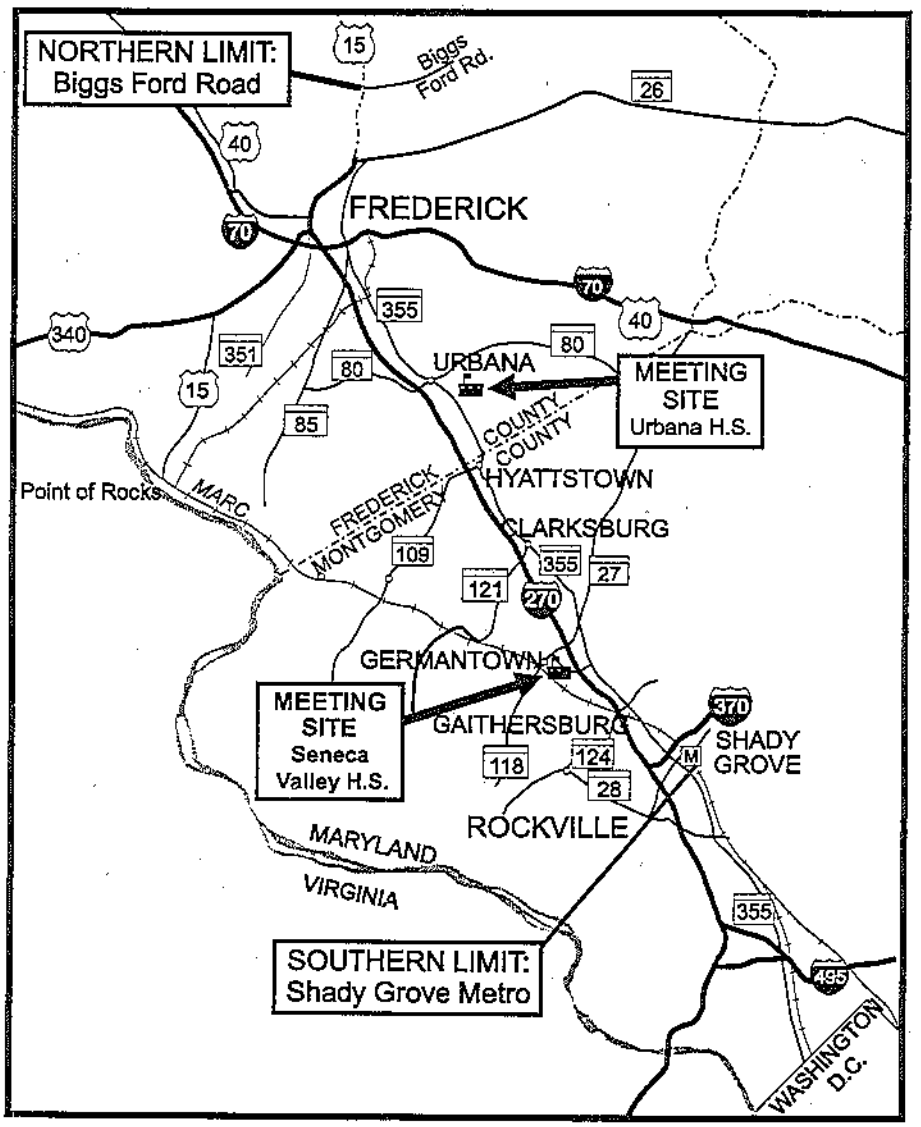
I-270 / US 15
Multi-Modal Corridor Study

LOCATION / DESIGN

Public Hearing



Montgomery County

Tuesday, June 25, 2002
Seneca Valley High School
12700 Middlebrook Road
Germantown, MD 20874

Frederick County

Thursday, June 27, 2002
Urbana High School
3471 Campus Drive
Ijamsville, MD 21754

Displays Available
5:30 PM

Presentation/Testimony
7:00 PM

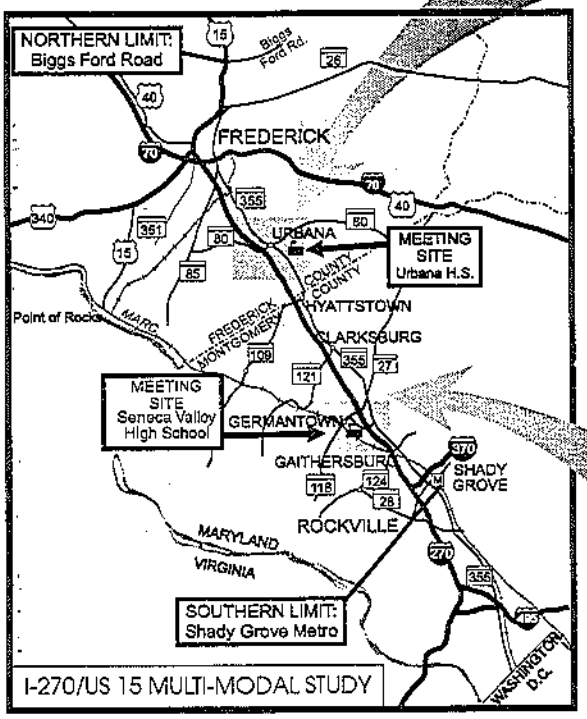
Project No. FR 192B11

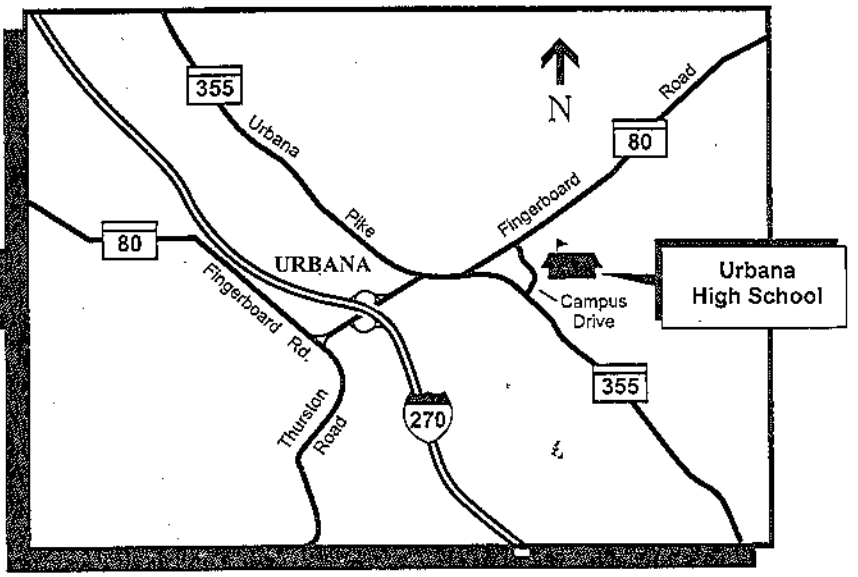
Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION

FEDERAL HIGHWAY ADMINISTRATION
US DEPARTMENT OF TRANSPORTATION

MTA *Maryland*

HEARING LOCATIONS





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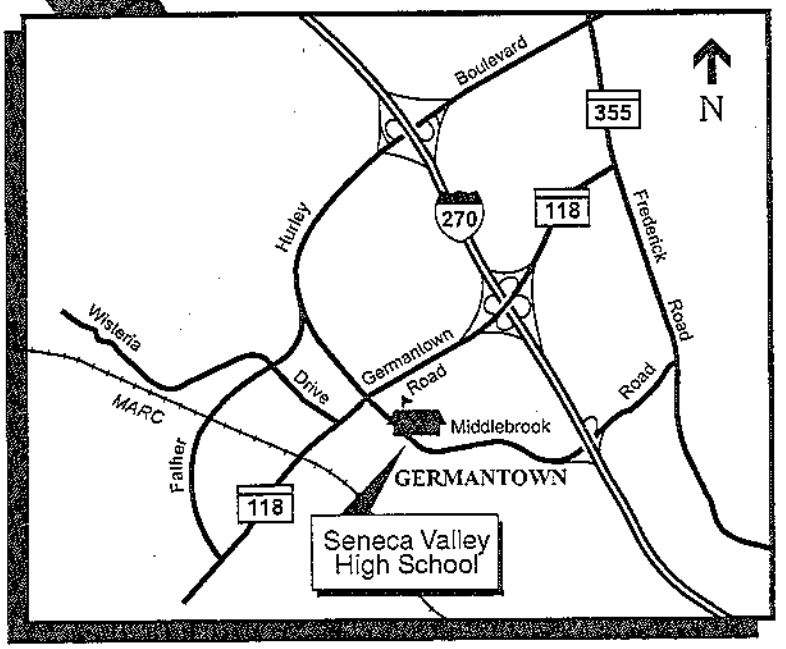

Tuesday, June 25, 2002
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Seneca Valley High School
12700 Middlebrook Road
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If you have any questions about this study, please feel free to contact one of the persons listed in the front of this brochure. You can find out about this and other projects at: www.marylandroads.com.

INTRODUCTION

The I-270/US 15 Multi-Modal Corridor Study is a jointly sponsored project between the State Highway Administration (SHA) and the Maryland Transit Administration (MTA). The Project Team, which consists of a multi-jurisdictional team of Federal, State and local governmental agencies, has carefully reviewed transportation issues within the project area, has defined the need for an improvement project, and has evaluated several transportation strategies and alternates to help address current and projected congestion and improve safety conditions along the I-270/US 15 Corridor. Extending from the Shady Grove Metrorail Station to the US 15/Biggs Ford Road intersection, this "Technology Corridor" provides a critical link between the Washington, D.C. metropolitan area and both central and western Maryland, and is an essential Corridor for carrying local and long distance trips, both within and beyond the Corridor.

PURPOSE OF THE STUDY

In response to existing and projected growth within the Corridor, the purpose of the I-270/US 15 Multi-Modal Corridor Study is to investigate options that address congestion, increase mobility and improve safety conditions along the I-270/US 15 Corridor. If nothing is done, transportation congestion, traffic operations and safety conditions will worsen, with many roadways and intersections being forced to handle more volume than the current capacity allows, thus substantially increasing travel times.

PURPOSE OF THE HEARINGS

The purpose of the Location/Design Public Hearing is to formally present the results of the engineering and environmental studies that have been completed for the I-270/US 15 Multi-Modal Corridor Study and to provide an opportunity for interested persons to offer verbal or written comments for consideration as part of the project record. Maps and other exhibits depicting the study alternates will be on display beginning at 5:30 PM. A formal presentation will begin at 7:00 PM and will be followed by public testimony. Testimony may also be given privately to a court reporter. The entire proceedings will be recorded and a transcript will be prepared. The transcript will be available for public review by mid-September 2002 at the locations indicated in the back of this brochure.

PUBLIC COMMENTS

The public is encouraged to participate in the Public Hearing to ensure input in the decision making process. A postage-paid return mailer is included with this brochure to submit your written comments. Additional copies of these mailers will also be available during the Public Hearing at the receptionist's desk. Written comments for inclusion in the Public Hearing transcript may be submitted until August 16, 2002.

PROGRAM STATUS

This project is included in the Interstate Development and Evaluation portion of MDOT's FY 2002-2007 Consolidated Transportation Program (CTP) and is currently funded only for the planning phase. Following approval of the project's location and design, if a "build" alternate is selected, the project will become eligible for

inclusion in future programs for final design, right-of-way acquisition and construction.

PUBLIC INVOLVEMENT

A key component throughout the development of the I-270/US 15 Multi-Modal Corridor Study has been our public information program. This involvement has been through various Public Workshops and Hearings, newsletters, news articles, briefings, presentations and discussions with community organizations and business organizations, including an active Focus Group as discussed later. Below is a list of past key public involvement efforts relating to this study.

June 1994: Initiated Major Investment Study (MIS)/National Environmental Policy Act (NEPA) Study, jointly sponsored by the SHA and the MTA.

May 1995: Public Initiation Meeting to familiarize the public with the Project Development Process and the project goals, as well as to present information regarding the environment, regional growth, travel forecasting, land use, and transportation strategies such as High Occupancy Vehicle (HOV) lanes, general-purpose lanes, and transit.

December 1995 / January 1996: Alternates Public Workshop to share the progress of the study with the public and gain opinions on the initial results of the transportation strategies analyses. Consequently, the conclusion from this phase of the study was that no single strategy alone would satisfy the Corridor's transportation needs.

March 1997: Alternates Workshop/Public Hearing to share the study progress with the public and gain feedback on the additional results of the transportation strategies analyses, which yielded the investigation of additional strategies (such as extended Collector-Distributor (C-D) lanes, premium bus service, and proposed new interchanges).

Fall 1998: Concluded the first stage or MIS portion of the study where concepts/strategies were initially evaluated, and recommended alternates for detailed planning study.

February 2001: Public Informational Meetings to share the study progress with the public.

FOCUS GROUP

A Focus Group, comprised of local residents, community leaders, and business owners has met periodically with the Project Team to assist in the development of the proposed transit alternatives and in the identification of possible highway improvements along I-270/US 15, its interchanges and nearby intersections, as well as to note local traffic circulation, access and aesthetic concerns. Comments and suggestions received from the Focus Group have been incorporated into the alternates where possible.

PROJECT NEED

HIGHWAY

The 1998 existing daily traffic volumes along the I-270/US 15 Corridor vary greatly depending upon location, with traffic volumes generally increasing as one approaches Washington, D.C. In addition, peak hour Levels of Service (LOS) show many sections within the Corridor failing. Level of Service is a measure of traffic operations during a peak travel hour, and is designated using a grading system. LOS "A" indicates free flowing traffic, while "F" indicates failure, characterized by severe congestion and delays. Generally, LOS "E" is regarded as the lowest acceptable operating condition. Typically, in the I-270/US 15 Corridor,

the morning peak period is from 6:00 AM to 9:00 AM, and the peak hour traffic volumes occur during this time frame. However, due to congestion, volumes similar to those during the peak hour extend throughout the peak period for several hours at some locations along I-270.

Traffic conditions are projected for the year 2025, the design year, using the regionally adopted (Metropolitan Washington Council of Governments) travel demand model based on the land use and roadway network from local master plans. Substantial population and employment growth within the Corridor is expected through the year 2025. This growth will create travel demand exceeding what the existing transportation system can handle, resulting in increased congestion, travel times and accidents. Residential and commercial growth are anticipated and planned in activity centers such as Frederick, Urbana, Clarksburg, Germantown and Gaithersburg. ***Table 1*** highlights existing 1998 and forecasted 2025 No-Build traffic volumes, LOS and percent of growth along some segments of I-270 and US 15.

Today, most of the mainline segments of the I-270/US 15 Corridor experience recurring congestion during the peak commuting periods. Based on the projected volumes, congestion is expected to worsen, causing greater delays and unsafe travel conditions. Even with all the planned improvements to the I-270/US 15 Corridor, which would provide increased capacity for more vehicles in the Corridor, overall congestion is expected to worsen. In addition, the peak periods would continue to lengthen.

SAFETY

Highway traffic accident analyses have been performed for I-270/US 15 (1996 to 1999 data) and MD 355 (1998 to 2000 data) within the project area. The accident rate and statewide average are based on 100 million vehicle miles (mvm) of travel. The average accident rate along sections of I-270 within the study limits was lower than, or consistent with, the statewide average rate for similarly designed highways. However, the average accident rate of 81.5 accidents/100 mvm on US 15 between I-70 and MD 26 was almost twice as high as the statewide average rate of 44.3 accidents/100 mvm for similarly designed highways. There were higher concentrations of accidents in several interchange areas along the Corridor, primarily due to the conflict of vehicles entering and exiting the highway.

Several sections along MD 355 within the project limits experienced greater than average accident frequency. High accident locations occurred mainly in urbanized areas, most likely due to the many traffic signals and commercial driveways in these areas.

Table 1
1998 EXISTING AND projected 2025 No-Build Average Daily Traffic (ADT) Volumes and Mainline southbound AM / northbound PM Peak hour LOS

LOCATION	1998 Existing ADT Volumes (LOS)		2025 No-Build ADT Volumes (LOS)		Percent Growth in ADT
I-270: MD 124 and Middlebrook Road	119,600	(E/E)	213,500	(F/F)	79%
I-270: MD 118 and Father Hurley Boulevard	83,100	(D/E)	130,200	(F/F)	57%
I-270: MD 109 and MD 80	68,350	(E/E)	102,800	(F/F)	50%
I-270: MD 80 and MD 85	71,250	(E/E)	125,600	(F/F)	76%
US 15: Opossumtown Pike and MD 26	68,700	(D/E)	80,400	(E/E)	17%
US 15: MD 26 and Biggs Ford Road	36,600	(C/C)	83,500	(F/F)	128%

Table 1

As the traffic volumes and congestion along I-270/US 15 increase, motorists will seek other travel routes. This will result in increased use of the local roadway system, making conditions on the local roadway network more congested and potentially unsafe. The higher than statewide average accident experience along MD 355, combined with the lack of access, areas of urbanization, and areas with poor geometric characteristics, reinforces the need to discourage motorists from over-using this alternate route. In addition, based on the assumption that as traffic volumes rise, accident numbers rise proportionately (due to congestion-related accidents), increased congestion may continue to worsen the already high accident rate along US 15 and may result in an increased accident rate along I-270.

TRANSIT

The proposed Corridor Cities Transitway (CCT) alignment runs along the Montgomery County master plan alignment and includes transit oriented development (i.e. King Farm, Washingtonian, DANAC, Decoverly, Quince Orchard Park, Parklands, etc.) clustered around the proposed CCT stations. These transit oriented development sites, coupled with the proposed stations and feeder bus network, will further enhance local transit trips. Due to its localized alignment and geometry, it is forecasted that CCT trips will be made by intra-corridor trips. Longer trips (i.e. Frederick County to Montgomery County/Washington, DC) would be better served by the proposed highway improvements (HOV lanes and direct access ramps).

Highway improvements alone will not be able to address future demand for travel in the Corridor. Therefore, alternative transportation solutions, in addition to highway improvements, are needed. Public transit is one alternative that provides effective mobility solutions for those who might otherwise use the automobile as well as for those who do not drive a car. The majority of trips will continue to be made by automobile, but with the continued development and congestion in the Corridor, improved transit service provides another option for travel. Reliable, quality transit service would provide commuters with travel time savings not offered by driving to their destinations. The projected transit demand demonstrates a need to study expanded transit service in the I-270/US 15 Corridor.

THINKING BEYOND THE PAVEMENT/CONTEXT SENSITIVE DESIGN

As part of this project, public comments and ideas regarding proposed improvements have been considered. Coordination will continue with the Montgomery County and Frederick County Departments of Public Works and Transportation, the Maryland - National Capital Park and Planning Commission (M-NCPPC), the Cities of Gaithersburg, Rockville, and Frederick, and the project Focus Group. This helps to ensure that "Thinking Beyond the Pavement," or Context Sensitive Design concepts that preserve and enhance the community's character while improving transportation in the project area, are incorporated wherever possible.

"Thinking Beyond the Pavement" addresses such issues as:

- Pedestrian circulation and safety
- Local traffic circulation to and from the neighborhoods and businesses
- Control of vehicular speed
- Maintenance of traffic during construction
- Access to transit

- Right-of-way impacts
- Problems of traffic diversions through residential neighborhoods
- Effects on police, fire, and emergency rescue response time
- Pedestrian/Bicyclist access along Corridor Cities Transitway (CCT)
- Aesthetics/Landscape/Streetscape Opportunities
- Other specific community issues

Your comments will help assure that the transportation alternates are being developed to improve access in relation to the local character and the aesthetic desires of the community. We encourage you to comment on "Thinking Beyond the Pavement" issues using the comment card at the back of this brochure.

ALTERNATES RETAINED FOR DETAILED STUDY

Following the December 1995 / January 1996 Alternates Workshops, it was concluded that no single transportation strategy alone would solve the transportation needs in the Corridor. Therefore, several of the transportation strategies were packaged together into Alternates retained and discussed with the Project Team and the public. Five alternates comprise the outcome of these discussions, including:

- Alternate 1: No-Build Alternate
- Alternate 2: Transportation System Management/Transportation Demand Management (TSM/TDM) Alternate
- Alternate 3A: Master Plan HOV/LRT
- Alternate 3B: Master Plan HOV/BRT Alternate
- Alternate 4A: Master Plan General-Purpose/LRT Alternate
- Alternate 4B: Master Plan General-Purpose/BRT Alternate
- Alternate 5A: Enhanced Master Plan HOV/General-Purpose/LRT Alternate
- Alternate 5B: Enhanced Master Plan HOV/General-Purpose/BRT Alternate
- Alternate 5C: Enhanced Master Plan HOV/General-Purpose/Premium Bus Alternate

These proposed alternates were approved by the federal and state resource and regulatory agencies for further, more detailed, consideration and are described in more detail below. Please refer to ***Figures 1 and 2***, which depict the existing/proposed alternates and typical sections.

In addition, this study is coordinating with other ongoing projects along I-270 and US 15, including the proposed US 15/MD 26 interchange improvements and the proposed new interchange at I-270/Watkins Mill Road Extended.

ALTERNATE 1: NO-BUILD ALTERNATE

Consists of the elements adopted from the 2000 Constrained Long Range Transportation Plan (e.g. MARC commuter train extension from Point of Rocks in Frederick County to the City of Frederick). The Baseline has been modified to reflect more accurately current and programmed conditions within the I-270/US 15 Corridor. Therefore, the southbound HOV lane between MD 121 and I-370 would be excluded since it is part of several alternates retained. This alternate assumes

that no major capacity improvements would be made on I-270 or US 15. Only routine maintenance and spot improvements are included.

Alternate 2: Transportation System Management (TSM)/Transportation Demand Management (TDM) Alternate

TSM/TDM Strategies - Consists of additional park and ride spaces/lots; enhanced rideshare and vanpool programs; improved pedestrian access to the Shady Grove Metro station and to the MARC stations in the project area; hiker/biker trails; improved telecommuting program; encouragement of flexible work hours, and Intelligent Transportation Systems (ITS) Technology.

Highway - None.

Transit - Consists of improved bus service including new routes and increased frequency on existing routes.

Alternate 3A: Master Plan HOV/LRT Alternate

Alternate 3B: Master Plan HOV/BRT Alternate

TSM/TDM Strategies - Consists of the TSM/TDM Strategies described in Alternate 2.

Highway - Consists of 31± miles of highway improvements, including additional general-purpose lanes; Collector-Distributor (C-D) lanes; High Occupancy Vehicle (HOV) lanes with direct access ramps at the proposed Watkins Mill Road and Newcut Road interchanges; and auxiliary lanes. *Alternates 3A/B would include one additional lane in each direction between MD 121 and I-70. This additional lane would be evaluated as an HOV lane.*

In addition, the build alternates include new or improved interchanges at I-270/MD 117 (improved); I-270/Middlebrook Road (improved); I-270/MD 118 (improved); I-270/Father Hurley Boulevard (improved); I-270/Newcut Road (new); I-270/MD 121 (improved); I 270/MD 109 (improved); I-270/MD 75 Extended (new interchange and roadwayextension); I-270/MD 80 (improved); I-270/MD 85 (improved); Jefferson Street/US 15/US 340 (improved); US 15/Trading Lane (new); and US 15/Biggs Ford Road (new).

Transit - Consists of the 14± mile Corridor Cities Transitway (CCT) alignment from the Shady Grove Metro Station to COMSAT as a separate alignment for either a Light Rail Transit (Alternate 3A) or Bus Rapid Transit (Alternate 3B) system.

Light Rail Transit (LRT) includes a double-tracked system along the CCT alignment. Track centers would be spaced approximately 14 feet apart and the overall width of the typical section would generally range between 50 and 75 feet. This right-of-way would also include the overhead catenary system used to power the light rail vehicles. The placement of the catenary poles could be between the two tracks or to the outside of each track. Implementing LRT along the CCT alignment would require a rail yard/shop facility associated with maintenance and storage of track and vehicles. Three locations are currently being considered for the rail yard: Shady Grove Metro Station area, Metropolitan Grove area, and the COMSAT area. A hiker/biker trail is also proposed adjacent to the LRT alignment.

Bus Rapid Transit (BRT) uses buses to emulate the speed, reliability, and image of light rail. Bus service would operate in two general formats: (1) line haul along the CCT; and (2) smaller feeder buses which circulate through neighborhoods before using the busway. The buses themselves can be

more modern in appearance, offering a more "rail-like" image. To enhance boarding and alighting, the buses can be low floor, with multiple doors. Fare collection can be barrier free and "pre-paid," similar to light rail operations. The CCT would be a paved roadway used exclusively by buses. The roadway would be constructed with one 12-foot lane in each direction, however, passing lanes would be provided at stations. The overall width of the typical section would range from 45 to 70 feet. Service on the BRT facility would be augmented by express bus service to the Shady Grove Metro Station using the I-270 HOV lanes. Implementing BRT along the CCT alignment would also require a bus yard/shop facility associated with maintenance and storage of vehicles. However, this facility could be located at one of the three areas being considered for the LRT facility (Shady Grove Metro Station, Metropolitan Grove, or COMSAT), or it could be located at another off-line facility. A hiker/biker trail is also proposed adjacent to the BRT alignment.

Alternate 4A: Master Plan General-Purpose/LRT Alternate

Alternate 4B: Master Plan General-Purpose/BRT Alternate

TSM/TDM Strategies - Consists of the TSM/TDM Strategies described in Alternate 2.

Highway - Consists of the same 31± miles of highway improvements and new/improved interchanges described in Alternates 3A/B. Alternates 4A/B would include one additional lane in each direction between MD 121 and I-70. This additional lane would be evaluated as a general-purpose lane.

Transit - Alternates 4A (LRT) and 4B (BRT) are the same as in 3A (LRT) and 3B (BRT).

Alternate 5A: Enhanced Master Plan HOV/General-Purpose/ LRT Alternate

Alternate 5B: Enhanced Master Plan HOV/General-Purpose/BRT

Alternate 5C: Enhanced Master Plan HOV/General Purpose/Premium Bus Alternate

TSM/TDM Strategies - Consists of the TSM/TDM Strategies described in Alternate 2.

Highway - Consists of the same 31± miles of highway improvements and new/improved interchanges described in Alternates 3A/B. Alternates 5A/B/C would include two additional lanes in each direction between MD 121 and I-70 (one general-purpose and one HOV).

In addition to the HOV direct access ramps included in Alternates 3A/B, 4A/B, and 5A/B at the proposed Watkins Mill Road and Newcut Road interchanges, Alternate 5C would include HOV direct access ramps at the I-370, MD 118, and Shockley Drive/MD 85 interchanges.

Transit - Alternates 5A (LRT) and 5B (BRT) are also the same as in 3A (LRT) and 3B (BRT). Alternate 5C consists of premium bus service from the Shady Grove Metro Station to Frederick along the I-270 HOV lanes, with potential direct access ramps to service high occupancy vehicles and buses to access the Shady Grove Metro Station (via I-370), Metropolitan Grove MARC Station (via Watkins Mill Road), Germantown Transit Center (via MD 118), COMSAT (via Newcut Road), and the MARC Monocacy Station (via MD 85/Shockley Drive). The CCT alignment is not included in Alternate 5C.

Components Not Carried Forward in this Study:

- Technology Boulevard (MD 75 Extended to MD 80). This is a separate Frederick County planning study under consideration as part of the Frederick County master plan process.

- High Occupancy / Toll (HOT) Lanes. Concerns have been raised about the economic impact that such a toll could have on some commuters.

- LRT to Frederick. This study shows 2025 demand for LRT along the CCT only to COMSAT. However, right-of-way preservation through the master plan process is recommended for future consideration.

- Heavy Rail Transit. This alignment is not identified as a recommended transportation project in the Maryland-National Capital Park and Planning Commission's (M-NCPPC) Transportation Policy Report. This type of facility would be dependent on higher land use densities within this area than are called for in current local master plans.

- CSX Alignment for LRT. This alignment does not provide service to emerging growth areas west of I-270. It is also inconsistent with local and regional 2025 land use priorities.

- Monorail. Monorail has not previously been implemented in this region and has not been used for a system of this magnitude. A monorail system able to serve the anticipated demand of the Corridor Cities would be at least as visually obtrusive as a typical elevated rail system.

TRAVEL DEMAND

Traffic Projections

The build alternates are forecasted in 2025 to accommodate up to 13% more traffic than the Baseline in the southern end of the Corridor, up to 26% more near the border between Montgomery and Frederick Counties and up to 12% more at the northern terminus of the project area. If any of these alternates are constructed, it is projected that they would relieve some of the anticipated I-270/US 15 congestion projected for the No-Build Alternate. Furthermore they would help to relieve some congestion on parallel roads, such as MD 355. Table 3 presents the 2025 ADT volumes and southbound AM/northbound PM peak hour levels of service along mainline I-270/US 15.

Projected Peak Hour Conditions

In the City of Frederick, traffic analyses have shown that the proposed build alternative of three through lanes plus one auxiliary lane (currently two through lanes in each direction) would operate at an acceptable level of service in most areas along US 15. There is one area along US 15 (between US 40/MD 144 and Jefferson Street) where the level of service (LOS) would operate at a failing LOS (LOS F).

Along I-270 in Frederick County, projected 2025 build traffic conditions would generally operate at an acceptable LOS, except along northbound I-270 from MD 80 to MD 85.

Along I-270 in Montgomery County, projected 2025 build traffic congestion substantially increases, resulting in poor LOS conditions. Between the County Line and MD 118, traffic would operate at LOS D/E conditions southbound and LOS E/F conditions northbound. From the MD 118 interchange to south of the I-370 interchange, peak hour traffic volumes result in LOS E/F conditions along the mainline and C-D lanes in both peak directions, even with the inclusion of additional auxiliary lanes along the Collector-Distributor (C-D) lanes.

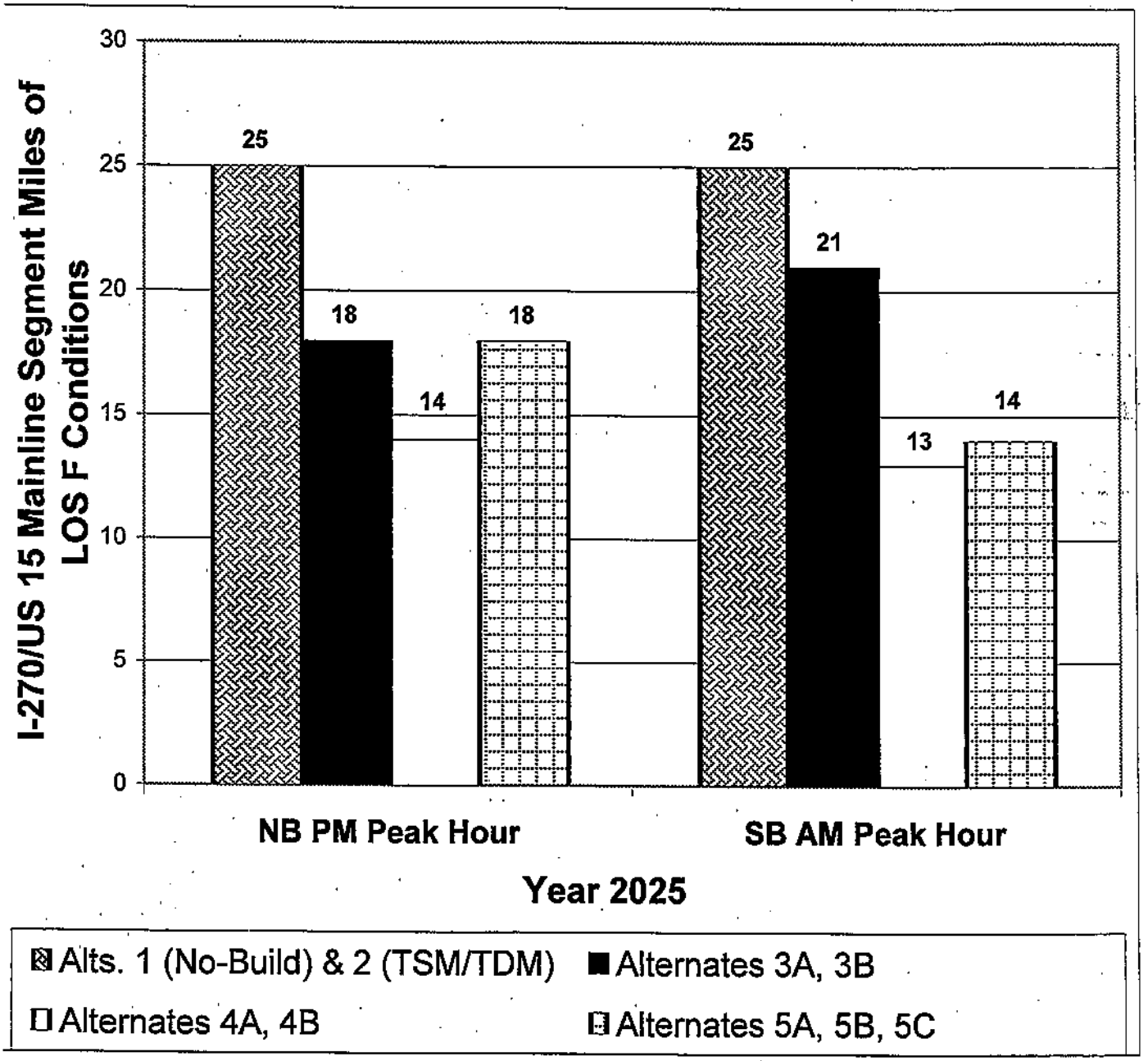
The overall traffic analyses show that I-270 and US 15 will continue to be congested (even with the proposed build alternates) to 2025 and beyond due to the existing and projected growth along the Corridor, as shown in ***Table 3***. However, the build alternates do provide congestion relief in that projected traffic operations would be worse with the No-Build conditions. For instance, reviewing the difference in mainline segment miles that operate under LOS F conditions between the build alternatives and No-Build conditions illustrates this congestion relief, as indicated in ***Figure 3***:

TABLE 3

2025 NO-BUILD AND 2025 BUILD AVERAGE DAILY TRAFFIC (ADT) VOLUMES AND MAINLINE SOUTHBOUND AM / NORTHBOUND PM PEAK HOUR LOS

Location	2025 No-Build ADT Volumes (LOS)	2025 Alts. 3A/B ADT Volumes (LOS)	2025 Alts. 4A/B ADT Volumes (LOS)	2025 Alts. 5A/B/C ADT Volumes (LOS)
I-270: I-370 and MD 117	238,300 (F/F)	264,100 (F/F)	264,100 (F/F)	266,400 (F/F)
I-270: MD 124 and Middlebrook Road	213,500 (F/F)	237,700 (F/F)	237,700 (F/F)	241,100 (F/F)
I-270: MD 118 and Father Hurley Boulevard	130,200 (F/F)	160,900 (E/E)	160,900 (E/E)	164,500 -(F/E)
I-270: MD 109 and MD 80	102,800 (F/F)	112,200 (F/F)	123,300 (E/E)	128,900 (E/F)
I-270: MD 80 and MD 85	125,600 (F/F)	134,200 (F/F)	150,500 (F/F)	156,700 (F/F)
US 15: Opossumtown Pike and MD 26	80,400 (E/E)	98,400 (C/C)	98,400 (C/C)	97,700 (C/C)
US 15: MD 26 and Biggs Ford Road	83,500 (F/F)	86,400 (D/D)	86,400 (D/D)	86,800 (D/D)

FIGURE 3
YEAR 2025 LEVEL OF SERVICE F CONDITIONS ON I-270 / US 15 MAINLINE SEGMENTS



Note: Total I-270/US 15 Corridor length is approximately 31 miles

Alternates 3A/B would provide an eleven mile total reduction in the mainline segments operating at LOS F (seven miles reduction northbound, four miles reduction southbound). Alternates 4A/B would provide a 23 mile total reduction in the mainline segments operating at LOS F (eleven miles reduction northbound, twelve miles reduction southbound). Alternates 5A/B/C would provide an 18 mile total reduction in the mainline segments operating at LOS F (seven miles reduction northbound, eleven miles reduction southbound).

TRANSIT MODE AND RIDERSHIP

Mode characteristics, ridership, and cost information, as well as public input, will be used in order to make a mode recommendation for the CCT once an alternate is selected. Some of the factors that will be considered for the transitway mode recommendation will attempt to address basic operational, technical and system characteristics in categories of consistency/compatibility, flexibility, staging potential, marketing, patronage, costs and othermeasures of effectiveness, where applicable. ***Table 4*** and ***Table 5*** below provide a comparison of the AM peak period and the daily boardings on the modes under consideration in these areas.

TABLE 4
PROJECTED 2025 AM PEAK PERIOD TRANSIT RIDERSHIP SUMMARY (BOARDINGS)

	LRT, BRT OR PREMIUM BUS BOARDINGS	PROJECT AREA MARC BOARDINGS	Shady Grove and Rockville Metrorail Boardings	Project area Feeder and Local Bus Boardings	Total Project area Transit Boarding
Year 2000 Observed	N/A	2,100	10,400	N/A	N/A
Alternate 1 (No-Build)	N/A	11,400	15,800	17,300	44,500
Alternate 2 (TSM/TDM)	N/A	9,900	15,900	27,600	53,400
Alternates 3A, 4A, 5A (LRT)	14,000	5,800	19,200	20,500	59,500
Alternates 3B, 4B, 5B (BRT)	18,300	6,000	22,000	29,200	75,500
Alternate 5C (Premium Bus)	14,500	4,700	24,800	31,300	75,300

TABLE 5
PROJECTED 2025 DAILY TRANSIT RIDERSHIP SUMMARY (BOARDINGS)

	LRT, BRT or Premium Bus Boardings	**Project Area MARC Boardings**	**Shady Grove and Rockville Metrorail Boardings**	**Project Area Feeder and Local Bus Boardings**	**Total Project Area Transit Boarding**
Year 2000 Observed	N/A	4,400	14,700	N/A	N/A
Alternate 1 (No-Build)	N/A	23,900	41,100	45,000	110,000
Alternate 2 (TSM/TDM)	N/A	20,800	41,300	71,800	133,900
Alternates 3A, 4A, 5A (LRT)	36,400	12,200	49,900	53,300	151,800
Alternates 3B, 4B, 5B (BRT)	47,600	12,600	57,200	75,900	193,300
Alternate 5C (Premium Bus)	37,700	9,900	64,500	81,400	193,500

CAPITAL COST ESTIMATES

Preliminary cost assessments prepared for the alternates under consideration are shown in ***Table 6***. These costs include design, right-of-way and construction costs. In addition, the cost effectiveness of the various transit modes under consideration has been evaluated as shown in ***Table 7***.

TABLE 6
CAPITAL COST ESTIMATES FOR PROPOSED ALTERNATES (MILLIONS OF 2001 DOLLARS)

Cost Component	Alt. 2	Alt. 3A	Alt. 3B	Alt. 4A	Alt. 4B	Alt. 5A	Alt. 5B	Alt. 5C
Highway Capital Costs								
Project Planning	-	$9				$9		$9
Preliminary Engineering	-	$216				$255		$271
Highway Right-of-Way	-	$139				$139		$139
Construction	-	$1,441				$1,695		$1,804
Subtotal Highway	-	$1,805				$2,098		$2,223
Transit Capital Costs								
Subtotal Transit	$33	$857	$792	$857	$792	$857	$792	$296
Total Cost of Alternate	**$33**	**$2,662**	**$2,597**	**$2,662**	**$2,597**	**$2,955**	**$2,890**	**$2,519**

TABLE 7
PRELIMINARY COST EFFECTIVENESS OF TRANSIT MODES

	LRT	BRT
Corridor Cities Transitway (CCT) Capital Cost (Millions of 2001 Dollars)	$857	$792
Corridor Cities Transitway (CCT) Cost per mile (Millions of 2001 Dollars)	$61.21	$56.57
Cost Effectiveness – Shady Grove to COMSAT (Cost per new rider)		
Relative to No-Build	$10.94	$10.45
Relative to TSM/TDM	$17.99	$13.40

NON-PREFERRED ALTERNATES

Due to the potential for significant residential impacts/displacements in two areas along the I-270 Corridor, the project team has identified the following items as Non-Preferred Alternates:

- I-270/I-370 direct access ramps (included in Alternate 5C)
- Slope Limits along I-270 Northbound, South of Middlebrook Road along Staleybridge Road (retaining wall to be provided) (included in Alternates 3A/B, 4A/B, 5A/B/C)

I-270/I-370 direct access ramps (included in Alternate 5C)

The proposed direct access ramps at the I-270/I-370 interchange are considered a non-preferred alternate, as the ramps and associated highway widening would result in a substantial number of residential/townhouse unit displacements. If direct access ramps are not provided, this would potentially avoid displacing up to 261 additional residential units, resulting in a potential total of either 91 to 124 displacements (without retaining walls) or 59 to 96 displacements (with retaining walls). The resulting displacements are identical to the impacts in Alternates 5A/B. Elimination of the I-270/I-370 direct access ramps would also potentially avoid up to one additional business displacement.

The elimination of the I-370 direct access ramps would likely reduce the Premium Bus transit ridership in Alternate 5C by approximately 4,000 riders during the AM peak period. This would decrease the total projected 2025 AM peak period ridership from 14,500 to 10,500 riders. In addition, the elimination of these ramps would decrease total Corridor transit ridership (MARC commuter rail, local bus, and premium bus) by approximately 800 riders, and would increase traffic volumes in the Corridor by approximately 650 additional low occupancy vehicle trips.

Slope Limits along I-270 Northbound, South of Middlebrook Road along Staleybridge Road (included in Alternates 3A/B, 4A/B, 5A/B/C)
Slope limits along I-270 northbound, south of Middlebrook Road are considered a non-preferred alternate, as these slope limits would result in the displacement of a substantial number of single-family residences. In lieu of slope limits in this area, a retaining wall would be provided along I-270 northbound, south of Middlebrook Road in order to avoid displacements to residences located along Staleybridge Road. Retaining walls in this area would reduce residential impacts from potential displacements of between 26 and 35 residences (total without retaining walls) to between nine and 13 residences.

ENVIRONMENTAL SUMMARY

A detailed analysis of the build alternates was conducted to determine the potential for impacts to socio-economic and natural environmental resources. A comparison and summary of these impacts is provided in ***Table 8***.

The intent of the Smart Growth Areas Act (1997) is to limit sprawl and direct state funding for growth-related projects toward County-designated Priority Funding Areas (PFA's). Alternates 3A/B, 4A/B, and 5A/B/C are located partially within the Priority Funding Areas throughout the corridor. In Montgomery County, the study limits are in a PFA from the I-270/I-370 interchange to north of the I-270/MD 121 interchange, including the Corridor Cities Transitway alignment from the Shady Grove Metro Station to COMSAT, south of Clarksburg. North of MD 121, the study limits are outside the PFA. In Frederick County, the study area is outside of the PFA from the Montgomery County/Frederick County line to south of the proposed MD 75 extended interchange; from Dr. Perry Road to south of the I-270/MD 80 interchange; from north of the I-270/MD 80 interchange to south of the I-270/MD 85 interchange; and north of the US 15/Biggs Ford Road intersection. Coordination will continue with the counties and Maryland Department of Planning to limit sprawl and direct state funding toward PFAs. Figures 1 and 2 highlight the limits of the PFA boundaries.

The build alternates 3A, 3B, 4A, and 4B are consistent with the various Montgomery and Frederick County master plans. Alternates 5A, 5B, and 5C are referred to as the "Enhanced Master Plan Alternates" because they include one additional general-purpose lane in each direction along I-270 (between MD 121 and the County line) beyond what is proposed in Montgomery County Master Plans. The southern portion of the project area, generally south of MD 121, consists of residential land uses (a mixture of single-family homes, townhomes and condominiums) and commercial land uses (with office/industrial development) along both sides of I-270. North of MD 121, most of the anticipated development is concentrated east of I-270, consisting mainly of office/light industrial uses. Most of the land west of I-270 is expected to remain agricultural/conservation. Residential and commercial land uses exist in Clarksburg and Urbana. Land uses in the vicinity of Frederick contain a mixture of residential and commercial, with agricultural and industrial designations north of the Frederick City limits. Planned land use consists of additional commercial, industrial, and multi-use development in designated growth areas throughout the project area including Gaithersburg, Germantown, Clarksburg, Urbana, and the City of Frederick. Depending upon the alternate, up to 592 acres of additional right-of-way will be required. There will be between 2 to 12 business displacements and up to 385 residential displacements depending on the alternate under consideration.

In accordance with Executive Order 12898, census tract data was used to identify minority populations and/or low-income populations. Outreach efforts to all communities included sending correspondence and a newsletter explaining the project, and offering the opportunity to meet and discuss the I-270/US 15 Multi-Modal Corridor Study. The project team will continue to confirm and refine the locations of minority populations and/or low-income populations during subsequent stages of the project, and develop mitigation measures if needed, in consultation with the affected communities, to reduce the impacts of the transportation improvements.

Depending upon the alternate, up to 48 acres of right-of-way would be required from 11 to 13 publicly owned public parks. Section 4(f) permits the use of publicly owned parks and recreational areas, wildlife or waterfowl refuges, or significant historic sites only if there is no feasible and prudent alternate to that use. A Section 4(f) evaluation to address the avoidance or minimization of such use has been prepared.

The State Highway Administration, in consultation with the Maryland Historical Trust and other consulting parties, has identified 31 historic resources including structures in the project area that are listed on or considered eligible for the "National Register of Historic Places." These resources are identified in the Draft Environmental Impact Statement (DEIS) prepared for the project. The build alternates are unlikely to affect significant archeological resources and no further work is recommended. In accordance with the Section 106 procedures of the National Historic Preservation Act, this Public Hearing provides the opportunity for public input regarding effects to cultural resources. The State Highway Administration is completing consultation with the State Historic Preservation Officer regarding project effects to historic properties including resolution of an adverse project effect through development of a draft Memorandum of Agreement. Public views on the resolution of adverse effects on historic resources are being sought.

Project area streams are designated as Use I, III, and IV waters by the Maryland Department of the Environment, (suitable for recreation, habitat for warm and cold water fish, including trout in some waters, and other wildlife). Stream impacts required range from approximately 13,407 linear feet to 16,331 linear feet. A range of 180 to 199 acres of woodland and 0.5 to 11.6 acres of non-tidal wetlands will also be impacted. The build alternates will impact up to 291 acres of prime farmland soils and up to 392 acres of soils of statewide importance. Coordination is being completed with the Natural Resources Conservation Service (NRCS) offices of Frederick and Montgomery Counties. A range of three to 24 acres of 100-year floodplains throughout the project area will be impacted. The proposed highway improvements will impact the 100-year floodplains associated with Muddy Branch, a tributary to Muddy Branch, a tributary to Great Seneca Creek, Great Seneca Creek, Wildcat Branch, Little Bennett Creek, Bennett Creek, Monocacy River, Carroll Creek, Rock Creek, and Tuscarora Creek. The transitway alignment will impact the 100-year floodplains of Muddy Branch, Gunners Branch, Great Seneca Creek, and a tributary to Great Seneca Creek. Strict enforcement of the State Highway Administration's sediment and erosion control procedures and the Maryland Department of the Environment's stormwater management regulations will minimize water quality effect during and after construction. Coordination with the US Fish and Wildlife Service and the Maryland Department of Natural Resources indicates that there are no affected state or federally listed threatened or endangered plant or wildlife species or unique habitat known to exist in the project area.

An air quality analysis indicates that the State and National Ambient Air Quality Standards will not be exceeded under the no-build or the build alternates.

A noise analysis was completed for a total of 55 noise sensitive areas along the highway alignment. The predicted 2025 design year noise levels indicate that the Federal Highway Administration (FHWA) Noise Abatement Criteria (67 dBA) would be approached (66 dBA) or exceeded under both the no-build and build conditions at up to 36 noise sensitive areas. Of these locations, the potential feasibility and reasonableness of noise barriers will be further investigated at 13 locations and the results will be included in the Final Environmental Impact Statement (FEIS). A noise analysis was also completed for a total of 18 noise sensitive areas along the potential transitway alignment. Ten locations would be affected without the train horn noise and 16 locations would be affected with the train horn noise. Of these locations, the potential feasibility and reasonableness of noise barriers will be further investigated at nine locations and the results will be included in the FEIS. Projected vibration levels throughout the transit alignment stay below impact threshold.

TABLE 8
SUMMARY OF IMPACTS

Resources	Alternate 1 No-Build	Alternate 2 TSM/TDM	Alternate 3A (LRT)	Alternate 3B (BRT)	Alternate 4A (LRT)	Alternate 4B (BRT)	Alternate 5A (LRT)	Alternate 5B (BRT)	Alternate 5C Premium Bus
Right-of-Way Required (Acres):									
Highway	0	0	374		374		404		428
Park-and-Ride Lots	0	18	18		18		18		18
Transitway[1]	0	0	170[1]		170[1]		170[1]		0
Total	0	18	562		562		592		446
Residential Displacements	0	0	64-127				64-128		127-385
Business Displacements	0	0	4-11				4-12		2-11
Number of Farmlands Affected	0	0	30				30		27
Farmlands Required (Acres)	0	6	133				143		106
Number of Public Parks Affected	0	0	11				12		13
Public Park Property Required (Acres)	0	0	37				44		48
Number of Historic Sites Affected	0	0	7				7		5
Historic Sites Affected (Acres)	0	0	37				44		48
Linear feet of Streams Impacted	0	0	14,185				16,331		13,407
100-Year Floodplains Required (Acres)	0	3	23				24		21
Wetlands Impacted (Acres)	0	0.5	10.7				11.6		10.7
Forests Impacted (Acres)	0	0	183				199		180
Hazardous Materials (Number of Properties Affected)	0	0	6	4	6	4	6	4	4
RTE Species Affected	0	0	0				0		0
Number of Air Quality Receptors with CO Violations	0	0	0				0		0
Number of Noise Monitoring/Modeling Locations Exceeding Abatement Criteria[2]	33		52[2]				51[2]		35
Consistent With Area Land Use Plans (Yes/No)	No	No	Yes				No		No

Note: 1. Transitway right-of-way impacts do not include a yard/shop facility.
2. Includes noise monitoring/modeling locations along the transitway alignment; includes transit horn noise impacts.

ADDITIONAL TRANSPORTATION PROJECTS/SERVICES

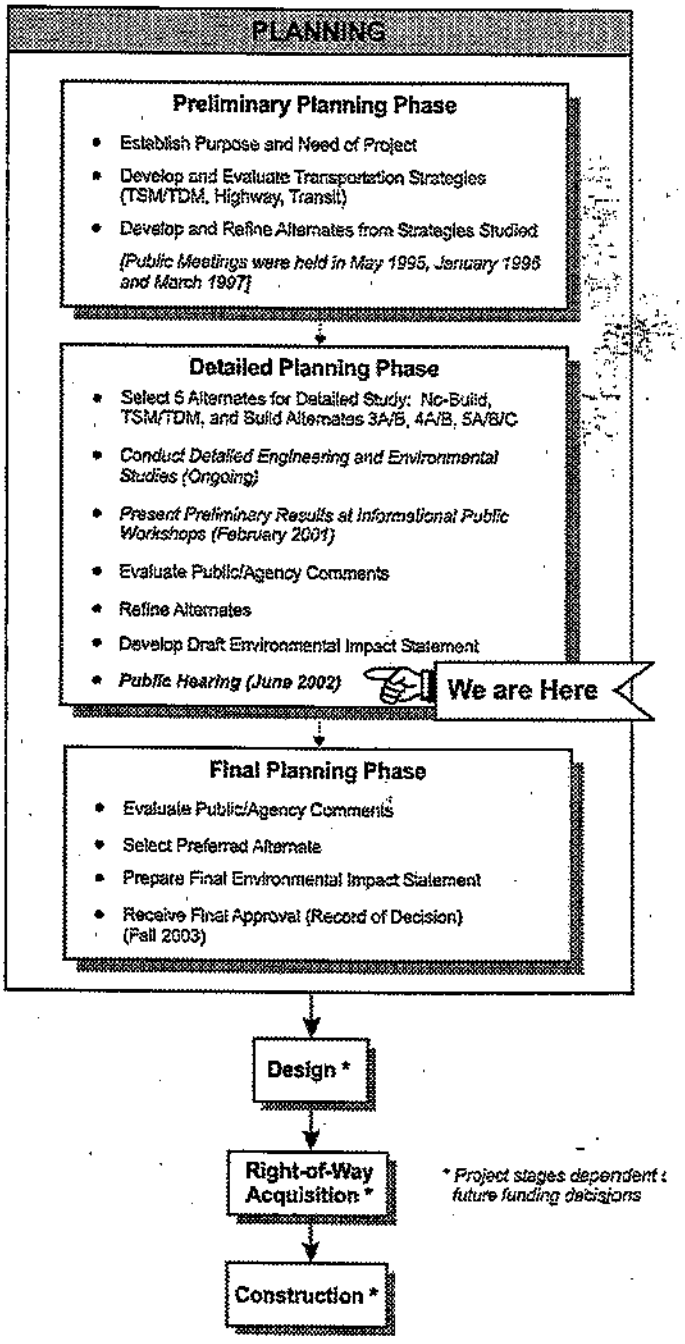
Additional information on State Highway Administration and Maryland Transit Administration projects and services can be found on the following websites:

State Highway Administration:
www.sha.state.md.us
Maryland Transit Administration:
www.mtamaryland.com

PROJECT PLANNING PROCESS

Several steps remain in this project planning study, including evaluating and addressing public and agency comments on the Draft Environmental Impact Statement and from the Public Hearing, as well as performing additional studies. Once these tasks are completed, the State Highway Administration (SHA) and Maryland Transit Administration (MTA) will recommend and select a preferred alternate. A Final Environmental Impact Statement addressing the preferred alternate will then be completed and distributed. Location approval will then be obtained from the Federal Highway Administration and Federal Transit Administration, and design approval will be obtained from the SHA and MTA Administrators for the selected alternate. These steps are shown in Figure 4. Once Location and Design Approvals are obtained, this project will become a candidate for future funding phases, including final design, right-of-way acquisition, and construction.

FIGURE 4
PROJECT DEVELOPMENT PROCESS



NON-DISCRIMINATION IN FEDERALLY ASSISTED AND STATE-AID PROGRAMS

Should you have any questions concerning non-discrimination in federally assisted and State-Aid programs, please contact:

State Highway Administration
Mr. Walter Owens, Jr., Director
Office of Equal Opportunity
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202
Phone: 410-545-0315
Email: wowens@sha.state.md.us

Maryland Transit Administration
Mr. Sam Glasscho, Manager
MBE/EEO
Maryland Transit Administration
6 Saint Paul Street
Baltimore, Maryland 21202
Phone: (410) 767-8362
Email: sglasscho@mdot.state.md.us

RIGHT-OF-WAY AND RELOCATION ASSISTANCE

The proposed project may require additional right-of-way. For information regarding right-of-way and relocation assistance, please contact:

SHA - Montgomery County
Mr. Richard Ravenscroft, Chief
District #3 Office of Real Estate
State Highway Administration
9300 Kenilworth Avenue
Greenbelt, Maryland 20770
Phone: 301-513-7455
Toll Free: 800-749-0737
Email: dravenscroft@sha.state.md.us

SHA - Frederick County
Mr. Rob Tresselt
District #7 Office of Real Estate
State Highway Administration
5111 Buckeystown Road
Frederick, Maryland 21704
Phone: (301) 624-8156
Toll Free: (800) 635-5119
Email: rtresselt@sha.state.md.us

MTA - Montgomery & Frederick Counties
Ms. Adele Stephens, Director
Office of Real Estate
Maryland Transit Administration
6 Saint Paul Street
Baltimore, Maryland 21202
Phone: (410) 767-3695
Email: astephens@mdot.state.md.us

MEDIA USED FOR MEETING NOTIFICATION

Advertisements for this meeting appeared in the following:

Maryland Register

The Washington Post

The Montgomery Journal

The Afro-American (D.C.)

El Montgomery

The Washington Jewish Week

The Frederick News Post

Gazette (F, G, and R Zones)

A news release was distributed to local newspapers, and public service announcements of this Public Hearing were furnished to radio stations serving the project area. In addition, those persons who are currently on the project mailing list received direct notice of this meeting.

DOCUMENT AVAILABLE FOR REVIEW

The Draft Environmental Impact Statement and Section 4(f) Evaluation will be on display during normal business hours at the following locations:

County Libraries

Rockville Branch
99 Maryland Avenue
Rockville, MD 20850
240-777-0140

Germantown Branch
12900 Middlebrook Road
Germantown, MD 20874
301-217-3320

C. Burr Artz Central Library
110 East Patrick Street
Frederick, MD 21701
301-694-1630

Local Government

City of Gaithersburg
City Hall
31 South Summit Avenue
Gaithersburg, MD 20877
301-258-6330

City of Frederick
City Hall
101 North Court Street
Frederick, MD 21701
301-360-3842

State Highway Administration

State Highway Administration
District 3
9300 Kenilworth Ave.
Greenbelt, MD 20770
301-513-7300

State Highway Administration
District 7
5111 Buckeystown Road
Frederick, MD 21704
301-624-8100

SHA Headquarters Building
Library Mailstop C-605
707 North Calvert Street
Baltimore, MD 21202
410-545-5573