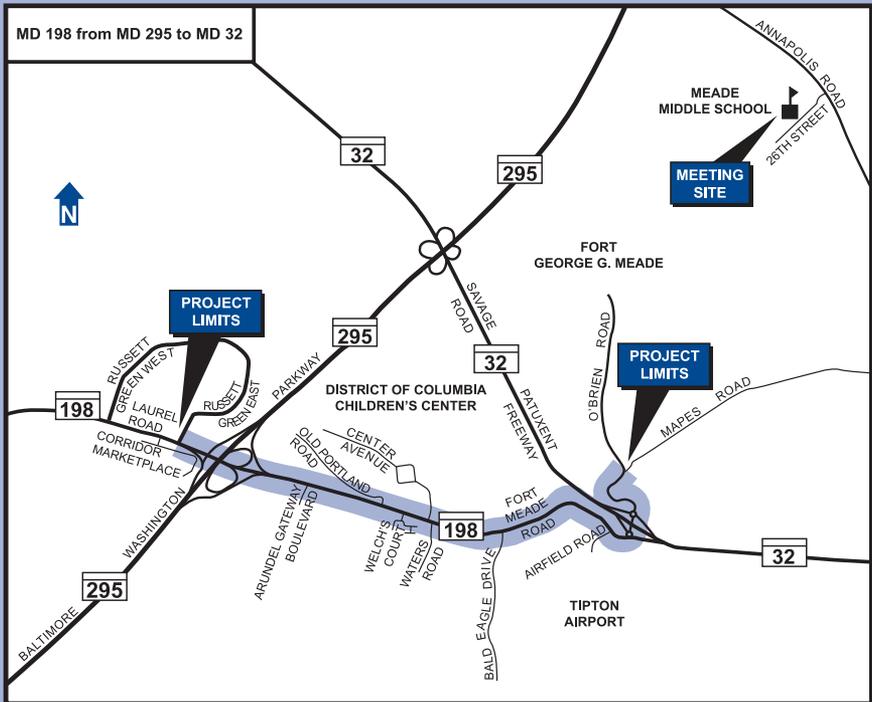


# MD 198 Project Planning Study

from MD 295 (Baltimore-Washington Parkway) to MD 32

## LOCATION/DESIGN Public Hearing



Thursday, November 17, 2011  
6:00 PM – Maps/Displays Available  
7:00 PM – Presentation/Testimony  
Meade Middle School  
1103 26th Street  
Ft. Meade, Maryland 20755

Project No. AA510M11



Maryland Department of Transportation  
State Highway Administration



US Department of Transportation  
Federal Highway Administration



US Army Corps of Engineers

## Project Planning Team

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## **Introduction**

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The Maryland State Highway Administration (SHA), in conjunction with the Federal Highway Administration (FHWA), Anne Arundel County, Fort George G. Meade (Ft. Meade), and the US Army Corps of Engineers, is conducting a Project Planning Study along the MD 198 (Laurel-Fort Meade Road) corridor. The study limits extend from west of MD 295 (Baltimore-Washington Parkway) at Russett Green East to MD 32 (Mapes Road/Savage Road), a distance of approximately 3.5 miles. The project area is located in northwestern Anne Arundel County, between Baltimore City and Washington, D.C.

## **Purpose of the Study**

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The purpose of the MD 198 Project Planning Study is to improve existing capacity and traffic operations; to enhance access to the Fort George G. Meade Military Reservation (Fort Meade); and to increase the safety of drivers, bicyclists, and pedestrians along MD 198, while supporting existing and planned development in the area. MD 198 provides direct access to Fort Meade from MD 32, MD 295, and points south and west of the study area.

## **Purpose of the Hearing**

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The purpose of the Location/Design Public Hearing is to formally present the results of the detailed engineering and environmental studies that have been conducted for this project. The public hearing will provide an opportunity for interested individuals, associations, citizen groups, and government agencies to offer spoken or written comments for the project record before an alternative is selected.

## **Hearing Format**

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Maps and other exhibits depicting the study's alternatives and other information will be on display for public viewing beginning at 6:00 p.m. Representatives from SHA and FHWA will be available to answer questions related to this project and receive comments. A formal presentation lasting approximately 20 minutes will begin at 7:00 p.m. and will be followed by public testimony. Testimony may also be given privately to a court reporter. All proceedings will be recorded and a transcript will be prepared. The transcript will be available for public review within approximately eight weeks after the hearing, at project-area libraries and government facilities listed at the back of this brochure.

## **How To Comment On The Study**

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The public is encouraged to participate in the public hearing to ensure citizen input during the Project Planning process. The postage-paid return mailer included in this brochure will enable interested persons to submit their comments.

Additional copies of these mailers will be available at the receptionist's desk during the hearing. Written comments for inclusion in the project record and the hearing transcript may be submitted until Monday, December 19, 2011.

## **Project Mailing List**

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You may add your name to the project mailing list by completing the enclosed mailer or giving your information to the receptionist at the hearing. If you have previously submitted your name and address by postcard or other means, or if you have received this brochure in the mail, you are already on the project mailing list.

## **Project Status**

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The MD 198 Project Planning Study is included in the Maryland Department of Transportation (MDOT) Development and Evaluation Program of the Fiscal Year 2011-2016 Consolidated Transportation Program (CTP) and is funded by Anne Arundel County for Project Planning only. This study is also included in the SHA Long-Range Plan (called the 2010 Highway Needs Inventory). If a build alternative is selected and the project receives Location/Design approval from FHWA, the project may become eligible for funding for Final Design, Right-of-Way Acquisition, and Construction.

## **Project History**

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The area around Fort Meade is one of the fastest-growing areas of Anne Arundel County. When combined, Fort Meade and the National Security Agency (NSA), a tenant of Fort Meade, represent the largest employer in the State of Maryland. As a result of the 2005 Base Realignment and Closure (BRAC) process, Fort Meade and the surrounding area expect considerable growth.

MD 198 provides a continuous connection between the City of Laurel and Fort Meade. The Laurel area has traditionally served the Fort Meade area by offering housing and services to Fort Meade. This relationship will continue as Fort Meade and its various tenant organizations increase in population and employment. Traffic from the Odenton area uses MD 198 to travel to the Baltimore-Washington Parkway (especially southbound) toward the Capital Beltway and the Washington Metropolitan Area.

In addition to job growth, the study area expects substantial increases in population, employment, housing, commercial activity, and vehicular traffic as a result of BRAC. This study will address projected operational and safety deficiencies resulting from that growth.

In a letter dated June 27, 2006, the Anne Arundel County Executive requested that SHA initiate a Project Planning Study for MD 198, noting the need to address these BRAC-associated traffic impacts. The letter noted that funding for the planning study has been allocated in the County's Capital Improvement

Program. Subsequently, SHA and the County reached an agreement that the County would fund 100 percent of the Project Planning costs, and the project was initiated.

The MD 198 project is consistent with the goals and objectives of state, regional, and local planning documents. Improvements to MD 198 within the study area are included in MDOT's six-year capital program - the Consolidated Transportation Plan (CTP); SHA's Long-Range Plan - the Highway Needs Inventory (HNI); and the Baltimore Metropolitan Planning Organization's 2007 Long-Range Plan - Transportation Outlook 2035 – The Baltimore Regional Transportation Plan. MD 198 is identified in the County's Functional Classification Plan as a principal arterial—a high-traffic-volume road that connects major highways and urban areas. It is also identified as a Priority Highway Improvement Corridor and is included in the Anne Arundel County Executive's May 15th, 2011 Transportation Priority Letter as a top priority on SHA's secondary highway system.

In Fall 2007, SHA mailed study-area residents and businesses project-initiation letters explaining that the MD 198 Project Planning Study had started and identified the project limits as west of MD 295 to MD 32. An Informational Newsletter was also mailed in Fall 2007 introducing the project and asking for public comment. An Informational Workshop was held on November 7, 2007, at Meade High School. On June 24, 2008, SHA conducted an Alternatives Public Workshop at the high school to accomplish the following actions:

- familiarize the public with the Project Planning process and the project's Purpose and Need;
- present the current findings of the environmental studies; and
- receive comments on the preliminary alternatives.

## Existing Conditions

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Within the project limits, MD 198 is primarily a two-lane open roadway with 10-foot-wide shoulders and no access control. Approaching the MD 295 and MD 32 interchanges at the project's western and eastern limits, the roadway widens to four lanes.

At the western end of the study limits, a partial cloverleaf interchange connects MD 198 to MD 295. Through the interchange area, MD 198 is a four-lane divided roadway. West of the MD 295 Interchange, MD 198 is a six-lane divided closed section.

At the eastern limit, a diamond interchange connects MD 198 to MD 32. Roundabouts are located at the end of each ramp. From just west of Airfield Road, to the roundabout at the intersection with the MD 32 eastbound ramps, MD 198 is a four-lane divided roadway. A three-lane bridge carries traffic over MD 32 to the roundabout at the intersection with the westbound MD 32 ramps (**See Table 1**).

*(continued on page 5)*

MD 198 – Existing Roadway Characteristics					
MD 198 Segments (West to East)	Posted Speed Limit	No. of Lanes	Divided/ Undivided	Median Type	Shoulder/ Wide Curb Lane *
West of MD 295 Interchange	40	6	Divided	Open	Wide curb lane
Through MD 295 Interchange Area	40	4	Divided	Open	10-foot Shoulder
East of MD 295 Interchange Area to Bald Eagle Drive	50	2	Undivided	None	10-foot Shoulder
Bald Eagle Drive to Little Patuxent River	40	2	Undivided	None	None
Little Patuxent River to just West of Airfield Road	40	2	Undivided	None	10-foot Shoulder
Just West of Airfield Road to Bridge over MD 32	40	4	Divided	Closed	10-foot Shoulder
Bridge over MD 32	40	3	Undivided	None	None
East of MD 32 Interchange	40	4	Undivided	None	None

**Table 1**

*\* Relates to bicycle compatibility*

Average Daily Traffic (ADT) Along MD 198			
MD 198 Segment	Existing (2006) ADT	Projected (2030) ADT	Percent Growth
West of MD 295 Interchange	42,900	67,500	57%
East of MD 295 Interchange	24,000	57,500	140%
West of Arundel Gateway Boulevard	22,700	52,400	131%
West of MD 216B	22,700	48,400	113%
West of Welch's Court	21,900	48,400	121%
West of Center Avenue	21,900	48,100	120%
West of Bald Eagle Drive	21,600	47,800	121%
West of Airfield Road	21,600	47,800	121%
West of MD 32 Interchange	21,800	47,900	121%
East of MD 32 Interchange	7,900	16,000	103%

**Table 2**

Signalized intersections within the study limits west of the MD 295 Interchange are located at the MD 198 intersections with Red Clay Road/Russett Green West and Corridor Market Place/Russett Green East and at Airfield Road (half-signal) near the MD 32 Interchange. Other intersecting public streets include Arundel Gateway Boulevard, MD 216B (Old Portland Road), Welch's Court, and Waters Road. In addition, several private driveways and commercial entrances have direct access to MD 198.

## Project Need

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### Background

Very little development occurred in the study area until 1917, when the United States War Department acquired 19,000 acres west of Odenton and built Fort Meade. The focus of Fort Meade expanded in the 1950s with the establishment of the National Security Agency (NSA). Originally a training and deployment center, Fort Meade is currently transitioning to an information and administrative center and has experienced recent employment growth as a result of the new Environmental Protection Agency (EPA) and Library of Congress buildings located on the base. Approximately 5,695 new on-base jobs are expected to relocate to Fort Meade, along with 4,000 new jobs at NSA. At least 20,000 private-sector jobs are anticipated as a result of the new jobs at Fort Meade and NSA. Those private-sector jobs will be located on and in the vicinity of Fort Meade.

Fort Meade is generally within an area bounded by MD 295 (to the west), MD 175 (to the north), and MD 32 (to the south). Access to the Fort is limited to four gates off MD 175 and by the one gate off MD 198, which crosses over MD 32 at a grade-separated interchange and provides direct access to Fort Meade from the south. Additional traffic generated by BRAC-related growth will be channeled to Fort Meade and NSA by these routes.

This study will investigate a number of approaches to address anticipated traffic volumes from planned and future development in and around the study area and will attempt to enhance the safety of drivers, bicyclists, and pedestrians along MD 198. In addition, the study will focus on traffic operations through the two interchanges at the project limits.

### Traffic Operations

Existing Average Daily Traffic (ADT) volumes along MD 198 between MD 295 and MD 32 are relatively even throughout, ranging from 21,600 to 24,000 ADT. At the west end of study area, the existing ADT is considerably higher, at 42,850 to the west of MD 295. At the east end of the study area, ADT drops to 7,900 just east of the MD 32 Interchange at the entrance to Fort Meade.

By 2030, the projected ADTs in the study area are expected to increase by over 100 percent within the majority of the MD 198 corridor, due to the implementation of BRAC and as residential, employment, and commercial growth occurs in the study area. Future volumes are projected to range from 67,500 ADT west of MD 295 to 16,000 ADT east of MD 32 (**See Table 2**).

A Level of Service (LOS) analysis was conducted for existing (2006) and forecasted (2030) No-Build and Build conditions for the study area intersections and roadway segments. LOS is a scale measuring the freedom of mobility or severity of congestion experienced by drivers. The LOS scale ranges from A to F. LOS A represents free flow movements of traffic, with little or no congestion, while LOS F represents failure, with stop-and-go conditions and long queues of traffic. LOS D occurs near a critical boundary where traffic flows become unstable. This level is generally considered acceptable during peak hours of traffic flow on streets and highways in urban and suburban areas. At LOS E, the roadway is operating near capacity, with unpredictable delays. LOS is normally determined for the peak hours of a typical weekday. These levels have been determined through traffic research and are related to measurable traffic characteristics, such as delays, speeds, or traffic density.

The existing LOS analysis shows that the study area intersections have LOS that ranges from A to F, with five intersections operating at failing LOS in either the AM or PM peak hours. In the 2030 design year, nine intersections are projected to operate at a failing LOS in either the AM or PM peak hours, and the mainline roadway segment of MD 198 between MD 295 and MD 32 is also projected to operate at a failing LOS during both peak periods (**See Table 3**).

A Level of Service analysis was also conducted for future (year 2030) conditions for each of the build alternatives. Alternative 2 (TSM) is projected to improve operations by consolidating access points along the corridor. However, the analysis results indicate that five intersections would still be projected to operate at failing LOS in the year 2030 under Alternative 2, and the mainline segment of MD 198 would also be projected to continue to operate at LOS F during both peak periods (**See Table 4**).

Alternative 4 Modified (Four-lane Divided Roadway) is projected to improve operations along the mainline segment of MD 198 between MD 295 and MD 32 to LOS D during both the AM and PM peak hours in the design year 2030. Alternative 4 Modified is also projected to improve all intersections within the study area to LOS E or better (**See Table 5**).

The MD 198/MD 32 Interchange improvement options were also analyzed to determine the LOS for each intersection under year 2030 conditions. The results indicate that all intersections are projected to operate at LOS E or better for each of the three retained interchange options (**See Table 6**).

## **Safety**

SHA completed a crash analysis for the three-year period from January 1, 2003 – December 31, 2005. Rates for all crash types on MD 198 from west of MD 295 (Clay Road/Russett Green West) to the Little Patuxent River (2.5 miles) fall within acceptable parameters for similar types of highways. Wet-surface crashes occur at a rate slightly higher than the statewide average for similar

*(continued on page 9)*

Existing and No-Build Level of Service (LOS) and Volume-to-Capacity Ratio				
Mainline	2006 AM	2006 PM	2030 AM	2030 PM
MD 198 – from MD 295 to MD 32	E (0.77)	E (0.87)	F (1.57)	F (1.68)
Intersections with MD 198	2006 AM	2006 PM	2030 AM	2030 PM
Corridor Market Place/Russett Green East	B (0.63)	C (0.78)	E (0.98)	E (1.00)
MD 295 Southbound Ramp*	F	F	F	F
Tischer Entrance*	F	F	F	F
Ourisman Entrance*	F	F	F	F
Arundel Gateway Boulevard*	A	B	F	F
MD 216B (Old Portland Road)*	E	D	F	F
Welch's Court*	E	F	F	F
Center Avenue (Woodlands Job Corps Center)*	B	D	F	F
Bald Eagle Drive*	A	F	F	F
Airfield Road	A (0.28)	A (0.49)	A (0.56)	C (0.76)
MD 32 Eastbound Ramps (Roundabout)*	A	A	B	C
MD 32 Westbound Ramps (Roundabout)*	B	A	F	F

**Table 3** \* Note: For unsignalized intersections, LOS is based on delay, and V/C ratio is N/A.

2030 Build Alternative 2 (TSM) Level of Service (LOS) and Volume-to-Capacity Ratios		
Mainline	AM LOS	PM LOS
MD 198 – from MD 295 to MD 32	F (1.57)	F (1.68)
Intersections with MD 198	AM LOS	PM LOS
Corridor Market Place/Russett Green East	E (0.98)	E (1.00)
MD 295 Southbound Ramp	F (1.20)	F (1.16)
Arundel Gateway Boulevard / Tischer / Ourisman	F (1.63)	F (1.74)
MD 216B / Welch's Court / Center Avenue	F (1.42)	F (1.37)
Bald Eagle Drive	F (1.37)	F (1.37)
Airfield Road	A (0.56)	C (0.76)
MD 32 Eastbound Ramps (Roundabout) *	B	C
MD 32 Westbound Ramps (Roundabout) *	F	F

**Table 4** \* Note: For unsignalized intersections, LOS is based on delay, and V/C ratio is N/A.

<b>2030 Build Alternative 4 Modified Level of Service (LOS) and Volume-to-Capacity Ratios</b>		
<b>Mainline</b>	<b>AM LOS</b>	<b>PM LOS</b>
MD 198 – from MD 295 to MD 32	D (0.70)	D (0.69)
<b>Intersections with MD 198</b>	<b>AM LOS</b>	<b>PM LOS</b>
Corridor Market Place/Russett Green East	E (0.98)	E (1.00)
MD 295 Southbound Ramp	D (0.83)	D (0.82)
Arundel Gateway Boulevard	E (0.95)	E (0.93)
Arundel Gateway – Second Access	D (0.90)	D (0.89)
MD 216B (Old Portland Road) / Welch's Court	D (0.81)	C (0.76)
Center Avenue / Liberty Valley Access	D (0.82)	D (0.81)
Bald Eagle Drive	C (0.75)	C (0.77)
Airfield Road	A (0.56)	C (0.76)

**Table 5**

<b>2030 Build Interchange Options Level of Service (LOS) and Volume-to-Capacity Ratios</b>		
<b>Option A (Flyover)</b>	<b>AM LOS</b>	<b>PM LOS</b>
MD 198 at MD 32 Eastbound Ramps (Roundabout)*	B	D
MD 198 at MD 32 Westbound Ramps (Roundabout)*	A	A
<b>Option C (Diamond Interchange)</b>	<b>AM LOS</b>	<b>PM LOS</b>
MD 198 at MD 32 Eastbound Ramps (Signal)	E (0.96)	B (0.70)
MD 198 at MD 32 Westbound Ramps (Signal)	E (0.97)	D (0.90)
<b>Option D (Two Bridge)</b>	<b>AM LOS</b>	<b>PM LOS</b>
MD 198 at MD 32 Eastbound Ramps (Roundabout)*	C	B
MD 198 Westbound at Mapes Road (Signal)	D (0.88)	D (0.86)

**Table 6**

\* Note: For unsignalized intersections, LOS is based on delay, and V/C ratio is N/A.

types of highways. Other crash types include rear-end, sideswipe, fixed-object, left-turn, angle, and parked vehicles. One crash resulting in pedestrian injury occurred near Russett Green West.

A total of 155 crashes, resulting in one fatality and 87 injuries, were reported within the limits of the crash analysis. Except for the fatality, which occurred in the MD 295 Interchange area, most of these crashes occurred at the western end of the study area, from the Clay Road/Russett Green West intersection through the MD 295 Interchange area, where volumes are much higher.

### **Intermodal Connectivity**

Currently, no bus service is available along MD 198, between MD 295 and MD 32. The Central Maryland Regional Transit (CMRT) provides bus-transit service along the MD 198 corridor, west of MD 295 in Maryland City.

Tipton Airport, located along the south side of MD 198 near the interchange with MD 32, is a former U.S. Army airfield designated for privatization by the 1988 BRAC. The airport closed in 1995 and reopened in 1999 and is operated today by the Tipton Airport Authority (Authority members are appointed by the Anne Arundel County Executive). The Authority plans to convert the airport to a state-of-the-art general aviation facility that will have a strong community presence and serve as a home to sport, recreational, private, and business aircraft.

MARC Commuter Train service is provided at either end of the project area. East of the project area, the Odenton MARC Station, which operates on the Penn Line, is located near the MD 32/MD 175 Interchange.

### **Context Sensitive Solutions**

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As part of this project, the project team will consider suggestions received from the public at the Location/Design Public Hearing and from comment cards, letters, and emails. SHA will continue to coordinate with representatives from Anne Arundel County, the FHWA, the National Park Service, the US Fish and Wildlife Service, and Fort Meade to further develop or refine the alternatives to incorporate Context Sensitive Solutions (CSS) concepts, wherever possible. This effort is an SHA initiative to preserve and enhance the community's character while improving transportation in the area.

CSS concepts address the following:

- Safety
- Pedestrian and bicycle circulation
- Local residential and business traffic circulation
- Access to mass transit
- Reduction of right-of-way impacts
- Effects on response times of police, fire, and other emergency services providers
- Aesthetics/landscape/streetscape opportunities

Your comments will help ensure that the proposed alternatives for improvements to the study area reflect the community's local character and aesthetic preferences. We encourage you to comment on CSS issues using the comment card in the back of this brochure.

## **Alternatives Retained for Detailed Study** *(See mapping packet)*

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### **Alternative 1 – No-Build**

The No-Build Alternative includes no major capital improvements. Minor short-term improvements would occur as part of routine maintenance and safety operations. This alternative does not address the purpose and need for the project. It serves as a baseline for comparing the impacts and benefits of the build alternatives.

### **Alternative 2 – Transportation Systems Management (TSM)**

The TSM Alternative consists of spot improvements and access management along the corridor to address public concerns at specific locations. TSM improvements can usually be constructed with relatively low costs and few environmental impacts, but would provide no substantial improvements or operations to address future concerns. TSM strategies being considered for this corridor include the following:

- Improvements to the off-ramp from MD 295 northbound to MD 198 eastbound to alleviate driver confusion and increase merge distance.
- Improvements to the off-ramp from MD 295 southbound to MD 198 eastbound and westbound. A channelized free-right turn is proposed in the eastbound direction. An exclusive left-turn lane, a through left-turn combined lane, and a signal are proposed in the westbound direction at this location.
- Extension of the channelized left-turn lane at Russet Green East/Corridor Marketplace.
- Access management solutions combining several driveways and access points along MD 198 to provide for fewer turn lanes off the main road.
- Proposed signals at MD 198 at Arundel Gateway Drive and MD 198 at Welch's Court.
- Left-turn lanes that combine access points to separate left turns from the through movement.

### **Alternative 4 Modified: Divided Roadway with Off-Road Shared-Use Facility and a Sidewalk**

This alternative provides two lanes in both directions (eastbound and westbound) divided by a grass median that varies from six feet to 20 feet in width, throughout the corridor. On-road bicycle accommodations are provided as part of the outside travel lane. In the eastbound direction, a five-foot-wide sidewalk would be provided from just east of the bridge over MD 295 to Gateway Boulevard. From Gateway Boulevard to the ball fields located adjacent to Bald Eagle Drive, an eight-foot-wide shared-use path would be provided. East of Bald Eagle Drive, the

shared-use path becomes a five-foot-wide sidewalk that extends to the eastern limits of the project. In the westbound direction, a five-foot-wide sidewalk extends from the businesses located just east of Center Avenue to Gateway Boulevard. From Gateway Boulevard an eight-foot-wide shared-use path is provided over MD 295 to the western limit of the project area. From the northbound on/off ramps for the Baltimore-Washington Parkway, to the second access point of Arundel Gateway, this alternative proposes a 12-foot-wide eastbound auxiliary lane to provide for entrance and exit of the Arundel Gateway development. Based on reports of flooding, Alternative 4 Modified proposes to raise the elevation and extend the length of the bridge over the Little Patuxent River.

Access to the water-treatment plant will be provided by a full movement with exclusive left turns. Loaded trucks leaving the treatment plant are restricted from MD 295 and required to use MD 32. To provide access for those trucks, this alternative provides an exclusive left-turn lane with spacing that allows slower trucks to increase their speed before merging onto mainline MD 198 in the direction of MD 32. The signal at MD 198 and Airfield Road will remain under all interchange options except Option D. This mainline build alternative is compatible with all three interchange options described below. If Alternative 4 Modified is selected as the build alternative, an interchange option will be selected with it.

### **MD 198/MD 32 Interchange Options**

The three options under consideration for the improvement of the MD 198/MD 32 Interchange are summarized below:

#### **Option A: Flyover Ramp**

Option A maintains the existing configuration of the MD 198/MD 32 Interchange and introduces a flyover ramp that allows traffic to flow from northbound MD 32 to westbound MD 198, completely separating that traffic from the roundabouts. The option also proposes widening the bridge over MD 32. All other traffic moving through the interchange, including trucks entering Fort Meade, would operate as it does today.

#### **Option C: Diamond Interchange at Existing Bridge**

Option C reconfigures the existing MD 198/MD 32 Interchange from two roundabouts to two signalized intersections and requires widening the existing bridge to accommodate the appropriate number of lanes. Truck traffic entering Fort Meade would operate as it does today.

#### **Option D: Two Bridge**

Option D reconfigures all traffic movements through the area by creating a second one-way crossing of MD 198. The existing MD 198 bridge over MD 32 would become a one-way crossing toward Fort Meade and would not be widened. The ramp from MD 32 west toward Laurel would become a second one-way crossing, and two turn lanes would be provided for right turns into Fort Meade. All other vehicles would have a free-flow movement toward Laurel. This option does not include a signal at MD 198 and Airfield Road.

## Alternatives And Options No Longer Under Consideration

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Following the Alternatives Public Workshop, the project team dismissed MD 198 Mainline Alternative 3 Divided Roadway with Off-Road, Shared-Use Facility because this alternative did not provide a sidewalk. Alternative 4 – Divided Roadway with Off-Road, Shared-Use Facility and Sidewalk was dismissed and was replaced by Alternative 4 Modified. Alternative 4 Modified has been developed to better address the projected traffic needs. MD 198/MD 32 Interchange Option B – Loop Ramp has been dismissed because it is not compatible with Alternative 4 Modified improvements along MD 198. MD 198/MD 32 Interchange Option E – Diamond Interchange with New Bridge has been dismissed because it does not provide increased transportation benefits when compared to Option C - Diamond Interchange at Existing Bridge. Option E has a higher cost than Option C.

## Environmental Summary

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Detailed analyses were performed on the Alternatives Retained for Detailed Study to identify potential impacts on natural, cultural, and socioeconomic resources within the study area. A comparison of potential impacts for each alternative and interchange option is included in **Table 7**.

### Land Use

The proposed MD 198 improvements are consistent with the Anne Arundel County General Development Plan (GDP) (2009), the Jessup/Maryland City Small Area Plan (2004), and the Odenton Small Area Plan (2003). Both the Anne Arundel County GDP and the Jessup/Maryland City Small Area Plan recommend capacity improvements along MD 198 through the study area.

Existing land use in the study area is primarily composed of forested areas and institutional facilities, in addition to smaller commercial, industrial, and residential uses. The institutional land uses in the study area include Fort Meade to the east, land owned by the US General Services Administration to the north, and the District of Columbia Children's Center north of MD 198, between MD 295 and MD 32. Other institutional uses include the Patuxent Research Refuge and the Tipton Airport along the south side of MD 198. Future land use is generally consistent with existing land uses, although the proposed Arundel Gateway development, which was rezoned during the County's comprehensive zoning process, will add residential and commercial land use immediately adjacent to the MD 198 corridor.

### Socioeconomic Resources

No residential relocations would be required for any of the alternatives or interchange options. Alternative 4 Modified would require one commercial displacement. Depending upon the alternative and interchange option chosen, between 3.1 and 19.7 acres of commercial right-of-way may be required.

*(continued on page 14)*

Summary of Environmental Impacts						
Category	MD 198 Mainline Alternatives			MD 198/MD 32 Interchange Options		
	1	2	4 Modified	A	C	D
Potential Displacements (number)						
A. Residential	0	0	0	0	0	0
B. Commercial	0	0	1	0	0	0
Properties Affected (number)						
A. Residential	0	0	1	0	0	0
B. Commercial	0	7	35	2	2	2
C. Other*	0	1	2	4	4	4
Right-of-Way Required (acres)						
A. Residential	0	0	0.1	0	0	0
B. Commercial	0	3.1	19.3	0.4	0.4	0.4
C. Other*	0	7.7	17.1	12.4	11.3	11.5
Wetlands (acres)	0	0.7	1.4	1.9	0.9	2.6
Stream Crossings (number)	0	1	1	3	3	3
Stream Impacts (linear feet)	0	71	459	93	190	252
100-Year Floodplain (acres)	0	0	0.1	2.4	2.4	2.4
Woodland (acres)	0	4.5	19.4	5.1	4.6	5.9
Baltimore-Washington Parkway (acres)	0	3.6	6	0	0	0
Potential Hazardous Waste Sites (number)	0	6	33	4	4	4
Total Cost Range in Millions**	\$ 0	\$ 18.5 - \$ 24.1	\$ 92.1 - \$ 122.5	\$ 105.2 - \$ 135.0	\$ 98.8 - \$ 126.7	\$ 83.6 - \$ 107.4

**Table 7**

\*Note: Fort Meade, Tipton Airport, Federal Lands, U.S. Fish and Wildlife Service, and historic properties

\*\*Note: Total Cost Range includes Final Design, Right-of-Way, and Construction and an inflation adjustment through 2020.

The intent of Maryland's Smart Growth legislation is to limit sprawl and direct State funding for growth-related projects toward county-designated Priority Funding Areas (PFAs). The alternatives and interchange options retained for detailed study are located entirely within the PFA designated by Anne Arundel County.

No minority or low-income populations have been identified within the project area. Consistent with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," no disproportionately high or adverse effects on minority and low-income communities are expected to result from any of the alternatives or interchange options.

Emergency response times in the study area are expected to improve as a result of the implementation of any of the proposed build alternatives. SHA will continue to coordinate with emergency services providers to identify potential traffic delays during construction and detour routes that could affect response times.

### **Parkland**

The Patuxent Research Refuge, a publicly owned public wildlife refuge with associated ball fields, is located in the study area. Each of the interchange options would require approximately 0.41 acre from a Fort-Meade-owned gravel parking lot adjacent to MD 198 that is used for ball field parking. In order to maintain the overall number of parking spaces, SHA is proposing to expand and improve the parking lot on the Refuge property, replacing the same number of parking spaces that would be lost due to the acquisition of the gravel lot. The US Fish and Wildlife Service, the Patuxent Research Refuge, and Fort Meade have concurred that the project would have no adverse effect on the activities, features, and attributes of the ball fields. Therefore, SHA has requested that FHWA make a Section 4(f) *de minimis* (minimal impact) finding on the proposed changes that would affect the ball field parking lot. This hearing provides members of the public the opportunity to review and comment on the project's effect on the activities, features, and attributes of the ball field and associated parking.

The Baltimore-Washington Parkway, owned by the National Park Service (NPS), is the only other public parkland or recreation facility in the study area. Options to avoid or minimize park impacts have been developed in accordance with the Section 4(f) regulations at 23 CFR 774. Permanent impacts on the Parkway, ranging from 3.6 to 6 acres, would be required due to ramp improvements proposed under Alternatives 2 and 4 Modified. The amount of NPS property being impacted by roadway improvements was minimized through the use of narrow shoulders and travel lanes, the shifting of stormwater-management facilities outside the park's boundary, and the addition of native plants for screening. This hearing and the circulation of the Section 4(f) Evaluation as

part of the Environmental Assessment (EA) will allow FHWA to obtain public comments on the avoidance and minimization options.

### **Cultural Resources**

The Baltimore-Washington Parkway (Parkway) is a significant historic resource listed on the National Register of Historic Places. Both build alternatives propose the modification and expansion of the southbound exit ramp from the Parkway onto MD 198. The Maryland Historical Trust has reviewed the proposed action and concurred that the project will have no adverse effect on historic resources. In accordance with the Section 106 procedures of the National Historic Preservation Act, this hearing provides the opportunity for public comment regarding impacts on historic properties.

### **Natural Resources**

The MD 198 study area is located within the Little Patuxent River watershed, which is classified as Use I waters (Water Contact Recreation and Protection of Nontidal Warmwater Aquatic Life) by the Department of Natural Resources (DNR), with an in-stream work prohibition period of March 1 through June 15, inclusive. Stream impacts range from 71 to 711 linear feet, depending on the build alternative and interchange option. In general, the impacts of the build alternatives and interchange options on study area streams are the result of pipe and culvert extensions and grading for highway fill slopes. As many as 2.4 acres of the 100-year floodplain associated with the Little Patuxent River could be impacted under any of the interchange options.

SHA, through consultation with the US Army Corps of Engineers (COE), has identified Waters of the United States, including jurisdictional wetlands, which are regulated by Section 404 of the Clean Water Act. Depending on the build alternative and interchange option, wetland impacts could range up to 4 acres. A portion of the Little Patuxent River within the study area contains a Nontidal Wetland of Special State Concern. None of these impacts occur within the Nontidal Wetland of Special State Concern.

This public hearing provides the opportunity to present views, opinions, and information which will be considered by the COE in evaluating a Department of the Army permit. The COE regulates discharges of dredged or fill material into wetlands and streams (Waters of the United States). All comments received will become part of the formal project record. In addition, a water quality certification, pursuant to Section 401 of the Clean Water Act, will be required from the Maryland Department of the Environment (MDE). Written statements expressing concern for aquatic resources may be submitted to Ms. Mary Frazier, U.S. Army Corps of Engineers, CENAB-OP-RMN, P.O. Box 1715, Baltimore, Maryland 21203, until December 19, 2011, or by email at [Mary.A.Frazier@usace.army.mil](mailto:Mary.A.Frazier@usace.army.mil).

Permits from the COE and/or MDE are required for wetland and stream impacts. Adverse impacts on water quality during construction would be minimized

through strict adherence to SHA sediment and erosion-control procedures which will be developed in accordance with MDE criteria.

Coordination with the US Fish and Wildlife Service and the DNR indicates that no federally listed rare, threatened, or endangered plant or wildlife species are known to exist in the project area. However, DNR's records indicate that the Little Patuxent River immediately below the Fort Meade Dam at MD 198 contains the Glassy Darter, a State-listed threatened species. White perch and herring are also known to spawn in the Little Patuxent River. All fish species should be adequately protected by the use of the instream work prohibition period, sediment and erosion control methods, and other Best Management Practices typically used during highway construction projects.

Between 4.5 and 25.3 acres of woodland impacts are anticipated if a build alternative and interchange option are selected. In accordance with the State Reforestation Law, impacted forest acreage as a result of project improvements will be replaced within the project limits or off-site within the same watershed.

### **Air and Noise Impacts**

Detailed air quality and noise analyses have been conducted for this project. The air quality analysis indicated that no violations of the applicable State and National Ambient Air Quality Standards are expected, and that the project meets the transportation conformity requirements of the Clean Air Act.

Six Noise Sensitive Areas (NSAs) were identified along MD 198 within the project limits. A noise model was built to predict the future noise levels from the build improvements and to establish a 66-decibel noise-impact contour line. However, none of the areas of frequent human use within any of the NSAs studied qualify for a sound barrier under SHA's 2011 Noise Policy criteria.

### **Related Transportation Projects**

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**The MD 175 Project Planning Study**, which extends from just west of MD 195 to MD 170, will accommodate future transportation needs in and around Fort Meade, improve connectivity between Odenton and MD 295, and assist in revitalizing the commercial district in North Odenton. A Preferred Alternative, identified in July 2010, consists of:

- Alternative 4 Modified from Brock Bridge Road to west of MD 295,
- Option F at the MD 175/MD 295 Interchange,
- Alternative 6 with the 21 ½ Street Option from MD 295 to MD 32, and
- Alternative 2A (Enhanced TSM) from MD 32 to MD 170.

The project is fully funded for Project Planning and partially funded for Final Design. We anticipate completion of the MD 175 Project Planning phase in Winter 2012.

## Remaining Steps in the Project-Planning Process

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- Evaluate and address public hearing comments and coordinate with State and Federal environmental review and regulatory agencies (*December 2011*)
- Identify the SHA Preferred Alternative (*Spring 2012*)
- Obtain Location/Design Approvals (*Winter 2013*)

## Non-Discrimination in Federally Assisted and State-Aid Programs

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For information concerning non-discrimination, please contact:

Ms. Sharon Lynn Holmes, Deputy Director  
Office of Equal Opportunity  
Maryland State Highway Administration  
707 N. Calvert Street  
Baltimore, MD 21202  
Telephone: (410) 545-0317  
Toll-free within Maryland: 1-888-545-0098  
Email: sholmes@sha.state.md.us

## Right-Of-Way and Relocation

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

Ms. Melody Bryant, Chief  
District 5, Office of Real Estate  
Maryland State Highway Administration  
138 Defense Highway  
Annapolis, MD 21401  
Telephone: (410) 841-1062  
Toll-free within Maryland: 1-800-331-5603  
Email: mbryant@sha.state.md.us

## Media Used for Meeting Notification

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An advertisement appeared in the following newspapers to announce the Location/Design Public Hearing:

- The Baltimore Sun
- West County Gazette
- Laurel Leader
- Sound Off

## **Your Opinion Matters**

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This hearing offers members of the public the opportunity to discuss their thoughts and concerns about the project and provide spoken and/or written comments. The Project Team will carefully review and consider the concerns and preferences expressed at the hearing. To assist you in providing comments, we have included in this brochure a pre-addressed, postage-paid mailer and the names, addresses, telephone numbers, and email addresses of members of the Project Planning Team.

## **Documents Available for Review**

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The EA is available for review at the locations listed below. The Location/Design Public Hearing Transcript will be available for review within approximately eight weeks of the hearing. To confirm availability, please call ahead, Monday through Friday, at:

Maryland State Highway Administration  
District 5 Office  
138 Defense Highway  
Annapolis, MD 21401  
Telephone: (410) 841-1000  
Toll-free within Maryland: 1-800-331-5603

Maryland State Highway Administration  
District 5 Glen Burnie Shop  
910 Stewart Avenue  
Glen Burnie, MD 21061  
Telephone: (410) 766-3770, (410) 766-3779, or (410) 766-3757  
Fax: (410) 766-1430

Maryland State Highway Administration  
Public Involvement Section  
707 N. Calvert Street, Mailstop C-301  
Baltimore, MD 21202  
Telephone: (410) 545-8522  
Toll-free within Maryland: 1-800-548-5026

Anne Arundel County Government  
Planning and Zoning Office  
Heritage Office Complex  
2664 Riva Road, 4th Floor  
Annapolis, MD 21401  
Telephone: (410) 222-7450  
8:00 AM - 4:00 PM, Monday-Friday

Anne Arundel County Public Library  
Maryland City at Russett Library  
3501 Russett Green  
Laurel, MD 20742-1810  
Telephone: (301) 725-2390  
Monday, Tuesday, Thursday, 1:00 PM – 9:00 PM  
Friday, 1:00 PM – 5:00 PM  
Wednesday and Saturday, 9:00 AM – 5:00 PM

## Thank You

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Thank you for participating in the MD 198 Project Planning Study Location/ Design Public Hearing. Your comments are greatly appreciated! Please direct your questions or concerns to project team members by mail, telephone, or email. For more information about this project and others, visit our internet site at <http://www.roads.maryland.gov>. Click on **Projects & Studies, SHA Projects Page**, and **Anne Arundel County**, then **MD 198, Laurel Fort Meade Road** under **Preconstruction**.

The Corps of Engineers has issued a public notice:  
[http://www.nab.usace.army.mil/Wetlands%20Permits/public\\_notices.htm](http://www.nab.usace.army.mil/Wetlands%20Permits/public_notices.htm)







Maryland Department of Transportation  
STATE HIGHWAY ADMINISTRATION  
Office of Planning and Preliminary Engineering  
707 North Calvert Street  
Mail Stop C-301  
Baltimore, MD 21202

**Martin O'Malley,**  
*Governor*

**Anthony Brown,**  
*Lieutenant Governor*

**Beverley K. Swaim-Staley,**  
*Secretary*

**Darrell B. Mobley,**  
*Acting Administrator*



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