

December 6, 2002

MEMORANDUM:

TO:

Montgomery County Planning Board

VIA:

Jeffrey Zyontz, Chief

County-wide Planning Division

Richard C. Hawthorne, Chief

Transportation Planning

FROM:

Alex Hekimian, Coordinator M

Transportation Planning

SUBJECT:

Staff Draft of Master Plan of Highways Amendment

Recommendation: Staff recommends that the Board approve the amendment to the plan for public hearing.

In response to the County Council's direction to the Planning Board, staff has prepared the attached draft document, which proposes adding the Capital Beltway HOV project and Randolph Road/Veirs Mill Road interchange to the Master Plan of Highways and related area master plans. The attached document provides the rationales for including the two projects in the plans and the actual changes that would be needed in the texts of the existing plans.

The Council had asked the Board to include the "Purple Line" transit project in the amendments, as well. However, the Council acknowledged that there might not be enough information to recommend an alignment or station locations for the Purple Line by the time the amendments for the other projects were ready. Since staff needs to wait until such information from the conceptual planning of the Purple Line project becomes available, separate amendments related to the Purple Line are expected to be prepared later in 2003.

This document was prepared in coordination with staff of the Community-Based Planning Division.

AH:cmd

Amendment to the Master Plan of Highways

Capital Beltway High Occupancy Vehicle Lane Project and Interchange at Randolph Road and Veirs Mill Road

An Amendment to the Approved and Adopted Comprehensive Amendment to The Master Plan of Highways within Montgomery County, as amended; the General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District within Montgomery County, as amended; and the 2002 Potomac Subregion Master Plan, 1990 Bethesda Chevy-Chase Master Plan, as amended; and the 1989 Master Plan for the Communities of Kensington-Wheaton.

December 2002

Prepared by:
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Montgomery County Department of Park and Planning 8787 Georgia Avenue Silver Spring, MD 20910-3760

ABSTRACT

TITLE:

Staff Draft Amendment of the Master Plan of Highways within

Montgomery County

AUTHOR:

The Maryland-National Capital Park and Planning Commission

SUBJECT:

A limited Master Plan Amendment to the Master Plan of Highways within Montgomery County, as amended, to add High Occupancy Vehicle Lanes for a portion of the Capital Beltway and an interchange at the intersection of Randolph Road and

Veirs Mill Road.

DATE:

December 2002

PLANNING AGENCY:

The Maryland-National Capital Park and Planning Commission

8787 Georgia Avenue

Silver Spring, Maryland 20910-3760

SOURCE OF COPIES:

The Maryland-National Capital Park and Planning Commission

8787 Georgia Avenue

Silver Spring, Maryland 20910-3760

ABSTRACT:

This document contains the text and supporting maps and tables for the Staff Draft Amendment to the Master Plan of Highways within Montgomery County. It amends the 2002 Potomac Subregion Master Plan, as amended; the 1990 Bethesda Chevy-Chase Master Plan, as amended; the 1989 Master Plan for the Communities of Kensington-Wheaton, as amended; and the General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District within Montgomery County, as amended.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

The Maryland-National Capital Park and Planning Commission is a bi-county agency created by the General Assembly of Maryland in 1927. The Commission's geographic authority extends to the great majority of Montgomery and Prince George's Counties; the Maryland-Washington Regional District (M-NCPPC planning jurisdiction) comprises 1,001 square miles, while the Metropolitan District (parks) comprises 919 square miles, in the two counties.

The Commission has three major functions:

- The preparation, adoption, and, from time to time, amendment or extension of The General Plan (On Wedges and Corridors) for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties;
- 2) The acquisition, development, operation, and maintenance of a public park system; and
- In Prince George's County only, the operation of the entire County public recreation program.

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

The Maryland-National Capital Park and Planning Commission encourages the involvement and participation of individuals with disabilities, and its facilities are accessible. For assistance with special needs (e.g., large print materials, listening devices, sign language interpretation, etc.), please contact the Community Relations Office, 301-495-4600 or TDD 301-495-1331.

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NOTICE TO READERS

An area master plan, after approval by the County Council and adoption by The Maryland-National Capital Park and Planning Commission, constitutes an amendment to the General Plan for Montgomery County. As such, it provides a set of comprehensive recommendations and guidelines for the use of publicly and privately owned land within its plan area. Each area master plan reflects a vision of future development that responds to the unique character of the local community within the context of a countywide perspective.

Area master plans are intended to provide a point of reference with regard to public policy. Together with relevant countywide functional master plans (such as the Master Plan of Highways within Montgomery County, Maryland; the Master Plan for Historic Preservation; and the Master Plan for the Preservation of Agricultural and Rural Open Space), they should be referred to by public officials and private individuals when decisions are made that affect the use of land within the plan's boundaries.

Functional master plans (such as this Amendment to the Master Plan of Highways) are developed through a process similar to that of an area master plan. They are also considered amendments to the General Plan for Montgomery County. Functional master plans provide guidance for the preparation and update of area master plans. Unlike area master plans, functional master plans do not recommend changes in existing zoning and are not accompanied by sectional map amendments.

THE MASTER PLAN OF HIGHWAYS PROCESS

STAFF DRAFT PLAN — This document is prepared by the Montgomery County Department of Park and Planning for presentation to the Montgomery County Planning Board. The Planning Board reviews the Staff Draft Plan, makes preliminary changes as appropriate, and approves the Plan for public hearing. When the Board's changes are made, the document becomes the Public Hearing (Preliminary) Draft Plan.

PUBLIC HEARING (PRELIMINARY) DRAFT PLAN — This document is a formal proposal to amend an adopted master plan or sector plan. Its recommendations are not necessarily those of the Planning Board; it is prepared for the purpose of receiving public hearing testimony. The Planning Board holds a public hearing and receives testimony on the Draft Plan. After the public hearing record is closed, the Planning Board holds public work sessions to review the testimony and to revise the Public Hearing (Preliminary) Draft Plan as appropriate. When the Board's changes are made, the document becomes the Planning Board (Final) Draft Plan.

PLANNING BOARD (FINAL) DRAFT PLAN — This document is the Planning Board's recommended Plan and it reflects the revisions made by the Board in its work sessions on the Public Hearing (Preliminary) Draft Plan. The Regional District Act requires the Planning Board to transmit the Master Plan directly to the County Council with copies to the County Executive. The Regional District Act then requires the County Executive, within sixty days, to prepare and transmit a fiscal impact analysis of the Planning Board (Final) Draft Plan to the County Council. The County Executive may also forward to the County Council other comments and recommendations regarding the Planning Board (Final) Draft Plan within the sixty-day period.

After receiving the Executive's fiscal impact analysis and comments, the County Council may hold a public hearing to receive public testimony on the Master Plan. After the record of this public hearing is closed, the Council's Planning, Housing, and Economic Development (PHED) Committee holds public work sessions to review the testimony and then makes recommendations to the County Council. The Council holds its own work sessions, and then adopts a resolution approving the Planning Board (Final) Draft Plan, as revised.

ADOPTED PLAN — The Master Plan approved by the County Council is forwarded to The Maryland-National Capital Park and Planning Commission for adoption. Once adopted by the Commission, the Plan officially amends the various master or sector plans cited in the Commission's adoption resolution.

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APPENDICES

Appendix A: Excerpt from Montgomery County Planning Board's Transportation Policy Report, January 15, 2002 (Capital Beltway HOV)

Appendix B: Levels of Service on Capital Beltway – Metropolitan Washington Council of Governments

Appendix C: Excerpt from Montgomery County Planning Board's Transportation Policy Report, January 15, 2002 (Randolph Road/Veirs Mill Road Interchange)

PURPOSE OF AMENDMENT

The purpose of this limited Master Plan Amendment is to revise the Master Plan of Highways and related area master plans and to document the need for: 1) high-occupancy vehicle lanes on the Capital Beltway (I-495) between the American Legion Bridge and the I-270 West Spur and 2) a grade-separated interchange where Randolph Road and Veirs Mill Road (MD 586) intersect. The locations of these two projects are shown in **Figure 1**.

These projects are consistent with three of the major priorities established by the Planning Board and endorsed by the County Council as part of the recent Transportation Policy Report (TPR) recommendations:

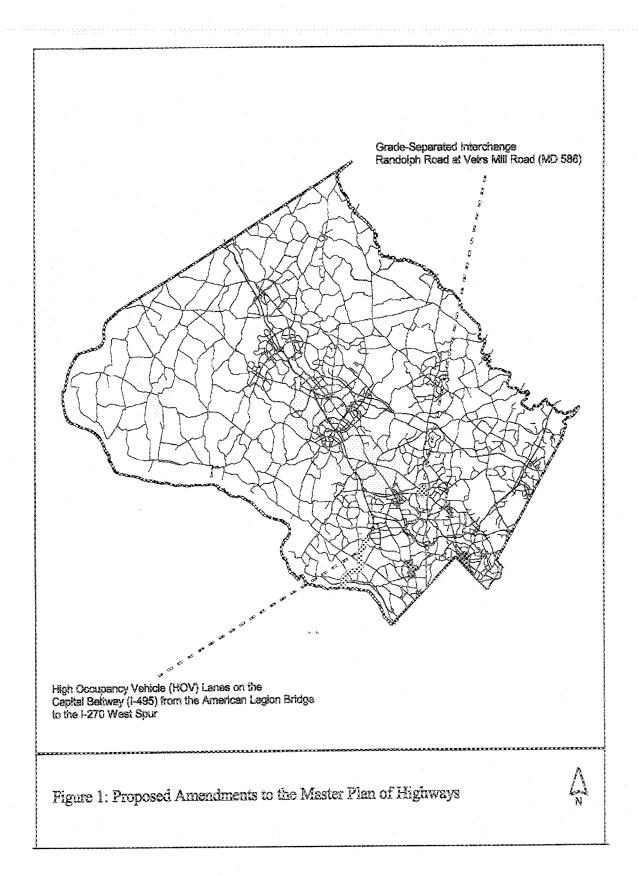
- Build a larger transitway network: light rail, busways, or HOV lanes
- Expand the east-west transportation network
- Remove major intersection delay points by building interchanges.

The Council has directed the Planning Board to propose including these two projects in the county's master plans. Since the area master plans that would contain these two projects are not scheduled for comprehensive updates in the near future, it is appropriate to include the projects by amending the Master Plan of Highways and master plans of Potomac, Bethesda-Chevy Chase, and Kensington-Wheaton.

CAPITAL BELTWAY HOV

Background

A network of high-occupancy vehicle (HOV) lanes on the Interstate Highway System in Montgomery County is a concept that has gained greater favor in recent years. In 1989, the Montgomery County Planning Department's Comprehensive Growth Policy Study discussed the idea of HOV lanes on the Capital Beltway. In 1993, the State Highway Administration (SHA) launched a series of studies of the feasibility of HOV lanes and other improvements in the corridor of the Maryland segments of the Capital Beltway. SHA's current Capital Beltway Study is analyzing HOV lanes and interchange improvements for the Beltway. It is expected to lead to an Environmental Impact Statement for federal review and approval. Meanwhile, the Montgomery County Planning Board's Transportation Policy Report has also recommended HOV lanes for the Beltway (see an excerpt from the report in Appendix A).



The Master Plan of Highways amendment would include HOV lanes for the portion of the Capital Beltway between the American Legion Bridge and I-270 West Spur, as depicted in Figure 2. It would connect the existing HOV lanes on I-270 with the proposed HOV lanes on the Virginia segments of the Capital Beltway. The project would consist of one HOV lane in each direction, adjacent to the median, with direct connections to the HOV lanes to the north and south.

This portion of the Capital Beltway forms the southeast boundary of the Potomac Subregion and the west boundary of the Bethesda-Chevy Chase Planning Area. The Beltway crosses Bradley Boulevard, River Road, Persimmon Tree, MacArthur Boulevard and the Clara Barton Parkway, and forms the eastern boundary of the West Bradley and Carderock residential communities, both zoned R-200. The Beltway also crosses Cabin John Regional Park and the Chesapeake and Ohio National Historical Park in this vicinity. In the Bethesda-Chevy Chase Planning Area, the community referred to as the Palisades abuts the Capital Beltway. The Palisades, which is located in the western part of the planning area, is comprised of residential neighborhoods and steeply wooded slopes and vistas near the Potomac River.

Walls are presently under construction to mitigate the effects of interstate highway traffic noise on the single-family communities north of River Road. The noise walls do not exclusively follow the edge of the highway right-of-way but are located to take maximum advantage of topography while maintaining as much vegetation as possible.

The Approved and Adopted 2002 Potomac Subregion Master Plan specifies a minimum right-of-way width of 300 feet for the Capital Beltway with eight travel lanes. For comparison purposes, the I-270 West Spur has six lanes and the section of mainline I-270 forming the east boundary of Potomac has twelve lanes, both within a recommended minimum right-of-way width of 300 feet.

The Approved and Adopted 1990 Bethesda-Chevy Chase Master Plan acknowledges that the minimum right-of-way width will need to vary, and that six to eight lanes will be needed.

Existing right-of-way for this short section of I-495 is currently a minimum of 300 feet, increasing to 350 feet approaching the I-270 West Spur. It appears that there is generally enough right-of-way along the alignment to include the HOV lanes; however, some additional right-of-way, primarily at the north and south ends of the project, may be needed. At this stage, there is insufficient information about the locations and amounts of rights-of-way required. Implementation issues involving the need for additional rights-of-way and relocation, if any, of the noise walls must await the results of an ongoing SHA study.

The need for improvements on the Capital Beltway are well documented. The Metropolitan Washington Council of Governments, through a consultant contract, has monitored traffic congestion levels on the Beltway. The most recent results from surveys performed in the spring of 2002 are shown in Appendix B. Some segments of the Capital Beltway between the American Legion Bridge and the I-270 West Spur are currently experiencing congested conditions (level of service F) during the morning rush hour of 8:00 to 9:00 AM. In the evening, conditions are worse, with congested conditions over the three-hour period of 4:00 – 7:00 PM.

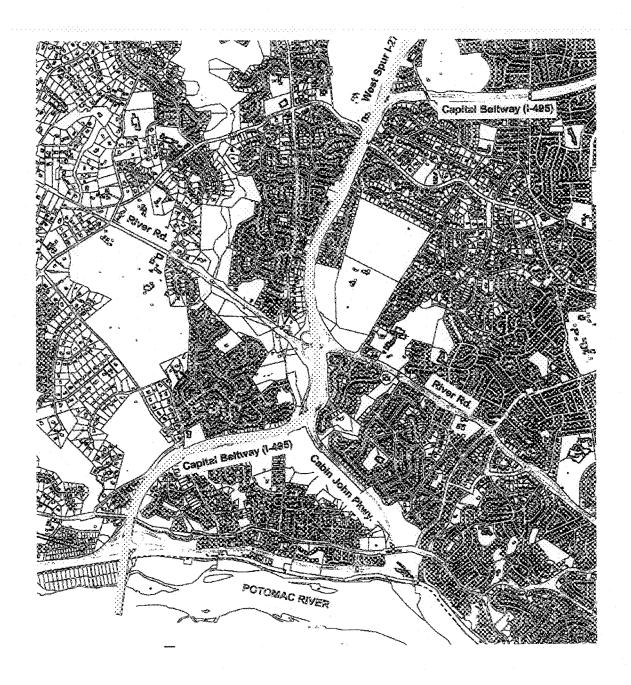


Figure 2
Proposed Alignment of Capital Beltway HOV
(American Legion Bridge to West Spur I-270)



Despite the current congested conditions on this segment of the Beltway, preliminary travel model runs by M-NCPPC staff show that peak-hour traffic volumes will tend to rise by 5-8% by 2015. The model runs show that, by 2015, HOV lanes on the Beltway would cause reductions in peak-hour traffic volumes of up to 10% in the general-purpose lanes. This indicates that the proposed HOV lanes have the potential to make vehicular use of the Beltway more efficient and to mitigate some of the congestion that would otherwise occur.

Another important benefit is that the HOV lanes would improve regional multi-modal accessibility by connecting with similar potential lanes on the Virginia HOV network. The HOV lanes would provide better priority treatment for buses, which now resort to using the Beltway's shoulders.

Changes to Affected Master Plans

The following changes are proposed using the legislative format, with deleted text indicated in brackets and new text underlined.

Potomac Subregion Master Plan, 2002

On page 109, Table 4 (Street and Highway Classifications) add to the text under "Freeways" to read as follows:

Roadway

F-8 Capital Beltway (I-495)

Limits

I-270 Spur to Potomac River

Minimum ROW Width (feet)

300

Number of Travel Lanes

8, plus 2 HOV, divided

Bethesda-Chevy Chase Master Plan, 1990

On page 113, Table 13, insert a new heading under "Major Highway Needs," and following the text under the heading "East-West Highway (MD 410)":

Name (Route #)	Limit	Recommendations	Current LOS	Conditions, Guidelines, Recommendations	Possible Long-term Changes
Capital Beltway	Between the American Legion Bridge and the West Spur I-270	Add HOV Lanes	E		

On page 122, second column, insert a new sub-heading after the text following the sub-heading "Massachusetts Ave. (MD 396)":

Capital Beltway

This Plan recommends adding high occupancy vehicle (HOV) lanes on the portion of the Capital Beltway (I-495), between the American Legion Bridge and the West Spur I-270. Some segments of the Capital Beltway between the American Legion Bridge and the West Spur I-270 are

experiencing congestion conditions (level of service F) during the morning rush hour of 8:00-9:00 AM. In the evening, conditions are worse, with congested conditions over the three-hour period of 4:00 – 7:00 PM. The proposed HOV lanes have the potential to make vehicular use of the Beltway more efficient and to mitigate some of the congestion that would otherwise occur. This proposed project would connect the existing HOV lanes on I-270 with the proposed HOV lanes on the Virginia segments of the Capital Beltway. The project would consist of one HOV lane in each direction, adjacent to the median, with direct connections to the HOV lanes to the north and south.

Street and Highway Classification

On page 126, Table 14, add to the text under "freeway" to read as follows:

Master Plan Designation	Name	Limits	Minimum Right-of- Way Width	Ultimate Pavement Width or Number of Lanes (for consideration beyond Master Plan)
<u>F-8</u>	Capital Beltway (I-495)	American Legion Bridge to I-270 West Spur	300'	8 lanes, plus 2 HOV, divided
F-8	Capital Beltway (I-495)	I-270 West Spur to Rock Creek Park	Varies	6 to 8 lanes

RANDOLPH ROAD/VEIRS MILL ROAD INTERCHANGE

Background

Randolph Road is a major east-west county road that has been a focus of attention in recent years. The SHA has been studying the possibilities of improving a number of Randolph Road intersections, including those at Rockville Pike, Connecticut Avenue, Georgia Avenue, New Hampshire Avenue, as well as Veirs Mill Road, to help ease traffic flow through the corridor. These studies are ongoing through SHA's Congestion Relief Study and subsequent project planning studies. Also, Montgomery County's Transportation Policy Report has identified the need for an interchange at the Veirs Mill Road intersection, as seen in Appendix C.

The Master Plan of Highways Amendment would include a grade-separated interchange for the intersection of Randolph Road and Veirs Mill Road, as depicted in **Figure 3**. This intersection is located in the northwestern part of the Kensington-Wheaton Master Plan area. This area generally comprises older residential communities of single-family detached homes adjacent to commercial development that runs along both sides of Randolph Road and Veirs Mill Road.

SHA has not yet identified the type of interchange and amount of right-of-way that would be needed. Given the high density of land uses around that intersection, every effort should be made to make the interchange as compact as possible.

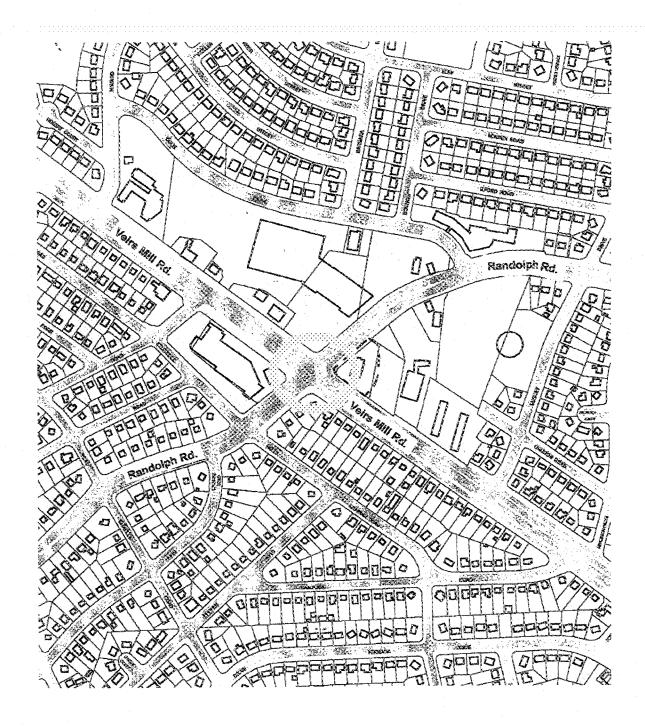


Figure 3
Proposed Location of Interchange at Intersection of Randolph Road and Veirs Mill Road



The Randolph Road/Veirs Mill Road intersection currently has congested conditions (level of service F) in the morning peak hour. Preliminary travel model runs by M-NCPPC staff show that traffic volumes will increase substantially by 2015. Some legs of the intersection could experience increases in peak-hour traffic volumes of 50% in the peak hours. SHA has proposed interim improvements, which would involve some minor widening of the existing intersection. This will result in some traffic relief in the near term but a longer-lasting solution of an interchange would still be needed at that location.

Changes to Affected Master Plans

The following changes are proposed using the legislative format, with deleted text indicated in brackets and new text underlined.

Master Plan for the Communities of Kensington-Wheaton, 1989

On page 99, first column, insert a new sub-heading after the Kenton Drive paragraph, as follows:

Randolph Road/Veirs Mill Road Intersection is recommended for further study as a grade-separated interchange. The precise characteristics of a proposed interchange will be determined in a future engineering study, which will take into account the potential access to affected properties, environmental impacts, visual quality, impacts on the adjoining communities, pedestrian circulation, and appropriate road designs, among other factors.

Appendix A

from

Montgomery County Planning Board's Transportation Policy Report January 15, 2002

Page 23

(Capital Beltway HOV)

- Montrose Parkway at its eastern terminus. These projects provide congestion relief in North Bethesda, Twinbrook, and Aspen Hill and are required whether or not the master-planned ICC is eventually built.
- · Concerning east-west travel, the recommended network would widen Norbeck Road (MD 28)/Spencerville Road (MD 198) to four lanes between Georgia Avenue (MD 97) and US 29. A discussion of higher capacity east-west connections, such as the ICC, follows in a separate section.
- Finally, the recommended network relieves many of the congestion "hot spots" throughout the county by upgrading these intersections to grade-separated interchanges. These interchanges within the non-freeway network are shown on page 18 and in the attachment to this Report.

It is recommended that studies be completed to determine the feasibility and desirability of several major potential projects. These include the HOV lanes on the Capital Beltway (I-495), with emphasis on the section from the Legion Bridge (with an appropriate terminus in Virginia) to I-95, and widening the I-270 spurs by one general purpose lane in each direction to provide better access and connection to and from the HOV lanes on the Beltway and I-270. These projects would support a potential future express bus network as well as encouraging carpool formation and use. However, the community effects of providing new HOV lanes by widening the Beltway are a major concern that would have to be balanced against the positive transportation benefits.

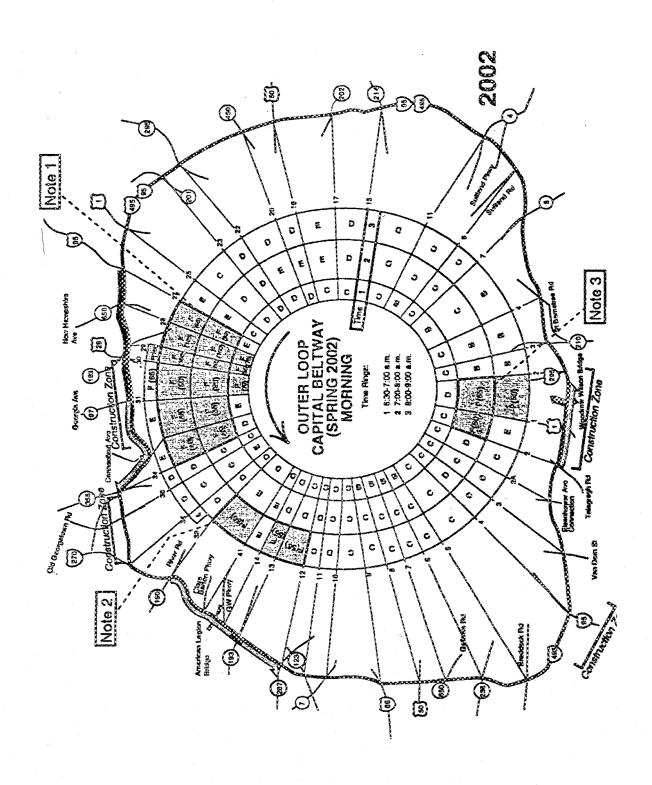
East-West Roadway Connections

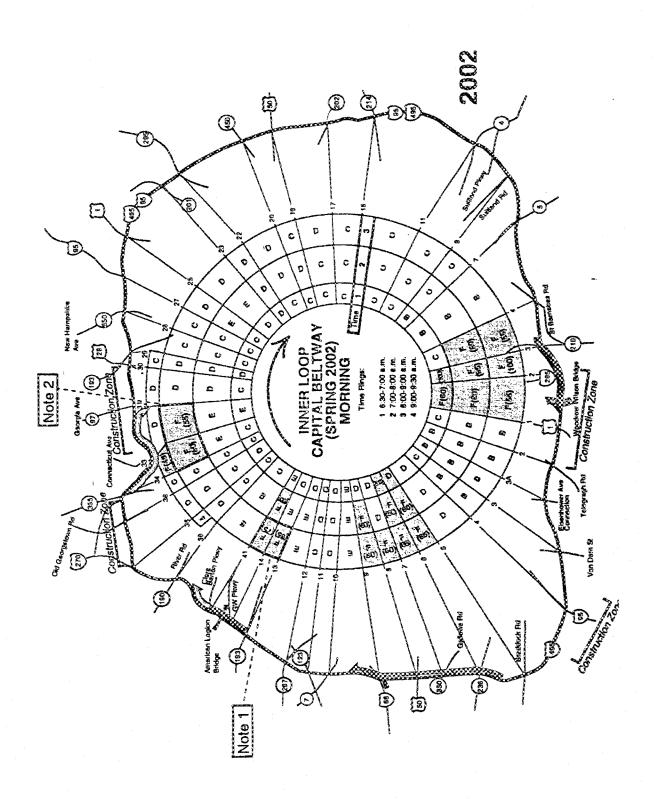
The provision of east-west movement between I-95 and I-270 above the Capital Beltway is a trade-off between the auto mobility provided by new or widened roads, and the accompanying impacts on natural resources and existing communities that would fall in the path of roadway changes. How to provide for east-west highway movement has been the single most complex and controversial transportation issue of the past decade in Montgomery County.

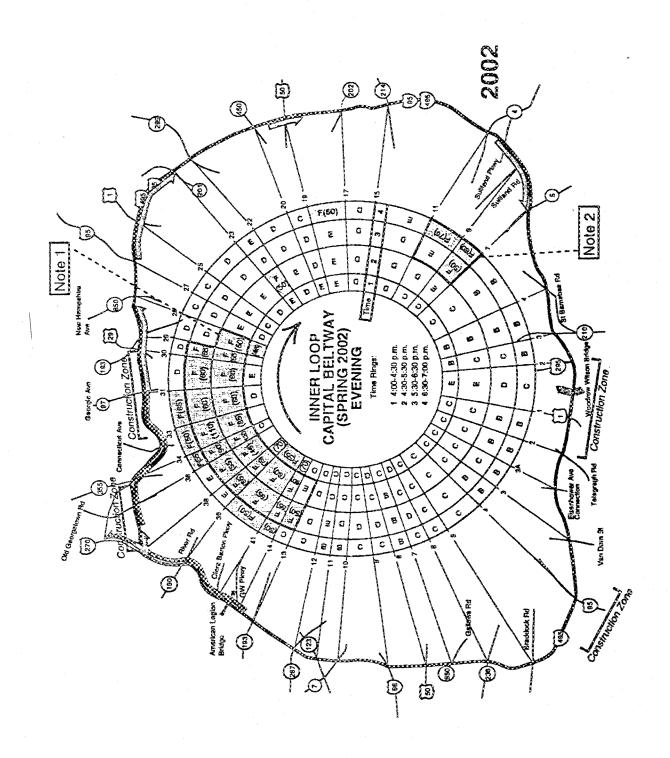
The TPR II analysis highlighted the need for improvements to east-west travel within the county. Two of the most important findings were:

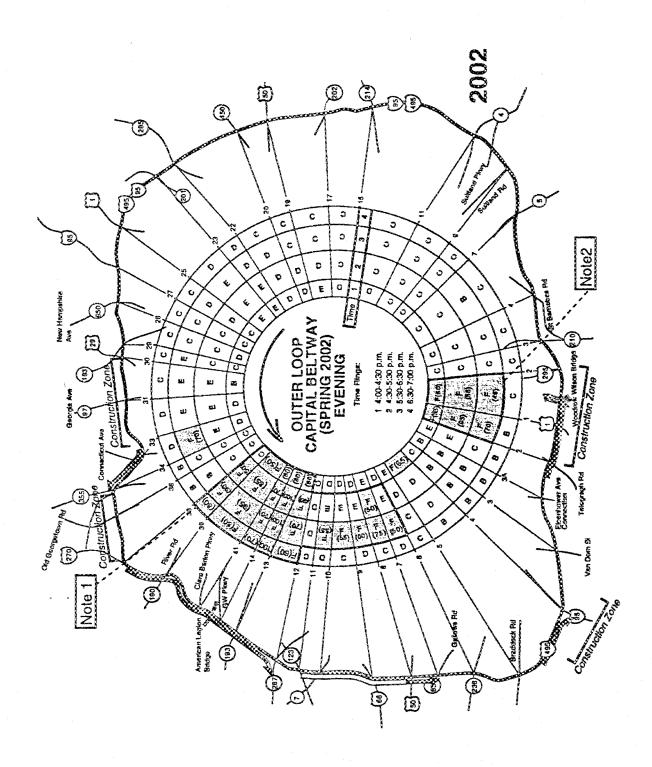
The corridor between I-270 and Georgia Avenue (MD 97) crossing Rock Creek will have the greatest corridor capacity deficiency in the county. While the total volume

Appendix B
Levels of Service on the Capital Beltway
Metropolitan Washington Council of Governments









Appendix C from

The Montgomery County Planning Board's Transportation Planning Report Page 63

(Randolph Road/Veirs Mill Road Interchange)

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	Project Name	Improvement Type	From	To.	Lanes	C L R P	2050 Base Nasier Part	Stand Network	Salary (Salary)	N. C.	Sec.
Rand 81 (85)	Randolph Rd. at Connecticut Ave. (MD 185)	New Interchange	Ϋ́Α	V/A	A/N			×	;;		173
15 8	Randolph Rd. at New Hampshire Ave. 82 (MD 650)	New Interchange	Ϋ́	N/A	٧ گ			×	£ C		38
6	83 Randolph Rd at Veirs Mil Rd. (MD 586)	New interchange	NA	N/A	N/A		-	×	6/8	.5	2
Sign	US 29 at 4 intersections (funded) 84 (Fairfand not funded for CLRP)	New Interchanges	N/A	ΑŅ	Ϋ́	×	×	×	1/3		282
33	RS US 29 at 4 Intersections (not funded)	New Interchanges	NA	N/A	N/A		×	×	e/u	8	170
4	Highways							75777		1	
Ĭ	86 Brlogs Chaney Rd.	Widening	Automobile / Castle Blvd.	PG County Line	4	×	×	×	1,24	*	13
1 5	87 Brookeville Bypass	New Road - Bypass	North of Brockeville	Ave. South of	2		×	×	1.02	w	33
ac ac	AR 1 Fairland Rd.	Widening	Paint Branch		4			×	1.34	£/3	60
1 8	89 Greencastle Rd.	Widening	US 29	PG County Line	4		×	X	1.57	60	20
ŏ8	ICC (MP alignment - Including Eastern 50 Connector)	New Road	1.370	US 1	6 lanes 4 • 2 HOV			Futher Study Required	16.39	~~~	\$1,434
	90.2 Western Connector (option 1)	New Road with at-grade intersections in ICC ROW	1.370	MD 28	4			Futher Study Required	6.51		98
3	on a Western Connector footlon 2)	Midcounty Highway from Shady Grove Road to ICC Alignment plus new road within ICC alignment from end of Midcounty Highway to MD 28 with a Legade Intersections	Shady Grove Rd,	MD 28	. 4			Futher Study Required	1.0	67	88
_ 0	91 ICC - Eastern Connector	New Road	US 29	US 1	ဖ			×	1.32	4	116
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Description of Planning Board Recommended Network