PROJECT INTRODUCTION

The Maryland State Highway Administration (SHA) is studying the State's 42-mile section of the Capital Beltway (I-495/I-95) from the American Legion Bridge to the Woodrow Wilson Bridge. The existing eight-lane roadway provides an essential link on the national highway system and serves local, regional, and interstate travel in the Washington, D.C. area. Traffic is projected to increase to about 300,000 vehicles per day on some sections of the Beltway by the year 2025.

Study History:

1995-2000	Multi-modal studies conducted and Public Meetings held
2001-2002	Federal Highway Administration and Federal Transit Administration approved separation of rail and highway studies and started development of highway improvement alternates
2003	Express Toll Lanes added to list of alternates to be considered

Currently, SHA is evaluating Express Toll Lane alternates to address the projected traffic demand more effectively.

Study Schedule:

May 2004	Public Open Houses
Fall 2004	Workshops to present alternate mapping and potential impacts
Spring 2005	Draft environmental document completed
Spring/Summer 2005	Hold Location/Design Public Hearing

ENVIRONMENTAL CONSIDERATIONS

National Environmental Policy Act (NEPA)

Requires that everything possible be done to protect and enhance the man-made and natural environment. A complete study of all reasonable alternates (including measures to avoid and minimize impacts) must be prepared, and the results must be made available to public officials and citizens before decisions are made.

Cultural Environment

Section 106 of the National Historic Preservation Act
Requires that agencies take into account the effects of a project on properties that are included in or eligible for the National Register of Historic Places.

- **Historic Structures**
- **Archaeological Sites**

Natural Environment

Section 404 of the Clean Water Act, Nontidal Wetlands Protection Act
Regulates dredge and fill of Waters of the United States. Guidelines published by the Environmental Protection Agency for evaluating alternates require that the Corps of Engineers evaluate the proposed project for environmental impacts (including historic and rare/threatened/endangered species impacts) and select the least environmentally damaging practicable alternatives.

- **Geology/Groundwater Resources**
- **Soils**
- **Surface Water**
- **Floodplains**
- **Wetlands**
- **Aquatic Life**
- **Plant Life**
- **Wildlife**

Socioeconomic Environment

Section 4(f) of the Department of Transportation Act
Requires that special effort be made to preserve publicly owned public parks and recreation areas, wildlife/waterfowl refuges and historical sites. No project that requires land from these resources may be approved unless 1) there is no feasible and prudent alternative to the use of the land and 2) the action includes all possible planning to minimize harm to the property resulting from such use.

Clean Air Act and Clean Air Act Amendments
An air quality analysis must be performed to determine if there are violations of the State or National Ambient Air Quality Standards for pollutants. Also, a conformity analysis must be done to make sure the Transportation Improvement Plan conforms to the State Implementation Plan.

Farmland Protection Policy Act
Requires that federal programs minimize conversion of farmland to non-agricultural uses (does not apply to farmland that is zoned or committed (planned) for urban development).

Economic Growth, Resource Protection, and Planning Act
Each transportation alternate must be evaluated by the Maryland Department of Planning to determine if it is consistent with this act. The act has several goals: to concentrate development in suitable areas to make sure that transportation, water, sewer, schools, etc. are adequate to support the growth; to protect sensitive areas (steep slopes, habitat for endangered species, streams and buffers, 100-year floodplains, etc.); to direct growth in rural areas to existing population centers; to provide stewardship of the Chesapeake Bay; and to conserve resources.

Neighborhood Conservation and Smart Growth Initiatives
Limits most state infrastructure funding and economic development, housing and other program monies to locally designated Priority Funding Areas. Directs state resources to revitalize older, developed areas, preserve resources and open space, and discourage suburban sprawl.

Executive Order 12898 (Environmental Justice)
Requires that agencies identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations.

- **Demographics**
- **Community Facilities**
- **Economic Setting and Land Use**
- **Air Quality**
- **Noise/Vibration**

PURPOSE OF PRESENTATION

The purpose of this Capital Beltway presentation is:

- **To provide an update and summary of the key project information.**
- **To present alternates under consideration with SHA's current thinking on whether to recommend or not recommend alternates to be carried forward.**
- **To describe the study process and next steps.**
- **To obtain comments and feedback from the public.**

Please provide comments and feedback on these alternates by using the comment cards provided at this Open House or in the brochure, or by contacting a project team member as shown on the inside cover of the Capital Beltway brochure.

Thank you for participating in our study.

PLANNING PROCESS

NEPA and Public / Agency Participation

STEP 1

Purpose and Need

- Initial Inventory Studies
- Purpose and Need Statement

STEP 2

Preliminary Alternates

- Data Collection
- Preliminary Alternates
- Alternates Public Workshop
- Open Houses

We are here

STEP 3

Detailed Studies

- Detailed Alternates
- Environmental Technical Analyses
- Informational Public Workshops
- Draft Environmental Document
- Public Hearing (Spring/Summer 2005)

STEP 4

Final Recommendation

- Additional Studies
- Final Recommendation
- Final Environmental Document
- Location Approval (Fall 2006)

Note: Project planning process will comply with National Environmental Policy Act (NEPA).

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PURPOSE & NEED

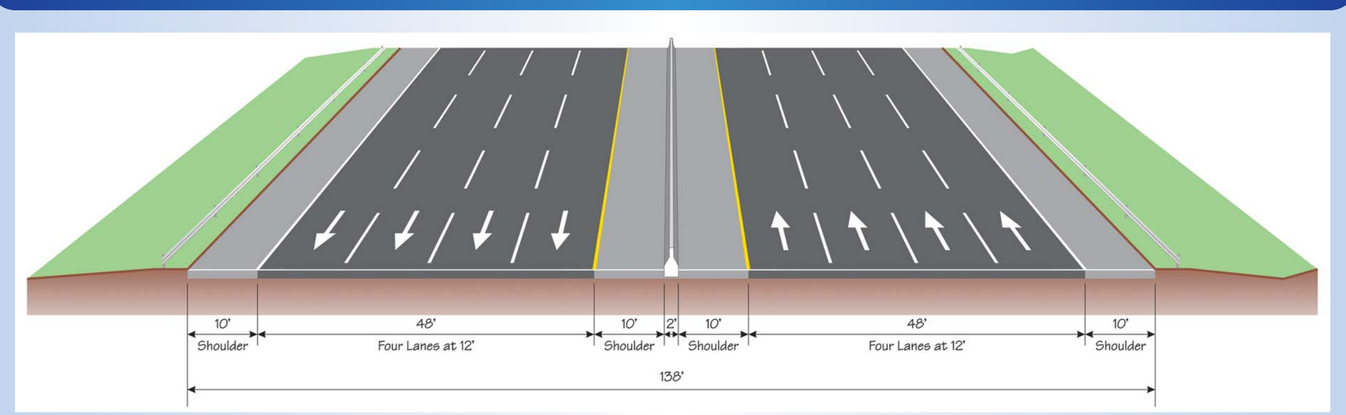
The purpose of this study is to determine the most feasible and effective means to:

- **Improve regional mobility**
- **Provide enhanced safety**
- **Maximize travel operational efficiencies**
- **Provide cost-effective transportation infrastructure**
- **Address current and forecasted travel demand in the Capital Beltway corridor**
- **Support the area's economic growth and the environment**

STUDY ALTERNATES

SHA's Current Thinking: Recommend for further study

No-Build



Description: Provides improvements that are already in SHA's program and includes continual maintenance improvements. This will serve as a basis for comparison with other alternates.

SHA's Current Thinking: Recommend this alternate be carried forward.

Reason for Recommending: Basis for comparison with Build Alternate.

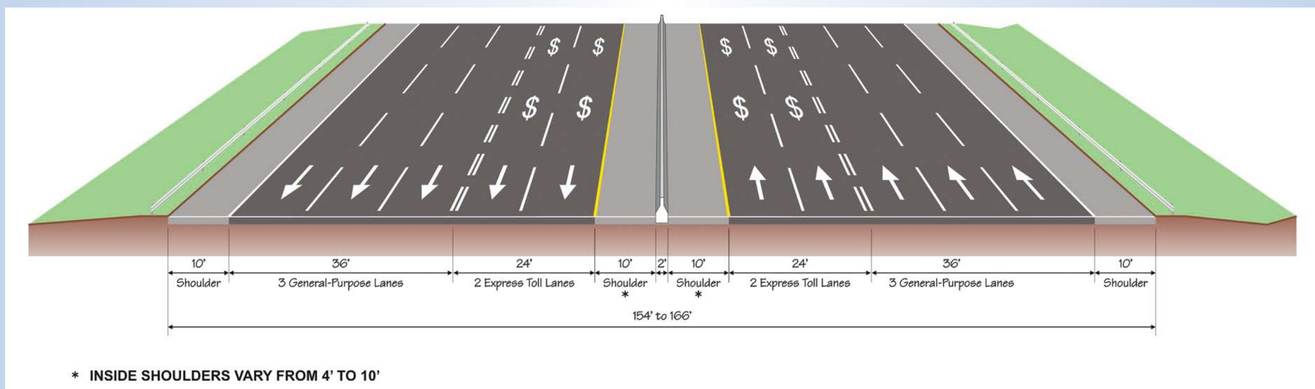
Transportation System Management/ Transportation Demand Management (TSM/TDM)

Description: TSM/TDM improvements aim to improve the efficiency of the existing facility, while minimizing impacts and construction costs. TSM/TDM includes measures to optimize the existing transportation system (TSM), as well as measures to affect the demand on the existing system (TDM). Typical solutions include modest interchange improvements, employer-participating flexible work hour or telecommuting programs, and parking restrictions/fees. For this study, TSM improvements include removing weaving areas from 10 of the interchanges.

SHA's Current Thinking: Recommend this alternate be carried forward and incorporated into all build alternates.

Reasons for Recommending: Would provide safety improvements and promote operational efficiency on the roadway. Improvements do not increase capacity as a stand alone alternate.

6 General Purpose & 4 Express Toll Lanes



Description: Provides one additional lane per direction that would be tolled and converts one existing lane per direction to be tolled. Tolls could vary based on traffic conditions or time of day. Tolls would be collected using Electronic Toll Collection (ETC) and would not require tollbooths.

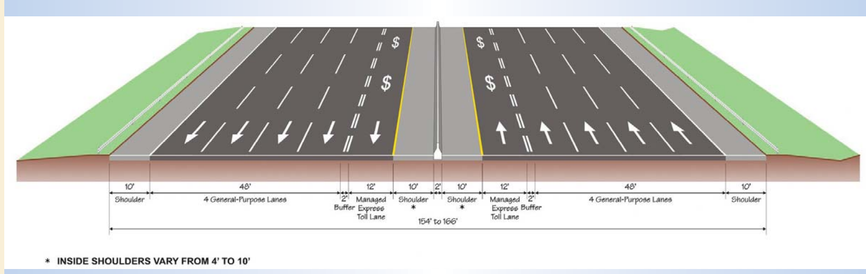
SHA's Current Thinking: Recommend for further study.

Reasons for Recommending: Would provide a management approach to ensure generally free-flowing travel. Would provide motorists with reliable travel time. Would generate maximum revenue to recover construction costs. Would provide a second express toll lane in case there is an emergency or vehicle breakdown in one lane. Express Bus service could take advantage of these lanes.

STUDY ALTERNATES

SHA's Current Thinking: Do not recommend for detailed study

8 General Purpose & 2 Express Toll Lanes

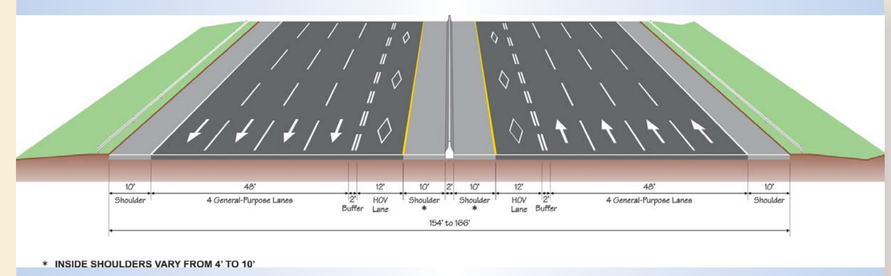


Description: Provides one additional lane per direction that would be tolled. Tolls could vary based on traffic conditions or time of day. Tolls would be collected using Electronic Toll Collection (ETC) and would not require tollbooths.

SHA's Current Thinking: Do not recommend for detailed study.

Reasons for Not Recommending: Would provide a management approach to ensure generally free-flowing travel. Would provide motorists with reliable travel time. Would not allow for passing opportunities. Would have limited revenue potential and less capacity available for motorists willing to pay toll.

High Occupancy Vehicle (HOV) Lanes

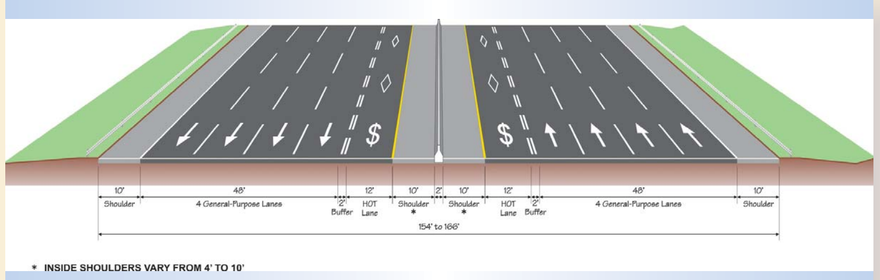


Description: Provides one additional lane per direction for high occupancy vehicles.

SHA's Current Thinking: Do not recommend for detailed study.

Reasons for Not Recommending: New construction would only benefit a limited set of users including carpools and transit. HOV 3+ volumes are forecasted to exceed the capacity of one lane. Would not generate revenue to recover construction costs.

High Occupancy Toll (HOT) Lanes

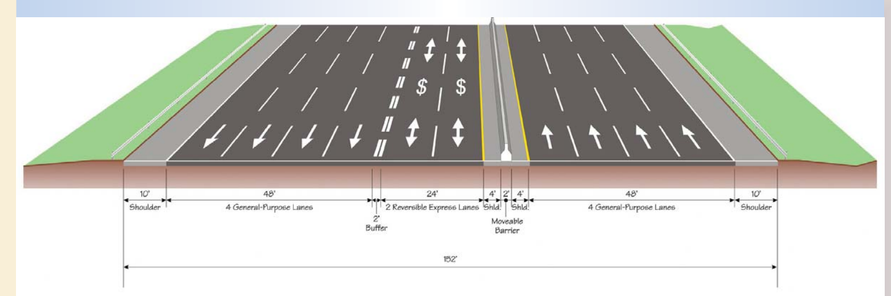


Description: Provides one additional lane per direction that would allow HOV vehicles to travel free or at a reduced cost and single occupant vehicles (SOV) to pay a toll. Tolls could vary based on traffic conditions or time of day. Tolls would be collected using Electronic Toll Collection (ETC) and would not require tollbooths.

SHA's Current Thinking: Do not recommend for detailed study.

Reasons for Not Recommending: Would be difficult for police to enforce and differentiate between HOVs and SOVs. Would offer very little capacity for SOVs due to projected high volumes of HOV. Would have limited revenue potential.

8 General Purpose & 1 or 2 Reversible Express Toll Lanes

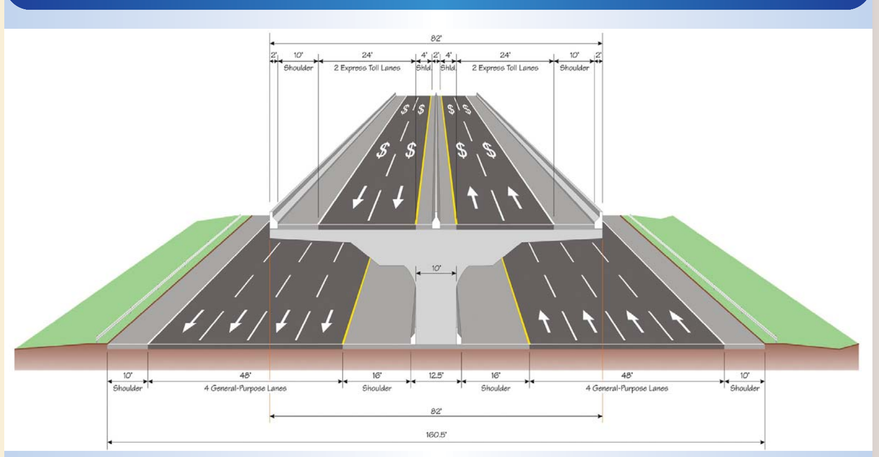


Description: Provides one or two additional lanes that are reversible in direction of highest volume.

SHA's Current Thinking: Do not recommend for detailed study.

Reasons for Not Recommending: Directional split of traffic volumes on the Beltway is 55%-45%. This split does not support reversible lanes because both directions need the additional capacity. Elevation of northbound and southbound lanes of the beltway are drastically different, which does not allow one lane to be used for both directions. Does not provide benefit to traffic in off peak periods. Would provide limited revenue if tolled.

8 General Purpose & 4 Express Toll Lanes, Elevated

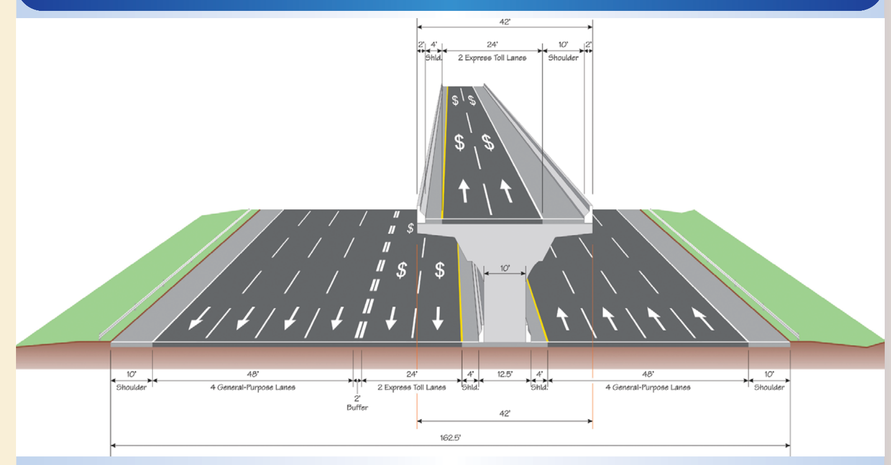


Description: Provides two additional lanes per direction on structure. Lanes on structure would be tolled. Tolls could vary based on traffic conditions or time of day and would be collected using Electronic Toll Collection (ETC) and would not require tollbooths.

SHA's Current Thinking: Do not recommend for detailed study.

Reasons for Not Recommending: Construction costs are prohibitively high. Interchange ramps connecting to the elevated structure may be over 80 feet high. Elevated structure will have more severe noise/aesthetic impacts and maintenance issues.

8 General Purpose & 2 Express Toll Lanes, At-Grade & 2 Express Toll Lanes, Elevated



Description: Provides two additional lanes per direction – one per direction on structure and one per direction at grade. All four new lanes would be tolled. Tolls could vary based on traffic conditions or time of day and would be collected using Electronic Toll Collection (ETC) and would not require tollbooths.

SHA's Current Thinking: Do not recommend for detailed study.

Reasons for Not Recommending: Construction costs are prohibitively high. Interchange ramps connecting to the elevated structure may be over 80 feet high. Elevated structure will have more severe noise/aesthetic impacts and maintenance issues.

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NEXT STEPS

- Summarize public comments received at this Open House
- Present Alternates Retained for Detailed Study to State and Federal agencies for approval
- Complete detailed engineering and environmental analyses for alternates in Fall/Winter 2004
- Hold Informational Public Workshops in Fall 2004
- Prepare Draft Environmental Document in Spring 2005
- Hold Location/Design Public Hearing in Spring/Summer 2005
- Prepare Final Environmental Document in Spring 2006
- Receive Record of Decision in Fall 2006