



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

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MCPB
Item No. 17
6-10-04

June 4, 2004

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Jeffrey Zyontz, Chief
Countywide Planning Division

John Carter, Chief
Community Based Planning Division

FROM: Alex Hekimian, 301-495-4525, for the Park and Planning
Department

SUBJECT: Capital Beltway Study: Briefing and Worksession on
Recommendations by the State Highway Administration on
Alternatives Retained for Detailed Study

STAFF RECOMMENDATIONS

Staff requests that the Planning Board endorse and transmit to the County Council and to the State Highway Administration (SHA) the following recommendations regarding the Capital Beltway Study:

1. Add to the Alternatives Retained for Detailed Study (ARDS) the alternative of constructing one new lane and converting an existing lane in each direction for HOT lanes, in which single-occupant vehicles are charged a variable rate fee based on the level of traffic congestion, and in which carpools, vanpools, and buses are given priority and are not charged a fee.
2. Add to the ARDS the alternative of not converting any lanes but only constructing one new lane in each direction for HOT lanes.

BRIEF BACKGROUND

Before proceeding, it is important to define, in general terms, the types of highway lane concepts that are discussed in this memorandum:

- **HOV lane:** a lane that is reserved exclusively for carpools, vanpools, and buses and used without a fee.
- **HOT lane:** a lane in which carpools, vanpools, and buses have priority and are not charged a fee, and in which single-occupant vehicles are allowed to use any leftover capacity and charged a fee.
- **Express toll lane:** a lane in which every vehicle is charged a fee.

The recommendations in this memorandum reflect the staff finding that HOV lanes are a specific policy element addressed in County master plans, whereas tolls are an operational element not covered by master plan recommendations. Therefore, HOT lanes would be compatible with HOV recommendations in master plans because HOVs would continue to get preference.

The origins of the Capital Beltway Study, which has a study area that extends from the American Legion Bridge to the Woodrow Wilson Bridge, date back to the early 1990s. It originally started as a High Occupancy Vehicle (HOV) feasibility study, but was later re-initiated as a multi-modal HOV/transit corridor study. In 2001, the HOV and transit components of the study were separated into two studies – the Capital Beltway Study and the Purple Line Study (now called the Bi-County Transitway Study). At that juncture, an important finding was that the degree of congestion on the Beltway and other transportation facilities in the corridor would be so high that no single transportation improvement would provide significant relief for the long-term demand. Therefore, a combination of highway and transit improvements would be necessary.

In 2002, during deliberations on the County's Transportation Policy Report, the County Executive recommended that HOV lanes be established on the entire Beltway. The County Council, meanwhile, supported adding HOV lanes on the portion of the Beltway between the American Legion Bridge and I-270 West Spur, preferring to reserve judgment on the desirability of adding HOV lanes on Beltway segments east of the I-270 West Spur, where right-of-way is more constrained, until the SHA study demonstrated the relative costs and benefits of HOV lanes. In early 2004, both the Planning Board and County Council approved master plan amendments to include HOV lanes for the portion of the Beltway between the American Legion Bridge and the I-270 West Spur.

At about the same time, the Virginia Department of Transportation (VDOT) was proposing to support HOVs by building two new HOT lanes in each direction

for a long segment of the Beltway in Virginia. Currently, VDOT is continuing to proceed with the HOT lane approach.

In contrast with the actions of Montgomery County and Virginia, SHA is now leaning toward abandoning the HOV concept for the Capital Beltway as well as for I-270 and replacing it with the Express Toll Lanes concept.

Attached (Planning Board members' packets only) is the information booklet that SHA recently distributed at two Open Houses – one in North Bethesda on May 17, 2004, and the other in Upper Marlboro on May 18, 2004. At these Open Houses, SHA indicated that its "current thinking" is to carry forward to ARDS only one "build" concept – constructing one new lane and converting one existing lane in each direction to create a total of four Express Toll Lanes on the Capital Beltway. Under this proposal, there would be no HOV priority. SHA staff has indicated that a decision on ARDS may occur within a month or two, so this meeting has been scheduled for the Planning Board to provide a recommendation to the County Council on its input into the ARDS decision.

CONCERNS ABOUT EXPRESS TOLL LANES CONCEPT

The Express Toll Lanes are intriguing because they provide a way to vary the price of using certain lanes based on supply and demand and because they offer a way to self-finance part of the cost of the project. However, there are sufficient concerns about them to prompt our staff to recommend that SHA not put all of its eggs in one basket but carry other alternatives to detailed design as well.

Cost Recovery. While SHA is counting on obtaining much-needed revenue through Express Toll Lanes, it is not clear that the income would be anywhere close to defraying the \$3 billion price tag for this Capital Beltway project. Under SHA's current proposal, only a few grade-separated interchanges (at I-270, I-95, and US 50) would have new direct access ramps to and from the Express Toll Lanes on the Beltway.

A large proportion of all Capital Beltway trips is not for long distances. Many motorists enter the highway through one interchange and leave it at an interchange just a few miles later. It is doubtful that the toll lanes would be useful for many of those people. Most motorists entering in a ramp on the outside edge of the Beltway during congested periods may not want to risk weaving through three lanes of bumper-to-bumper traffic to get to the toll lanes next to the median only to weave back to exit at a ramp a few miles away. SHA will need to consider what implications the weave across three congested highway lanes has on safety and flow of traffic. Furthermore, during periods when Beltway traffic flows more freely, there would be little reason to use the toll lanes. There would be no significant time advantage and there would be, in fact, a price penalty for using

the toll lanes instead of general-purpose lanes during such free-flow periods. This raises a question about how practical toll lanes would be for most motorists during peak as well as non-peak periods on the Beltway.

Inconsistency with County Policies and Master Plans. Montgomery County has a long tradition of being a strong advocate for more efficient use of existing facilities through alternatives to driving alone. The County's transportation policies have led to providing various incentives for carpooling, vanpooling, and public transit, such as ridesharing programs, park-and-ride lots, transit fare discounts, and HOV lanes. SHA's Express Toll Lanes concept, on the other hand, appears to turn away from supporting those County policies and from the original concept of providing HOV lanes on not only the Capital Beltway, but I-270 as well.

The strong emphasis on HOV lanes in the County's Transportation Policy Report has led to recent amendments to the County's master plans. Earlier this year, the Planning Board and County Council approved adding HOV lanes to the Capital Beltway between the American Legion Bridge and the I-270 West Spur in the County's Master Plan of Highways and related area master plans. The Express Toll Lanes, therefore, would be inconsistent with the County's master plans. If, however, SHA were to carry forward to detailed study the recommended HOT lanes alternatives in this memorandum, then those alternatives would be considered compatible with the HOV emphasis in our County's policies and master plans.

Inconsistency with Other Projects in Nation. All of the existing and proposed toll lane projects described below adopt the policy of giving HOVs priority:

- The existing I-15 Express Lanes in San Diego, California allow carpools and vanpools with two or more occupants, buses, and motorcycles to use the lanes free of charge.
- Another toll lane project under construction in the San Diego area, SR 125, would be a public/private partnership and would have an HOV policy similar to I-15.
- The privately owned and operated SR 91 toll road in Orange County, California, allows carpools of at least three occupants, vanpools, and motorcycles to use the toll lanes free of charge during off-peak times and in the peak period, off-peak direction, and at a 50% discount in the peak period, peak direction.
- SR 167, in the Puget Sound area of Washington, may have existing HOV lanes converted to HOT lanes, allowing carpools, vanpools, and buses use of the HOT lanes free of charge.

- Another public/private partnership is proposing to convert HOV lanes on I-394, near Minneapolis, Minnesota, to HOT lanes, giving HOVs use of the HOT lanes free of charge.
- In the Denver, Colorado area, HOV lanes are being converted to HOT lanes, with HOVs having use of the HOT lanes free of charge.
- A public/private partnership in Miami-Dade County, Florida, is preparing to implement a conversion of HOV lanes to HOT lanes on I-95, with HOVs having use of the HOT lanes free of charge.
- In Houston, Texas, I-10 has an HOV lane that is free for carpools of three or more occupants while a limited number of two-occupant carpools are allowed to buy into the lane at a rate of \$2 per trip.
- And last, but certainly not least, VDOT is considering a public/private partnership to implement HOT lanes rather than Express Toll Lanes on its portion of this region's Capital Beltway.

Conversion of Existing General Purpose Lanes to Toll Lanes. There has been long-standing public resistance to converting "general purpose" lanes that motorists have been using free of charge to some other type of operation. These concerns have influenced prior SHA objections to converting such lanes. Nevertheless, the Express Toll Lanes proposal includes the conversion of an existing general-purpose lane in each direction on the Capital Beltway to toll operation.

In a related project for I-270, SHA is currently considering converting the existing northbound HOV lane from Shady Grove to Clarksburg to an Express Toll Lane. Converting the HOV lane to some other use, however, may be a problem if federal rules regarding such conversions cannot be satisfied.

No Toll Revenues for Public Transit Improvements. Transportation agencies in other parts of the nation have made toll lane projects more acceptable to the public by promising that all or a large part of the toll revenues would be used to improve public transit in the corridor. For example, revenues from the I-15 Express Lanes in San Diego are used for transit improvements in the corridor. SHA indicates that Capital Beltway toll revenues would go primarily to pay for the construction, maintenance, operation, and enforcement of the toll lanes.

RATIONALE FOR STAFF RECOMMENDATIONS

Given the concerns that are described above, staff recommends that SHA carry forward more than just an Express Toll Lanes alternative to detailed study.

The staff recommendations at the beginning of this memorandum provide two additional alternatives. The alternatives of having two HOT lanes in each direction or not converting any general purpose lanes but only constructing one new HOT lane in each direction, deserve to be examined in a more detailed manner. These additional alternatives will facilitate both community and elected official understanding of the pros and cons of the various alternatives and provide important information for the selection of a preferred alternative.

SHA appears to dismiss alternatives other than Express Toll Lanes on the basis of enforcement issues and costs. If there are enforcement issues with HOV or HOT lanes, then we need to learn how VDOT as well as the many other transportation agencies around the nation are able to successfully surmount them. If the HOV enforcement component of HOT lanes requires additional right-of-way, we need to know whether enforcement areas can be provided without substantially increasing community impacts. If cost is an issue, then we deserve to see how the funding stream of other alternatives would compare with the Express Toll Lanes proposal.

It is especially important to examine more closely other alternatives because Express Toll Lanes would be a major departure from long-standing policies adopted by the State and County. SHA's toll lanes proposal runs counter to policies that favor incentives for HOVs, is contrary to the County's master plans because it does not give preference to HOVs, and is inconsistent with VDOT's HOT lane proposals for the Capital Beltway. Such a major departure should only be considered after a detailed study of other more compatible alternatives.

AH:kcw
Attachments

memo to PB on Capital Beltway Study 6-4-04.doc