generation report, particularly for commercial land uses. The rates reflect the fact that ITE rates for most commercial locations do not have the transit availability found in Glenmont. The difference for residential uses is not quite as high because ITE multifamily trip generation

rates do reflect the fact that most multifamily housing units have sufficient density to support transit service. Finally, the retail trip generation rates in the Glenmont zones also incorporate a discount for pass-by and diverted-link trips.

Table 10 depicts the land use assumptions modeled to determine the LATR results. A land-use scenario with a higher density than what was used for LATR, was used to determine the PAMR and cordon-line results.

Table 10: Existing and proposed development estimates (for the entire Sector Plan area)				
	Existing Land Use	1997 Sector Plan Buildout ¹	Projected Sector Plan Buildout ²	Proposed Sector Plan Buildout ³
Non-Residential s.f.	402,000	508,500	743,000	813,000
Housing Units	3,100	4,600	6,335	8,900
Jobs	873	1,278	2,180	2,350
Jobs-Housing Ratio	0.3:1	0.3:1	0.3:1	0.3:1

¹ 30-year estimate of development for the 1997 Sector Plan
² Buildout excluding potential redevelopment Glenmont Forest and Winexburg Apartments
³ Buildout including potential redevelopment of Glenmont Forest and Winexburg Apartments if the properties are rezoned in a future Local Map Amendment. Used to test the capacity of infrastructure including road network and school enrollment

As with all Master Plans, the Glenmont Sector Plan’s transportation analysis and plans were made in close coordination with both the SHA and MCDOT. The area-wide transportation analysis used in the Glenmont Sector Plan is consistent with other Sector Plan/Master Plans that are being studied at the same time; Chevy Chase Lake, White Oak Science Gateway and Long Branch.

The transportation analysis and modeling that was performed in support of this Sector Plan is not the same as a traffic study for a specific site. The transportation modeling is used to determine if the proposed land uses are “in balance” with the recommended transportation network.

Any and all developments in Glenmont will be subject to the Adequate Public Facilities Ordinance (APFO) development review process.