



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

MCPB
Item No. 5
7-22-04

July 16, 2004

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Jeff Zyontz, Chief
Countywide Planning Division

Eric Graye, Supervisor *ES*
Transportation Planning

FROM: Richard I. Roisman, 301-495-4547 for the Park and Planning Department *Ri*

SUBJECT: Annual Development Approval and Congestion (ADAC) Report
Final Draft

RECOMMENDATION: Approval to transmit ADAC report and prioritized project lists to the County Council and County Executive.

Staff is pleased to present to the Planning Board the final draft of the first Annual Development Approval and Congestion (ADAC) report. There are four substantive changes from the preliminary draft report that the Board received on June 18:

- The data tables, charts, and analysis of development approvals have been updated to reflect the previous year's worth of approvals (May 1, 2003 to April 30, 2004) rather than the entire development pipeline. These are basically the same data that the Board saw during the staff presentation on June 18, but at the time they were not contained in the body of the report; a few errors in data compilation were corrected prior to inserting them in the report.
- The lists of priority transportation projects have been further evaluated using the County's planning goals and policies in addition to the methodology previously described in the report. In many cases, the needs and desires to achieve planning goals such as targeting transportation investment in planned growth areas, promoting development in central business districts and metro station areas, and supporting a multimodal transportation network proved to be more important than relying solely on the results of the quantitative congestion

measures contained in the report, so several projects have been ranked differently than they were in the preliminary draft.

- To advance the goal of creating a multimodal transportation system, the Georgia Avenue Busway has been added to the State Development and Evaluation (Project Planning) Priority List. Staff asserts that both the design of this project, which would be constructed in the median of Georgia Ave (MD 97), and the potential benefits for existing drivers on Georgia Ave qualify this project as a road improvement that conforms with the Council's charge to the Board for creating the ADAC report.
- The Randolph Road facility planning study has been dropped from the County Project Priority List, due to the T&E Committee's July 2 recommendation not to proceed with Phase II Facility Planning.

Priority Transportation Projects

The revised ranking methodology, priority lists of projects, and supporting rationale for each project appear on pages 55 through 69 of the report, and are included separately as Attachment 1 to this memo. The projects are broken into the following categories:

- Projects of Regional and Statewide Significance
- State Construction Priority List
- State Development and Evaluation (Project Planning) Priority List
- County Project Priority List

The projects of regional and statewide significance remain unranked but now include the two major regional transit projects – the Corridor Cities Transitway (CCT) and the Bi-County Transitway (BCT). The State Construction Priority List remains essentially unchanged from last year and is unchanged from the June 18 preliminary draft report. The State Development and Evaluation Priority List and the County Project Priority List are ranked based on the revised methodology, which adds review and analysis of the County's planning goals, objectives, and policies. The previous ranking of these projects contained in the June 18 preliminary draft may be found in ***bold italics*** (in Attachment 1 only).

Specific pedestrian and bikeway improvements still do not appear in the lists of projects; however, continued funding of the State and County sidewalk and bikeway programs is central to meeting the County's goal of creating a multimodal transportation system and should be identified as a high priority in the transmittal letter to the Council and Executive. Similarly, in addition to including the Georgia Avenue Busway in the list of priority projects, staff believes the Board should further reaffirm its goal of improving transit service in the county, by recommending advancement of the ongoing studies for the CCT and BCT and the Bus Rapid Transit (BRT) studies along Veirs Mill Rd (MD 586) and University Blvd (MD 193). Finally, the transmittal letter should indicate

that funding for bus service, Metrorail (including the resources to allow all Red Line trains to serve Shady Grove and Glenmont), and operational improvements for both the highway and transit networks are high priorities not tied to a single project.

Staff also recommends the Board seek clarification from the Council for next year's ADAC report, including the possibility of amending the AGP resolution to add language specifically requiring the ADAC report to include policy considerations and transportation improvements other than roadways, interchanges, and intersections. This should eliminate confusion about what types of projects should be considered in future ADAC reports, and can provide guidance for including more non-auto performance measures in those reports.

Transportation Improvement Priorities

The project priorities are broken into the following categories:

- Projects of Regional and Statewide Significance
- State Construction Priority List
- State Development and Evaluation (Project Planning) Priority List
- County Project Priority List

The projects of regional and statewide significance are not ranked. The remaining projects are ranked based on the following methodology:

- Retain the previous year's rankings unless there are *new and significant* observed data on current congestion patterns, current development approvals, forecast congestion patterns, or planning and policy objectives that cause projects to be ranked differently.
- Review and analyze available current observed data on congestion
 - CLVs, AADTs, DASH data, other link volumes, travel time / speed GPS data
- Review and analyze available current data on development approvals
 - Pipeline report, Hansen queries
- Review and analyze recent travel forecasting data
 - Link V/C Ratios, Average Speeds
- Review project progress reports
 - Projects that are further along in facility planning may be ranked higher compared with similar projects, absent other policy considerations
- Review county planning goals and policies
- Based on review of data and policies, recommend changes to project rankings, if applicable
- Based on review of data and policies, recommend new projects for consideration

Some of the policies considered in the evaluation include supporting development in the county's designated growth areas -- both increased density in areas served by transit and auto-based development; providing a geographic balance for transportation investment; creating a multimodal transportation system; transportation user safety, environmental stewardship, and potential community impacts (at a sketch planning level).

Projects of regional and statewide significance (not ranked)

- Intercounty Connector
- I-270 improvements (extension of HOV lanes, managed lanes concept)*
- I-495 improvements (managed lanes concept)*
- Corridor Cities Transitway
- Bi-County Transitway

*The County's 12/5/2003 letter to the State ranked HOV on I-270 and I-495 as priorities #11 and 12 for road improvements, respectively. Given the emergence of the managed lanes/HOT concept, it is best to consider them again as major regional unranked projects.

State Construction Priority List (last year's ranking in parentheses)*

1. Rockville Pike (MD 355)/Montrose Parkway (Phase 1): build grade-separated interchange (1)
2. Georgia Avenue (MD 97)/Randolph Road: build grade-separated interchange (2)
3. Woodfield Road (MD 124): widen to 6 lanes from Midcounty Highway to Fieldcrest Road (3)
4. Clopper Road (MD 117): improve intersections from I-270 to Seneca Creek State Park (4)
5. Georgia Avenue (MD 97)/Norbeck Road (MD 28): build grade-separated interchange (5)
6. Georgia Avenue (MD 97): build 2-lane bypass around Brookeville (6)
7. MD 198: widen to 4 lanes from Old Columbia Pike to US 29 (7)
8. Rockville Pike (MD 355)/Montrose Parkway (Phase 2): build bridge over CSX Railroad (8)
9. I-270/Watkins Mill Road Extended (Phase 1): build grade-separated interchange (9)
10. US 29/Fairland Road/Musgrove Road: build grade-separated interchange (10)
11. Woodfield Road (MD 124): widen from Fieldcrest Road to Warfield Road (13)
12. MD 28/198: widen to 4 lanes from MD 97 to Old Columbia Pike (14)
13. Veirs Mill Road (MD 586)/First Street (MD 28): build grade-separated interchange (15)

*The County's 12/5/2003 letter to the State ranked HOV on I-270 and I-495 as priorities #11 and 12 for road improvements, respectively. Given the emergence of the managed lanes/HOT concept, it is best to consider them again as major regional unranked projects.

**State Development and Evaluation (Project Planning) Priority List
(last year's rankings in parentheses)**

1. Georgia Ave (MD 97) reconstruction in Montgomery Hills: add to Development and Evaluation Program (1) **2**
2. Rockville Pike (MD 355)/Cedar Lane grade-separated interchange: add to Development and Evaluation Program (6) **4**
3. I-270/Newcut Rd Extended grade-separated interchange: add to Development and Evaluation Program (**) **11**
4. Veirs Mill Road (MD 586) widening from Twinbrook Pkwy to Randolph Rd: add to Development and Evaluation Program (2)*** **3**
5. Frederick Rd (MD 355)/Gude Drive grade separated interchange: add to Development and Evaluation Program (4) **5**
6. Great Seneca Hwy (MD 119) flyover at Sam Eig Hwy: add to Development and Evaluation Program (2) **6**
7. Rockville Pike (MD 355)/Nicholson Ln grade-separated interchange: add to Development and Evaluation Program (5) **7**
8. Frederick Rd (MD 355) reconstruction in Olde Towne Gaithersburg: add to Development and Evaluation Program (3) **14**
9. Georgia Avenue Busway – Study Busway Between Olney Town Center and Glenmont Metrorail Station: add to Development and Evaluation Program (**) ******
10. Veirs Mill Rd (MD 586)/Randolph Rd grade-separated interchange: add to Development and Evaluation Program (**) **10**
11. Frederick Rd (MD 355) widening from 2000 feet south of Brink Rd to future Old Frederick Rd / Clarksburg Bypass: add to Development and Evaluation Program (**) **12**
12. Rockville Pike (MD 355) at Jones Bridge Rd / Center Dr intersection improvements: add to Development and Evaluation Program (**) **13**
13. US 29 / Stewart Lane / Milestone Drive: complete facility planning for grade-separated interchange and fund for construction (**) **1**
14. Ridge Rd (MD 27) from Midcounty Hwy to Damascus Main St (MD 108): add to Development and Evaluation Program (**) **9**
15. River Rd (MD 190) widening from I-495 to DC Line: add to Development and Evaluation Program (**) **8**

**Project did not appear on previous list.

***The road widening was requested as part of the Bus Rapid Transit study.

County Project Priority List (not previously ranked)

1. Montrose Parkway East, new road from Parklawn Dr to Veirs Mill Rd (MD 586): complete facility planning and fund for construction **1**
2. Chapman Ave, extend road between Randolph Rd and Old Georgetown Rd: complete facility planning and fund for construction **2**
3. Stringtown Rd East (Section II), build new road 400 feet east of MD 355 to Midcounty Hwy (A-305): add to facility planning candidate list **11**
4. West Deer Park Dr – replace bridge over CSX and construct master-planned realignment of Oakmont Ave: complete facility planning and fund for construction **8**
5. Ripley District Improvements, build new circulation streets in Silver Spring CBD: complete facility planning and fund for construction **9**
6. Seminary Rd / Seminary Pl / Second Ave / Brookville Rd / Linden Ln intersection safety improvements: add to facility planning candidate list **14**
7. Snouffer School Rd from Centerway Rd to Flower Hill Dr – widen to 4 lanes: add to facility planning candidate list **13**
8. Midcounty Hwy (M-83) / Middlebrook Rd, from Montgomery Village Ave to Ridge Rd (MD 27) and from east of Frederick Rd (MD 355) to Midcounty Hwy: complete facility planning and fund for construction **3**
9. Goshen Rd South – widen road from Odenhal Ave to Warfield Rd: complete facility planning and fund for construction **7**
10. Observation Dr, extend road from 800 feet north of Dorsey Mill Rd to Frederick Rd (MD 355): complete facility planning and fund for construction **4**
11. Midcounty Hwy (M-83), study options between Shady Grove Rd and ICC, including grade-separation of Midcounty Hwy / Shady Grove Rd intersection: add to facility planning candidate list **12**
12. Longdraft Rd, widen to 4 lanes between Quince Orchard Rd (MD 124) and Clopper Rd (MD 117): complete facility planning and fund for construction **6**
13. Watkins Mill Rd, extend road from 1400 feet north of Clopper Rd (MD 117) to Frederick Rd (MD 355): complete facility planning and fund for construction **5**

Analysis / Rationale for Priority Project Lists

State Construction Priority List

The rankings for the State construction list are unchanged from last year, except for moving I-270 and I-495 into the unranked regional projects list and promoting the Woodfield Rd widening, MD 28/MD 198 widening, and Rockville Town Center grade-separation to fill in the remaining spaces on the list. The rationale behind the ranking of the projects on the State construction list is well documented and has been determined through a series of discussions among the various county decision-makers. The Board sees little value in reopening debate on these projects when a set of unified county priorities is already on record with MDOT, the delegation, and the Governor.

State Development and Evaluation (Project Planning) Priority List

The State project planning list is discussed project-by-project below in the order in which project is ranked.

1. Georgia Ave (MD 97) reconstruction in Montgomery Hills: add to Development and Evaluation Program

With an average annual daily traffic (AADT) volume ranging between 80,000 and 90,000 over the past decade, the section of MD 97 between 16th St (MD 390) and the Capital Beltway (I-495) ranks among the highest traffic volumes on an arterial highway *in the State of Maryland*. Redesigning the section of MD 97 between Forest Glen Rd (MD 192) and MD 390 to restore the median and allow more peak period turns is a recommendation of the 2000 North and West Silver Spring Master Plan and a series of design concepts that will not worsen the traffic conditions are discussed in significant detail in that document. As the Plan states:

The Proposed Concept...improves safety, vehicular accessibility, and the pedestrian environment without degrading the overall level of traffic service in Montgomery Hills.

The intersection of MD 97 and Seminary Pl ranked #45 on the list of CLVs with an evening peak hour CLV of 1649 that exceeds the congestion standard of 1600. The intersection of MD 97 and Seminary Rd / Columbia Blvd ranked #29 on the list of CLVs with a morning peak hour CLV of 1754 and an evening peak hour CLV of 1722, both of which exceed the congestion standard of 1600. In addition, recent collision data places three intersections in this corridor – MD 97 at MD 192, MD 97 at I-495, and MD 97 at Seminary Rd in the top ten recurring collision intersections for the year 2003 in the area, and ranks the section of MD 97 within from Dennis Ave to Colesville Rd as the second highest incident location in the area. This project is linked with the safety improvements at the Seminary Rd / Seminary Place / Second Ave / Brookville Rd / Linden Ln intersection, which appears on the County Project Priority List.

2. Rockville Pike (MD 355) at Cedar Ln / West Cedar Ln grade-separated interchange: add to Development and Evaluation Program

This intersection has the highest CLV of the 320 sampled for the report – 2131 during the morning peak hour and 2391 during the evening peak hour, both of which exceed the congestion standard of 1600. This location is consistently among the most congested intersections in the county. The congestion at this location inhibits access to the National Institutes of Health (NIH) and National Naval Medical Center (NNMC) campuses, as well as the Bethesda CBD and Friendship Heights CBD located further south on MD 355. The 1990 Bethesda / Chevy Chase Master Plan reported at that time that the intersection was operating at LOS F, and recommended a grade-separated interchange “be retained as a possible long-range project.”

3. I-270 at Newcut Rd Extended grade-separated interchange: add to Development and Evaluation Program

This new interchange in Clarksburg is part of the menu of highway improvements under consideration in the I-270 / US 15 Draft Environmental Impact Statement (DEIS). Originally, it was hoped that the developer of the Cabin Branch project would fund this project to meet staging ceiling requirements under Policy Area Transportation Review. Since the recent revisions to the AGP removed the PATR test, the developer is no longer required to fund this project to move forward, and the project must be funded through other means. The interchange is crucial to east-west circulation in Clarksburg and not overburdening the existing interchange at Clarksburg Rd (MD 121) or the surrounding local street network once the remaining residential pipeline development (23% of the county total) is constructed. The intersection at MD 121 and Frederick Rd (MD 355) currently ranks #68 on the list of most congested intersections, with a CLV of 1569 during the morning peak hour and 1525 during the evening peak hour, both of which exceed the congestion standard of 1450. This project should be broken out from the ongoing I-270 study and have its own facility planning study; without its construction, Clarksburg will experience severe traffic congestion.

4. Veirs Mill Rd (MD 586) widening from Twinbrook Pkwy to Randolph Rd: add to Development and Evaluation Program

This project, which would widen MD 586 to 6 lanes, was not included by the Board but was ranked #2 by both Council staff and the Executive on last year’s priority list of State highway projects to move into project planning. The project was included in the final letter of transmittal to the State delegation but was envisioned as part a larger study of Bus Rapid Transit (BRT) in the MD 586 corridor. The 2003 AADT along MD 586 east of Norbeck Rd (MD 28) was 37,000 vehicles. This section of MD 586 is forecast to experience congestion during the year 2010, and the section between the future Montrose Parkway and Randolph Rd is forecast to operate at LOS F in both directions. Volumes on the surrounding network are also forecast to increase. Widening this

section of road that serves as one of the gateways to Rockville will provide both a roadway and a future transit improvement.

5. Frederick Rd (MD 355) at Gude Drive grade-separated interchange: add to Development and Evaluation Program

This intersection ranked eighth on the list of most congested intersections, with a CLV of 2028 during the morning peak hour and 2017 during the evening peak hour, both of which exceed the congestion standard of 1500. In the 2001 City of Rockville Master Plan, it ranked fourth in the top ten most congested intersections in the city. The Rockville Master Plan recommends a grade separation for this location, which will become part of the main east-west route through the city after Gude Drive is designated MD 28 in the future.

6. Great Seneca Hwy (MD 119) Flyover at Sam Eig Hwy: add to Development and Evaluation Program

Turning movement counts observed during 2004 have been received for this location and have not yet been loaded into the digital intersection database, but the CLV of 1839 during the evening peak hour would rank this location in the top 25 on the list of most congested intersections and exceeds the congestion standard of 1450. In the evening, most traffic coming from I-370 and I-270 along westbound Sam Eig goes onto northbound MD 119, and the proposed westbound to northbound and southbound to eastbound flyover ramp would take this critical movement out of the intersection and address the congestion problem. The flyover ramp is recommended in the 1990 Shady Grove Study Area Master Plan.

7. Rockville Pike (MD 355) at Nicholson Ln grade-separated interchange: add to Development and Evaluation Program

This intersection had a morning peak hour CLV of 1069 and an evening peak hour CLV of 1582. Even though these CLVs are still below the White Flint policy area standard of 1800, 32% of the past year's approved non-residential square-footage (approximately 12% of the remaining non-residential pipeline) and 22% of the past year's residential approvals (approximately 6% of the total remaining residential pipeline) will be constructed in White Flint or the surrounding North Bethesda policy area, and the intersection will not be able to efficiently handle the resulting traffic without constructing this improvement.

8. Frederick Rd (MD 355) reconstruction in Olde Towne Gaithersburg: add to Development and Evaluation Program

This project is primarily a pedestrian improvement and does not provide any congestion relief; however, it greatly improves pedestrian access in one of the County's urbanized areas, which is a major planning and policy goal.

9. Georgia Ave Busway -- Study busway between Olney Town Center and Glenmont Metrorail Station: Add to Development and Evaluation Program

This project, which would be constructed in the median of Georgia Ave (MD 97), provides high-speed transit service to the areas north of Glenmont along MD 97 and will improve traffic flow along MD 97 itself by diverting trips to the new transit service. Besides meeting the County's goal of providing a multimodal transportation system, the project may also be considered as a roadway improvement because of the potential benefits to drivers along MD 97.

10. Veirs Mill Rd (MD 586) at Randolph Rd grade-separated interchange: add to Development and Evaluation Program

This interchange, which was recently added to the Kensington / Wheaton Master Plan through an Amendment to the Master Plan of Highways (Transportation), is needed in conjunction with the widening of Veirs Mill Rd (MD 586) from Twinbrook Pkwy to Randolph Rd to address current congestion at the intersection and future traffic growth. The intersection currently ranks #58 on the list of most congested intersections, with CLVs of 1613 during the morning peak hour (which exceeds the congestion standard of 1600) and 1380 during the evening peak hour. The Master Plan of Highways amendment states:

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.

Beginning a facility planning study now would allow these issues to be sufficiently resolved in time to move toward construction while keeping schedule with both Montrose Parkway East and the widening of MD 586. This intersection is part of the State's Congestion Relief Study (CRS) program, and SHA will soon begin a series of improvements to the MD 586 legs of the intersection; however, as the master plan amendment states:

[the CRS improvement] 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.

It is possible that a future interchange would allow movements from westbound Randolph to southbound MD 586 and from eastbound Randolph to northbound MD 586, which are prohibited left turns under the current intersection configuration.

11. Frederick Rd (MD 355) widening from approximately 2000 feet south of Brink Rd to future Old Frederick Rd / Clarksburg Bypass: add to Development and Evaluation Program

This project is needed for north-south circulation and additional capacity in Clarksburg to provide access to and from the town center, as well as for through trips. Because much of the development planned for Clarksburg is just starting to be constructed, most of the available observed data does not show congested conditions. However, the intersection of Frederick Rd (MD 355) and Clarksburg Rd (MD 121) ranks #68 on the list of most congested intersections, with CLVs of 1569 during the morning peak hour and 1525 during the evening peak hour, both of which exceed the congestion standard of 1450. Twenty-three percent of the total remaining residential pipeline development is located in Clarksburg.

12. Rockville Pike (MD 355) at Jones Bridge Rd / Center Dr intersection improvements: add to Development and Evaluation Program

This intersection, while not recommended for a grade-separation in the current master plan, merits special consideration because of its high congestion levels. It is the second most congested intersection on the list in the report, with CLVs of 1497 during the morning peak hour and 2299 during the evening peak hour, which exceeds the congestion standard of 1600. DPWT completed a series of spot improvements at this location in March 2004. A more recent traffic count would illustrate the effects of that work; however, the DPWT project envisioned a second phase of improvements that have been put on hold pending changes in local circulation patterns to be implemented by NIH. Future improvements cannot proceed until NIH determines their circulation, since the intensity of traffic flow on the Center Dr leg serving NIH will impact the optimal configuration and operation of the intersection. Nonetheless, improvements need to be completed as soon as possible to address the existing congestion levels, and state funding may facilitate this process.

13. Columbia Pike (US 29) at Stewart Ln / Milestone Dr: complete facility planning for grade-separated interchange and fund for construction

The 1997 Fairland Master Plan recommends the following construction priority for the interchanges along US 29:

- MD 198/Dustin Rd
- Briggs Chaney Rd
- Randolph Rd
- Tech Rd / Industrial Pkwy
- Stewart Ln
- Musgrove Rd / Fairland Rd
- Blackburn Rd / Greencastle Rd

The Plan also provides the following guidance:

Monitor the net effects of completing each grade-separation for adverse impacts on upstream and downstream intersections as well as for east-west circulation as compared to the expected operational improvements. Monitoring may change the priorities, the cost-effectiveness of the improvements, or whether other grade-separations should be constructed at all.

The interchanges at MD 198, Briggs Chaney Rd, and Randolph Rd are all currently under construction, with the MD 198 interchange to be completed in spring 2005. The Fairland / Musgrove interchange has its own facility planning study and is the next one to be funded for construction, subject to the results of monitoring of effects of the completed interchanges. The remaining interchanges, Stewart, Tech / Industrial, and Blackburn / Greencastle (now broken into two separate projects) are the combined subject of another facility planning study. Of those four, Greencastle at 40% design has proceeded the furthest, in part because some of the design was completed during the facility planning for the MD 198 interchange before the Greencastle interchange was broken off as a separate project.

While a recent turning movement count was not available for the existing intersection with Greencastle Rd, the existing intersection at Stewart / Milestone has the highest CLV of the remaining planned interchange locations and ranked #14 on the list of most congested intersections with CLVs of 1890 during the morning peak hour and 1849 during the evening peak hour, both which exceed the congestion standard of 1500. Even though a determination on the necessity of constructing the remaining interchanges along US 29 has not yet been made, the available congestion data indicate that planning for the Stewart Ln interchange should be accelerated. Breaking the project out into a separate facility planning study will ensure that work is completed in time to receive construction funding when it becomes available and if it is determined that additional interchanges need to be built.

14. Ridge Rd (MD 27) – Midcounty Hwy to Damascus Main St (MD 108): Add to Development and Evaluation Program

The forthcoming draft of the Damascus Master Plan recommends keeping this stretch of Ridge Rd at 2 lanes but also investigating additional turn lanes and operational improvements to address current congestion levels on the roadway. The intersection of Ridge Rd and Bethesda Church Rd ranked #40 on the list of most congested intersections with CLVs of 1565 during the morning peak hour and 1667 during the evening peak hour, both of which exceed the congestion standard of 1450. The intersection of Ridge Rd and Kings Valley Rd ranked #62 on the list of most congested intersections with CLVs of 1599 during the morning peak hour, which also exceeds the congestion standard of 1450, and 1322 during the evening peak hour. Traffic volumes along Ridge Rd are expected to increase as trips are attracted by the new development in Clarksburg and growth continues in southern Frederick County. It is possible that the

upcoming construction of Woodfield Rd extended (the master-plan designated roadway A-12), which will provide an alternate route through the Damascus Town Center and the future widening of Woodfield Rd (MD 124) south of Damascus may provide some relief to Ridge Rd, so conditions should be monitored during the study.

15. River Rd (MD 190) widening from I-495 to DC Line: add to Development and Evaluation Program

This section of road serves as part of the gateway routes for the Bethesda and Friendship Heights CBDs, as well as serving through trips to Washington, D.C. The 1990 Bethesda / Chevy Chase Master Plan and the 1982 Westbard Sector Plan recommend that River Road in this section ultimately have 4 to 6 lanes. The entire length of road is currently built at 4 lanes and experiences congested conditions. The intersections at the Holton Arms School, Beechtree / Nevis, Wilson Ln (MD 188), and Whittier Blvd ranked #19, #20, #25, and #27 on the list of congested intersections and have morning peak hour CLVs of 1858, 1853, 1779, and 1776, respectively. These CLVs exceed the congestion standard of 1600. The intersection of River Rd and Goldsboro Rd (MD 614) ranked #69 on the list of intersections with a morning peak hour CLV of 1566, which falls just below the congestion standard of 1600. The section of MD 190 between the Beltway and MD 614 had a 2003 AADT of just under 60,000; between MD 614 and the District of Columbia line the AADT decreases to 40,000 as people use Goldsboro to access the Bethesda CBD and to travel on Massachusetts Ave (MD 396) into Washington (some of those travelers also cut through on Little Falls Parkway).

It is possible that some of the widening could be done to the inside rather than the outside of the roadway, but right-of-way is tight throughout the corridor and a determination would have to be made after detailed study. These potential community impacts cause the project, although a priority, to be ranked lowest on the list. Even though the Bethesda / Chevy Chase Master Plan recommends that "roads in the Planning Area not be widened during the time frame of the Master Plan," it is a virtual certainty even with this recommendation, no road widening would actual occur until after the year 2010, which is the time frame of the current master plan.

County Project Priority List (not previously ranked)

The County Project Priority list is discussed project-by-project below in the order in which project is ranked.

1. Montrose Parkway East, new road from Parklawn Dr to Veirs Mill Rd (MD 86): complete facility planning and fund for construction

This project is the new eastern gateway to the North Bethesda and White Flint policy areas, both of which are slated to receive significant amounts of future development. Thirty-two percent of the past year's approved non-residential square-footage (approximately 12% of the remaining non-residential pipeline) and 22% of the past year's residential approvals (approximately 6% of the total remaining residential pipeline) will be constructed in White Flint or the surrounding North Bethesda policy area. It will provide relief to Randolph Rd, which showed congested conditions during GPS travel time runs and operates with V/C ratios approaching 1.0 in the model run for the base case. The intersection of Randolph Rd and Gaynor Rd ranked #15 on the list of most congested intersections, with CLVs of 1259 during the morning peak hour and 1885 during the evening peak hour, which exceeds the congestion standard of 1550. The intersection of Randolph Rd and Lauderdale Dr ranked #41 on the list of most congested intersections with CLVs of 1388 during the morning peak hour and 1663 during the evening peak hour, which exceeds the congestion standard of 1550.

2. Chapman Ave, extend road between Randolph Rd and Old Georgetown Rd: complete facility planning and fund for construction

This project is needed to complete the master-planned street grid in North Bethesda and White Flint to disperse traffic and divert trips from Rockville Pike (MD 355) in anticipation of future development. Thirty-two percent of the past year's approved non-residential square-footage (approximately 12% of the remaining non-residential pipeline) and 22% of the past year's residential approvals (approximately 6% of the total remaining residential pipeline) will be constructed in White Flint or the surrounding North Bethesda policy area.

3. Stringtown Rd East (Section II), build new road 400 feet east of Frederick Rd (MD 355) to Midcounty Hwy (A-305): add to facility planning candidate list

This project was bumped from the facility planning candidate list during the last CIP update. It is needed for east-west circulation in Clarksburg and to provide access to the town center. Because much of the development planned for Clarksburg is just starting to be constructed, most of the available observed data does not show congested conditions. However, the intersection of Frederick Rd (MD 355) and Clarksburg Rd (MD 121) ranks #68 on the list of most congested intersections, with CLVs of 1569 during the morning peak hour and 1525 during the evening peak hour, both of which exceed the congestion standard of 1450. Twenty-three percent of the total remaining residential pipeline development is located in Clarksburg.

4. West Deer Park Dr, replace bridge over CSX railroad and construct master-planned realignment of Oakmont Ave: complete facility planning and fund for construction

This project provides an important safety improvement and improves connectivity between Shady Grove and Gaithersburg. Although it provides little to no congestion relief it is ranked higher due to the pressing need to replace a bridge that is reaching the end of its useful life.

5. Ripley District Improvements, build new circulation streets in Silver Spring CBD: complete facility planning and fund for construction

This project provides local circulation improvements in the Silver Spring CBD and facilitates growth in the County's downtown area by allowing redevelopment of an area that previously had limited access due to a lack of a street grid. Although the improvements add minimal link capacity, they provide some congestion relief by allowing greater dispersal of traffic in the downtown area. In particular, the intersection of Georgia Ave (MD 97) and Wayne Ave should experience benefits from the construction of these improvements. Even though that intersection ranked #162 on the list of intersections with a morning peak hour CLV of 1225 and an evening peak hour CLV of 1210, both of which are below the congestion standard of 1800, the traffic generated by the Downtown Silver Spring project and other developments in the immediate area will increase CLVs in the near future. This project also supports the Silver Spring Transit Center development, which not only unifies transit services for increased accessibility, but will also include additional development in one of the County's urbanized areas.

6. Seminary Rd / Seminary Place / Second Ave / Brookville Rd / Linden Ln intersection safety improvements: add to facility planning candidate list

This project is a key element of the Montgomery Hills Proposed Concept contained in the 2000 North and West Silver Spring Master Plan. The main study of the Proposed Concept along Georgia Ave (MD 97) is ranked #1 on the State Development and Evaluation (Project Planning) Priority List. Although the improvements will not provide any direct congestion relief, they provide important pedestrian, bike and vehicular safety improvements to an area that experiences heavy truck traffic from the industrial sites along Brookville Rd, the Walter Reed Annex, and the DPWT bus depot. This intersection also provides access to Woodlin and Rosemary Hills Elementary Schools, and ensuring safe travel to school sites is a critical planning goal.

7. Snouffer School Rd from Centerway Rd to Flower Hill Dr – widen to four lanes: add to facility planning candidate list

Snouffer School Rd has 4 through lanes from Woodfield Rd north to Flower Hill Way. The developer of the Airpark North project will widen Snouffer School Rd to four through

lanes as a condition of their plan, which was submitted when Policy Area Transportation Review was still in effect. Moving this small project into the facility planning candidate list will obviate the creation of an artificial bottleneck in the road when the developer-funded widening moves forward. The upstream intersection of Snouffer School and Centerway Rd ranked #94 on the list of most congested intersections, with CLVs of 1483 during the morning peak hour and 844 during the evening peak hour. The congestion standard for that intersection is 1450, meaning it is already exceeding its congestion standard during the morning peak hour without the additional trips generated by the Airpark North project and other developments in the area, including the potential relocation of some elements of the County Service Park from the Shady Grove area as recommended in the recent draft of the Shady Grove Study Area Master Plan.

8. Midcounty Hwy (M-83) / Middlebrook Rd from Montgomery Village Ave to Ridge Rd (MD 27) and from east of Frederick Rd (MD 355) to Midcounty Hwy: complete facility planning and fund for construction

The Clarksburg Policy Area contains 23% of the remaining residential pipeline. When those residents travel to destinations in the I-270 corridor, they will add to the already congested facilities crossing Seneca Creek: I-270 and Frederick Rd (MD 355), which showed significant congestion in the GPS-based travel time and speed data. The master-planned Midcounty Hwy on the east side of I-270 provides a parallel facility similar to Great Seneca Hwy (MD 119) on the west side of I-270. Ongoing concerns about the environmental impacts of this project, particularly the crossing of Wildcat Branch, cause this project to be ranked lower.

9. Goshen Rd South, widen road from Odenhal Ave to Warfield Rd: complete facility planning and fund for construction

This project provides improved access to downtown Gaithersburg, supporting the planning goal of improving access to urbanized areas, and also provides an alternative to Woodfield Rd (MD 124). The priority recommendation is to support Alternative 8 of this project, with 4 through lanes.

10. Observation Dr, extend road from approximately 800 feet north of Dorsey Mill Rd to Frederick Rd (MD 355): complete facility planning and fund for construction

This facility provides a north-south alternative to I-270 and Frederick Rd (MD 355) between Germantown and Clarksburg, where both facilities currently experience congested conditions and both residential and non-residential growth will continue. 23% of the remaining residential pipeline development is located in Clarksburg. Seven percent of the remaining non-residential pipeline development is located in the Germantown East Policy Area. The intersections of MD 355 at Clarksburg Rd (MD 121), MD 355 at Ridge Rd (MD 27), MD 355 at Darnestown-Germantown Rd (MD 118), and MD 355 at Middlebrook Rd all have CLVs that exceed the congestion standard of 1450 for Germantown East and Clarksburg for either the morning peak hour or the evening

peak hour, or both. However, this project is best linked with the Corridor Cities Transitway, which will operate in the median of the roadway, and there are other area improvements that are higher priority.

11. Midcounty Hwy (M-83), study options between Shady Grove Rd and ICC, including grade-separation of Midcounty Hwy / Shady Grove Rd intersection: add to facility planning candidate list

The existing intersection of Midcounty Hwy and Shady Grove Rd ranks #10 on the list of most congested intersections, with CLVs of 1961 during the morning peak hour (which exceeds the congestion standard of 1475) and 1242 during the evening peak hour. The intersection will become more congested once the additional traffic from a fourth (westbound) leg is added if the extension of Midcounty to the ICC is constructed. The CLV in the existing configuration merits study on its own, but studying the entire corridor to determine the best option given the uncertainties regarding the ICC and the northern extension of Midcounty Hwy constitutes the most prudent course of analysis and was recommended in the recent draft of the Shady Grove Study Area Master Plan. The study needs to begin soon to allow coordination with the State's action on the ICC.

12. Longdraft Rd, widen to 4 lanes between Quince Orchard Rd (MD 124) and Clopper Rd (MD 117): complete facility planning and fund for construction

This project will provide parallel capacity in Gaithersburg to relieve Quince Orchard Rd (MD 124).

13. Watkins Mill Rd, extend road from approximately 1400 feet north of Clopper Rd (MD 117) to Frederick Rd (MD 355): complete facility planning and fund for construction

This project works in conjunction with the State's project to build a grade-separated interchange at Watkins Mill Rd and I-270 to provide a new access route to and across I-270 and provide relief to both Montgomery Village Ave and Clopper Rd (MD 117), the main access routes to I-270 in the area. The 2003 AADT along Montgomery Village Ave between I-270 and Frederick Rd (MD 355) was 81,000 vehicles. Both existing routes currently experience congestion, as shown in the GPS travel time and speed data. The City of Gaithersburg has significantly down-planned land use in this area, which makes the need for the improvement less pressing and thus a lower priority.