

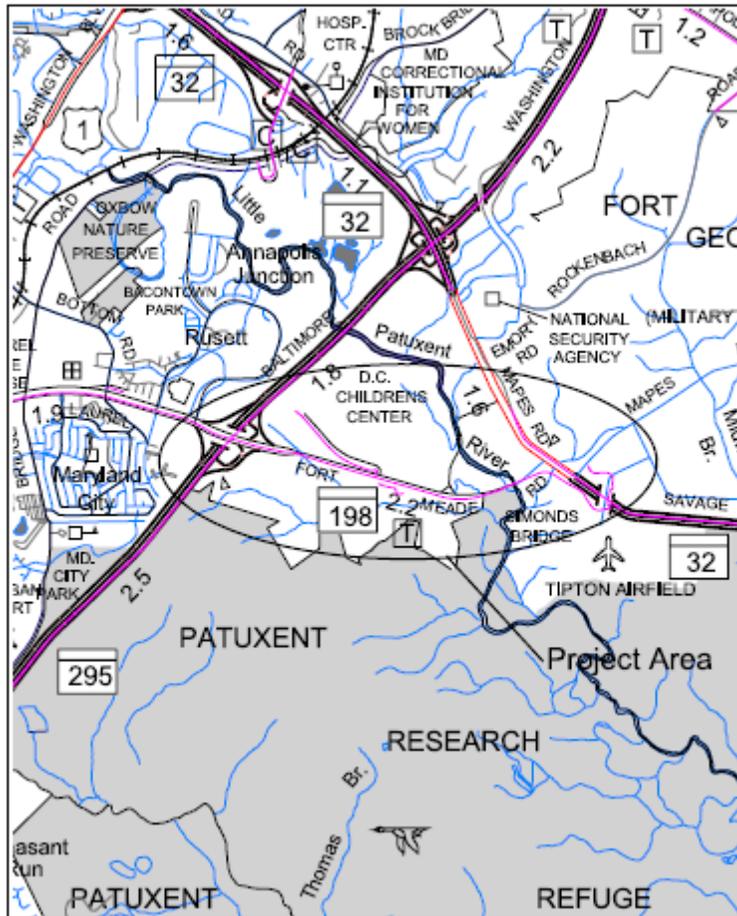
MD 198 (Laurel Fort Meade Road)

From West of MD 295 (Baltimore/Washington Parkway) to
MD 32 (Mapes Road/Savage Road)

Anne Arundel County, Maryland

DRAFT

Purpose and Need Statement



Maryland State Highway Administration
Office of Planning and Preliminary Engineering
707 North Calvert Street
Baltimore, Maryland 21202

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I. PROJECT LOCATION

The limits of the MD 198 (Laurel Fort Meade Road) Project Planning Study extend from west of MD 295 (Baltimore-Washington Parkway) at Russett Green East to MD 32 (Mapes Road/Savage Road), approximately 3.5 miles. The project study area is located roughly midway between Baltimore City and Washington D.C. in northwestern Anne Arundel County, Maryland. (See Project Vicinity Map, **Figure 1**)

II. PURPOSE OF THE PROJECT

The purpose of the project is to improve the existing capacity and traffic operations, enhance access to Fort Meade, and increase vehicular, bicycle, and pedestrian safety along MD 198, while supporting existing and planned development in the area. MD 198 provides direct access to the Fort George G. Meade Military Reservation (Fort Meade) from MD 32, MD 295 and generally points south and west of the study area.

III. NEED FOR THE PROJECT

The area around Fort Meade is one of the fastest growing areas of Anne Arundel County. Fort Meade and the National Security Agency (NSA), a tenant of the Fort, combined represent the largest employers in the State of Maryland. Fort Meade's workforce is comprised of more than 39,000 military, civilian, and contractor personnel. As a result of the 2005 Base Realignment and Closure (BRAC) process, Fort Meade and the surrounding area are expected to experience considerable growth. By 2010, approximately 5,300 additional new on-base jobs are expected to be relocated to Fort Meade, along with 7,500 new jobs at NSA. As many as 20,000 or more private sector jobs are also anticipated as a result of the new jobs at both Federal installations, primarily in the defense and support industries. These jobs would be located both on and in the vicinity of the Fort.

MD 198 provides a continuous connection between the City of Laurel and its suburbs with Fort Meade. The Laurel area has been a traditional community of Fort Meade and this relationship will continue as the Fort and its various tenant organizations increase in population and employment. MD 198 is also the route to convey Odenton area-generated travel demand to the Baltimore Washington Parkway (especially southbound) toward the Capital Beltway and the Washington Metropolitan area.

In addition to jobs, the study area is expected to see substantial increases in population, housing, commercial activity and vehicular traffic as a result of BRAC. This project will address projected operational and safety deficiencies resulting from the expected growth.

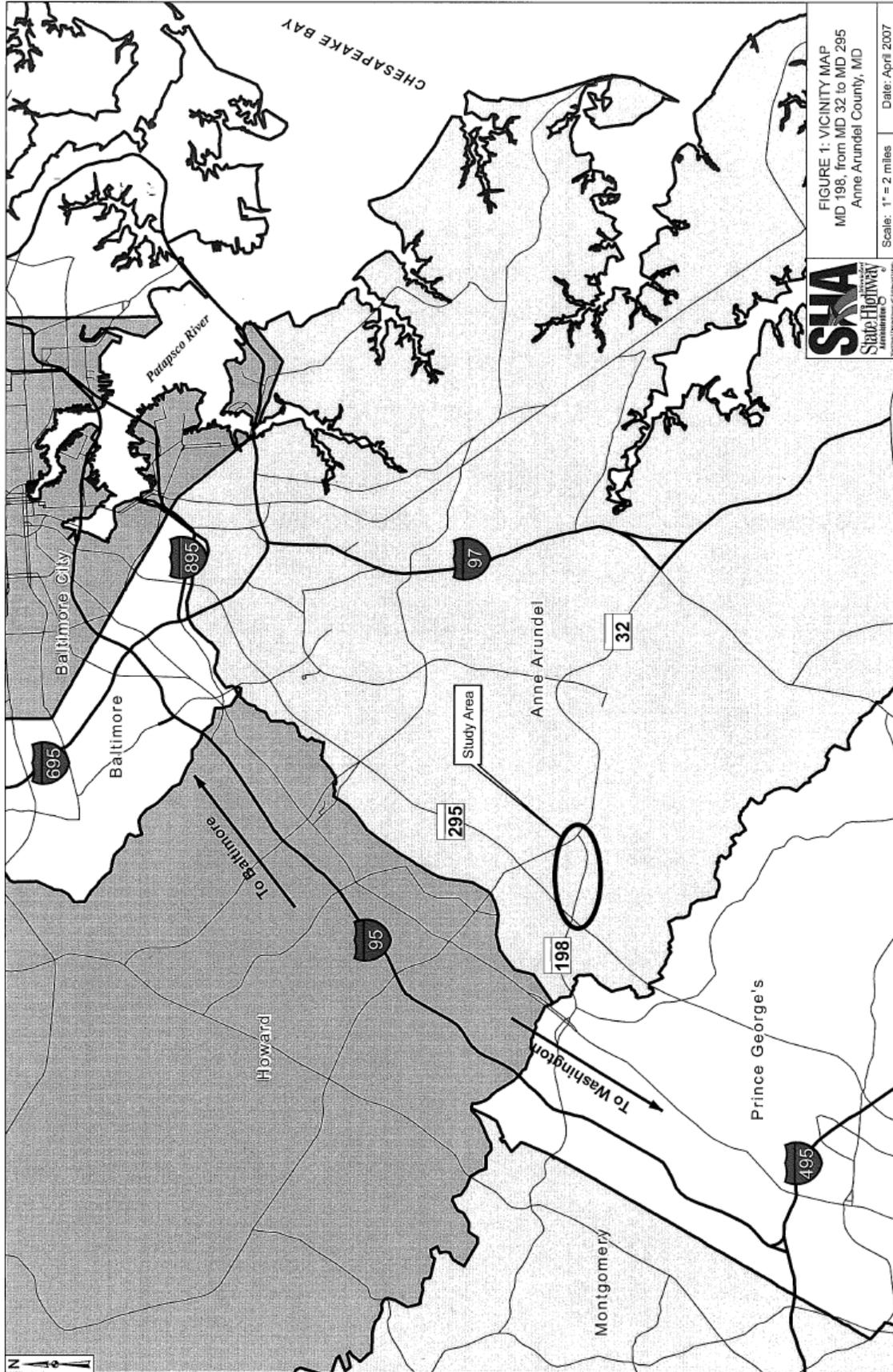


FIGURE 1: VICINITY MAP
 MD 198, from MD 32 to MD 295
 Anne Arundel County, MD

Scale: 1" = 2 miles Date: April 2007

IV. PROJECT BACKGROUND

Very little development occurred in the study area until the early part of the 20th century with the arrival of Fort Meade in 1917, when the United States War Department acquired 19,000 acres of land west of Odenton. The focus of Fort Meade expanded in the 1950s with the establishment of the NSA. Originally a training and deployment center, Fort Meade is currently transitioning to an information and administrative center, and experienced recent employment growth as a result of the new Environmental Protection Agency (EPA) and Library of Congress buildings located on the base.

The Fort is generally within an area bounded by MD 295, an access controlled freeway, to the west; MD 175, an urban arterial, to the north; and MD 32, an access controlled freeway, to the south. Access to the Fort is limited to three gates off of MD 175 and MD 198, which crosses over MD 32 at a grade-separated interchange and provides direct access to the Fort from the south. A fourth gate along MD 175, at Lewellyn Avenue, is currently closed but may be opened in the future. The Canine and Samford Road interchanges with MD 32, east of MD 198, provide access to NSA. The additional traffic that will be generated by the increased growth associated with BRAC will be channeled onto these routes leading to the Fort Meade/NSA gates (see PFA Map, **Figure 2**).

In a letter dated June 27, 2006, the Anne Arundel County Executive requested that the State Highway Administration (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 for the County to fund 100% of the Project Planning costs and the project was initiated.

V. SYSTEM LINKAGE/REGIONAL CONSISTENCY

Functional Classification

MD 198 is on the State's Secondary System of highways and is functionally classified as an Urban Other Principal Arterial under the Federal Functional Classification System. It is an east-west route that extends from Montgomery County to the west, through the City of Laurel in Prince George's County, and terminates at Fort Meade at the eastern end of the project limits. As part of the regional grid, it connects to major north-south arterials such as US 29, I-95, US 1 and MD 295. Within the study limits, MD 198 has grade-separated interchanges with MD 295 and MD 32, and several at-grade intersections with local roadways and access roads to Fort Meade. It serves as a primary gateway to Fort Meade from the south side of the installation.

Regional Consistency

The MD 198 project is consistent with the goals and objectives of State, regional and local planning documents. Improvements to MD 198 within the project study area are included in Maryland Department of Transportation's six-year capital program Consolidated Transportation Plan (CTP), SHA's Long Range Plan, called the Highway Needs Inventory (HNI) and the Baltimore Metropolitan Planning Organization's 2004 Long Range Plan called Transportation 2030 – The Baltimore Regional Transportation Plan. The project is identified in the Anne Arundel County Executive's 2006 Transportation Priority Letter as a top priority.

There are three master plans that govern land use in parts of the study area: the 1997 Anne Arundel County General Development Plan (GDP), the 2004 Jessup/Maryland City Small Area Plan and the 2003 Odenton Small Area Plan. The study area falls mostly within the Jessup/Maryland City Small Area Plan. Both the GDP and the Jessup/Maryland City Small Area Plan recommend capacity improvements along this segment of MD 198 to alleviate congestion and accommodate future development.

Intermodal Connectivity

Bus Service

There is currently no bus service on MD 198 between MD 295 and MD 32. Bus transit service along the MD 198 corridor, west of MD 295 in Maryland City, is provided by the Corridor Transportation Corporation (CTC). CTC Connect-a-Ride routes B, F and K provide service to the Laurel Mall, Laurel Racetrack, NSA, Arundel Mills and the Cromwell Light Rail Station in Glen Burnie. At Laurel Mall, riders can connect to services provided by Howard Transit, the Maryland Transit Administration (MTA) and Metrobus. MTA bus service is also available at Arundel Mills. Service between Arundel Mills and Annapolis is provided by Annapolis Transit.

Note that the Washington Metropolitan Area Transit Authority (WMATA) operates the B-30 route connecting the Greenbelt Metrorail Station (Green Line) with BWI Thurgood Marshall Airport. This service, while it does not stop at Fort Meade, is operated by WMATA as a MTA reimbursable operation and could potentially provide a connection, if planned.

Tipton Airport

Tipton Airport, located along the south side of MD 198 near the interchange with MD 32 is a former U.S. Army airfield that was designated for privatization by the 1988 Base Realignment and Closure Act. Today, the airport is operated by the Tipton Airport Authority, which is a County-chartered public corporation. The airport is planned to be a state-of-the-art general aviation facility with a strong community presence and home to sport, recreational, private, and business aircraft. No scheduled airline, commuter or cargo service is planned or expected. Near-term plans for the airport include the installation of T-Hangars, rehabilitation of large hangars and pavement rehabilitation. Though currently not funded for construction, the airport does have an Environmental Assessment/Finding of No Significant Impact permitting the extension of the runway from 3,000 to 4,000 feet, plus the extension of landing lights.

Commuter Train

MARC Commuter train service is provided within a couple of miles at either end of the project study area. East of the project area is the Odenton MARC Station, which is on the Penn Line and is located near the MD 32/MD 175 interchange. The Odenton Station is the third most utilized station within the MARC system, behind only Penn Station in Baltimore and Union Station in Washington, DC. The MTA recently expanded surface parking capacity of the station. In addition, the Maryland Department of Transportation (MDOT), along with the Maryland Transportation Authority (MdTA) and MTA have entered into a private/public partnership for the development of a large mixed-use Transit Oriented Development (TOD) centered around the Odenton station. The TOD will include a parking structure that could accommodate an additional 2,500 to 3,500 spaces. The TOD is expected to be completed in 3-5 years. West of the project area, and just west of the Anne Arundel County line in Prince George's County, MARC service is provided on the Camden Line at the Laurel station. Service on the Camden Line is less frequent than that on the Penn Line.

Bicycle and Pedestrian

Between MD 295 and MD 32, most of MD 198 has 10-foot shoulders, providing a good comfort level with respect to bicycle compatibility. There are no shoulders however in the segment between Bald Eagle Drive and the Little Patuxent River. There are few sidewalks within the project limits; nor are there any hiking or biking trails within close proximity of the project area. Between the Little Patuxent River and MD 32, MD 198 is signed as a designated bicycle route. The bicycle designation extends onto MD 32, east of the MD 198 interchange to MD 175, providing bicycle compatible connectivity to the Odenton MARC station as well as the Odenton Town Center. Bicycles and pedestrians are prohibited from MD 32 west of the MD 198 interchange. SHA has plans to designate MD 198 as a bicycle route from MD 32 to

Old Columbia Pike in Montgomery County. The Anne Arundel County Pedestrian and Bicycle Master Plan (2003) recommends improvements to enhance bicycle and pedestrian compatibility along MD 198 through the project limits.

Related Projects

Project Planning is underway for improvements to MD 175 (Annapolis Road) from MD 295 to MD 170. The purpose of this project is to develop options for addressing existing and future capacity needs along the corridor. It will help to enhance access on the north side of Fort Meade. Project Planning is expected to be completed in the Spring of 2009. The project is not funded beyond project planning; therefore, there is no schedule for design and construction.

Howard County is developing a Central Maryland Transit/Maintenance Facility to be located on a Fort Meade site (outside of their security area) adjacent to Tipton Airport. This project, which is in the planning stage, is designed to support transit operations in Howard County, western Anne Arundel County, and the town of Laurel.

Anne Arundel County, in cooperation with the MTA, is updating their 5-year Transit Development Plan (TDP). The update process will include an assessment of existing and future needs resulting from BRAC related growth. The TDP update should be completed by the end of 2007.

VI. LAND USE AND ECONOMIC DEVELOPMENT

Except for right-of-way along MD 295 (Baltimore-Washington Parkway) near the western edge of the study limits, the study area is located entirely within Anne Arundel County's designated Priority Funding Area (PFA). The portion of MD 295 that crosses the study area is owned and maintained by the National Park Service. (See PFA Map, **Figure 2**)

Land uses throughout the study area are variable (see Existing Land Use Map, **Figure 3A**). West of the MD 295 interchange land uses are mostly strip commercial along MD 198 frontage. Residential developments behind the commercial strips gain access to MD 198 at the Clay Road/Russett Green West and Russett Green East intersections. Between the MD 295 interchange and Bald Eagle Drive there are scattered pockets of small businesses and some residential uses. The predominant use on the north side of MD 198 within the project limits is institutional, with the District of Columbia Children's Center and the Job Corps occupying large tracts of land. There is a small trailer park off of Welch's Court, south of MD 198. Between Bald Eagle Drive and MD 32, the south side of MD 198 is fronted by the Patuxent Research Refuge and Tipton Airport. East of MD 32 is Fort Meade.

The study area has experienced high population growth over the past several years. Between 1990 and 2000, the population of the census tract that envelopes the project area (740500), and includes the MD 198 corridor from the Prince George's County line to MD 32, grew 81%, from 7,036 to 12,775. The overall Anne Arundel County population increased by only 14.6%, from 427,239 to 489,656.

The increase in growth resulting from the BRAC process is expected to spur positive economic gains for the entire region and the State. Over 30,000 additional direct and indirect jobs are forecasted to locate to the region. This will create a demand for office space, housing, and commercial services throughout western Anne Arundel County, as well as in nearby areas of Prince George's and Howard Counties, to support the influx of growth. Within the immediate study area, there are about 300 acres of developable land currently zoned for light industrial along the south side of MD 198 between MD 295 and Bald Eagle Drive. To-date, there has not been a plan formally submitted for review, although there have been discussions between a potential developer and State and local officials regarding the site. In the

Jessup/Maryland City Small Area Plan, the proposed land use north of MD 198 from MD 295 to Old Portland Road changes from light residential to commercial (see Proposed Land Use Map, Figure 3B).

MD 198 Project Planning Study Priority Funding Areas Map

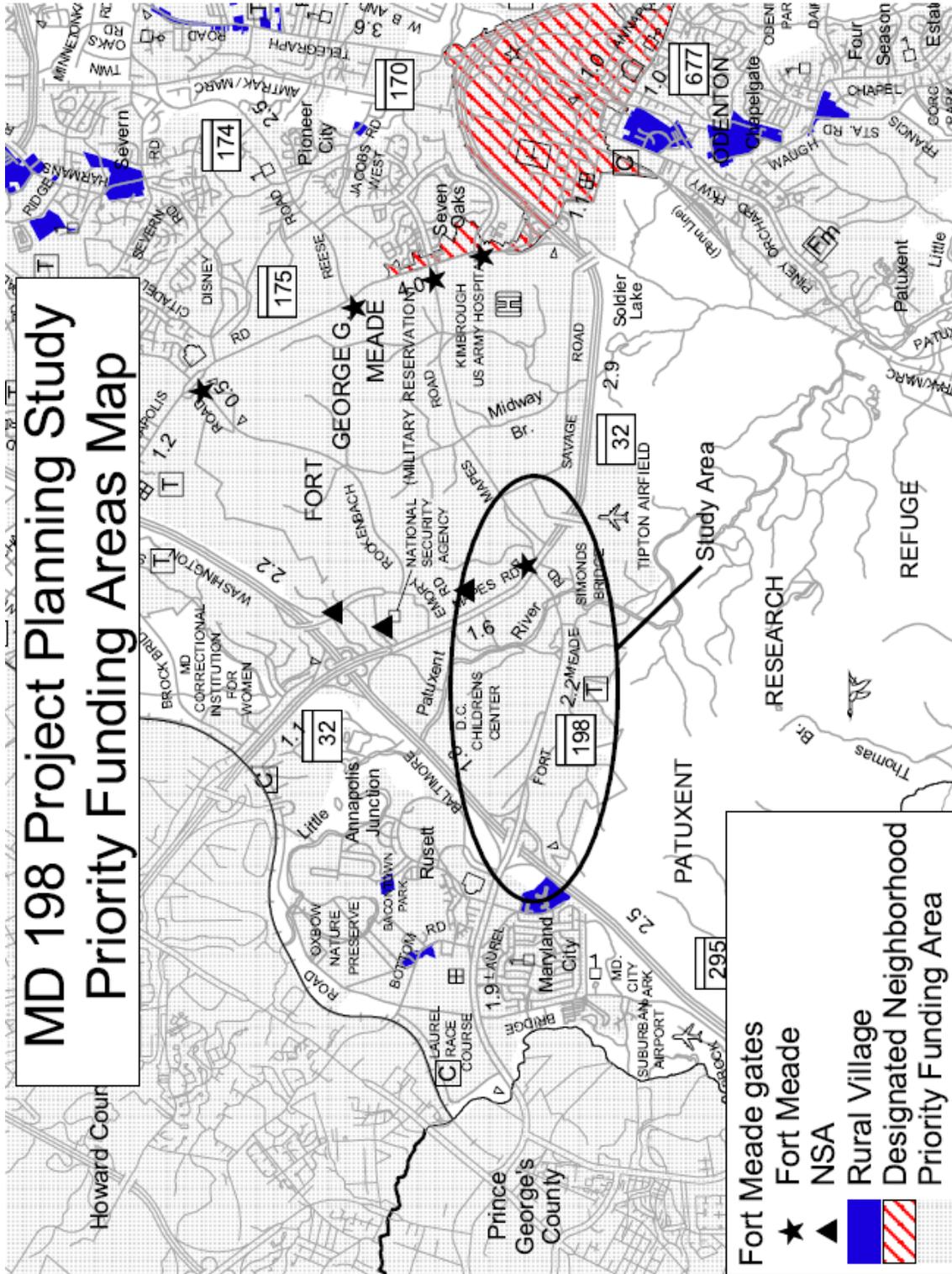


Figure 2: Priority Funding Areas

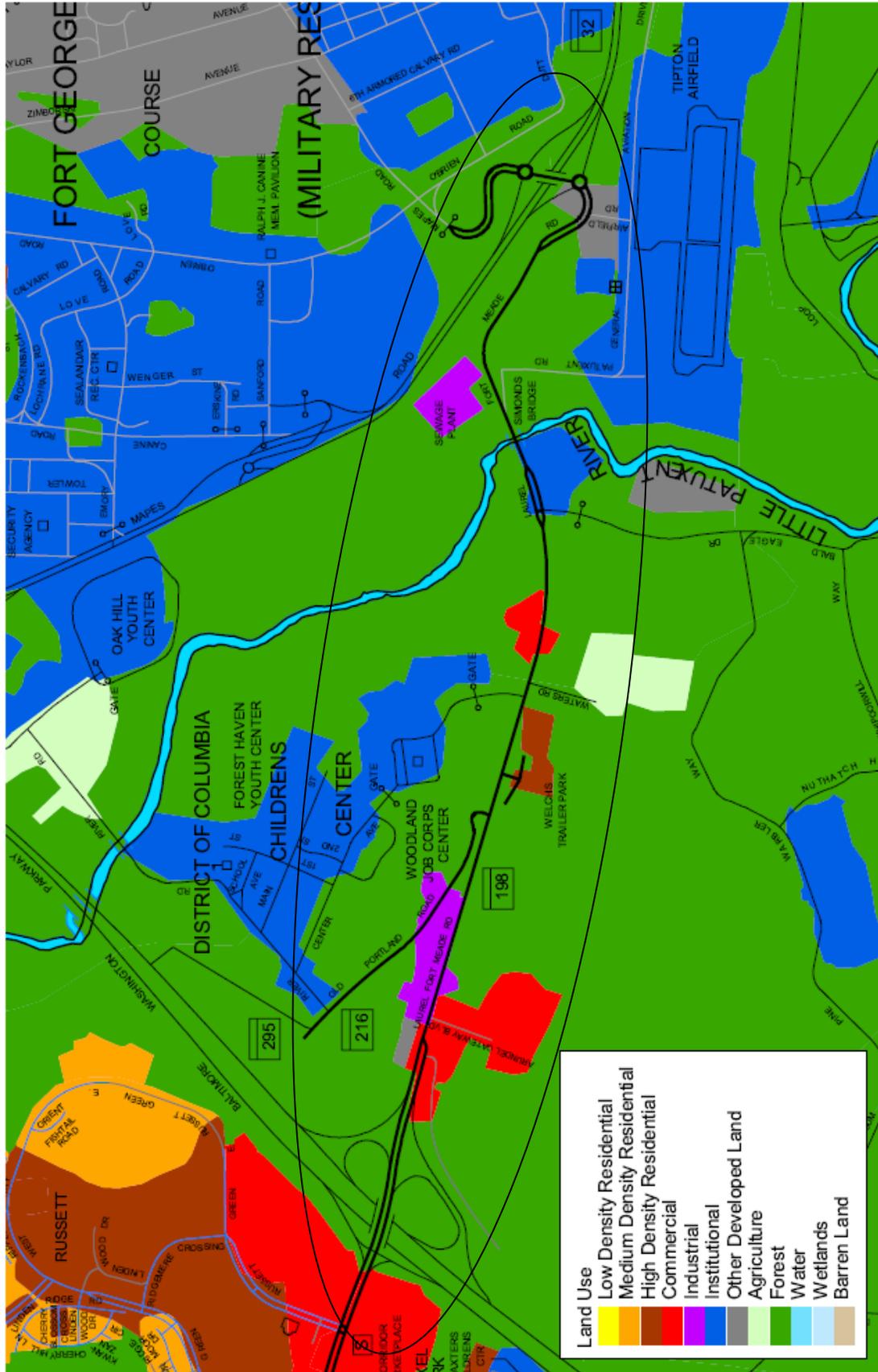


Figure 3A: Existing Land Use

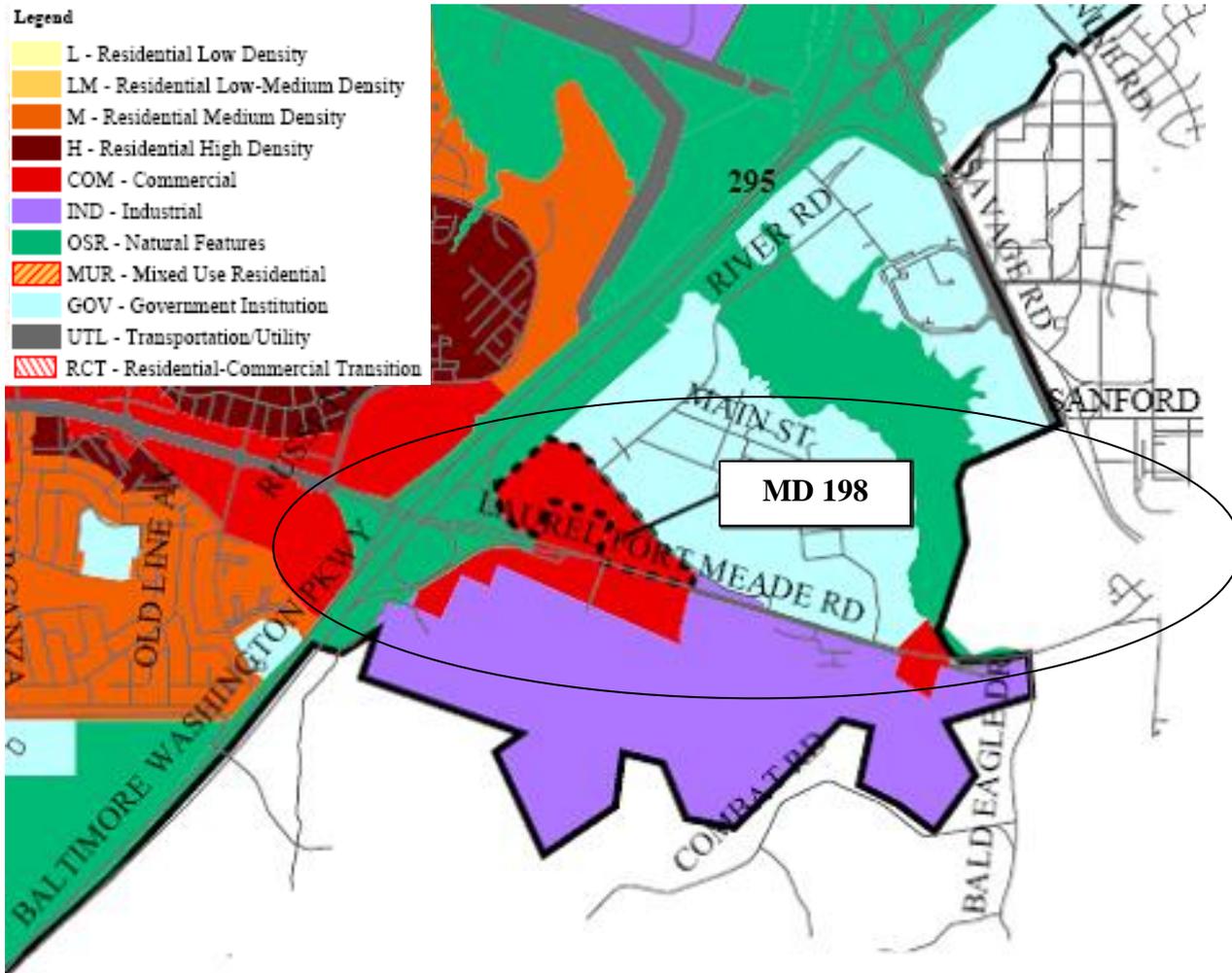


Figure 3B: Proposed Land Use

VII. EXISTING CONDITIONS

Typical Section

Within the project limits, MD 198 is generally a two-lane open roadway with 10-foot shoulders and no control of access. Approaching the MD 295 and MD 32 interchanges at the western and eastern termini, respectively, the roadway widens to four lanes. (See Project Area Map, **Figure 4**)

At the western end of the study limits, MD 198 connects to MD 295 via a partial cloverleaf interchange. Through the interchange area MD 198 is a four-lane divided roadway. West of the MD 295 interchange MD 198 is a 6-lane divided, closed section.

At the eastern terminus MD 198 connects to MD 32 via a diamond interchange. Roundabouts are located at each of the ramp termini. 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. The limits of SHA maintenance end just east of the interchange, approaching the gate into Fort Meade.

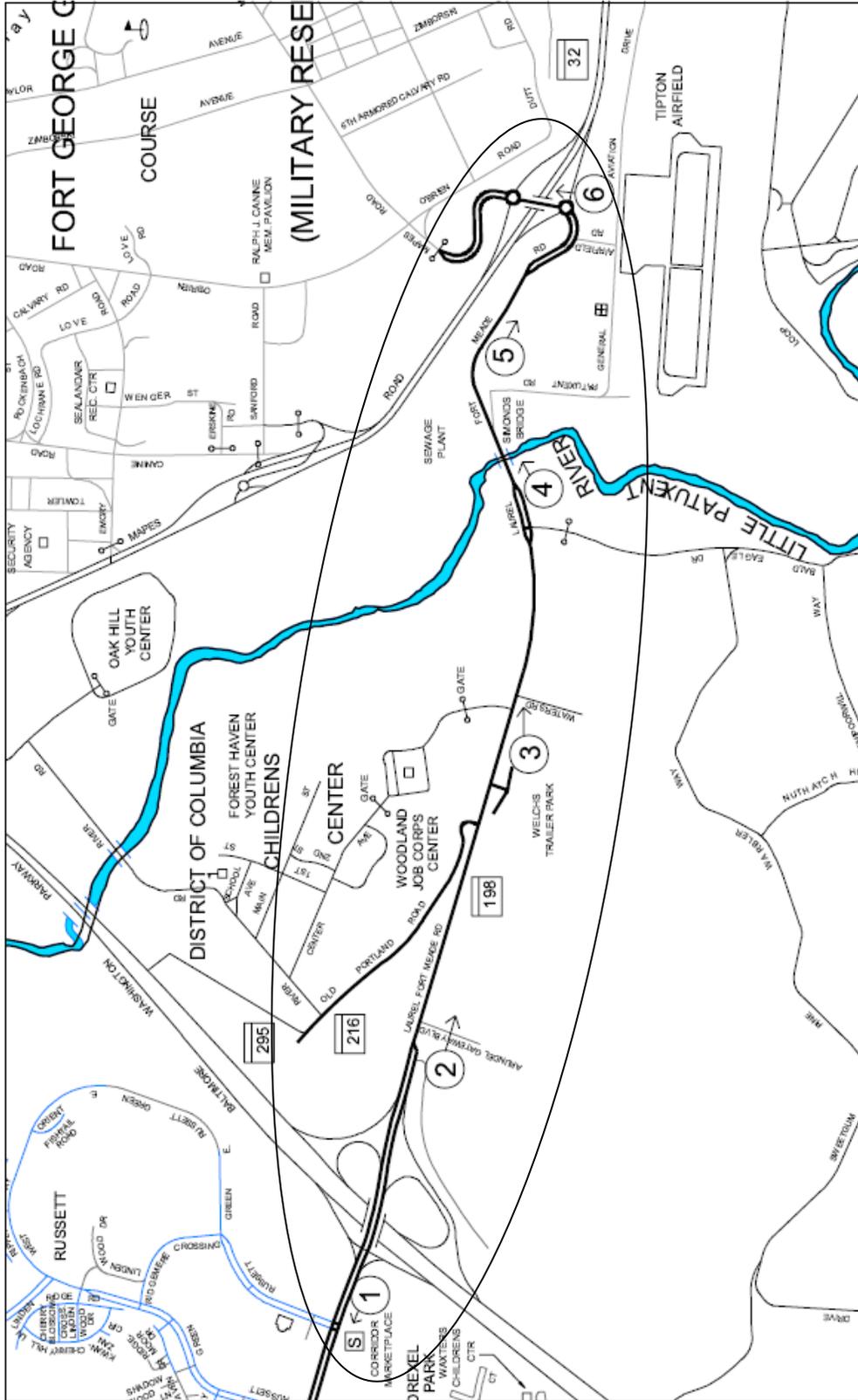
Signalized intersections within the study limits are located at the MD 198 intersections with Clay Road/Russett Green West and Corridor Market Place/Russett Green East west of the MD 295 interchange; and at Airfield Road (half-signal) near the MD 32 interchange. Other intersecting public streets include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

Table 1 summarizes the existing roadway characteristics throughout the study limits by segment, including typical section, posted speed, and median type. **Figures 5A and 5B** illustrate the roadway segments summarized in the table.

Table 1
MD 198 – Existing Roadway Characteristics

MD 198 Segments (from west to east)	Posted Speed	# of Lanes	Divided/ Undivided	Median Type	Shoulder/ *Wide Curb Lane?
West of the MD 295 Interchange	40	6	Divided	Open	Wide curb lane
Through the MD 295 Interchange area	40	4	Divided	Open	10' Shoulder
East of the MD 295 Interchange area to Bald Eagle Drive	50	2	Undivided	None	10' Shoulder
Bald Eagle Drive to the Little Patuxent River	40	2	Undivided	None	None
Little Patuxent River to just west of Airfield Road	40	2	Undivided	None	10' Shoulder
Just west of Airfield Road to the bridge over MD 32	40	4	Divided	Closed	10' Shoulder
Bridge over MD 32	40	3	Undivided	None	None
East of the MD 32 Interchange	40	4	Undivided	None	None

*Relates to bicycle compatibility



Location of photographs shown on pages 12-13

Figure 4: Project Area Map



1. West of the MD 295 Interchange
 Maryland City, looking west towards Laurel. This is a 6-lane divided roadway section with a wide outside curb lane, sidewalks. Land use is strip commercial.



2. MD 295 Interchange Area
 Looking east, towards Ft. Meade. Through the MD 295 interchange area, MD 198 is a 4-lane divided roadway with 10' shoulders. Just east of the interchange area it transitions to a 2-lane roadway with 10' shoulders. Development is much less dense. Land use is a mix of low-density commercial, scattered residential and institutional.



3. Low Density Commercial
 There are several smaller, locally owned commercial establishments scattered throughout the 2-lane section between MD 295 and MD 32. Pictured here are a BBQ restaurant and an auto repair shop. Off to the right, just out of view, is a bar and liquor store that is now closed.

Figure 5A Roadway Segment Pictures



4. Little Patuxent River Bridge
Between Bald Eagle Drive and the Little Patuxent River there are no shoulders. This picture is looking east. Just beyond the bridge heading east 10' shoulders are in place all the way to the bridge over MD 32.



5. MD 32 Interchange Approach
Looking east. Approaching the MD 32 interchange MD 198 transitions to a 4-lane divided roadway. Off to the right is Airfield Road, which provides access to Tipton Airport. The Airfield Road intersection is controlled by a half-signal. This segment of MD 198, to MD 32, is a designated bicycle route.



6. Bridge over MD 32
The bridge over MD 32 has three lanes and minimal shoulders. Just east of the bridge, approaching the gate to Ft. Meade, SHA ownership and maintenance ends. The MD 198/MD 32 interchange was opened in the fall of 2002.

Figure 5B Roadway Segment Pictures

Traffic Operations

The adequacy of roadway capacity can be determined using a measure called volume-to-capacity (v/c) ratio. The v/c ratio is the relationship between the peak hour volume carried by a roadway or intersection and its hourly capacity expressed in vehicles per hour. Roadways may have traffic volumes that exceed or are forecasted to exceed capacity. This would result in a v/c ratio that exceeds 1.00 and indicates the need for capacity improvements. If existing or future capacity levels are sufficient, the v/c ratio will be less than 1.00. This methodology was used for analyzing signalized intersections and mainline MD 198.

Another method for measuring roadway efficiency is by calculating the average delay, in terms of seconds per vehicle. This method was used to analyze performance at unsignalized intersections within the study limits, based upon average delay experienced by the low volume side street approaches.

Level of Service (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 movement of traffic with little or no congestion. 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 daily delays. LOS is normally determined for the peak hours of the typical weekday. These levels have been determined through traffic research and are related to measurable traffic characteristics such as delays, speeds, traffic density, or v/c ratios.

Existing 2006 Traffic

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. Just west of the MD 295 interchange the existing ADT is considerably higher, at 43,100. At the other end of the project limits the ADT drops to 7,900 just east of the MD 32 interchange. The truck percentage along MD 198 between MD 295 and MD 32 is 7% and west of MD 295 is 3%. **Figure 6** depicts the existing ADT volumes throughout the study limits.

The peak hour volumes along MD 198 between MD 295 and MD 32 are relatively constant; about 2250 vehicles per hour (VPH) in the AM peak and about 2575 VPH in PM peak - both directions. There is very little peak hour trip generation within these limits. This segment currently operates at a LOS E as a two-lane facility. Three intersections within the study limits are operating at LOS E or F, under current traffic conditions, during both the AM and PM peak hours: MD 198/Tischer Entrance LOS F (AM and PM); MD 198/Honda Dealer LOS F (AM and PM); and MD 198/Welch's Court LOS E (AM) and LOS F (PM). The intersection at MD 216 B (Old Portland Road) operates at LOS E in the AM peak; the Bald Eagle Drive intersection operates at LOS F in the PM peak (see **Figures 7 & 8** for the location of these intersections).

Figures 7 and 8 present peak hour volumes and Level of Service analysis, respectively, for each intersection within the project limits, under the existing condition. **Figure 8** also includes the lane configuration at each intersection.

Table 2 summarizes the results of the Level of Service analysis conducted for interchanges and intersections in the study area under existing 2006 conditions.

**Table 2
Existing 2006 Level of Service**

Intersection Control	Intersection of MD 198 and.. (from west to east)	Analysis	AM LOS	V/C¹	Delay²	PM LOS	V/C¹	Delay²
Signal	Red Clay Road/ Russett Green West	CLV	B	0.65		C	0.74	
Signal	Market Place Corridor/ Russett Green East	CLV	B	0.63		C	0.78	
Stop Control	Tischer Entrance	HCS	F		100+	F		100+
Stop Control	Honda Dealer	HCS	F		100+	F		100+
Stop Control	Arundel Gateway	HCS	A		9.6	B		12.4
Stop Control	MD 216B	HCS	E		43.1	D		30.3
Stop Control	Welch's Court	HCS	E		47.8	F		100+
Stop Control	Gate Access (Childrens Center)	HCS	B		12.2	D		31.7
Stop Control	Bald Eagle Drive	HCS	A		9.4	F		75.3
Half-Signal	Airfield Road	CLV	A	0.28		A	0.49	
Roundabout	MD 32 Eastbound Ramps	SIDRA	A		4.6	A		4.8
Roundabout	MD 32 Westbound Ramps	SIDRA	B		14.0	A		9.6
Two-Lane Roadway	MD 198, MD 295 to MD 32	HCS	E	0.77		E	0.87	

Notes

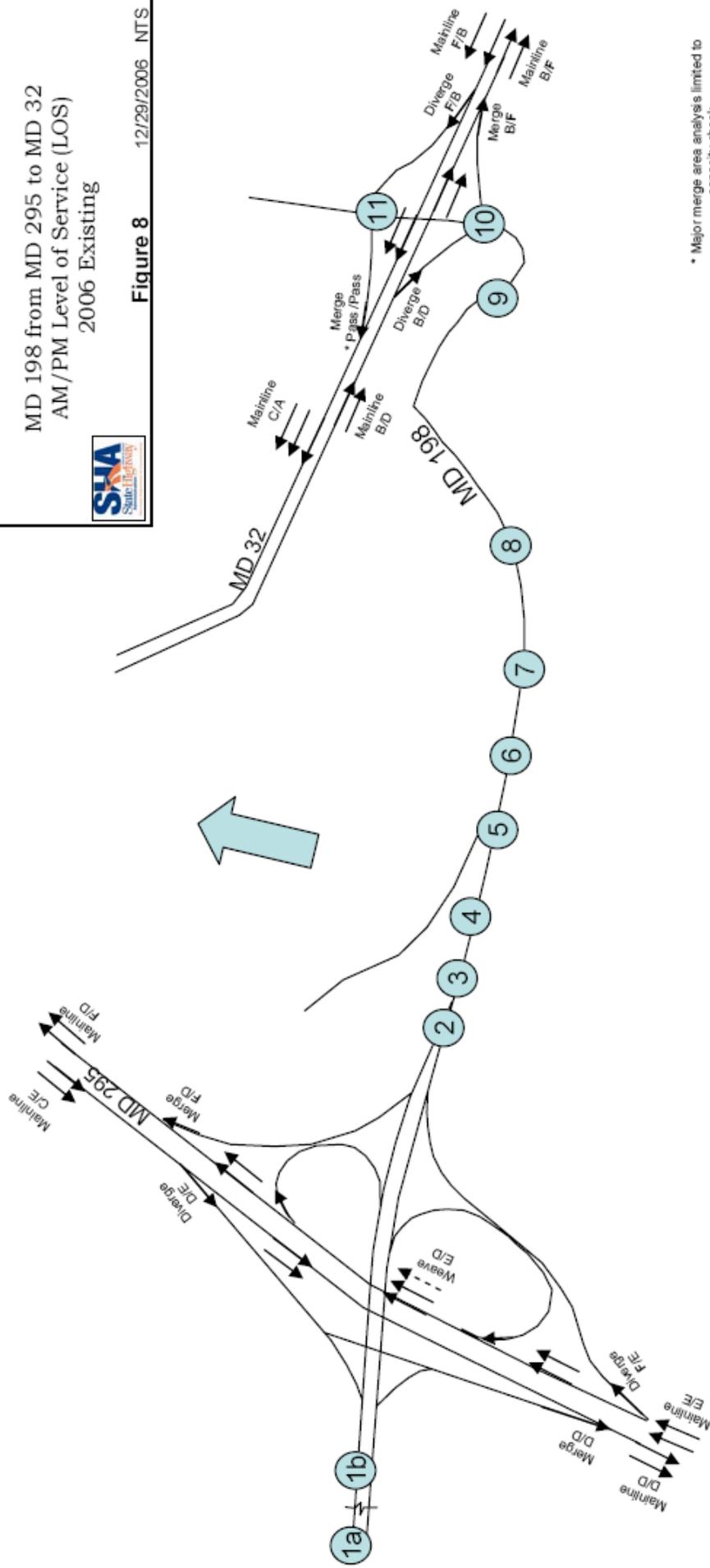
1. LOS at signalized intersections based on v/c ratio on side street.
2. LOS at unsignalized intersections based on average delay, in terms of seconds per vehicle, on the low volume side street approach.

MD 198 Project Planning Study

MD 198 from MD 295 to MD 32
AM/PM Level of Service (LOS)
2006 Existing



Figure 8 12/29/2006 NTS



* Major merge area analysis limited to capacity check.

MD 198 at Red Clay/Russett Green W.	MD 198 at Corridor/Russett Green E.	MD 198 at Tischler Entrance	MD 198 at Honda Entrance	MD 198 at Proposed Access	MD 198 at MD 216C
1a.	1b.	2.	3.	4.	5.
6.	7.	8.	9.	10.	11.

Safety

A crash analysis was completed for a three-year period from January 1, 2003 through December 31, 2005. This information includes summaries of crash types and severities for major roadway segments, and the crash rates per 100 million vehicle miles of travel versus the comparable weighted statewide rates for similarly designed State maintained highways.

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 type highways. Wet surface crashes occur at a rate higher than the statewide average for similar type highways; however they are not significantly higher. Other accident types included rear end, sideswipe, fixed object, left turn, angle, and parked vehicles. One pedestrian accident occurred in the project area, which resulted in injury. This accident occurred near Russett Green West, and was caused by the driver's failure to yield right of way to the pedestrian. The analysis did not include information from the Little Patuxent River thru the MD 198/MD 32 interchange area (about 1 mile). The interchange was opened to traffic in the fall of 2002 and was too new to include in the study.

There were a total of 155 reported crashes within the limits of the crash analysis, resulting in one fatality and 87 injuries. The fatality occurred in the MD 295 interchange area. The majority of the reported 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 the volumes are much higher. See **Appendix A** for a more detailed breakdown of the crash data.

VIII. 2030 NO-BUILD CONDITIONS

The projected 2030 ADT in the study area is expected to increase approximately 35% west of MD 295 and 75% between MD 295 and MD 32, with future volumes ranging between 57,900 ADT just west of MD 295 to 33,450 ADT just west of the MD 32 interchange. Between the MD 32 interchange and the Fort Meade gate the ADT is expected to increase approximately 257% to 28,200 ADT (see 2030 No-Build Average Daily Traffic Volumes, **Figure 9**).

Peak period volumes are expected to increase at a similar rate. The forecasted AM and PM peak period volumes between MD 295 and MD 32 are 4,090 and 4,205 VPH, both directions, respectively.

Without improvements, congestion throughout the study limits will reach severe conditions and the crash rate would be expected to increase. As a two-lane roadway, MD 198 between MD 295 and MD 32 is projected to experience failing conditions, with queues extending the entire length of the study limits. Nine of the twelve intersections in the study area are expected to operate at a LOS F in either the AM or PM peak period, or both, including the roundabouts at the MD 198/MD 32 interchange.

Table 3 summarizes the results of the Level of Service analysis conducted for interchanges and intersections in the study area under the 2030 No-Build condition. **Figures 10 and 11** present peak hour volumes and LOS analysis, respectively. **Figure 11** also includes the No-Build lane configurations at each of the intersections.

Table 3**2030 No-Build Level of Service**

Intersection Control	Intersection of MD 198 and (from west to east)	Analysis	AM LOS	V/C¹	Delay²	PM LOS	V/C¹	Delay²
Signal	Red Clay Road/ Russett Green West	CLV	D	0.84		E	0.95	
Signal	Market Place Corridor/ Russett Green East	CLV	D	0.87		F	1.02	
Stop Control	Tischer Entrance	HCS	F		100+	F		100+
Stop Control	Honda Dealer	HCS	F		100+	F		100+
Stop Control	Arundel Gateway	HCS	C		17.5	C		19.2
Stop Control	MD 216B	HCS	F		100+	F		100+
Stop Control	Welch's Court	HCS	F		100+	F		100+
Stop Control	Gate Access (Childrens Center)	HCS	C		18.9	F		100+
Stop Control	Bald Eagle Drive	HCS	C		16.8	F		100+
Half-Signal	Airfield Road	CLV	B	0.69		C	0.76	
Roundabout	MD 32 Eastbound Ramps	SIDRA	F		100+	A		6.2
Roundabout	MD 32 Westbound Ramps	SIDRA	F		100+	F		53.4
Two-Lane Roadway	MD 198, MD 295 to MD 32	HCS	F	1.40		F	1.42	

Notes

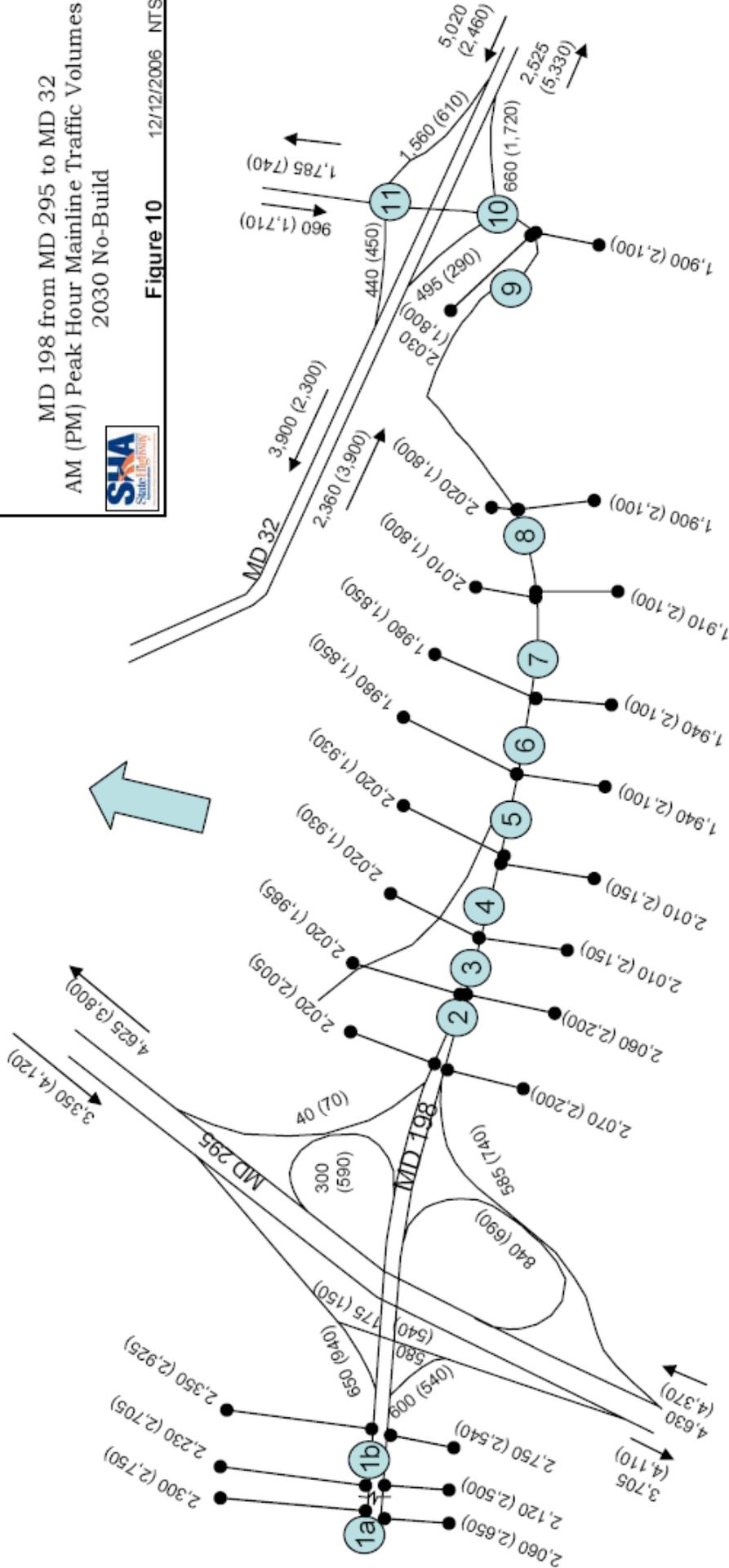
1. LOS at signalized intersections based on v/c ratio on side street.
2. LOS at unsignalized intersections based on average delay, in terms of seconds per vehicle, on the low volume side street approach.

MD 198 Project Planning Study

MD 198 from MD 295 to MD 32
 AM (PM) Peak Hour Mainline Traffic Volumes
 2030 No-Build



Figure 10 12/12/2006 NTS



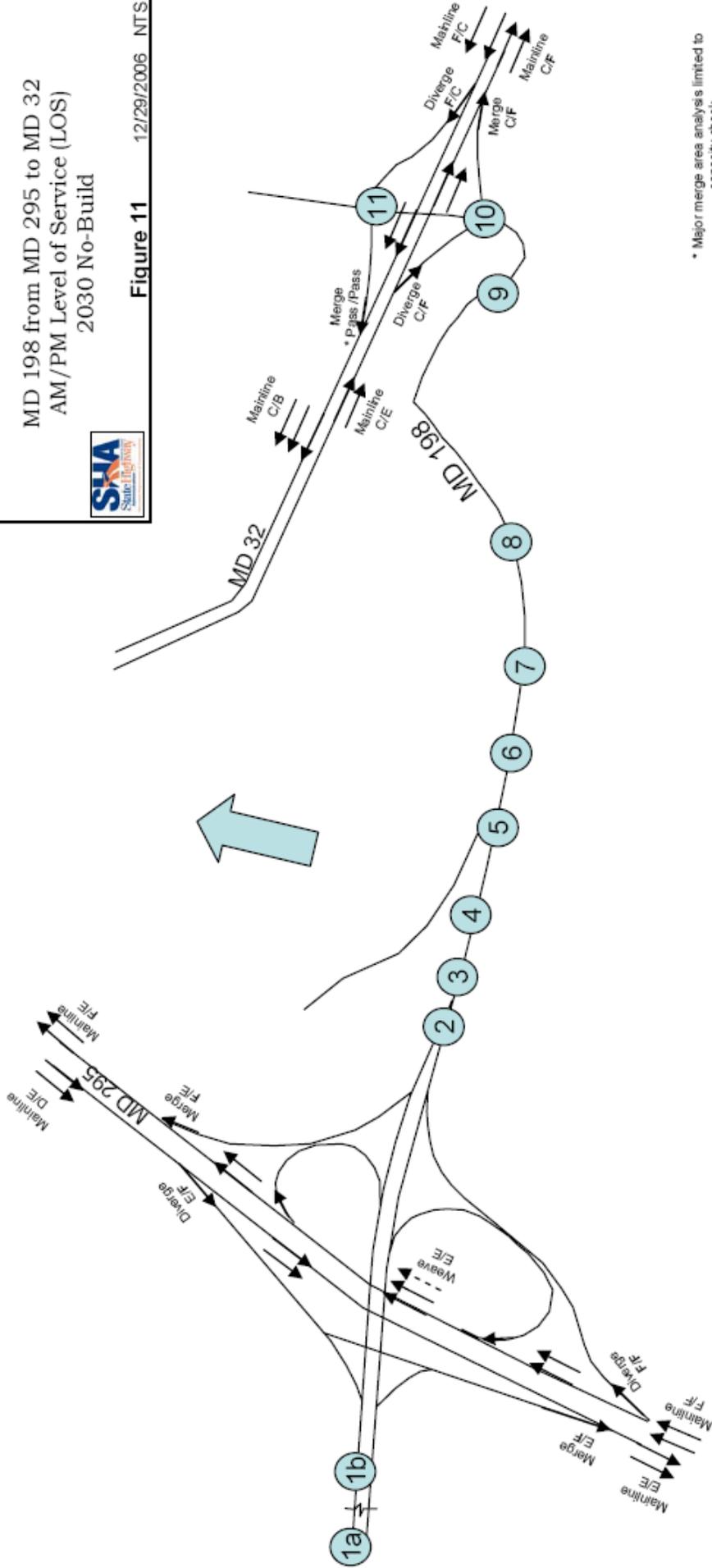
MD 198 at Red Clay/Russett Green W.	MD 198 at Corridor/Russett Green E.	MD 198 at Tischer Entrance	MD 198 at Honda Entrance	MD 198 at Proposed Access	MD 198 at MD 216C
<p>1a.</p> <p>110 (175) ← 140 (110) →</p> <p>30 (75) ← 110 (110) →</p> <p>280 (140) ← 320 (180) →</p> <p>50 (270) ← 1,640 (2,400) →</p> <p>70 (200) ← 320 (180) →</p>	<p>1b.</p> <p>150 (180) ← 270 (600) →</p> <p>40 (110) ← 1,900 (2,115) →</p> <p>50 (130) ← 150 (210) →</p> <p>250 (400) ← 700 (480) →</p> <p>160 (480) ← 1,900 (1,870) →</p> <p>60 (150) ← 60 (150) →</p>	<p>2.</p> <p>30 (50) ← 0 (0) →</p> <p>0 (0) ← 1,990 (1,955) →</p> <p>30 (30) ← 30 (30) →</p> <p>2,040 (2,160) ← 0 (0) →</p> <p>30 (40) ← 30 (40) →</p>	<p>3.</p> <p>70 (65) ← 1,990 (2,135) →</p> <p>30 (70) ← 30 (15) →</p> <p>20 (15) ← 1,990 (1,915) →</p>	<p>4.</p> <p>2,010 (2,150) ← 0 (0) →</p> <p>0 (0) ← 0 (0) →</p> <p>0 (0) ← 0 (0) →</p> <p>0 (0) ← 2,020 (1,930) →</p> <p>80 (60) ← 1,930 (2,090) →</p>	<p>5.</p> <p>80 (60) ← 80 (60) →</p> <p>1,930 (2,090) ← 1,960 (1,840) →</p> <p>20 (10) ← 20 (10) →</p>
<p>6.</p> <p>10 (10) ← 10 (10) →</p> <p>1,930 (2,090) ← 10 (10) →</p> <p>10 (10) ← 10 (10) →</p>	<p>7.</p> <p>30 (15) ← 1,910 (2,085) →</p> <p>0 (65) ← 30 (5) →</p> <p>30 (5) ← 1,990 (1,795) →</p>	<p>8.</p> <p>10 (10) ← 1,900 (2,060) →</p> <p>0 (10) ← 10 (10) →</p> <p>0 (10) ← 2,010 (1,790) →</p>	<p>9.</p> <p>30 (40) ← 0 (0) →</p> <p>0 (0) ← 1,990 (1,760) →</p> <p>30 (40) ← 40 (40) →</p> <p>1,870 (2,060) ← 30 (40) →</p>	<p>10.</p> <p>510 (1,490) ← 1,380 (610) →</p> <p>120 (160) ← 376 (130) →</p> <p>0 (0) ← 1,910 (1,640) →</p>	<p>11.</p> <p>1,565 (640) ← 200 (100) →</p> <p>240 (350) ← 720 (1,360) →</p> <p>1,340 (510) ← 0 (0) →</p>

MD 198 Project Planning Study

MD 198 from MD 295 to MD 32
 AM/PM Level of Service (LOS)
 2030 No-Build



Figure 11 12/29/2006 NTS



* Major merge area analysis is limited to capacity check.

MD 198 at Red Clay/Russett Green W.	MD 198 at Corridor/Russett Green E.	MD 198 at Tischler Entrance	MD 198 at Honda Entrance	MD 198 at Proposed Access	MD 198 at MD 216C
1a.	1b.	2.	3.	4.	5.
6.	7.	8.	9.	10.	11.

X. CONCLUSION

The MD 198 study area is one of the fastest growing areas in Anne Arundel County and is projected to grow rapidly over the next decade due to employment and residential expansion at and near Fort Meade. As a result of this increased growth there is expected to be considerable increases in commercial activity and economic development opportunities for this area of Anne Arundel County, which is in the County's designated Priority Funding Area. The proposed improvements are needed to address existing and future operational, vehicular and pedestrian safety, and capacity issues while supporting existing and planned economic development. The project would improve access to Fort Meade from both MD 295 and MD 32 and improve operational efficiency and safety in the MD 198 corridor.

APPENDIX A CRASH ANALYSIS



State Highway Administration

Robert L. Ehrlich, Jr., Governor | Michael S. Steele, Lt. Governor

Robert L. Flanagan, Secretary | Neil J. Pedersen, Administrator

Maryland Department of Transportation

MEMORANDUM

TO: Mr. Bruce M. Grey, Deputy Director
Office of Planning and Preliminary Engineering
ATTN: Ms. L'Kiesha Markley
Project Engineer
FROM: Bill Matheny
Traffic Development and Support Division
DATE: November 10, 2006
SUBJECT: MD 198 from west of MD 295 to MD 32 Interchange /Ramps
Anne Arundel County

Handwritten signature of Bill Matheny

RECEIVED TRAVEL FORECASTING SECTION 06 NOV 13 AM 8:38 JOB NO.

Thank you for your recent memorandum requesting accident information for the above-cited location. Attached are a study worksheet, accident summary, and an accident history for the three-year study period, 2003 through 2005. These forms describe the accident experience by year, severity, collision type, probable cause, logmile location, accident rate per 100 million vehicle miles of travel (acc/100mvm) and comparable weighted statewide average accident rate for all similarly designed highways under state maintenance.

Listed below are our findings for the studied sections:

- MD 198 from west of MD 295 to east of MD 32 - All accident rates fall within acceptable parameters for similar maintained highways. Wet surface accidents are higher than their respective statewide rate; however they are not significantly higher. Our state maintenance ends at 3.78 in years 2003 - 2004, and begins GV 198 from .00 to .36. In 2005 this section was fully maintained by the State of Maryland from 1.45 to 4.94. This section did not qualify to be a priority section from 2003 to 2005.
MD 295 from the Prince George's County Line to the Little Patuxent River - This section was fully maintained by the State of Maryland for the entire study period. There were a total of 15 accidents for the three year period of January 1, 2003 to December 31, 2005. All accident rates and percentages fall well below their respective statewide average rate when compared to similarly designed highways. This section did not qualify to be a priority section for 2003 to 2005.

Mr. Bruce Grey
Page Two

- MD 32 from Rogue Harbor Road to north of Mapes Road – This section was state maintained from 7.35 to 9.21. After 9.21, it became Mapes Road (GV 714 FROM 9.21 TO 9.72) and then terminates at Savage Road (GV 714 from 9.72 to 10.07). This section had 11 total accidents. All accident categories fell below their respective statewide average rate. Nighttime accidents were higher than its statewide percentage; however it was not significantly higher. This section did not qualify to be a priority location for the study period.

Interchange information is only complete up to 2003. The interchange of MD 32 and MD 198 is too recent to include in our study.

Please note that the scope of this study includes highways which are under Fort Meade's jurisdiction and we currently have no accident information for these areas. Also, all accident rates were calculated by using the ADTs your office supplied, and some accident rates could be low due to the isolated reporting of the accidents within Fort Meade's jurisdiction.

If you have any questions or require additional information, please do not hesitate to contact me at 410 787-5850, or via email at: wmatheny@sha.state.md.us.

Attachments

cc: Mr. Robert Cunningham
Mr. Derk Gunn
Ms. Kameel Holmes
Mr. Vaughn Lewis
Mr. Scott Sumner
Ms. Kimberly Tran
Mr. Gregory Welker

Maryland State Highway Administration
 Office of Traffic and Safety - Traffic Development and Support Division
 SHA 52.1 ADC Combined Logmile History Output rev. 06/2006-1

Name: William Matheny
 Date: 10/31/2006

Location: MD0032 From R. HARBOR To MAPES GV714 Logmile: From 007.35 To 009.21 Length: 1.86
 County: Anne Arundel Period: January 1, 2003 To December 31, 2005 Note(s):

LOGMILE	IR	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	FX OB	CLSN TYPE	MOVE V1 V2	PROBABLE CAUSE
MD0032											
8.33		050804	PROPERTY	10P	NIGHT	DRY	✓		OTHER	SS na	FAIL TO GIVE FULL TIME/ATTENT
8.58		071203	PROPERTY	12P	NIGHT	WET		09	FXOBJ	WS na	FAIL TO GIVE FULL TIME/ATTENT
8.58		011905	PROPERTY	2P	DAY	SNOW			OTHER	WS na	RAIN, SNOW
8.74		071804	PROPERTY	12P	DAY	WET			OTHER	UU na	UNKNOWN OR OTHER CAUSE
8.83	✓	051303	PROPERTY	9P	NIGHT	DRY			OTHER	UU NS	UNKNOWN OR OTHER CAUSE
8.83		011805	PROPERTY	11A	DAY	DRY			RREND	NS NS	UNKNOWN OR OTHER CAUSE
8.83		051805	PROPERTY	9P	NIGHT	DRY			OTHER	WS na	FAIL TO OBEY OTHER CTRL DEVICE
8.84		061705	PROPERTY	7P	DAY	DRY			SDSWP	ES ES	FAIL TO YIELD RIGHT OF WAY
8.89		081505	PROPERTY	8A	DAY	DRY			SDSWP	NS NS	FAIL TO GIVE FULL TIME/ATTENT
8.93		042104	PROPERTY	12P	DAY	DRY			OTHER	WS UU	UNKNOWN OR OTHER CAUSE
9.10		012404	PROPERTY	10A	DAY	WET		09	FXOBJ	NS na	FAIL TO GIVE FULL TIME/ATTENT

FXOB(01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence
 (08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construc. Barrier (13)=Crash Attenuator

Location: MD0032 From R. HARBOR To MAPES GV714 Logmile: From 007.35 To 009.21 Length: 1.86
 County: Anne Arundel Period: January 1, 2003 To December 31, 2005 Note(s):

SEVERITY				DAY OF THE WEEK																		
Fatal	Injury	P-Damage	Total	SUN	MON	TUE	WED	THU	FRI	SAT	UNK											
Accidents		11	11																			
Veh Occ				1	1	2	3		1	3												
Pedestrian																						
MONTH OF THE YEAR																						
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	CONDITION: DRIVER	PED								
3			1	3	1	2	1						Normal:	6								
													ALCOHOL:	1								
													Other:	4								
VEHICLES INVOLVED PER ACCIDENT																						
TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK	1	2	3	4	5	6+	UNK	TOTAL	
AM:									1		1	1			1	2	3	4	5	6+	UNK	
PM:	2		1					1		2	1	1			6	5						16
VEHICLE TYPE		SURFACE		MOVEMENTS																		
M_Cycle/Moped	Trk_Trailer	3	WET	NORTH			SOUTH			EAST			WEST									
9 Passenger Veh	Passenger Bus	7	DRY	LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT							
3 Light Truck	School Bus	1	SNO/ICH	6			1			2			4									
3 Heavy Truck	Emergency Veh		MUD																			
1 Other Types			OTHER	OTHER MOVEMENTS 3																		
PROBABLE CAUSES				COLLISION TYPES				FAT	INJ	PROP	TOTAL											
Inf. of Drugs	Improper Parking			OPPOSITE DIR	RELATED:																	
Inf. of Alcohol	Passenger Interfere/Obetr.				UNRELATED:																	
Inf. of Medication	Illegally in Roadway			REAR END	RELATED:																	
Inf. of Combined Substance	Bicycle Violation				UNRELATED:				1		1											
Physical/Mental Difficulty	Clothing not Visible			SIDESWIPR	RELATED:																	
Pell Asleep/Fainted etc.	Smog, Smoke				UNRELATED:				2		2											
4 Fail to give full attent.	Sleet, Hail, Frz. Rain			LEFT TURN	RELATED:																	
Lic. Restr. Non-comply	Blowing Sand, Soil, Dirt				UNRELATED:																	
1 Fail to Yield Rightofway	Severe Crosswinds			ANGLE	RELATED:																	
Fail to Obey Stop Sign	1 Rain, Snow				UNRELATED:																	
Fail to Obey Traffic Sig	Animal			PEDESTRIAN	RELATED:																	
1 Fail to Obey Other Contr.	Vision Obstruction				UNRELATED:																	
Fail to Keep Right of Ctr	Vehicle Defect			PARKED VEH.	RELATED:																	
Fail to Stop for Sch. Bus	Wet				UNRELATED:																	
Wrong Way on One Way	Icy or Snow Covered			OTHER CT	RELATED:				1		1											
Exceeded Speed Limit	Debris or Obstruction				UNRELATED:				5		5											
Too Fast for Conditions	Ruts, Holes, Bumps			F BRIDGE	01																	
Followed too Closely	Road Under Construction			I BUILDING	02																	
Improper Turn	Traffic Cntrl Device Inop.			X CULVERT/DITCH	03																	
Improper Lane Change	Shoulders Low, Soft, High			E CURB	04																	
Improper Backing				D GUARDRAIL/BARRIER	05																	
Improper Passing	4 Other or Unknown			I EMBANKMENT	06																	
Improper Signal				O FENCE	07																	
				B LIGHT POLE	08																	
				J SIGN POST	09					2	2											
				E OTHER POLE	10																	
				C TREE/SHRUBBERY	11																	
				T CONSTR. BARRIER	12																	
				S CRASH ATTENUATOR	13																	
				OTHER FIXED OBJECT																		
WEATHER		ILLUMINATION		TOTALS																		
8 CLEAR/CLDY	7 DAY																					
FOGGY	DAWN/DUSK																					
2 RAINING	2 DARK - LIGHTS ON	2003	2																			
1 SNOW/SLEET	2 DARK - NO LIGHTS	2004	4																			
OTHER	OTHER	2005	5																			

Location: MD0198 From MD 295 To GV 198
 County: Anne Arundel

Period: January 1, 2003 To December 31, 2005

Logmile: From 001.45 To 004.94 Length: 3.49
 Note(s):

SEVERITY	Fatal	Injury	P-Damage	Total	DAY OF THE WEEK							UNK												
Accidents	1	59	95	155	SUN	MON	TUE	WED	THU	FRI	SAT	UNK												
Veh Occ	1	86			19	23	22	23	21	23	24													
Pedestrian		1																						
MONTH OF THE YEAR																								
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	CONDITION: DRIVER	PED										
17	16	8	12	13	13	8	12	10	15	17	14		Normal:	116	1									
													ALCOHOL:	11										
													Other:	28										
TIME																								
AM:	12	01	02	03	04	05	06	07	08	09	10	11	UNK	VEHICLES INVOLVED PER ACCIDENT										
PM:	6	15	9	13	4	12	11	9	7	10	4	3		1	2	3	4	5	6+	UNK	TOTAL			
													25	112	14	3		1	310					
VEHICLE TYPE													SURFACE			MOVEMENTS								
5 M_Cycle/Moped	1 Trk_Trailer			46 WET			NORTH			SOUTH			EAST			WEST								
185 Passenger Veh	Passenger Bus			106 DRY			LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT						
52 Light Truck	1 School Bus			2 SMO/ICB			7	11	1	1	17	1	7	133	2	11	63	2						
5 Heavy Truck	2 Emergency Veh			MUD																				
59 Other Types				1 OTHER			OTHER MOVEMENTS 54																	
PROBABLE CAUSES													COLLISION TYPES											
8 Inf. of Drugs	Improper Parking			OPPOSITE DIR									RELATED:	PAT	INJ	PROP	TOTAL							
8 Inf. of Alcohol	Passenger Interfere/Obstr.			UNRELATED:																				
Inf. of Medication	Illegally in Roadway			REAR END									RELATED:											
Inf. of Combined Substance	Bicycle Violation			UNRELATED:																				
Physical/Mental Difficulty	Clothing not Visible			SIDESWIPE									RELATED:											
1 Fell Asleep/Fainted etc.	Smog, Smoke			UNRELATED:																				
40 Fail to give full attent.	1 Sleet, Hail, Frz. Rain			LEFT TURN									RELATED:	1	7	4	12							
Mic. Restr. Non-comply	Blowing Sand, Soil, Dirt			UNRELATED:																				
25 Fail to Yield Rightofway	Severe Crosswinds			ANGLE									RELATED:	9	12	21								
Fail to Obey Stop Sign	1 Rain, Snow			UNRELATED:																				
6 Fail to Obey Traffic Sig	Animal			PEDESTRIAN									RELATED:	1		1								
6 Fail to Obey Other Contr.	Vision Obstruction			UNRELATED:																				
Fail to Keep Right of Ctr	Vehicle Defect			PARKED VEH.									RELATED:											
Fail to Stop for Sch. Bus	Wet			UNRELATED:																				
Wrong Way on One Way	Icy or Snow Covered			OTHER CT									RELATED:	2	8	10								
1 Exceeded Speed Limit	Debris or Obstruction			UNRELATED:																				
18 Too Fast for Conditions	Ruts, Holes, Bumps			F BRIDGE									01											
12 Followed too Closely	Road Under Construction			I BUILDING									02											
4 Improper Turn	Traffic Cntrl Device Inop.			X CULVERT/DITCH									03	2	1	3								
5 Improper Lane Change	Shoulders Low, Soft, High			E CURB									04	1	3	4								
2 Improper Backing				D GUARDRAIL/BARRIER									05		2	2								
Improper Passing	25 Other or Unknown			EMBANMENT									06	1		1								
Improper Signal				O FENCE									07											
WEATHER													I LIGHT POLE			08	1	2	3					
116 CLEAR/CLDY	ILLUMINATION			J SIGN POST									09											
4 FOGGY	91 DAY			E OTHER POLE									10											
32 RAINING	14 DAWN/DUSK			C TREE/SHRUBBERY									11	2	2	4								
3 SNOW/SLEET	40 DARK - LIGHTS ON			T CONSTR. BARRIER									12											
OTHER	10 DARK - NO LIGHTS			S CRASH ATTENUATOR									13											
	OTHER			OTHER FIXED OBJECT																				
	2003																							
	2004																							
	2005																							

Location: MD0198 From MD 295 To GV 198

Logmile: From 001.45 To 004.94 Length: 3.49

County: Anne Arundel

Period: January 1, 2003 To December 31, 2005

Note(s):

LOGMILE	IR	DATE	SEVERITY	TIME	LIGHT	SUR FACE	FX ALC	CLS OB	CLSN TYPE	MOVE V1 V2	PROBABLE CAUSE
MD0198											
1.45	✓	121903	PROPERTY	6A	DAY	DRY			OTHER	UU UU	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	082803	PROPERTY	9A	DAY	DRY			RREND	WS WS	FELL ASLEEP, FAINTED, ETC.
1.45		020103	PROPERTY	5A	NIGHT	DRY			RREND	WS WS	IMPROPER LANE CHANGE
1.45	✓	122503	PROPERTY	7P	NIGHT	DRY			RREND	ES ES	IMPROPER TURN
1.45	✓	031003	PROPERTY	8A	DAY	DRY			ANGLE	NR ES	UNKNOWN OR OTHER CAUSE
1.45	✓	092903	1 Inj.	10A	DAY	DRY			ANGLE	ES SS	UNKNOWN OR OTHER CAUSE
1.45	✓	051203	2 Inj.	8P	NIGHT	DRY	✓		ANGLE	NL WS	FAIL TO OBEY TAFFIC SIGNAL
1.45	✓	111203	PROPERTY	9P	NIGHT	WET			OTHER	UU NL	FAIL TO GIVE FULL TIME/ATTENT
1.45		082503	PROPERTY	2P	DAY	DRY			OTHER	UU ES	UNKNOWN OR OTHER CAUSE
1.45	✓	022203	PROPERTY	1P	DAY	WET			OTHER	UU UU	FAIL TO YIELD RIGHT OF WAY
1.45		040803	PROPERTY	8A	DAY	WET		08	FXOBJ	ES na	TOO FAST FOR CONDITIONS
1.45	✓	121003	PROPERTY	5A	DAY	WET			RREND	WS WS	FOLLOWED TOO CLOSELY
1.45	✓	011303	1 Inj.	10A	DAY	WET			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	111603	1 Inj.	3P	DAY	DRY			LFTRN	WL ES	FAIL TO YIELD RIGHT OF WAY
1.45	✓	112803	PROPERTY	10A	DAY	WET			RREND	WS WR	TOO FAST FOR CONDITIONS
1.45	✓	082503	PROPERTY	1P	DAY	DRY			ANGLE	WS WS	FAIL TO OBEY TAFFIC SIGNAL
1.45	✓	090603	1 Inj.	9A	DAY	DRY			OTHER	SR EU	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	110603	PROPERTY	1P	DAY	WET		05	FXOBJ	WR na	RAIN, SNOW
1.45		071104	PROPERTY	8P	DAY	DRY			OTHER	EU WS	IMPROPER BACKING
1.45	✓	103004	3 Inj.	9A	DAY	DRY			ANGLE	ES SS	FAIL TO OBEY TAFFIC SIGNAL
1.45	✓	112404	1 Inj.	8A	DAY	WET			ANGLE	ES NS	FAIL TO YIELD RIGHT OF WAY
1.45	✓	090504	1 Inj.	12P	DAY	DRY			ANGLE	ES SS	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	121704	PROPERTY	9A	DAY	DRY			ANGLE	ES NS	FAIL TO OBEY TAFFIC SIGNAL
1.45	✓	010204	PROPERTY	4P	DAY	DRY			LFTRN	WL ES	FAIL TO YIELD RIGHT OF WAY
1.45	✓	090604	PROPERTY	9P	DAY	DRY			OTHER	EU ES	UNKNOWN OR OTHER CAUSE
1.45	✓	090104	1 Inj.	1P	DAY	DRY			ANGLE	NS WS	FAIL TO GIVE FULL TIME/ATTENT
1.45		060504	PROPERTY	5A	DAY	WET			RREND	ES ES	TOO FAST FOR CONDITIONS
1.45	✓	031604	1 Inj.	2P	DAY	WET			RREND	WS WS	FOLLOWED TOO CLOSELY
1.45	✓	101905	PROPERTY	7A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	060305	PROPERTY	9P	NIGHT	WET			RREND	WS WS	TOO FAST FOR CONDITIONS
1.45	✓	022105	1 Inj.	6A	DAY	WET			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	051105	1 Inj.	12P	DAY	DRY			LFTRN	EL WS	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	053105	PROPERTY	2P	DAY	WET			CPDIR	WS ES	IMPROPER LANE CHANGE
1.45	✓	112805	PROPERTY	7P	NIGHT	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
1.45	✓	102405	PROPERTY	6P	NIGHT	WET			SDSWP	ES ES	IMPROPER LANE CHANGE
1.45		100105	2 Inj.	9P	NIGHT	DRY			RREND	WS WS	UNKNOWN OR OTHER CAUSE
1.45	✓	110905	1 Inj.	10A	DAY	DRY			LFTRN	ES WL	FAIL TO OBEY OTHER CTRL DEVICE
1.45	✓	100505	PROPERTY	10P	NIGHT	DRY			ANGLE	ES SL	FAIL TO OBEY OTHER CTRL DEVICE
1.45	✓	090805	PROPERTY	12P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
1.45	✓	081305	1 Inj.	11P	NIGHT	DRY	✓		RREND	WS WS	UNDER INFLUENCE OF ALCOHOL
1.45	✓	112905	1 Inj.	2P	DAY	WET			PHD	NS na	FAIL TO YIELD RIGHT OF WAY
1.45	✓	062605	2 Inj.	5P	DAY	DRY			LFTRN	WL ES	FAIL TO YIELD RIGHT OF WAY

FXOB (01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence
 (08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construc. Barrier (13)=Crash Attenuator

Continues...

ADC Combined Logmile History Output Continued...

LOGMILE	IR	DATE	SEVERITY	TIME	LIGHT	SUR FACE	FX ALC	CLSN OB	MOVE TYPE	VI	V2	PROBABLE CAUSE
1.45	✓	061305	PROPERTY	8P	NIGHT	WET			RREND	WS	WS	TOO FAST FOR CONDITIONS
1.45	✓	041005	1 Inj.	9P	NIGHT	DRY			LPTRN	EL	WS	FAIL TO YIELD RIGHT OF WAY
1.45	✓	021705	PROPERTY	1P	DAY	DRY			ANGLE	NS	ES	FAIL TO YIELD RIGHT OF WAY
1.45	✓	020205	PROPERTY	1P	DAY	DRY			RREND	WS	WS	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	021105	PROPERTY	1P	DAY	DRY			ANGLE	NS	ES	UNKNOWN OR OTHER CAUSE
1.45	✓	022005	PROPERTY	1A	NIGHT	DRY			ANGLE	WS	NL	FAIL TO OBEY OTHER CTRL DEVICE
1.45	✓	012005	1 Inj.	2P	DAY	DRY			ANGLE	ES	NS	FAIL TO GIVE FULL TIME/ATTENT
1.45	✓	070305	PROPERTY	5P	DAY	DRY			RREND	ES	ES	UNKNOWN OR OTHER CAUSE
1.46		091203	2 Inj.	4P	DAY	WET			SDSWP	WS	WS	FAIL TO GIVE FULL TIME/ATTENT
1.46		071904	2 Inj.	10P	NIGHT	DRY			RREND	ES	ES	FAIL TO GIVE FULL TIME/ATTENT
1.46	✓	022704	2 Inj.	7P	NIGHT	DRY	✓		RREND	WS	WS	UNDER INFLUENCE OF ALCOHOL
1.46		031905	PROPERTY	1P	DAY	DRY			RREND	ES	ES	FOLLOWED TOO CLOSELY
1.47		071903	1 Inj.	11P	NIGHT	DRY	✓		RREND	WS	WS	FAIL TO GIVE FULL TIME/ATTENT
1.48	✓	062203	PROPERTY	4P	DAY	OTHR			RREND	WS	WS	FOLLOWED TOO CLOSELY
1.54		042805	1 Inj.	3P	DAY	DRY			RREND	ES	ES	FAIL TO GIVE FULL TIME/ATTENT
1.55		010805	PROPERTY	7P	NIGHT	DRY			SDSWP	ES	ES	FAIL TO GIVE FULL TIME/ATTENT
1.55	✓	052005	PROPERTY	1P	DAY	WET			RREND	WS	WS	FAIL TO GIVE FULL TIME/ATTENT
1.55		100705	PROPERTY	3P	DAY	WET			SDSWP	ES	ES	FAIL TO YIELD RIGHT OF WAY
1.68		050305	PROPERTY	3P	DAY	DRY			OTHER	EU	ES	FAIL TO GIVE FULL TIME/ATTENT
1.69		060503	PROPERTY	8A	DAY	DRY			RREND	WS	WS	TOO FAST FOR CONDITIONS
1.69	✓	060204	1 Inj.	11A	DAY	DRY			LPTRN	WL	ES	FAIL TO OBEY TAFFIC SIGNAL
1.69	✓	112404	1 Inj.	7P	NIGHT	WET			ANGLE	WS	NS	FAIL TO OBEY OTHER CTRL DEVICE
1.69	✓	110404	2 Inj.	9P	NIGHT	WET			LPTRN	WL	ES	FAIL TO OBEY OTHER CTRL DEVICE
1.69	✓	121205	PROPERTY	5A	NIGHT	DRY			ANGLE	WS	SS	FAIL TO OBEY TAFFIC SIGNAL
1.69	✓	082605	PROPERTY	11P	NIGHT	DRY	✓		RREND	WS	WS	UNDER INFLUENCE OF ALCOHOL
1.69		112905	2 Inj.	7P	NIGHT	WET			SDSWP	WS	WS	IMPROPER LANE CHANGE
1.69	✓	011505	PROPERTY	8A	DAY	WET			ANGLE	SS	ES	FAIL TO OBEY OTHER CTRL DEVICE
1.73		061903	PROPERTY	5A	DAY	WET		11	FXOBJ	WS	na	TOO FAST FOR CONDITIONS
1.73		012805	3 Inj.	6P	NIGHT	DRY			OTHER	ES	WU	UNKNOWN OR OTHER CAUSE
1.78		072203	PROPERTY	1P	DAY	DRY			RREND	ES	ES	FAIL TO YIELD RIGHT OF WAY
1.84		021003	1 Inj.	10A	DAY	WET			RREND	ES	ES	UNKNOWN OR OTHER CAUSE
1.84		010605	PROPERTY	6P	NIGHT	WET		04	FXOBJ	ES	na	TOO FAST FOR CONDITIONS
1.84		042305	PROPERTY	3P	DAY	DRY			RREND	ES	ES	FOLLOWED TOO CLOSELY
1.91		020503	1 Inj.	3P	DAY	DRY			ANGLE	NL	ES	FAIL TO YIELD RIGHT OF WAY
1.92		012703	1 Inj.	9P	NIGHT	DRY			ANGLE	SS	ES	FAIL TO GIVE FULL TIME/ATTENT
1.93		040603	1 Inj.	9P	NIGHT	DRY			OTHER	SS	na	FAIL TO GIVE FULL TIME/ATTENT
1.93		120503	PROPERTY	11A	DAY	SNOW		11	FXOBJ	ES	na	SLEET, HAIL, FREEZING RAIN
1.93	✓	112803	PROPERTY	10A	DAY	WET			RREND	NL	WS	UNKNOWN OR OTHER CAUSE
1.93	✓	121303	PROPERTY	6P	NIGHT	DRY	✓		LPTRN	NL	ES	FAIL TO YIELD RIGHT OF WAY
1.93		110503	PROPERTY	5P	NIGHT	WET			SDSWP	ES	ES	IMPROPER LANE CHANGE
1.93		100403	1 Inj.	3P	DAY	DRY			RREND	ES	ES	FAIL TO YIELD RIGHT OF WAY
1.93		062003	PROPERTY	10P	NIGHT	WET			RREND	SS	SS	FOLLOWED TOO CLOSELY
1.93		030203	PROPERTY	3P	DAY	DRY			OTHER	NS	US	FAIL TO GIVE FULL TIME/ATTENT
1.93		042104	PROPERTY	8A	DAY	DRY			RREND	SS	SS	FAIL TO GIVE FULL TIME/ATTENT
1.93		022004	PROPERTY	2A	NIGHT	DRY	✓	04	FXOBJ	ES	na	UNDER INFLUENCE OF ALCOHOL
1.93	✓	120904	PROPERTY	6A	DAY	DRY			OTHER	UU	UU	UNKNOWN OR OTHER CAUSE
1.93	✓	022605	1 Inj.	7P	NIGHT	DRY			OTHER	ES	NS	UNKNOWN OR OTHER CAUSE
1.93	✓	040705	PROPERTY	8P	NIGHT	WET			LPTRN	NL	ES	IMPROPER TURN
1.93		042405	3 Inj.	6A	DAY	DRY		11	FXOBJ	ES	na	FAIL TO GIVE FULL TIME/ATTENT

FXOB(01)-Bridge (02)-Building (03)-Culver/Ditch (04)-Curb (05)-Guardrail/Barrier (06)-Embankment (07)-Fence
 (08)-Light Pole (09)-Sign Post (10)-Other Pole (11)-Tree/Shrubbery (12)-Construc. Barrier (13)-Crash Attenuator

ADC Combined Logmile History Output Continued...

LOGMILE	IR	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	FX OB	CLSN TYPE	MOVE V1 V2	PROBABLE CAUSE
1.93		101805	1 Inj.	3P	DAY	DRY			OTHER	EU ES	FAIL TO YIELD RIGHT OF WAY
1.93		012205	PROPERTY	2A	NIGHT	DRY	✓		PARKD	ES UP	UNDER INFLUENCE OF ALCOHOL
1.93		013105	2 Inj.	6A	DAY	DRY			ANGLE	SS ES	FAIL TO YIELD RIGHT OF WAY
1.93	✓	111505	PROPERTY	6P	DAY	DRY			ANGLE	SS ES	FAIL TO GIVE FULL TIME/ATTENT
1.93	✓	110705	PROPERTY	5P	NIGHT	DRY			LFTRN	WL ES	FAIL TO YIELD RIGHT OF WAY
1.93		052405	PROPERTY	7P	DAY	DRY		08	FXOBJ	SS na	TOO FAST FOR CONDITIONS
1.93		080905	1 Inj.	7A	DAY	WET		08	FXOBJ	ES na	UNKNOWN OR OTHER CAUSE
1.93	✓	102205	PROPERTY	3P	DAY	WET			ANGLE	NS ES	IMPROPER TURN
1.93		100605	1 Inj.	8P	NIGHT	DRY		06	FXOBJ	ER na	TOO FAST FOR CONDITIONS
1.93	✓	122805	PROPERTY	4A	NIGHT	DRY			OTHER	EU WS	IMPROPER BACKING
1.94	✓	060805	PROPERTY	5P	DAY	DRY			ANGLE	ES NL	FAIL TO YIELD RIGHT OF WAY
1.99		082003	PROPERTY	8A	DAY	DRY			ANGLE	NL ES	FAIL TO YIELD RIGHT OF WAY
2.00	✓	072003	1X II	9P	NIGHT	DRY			LFTRN	WL ES	FAIL TO YIELD RIGHT OF WAY
2.02		021103	PROPERTY	8P	NIGHT	ICE			RREND	ES ES	TOO FAST FOR CONDITIONS
2.03	✓	052604	1 Inj.	1P	DAY	DRY			ANGLE	NL ES	FAIL TO YIELD RIGHT OF WAY
2.10		050305	2 Inj.	12P	DAY	DRY			OTHER	EU WS	IMPROPER TURN
2.10		121705	PROPERTY	2A	NIGHT	DRY		03	FXOBJ	ES na	UNKNOWN OR OTHER CAUSE
2.18		010303	PROPERTY	10A	DAY	WET			RREND	ES ES	UNKNOWN OR OTHER CAUSE
2.19		102203	PROPERTY	1P	DAY	WET			RREND	WS WS	UNKNOWN OR OTHER CAUSE
2.43		071905	PROPERTY	5A	DAY	DRY			OTHER	SS na	UNKNOWN OR OTHER CAUSE
2.45		091503	1 Inj.	11A	DAY	DRY			OTHER	ES EU	FOLLOWED TOO CLOSELY
2.55		040505	PROPERTY	10P	NIGHT	DRY	✓		SDSWP	WS WS	UNDER INFLUENCE OF ALCOHOL
2.66	✓	050204	PROPERTY	8P	NIGHT	WET			OTHER	WU ES	UNKNOWN OR OTHER CAUSE
2.68		122203	PROPERTY	6P	DAY	DRY			OTHER	UU UU	FAIL TO YIELD RIGHT OF WAY
2.82		101203	1 Inj.	1P	DAY	DRY			LFTRN	EL WS	FAIL TO YIELD RIGHT OF WAY
2.91	✓	030103	PROPERTY	7P	NIGHT	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.91	✓	031103	PROPERTY	2P	DAY	DRY		04	FXOBJ	ES na	FAIL TO GIVE FULL TIME/ATTENT
2.91	✓	050103	PROPERTY	6A	DAY	DRY			OTHER	UU ES	FOLLOWED TOO CLOSELY
2.91	✓	080403	PROPERTY	2P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
2.91		051603	PROPERTY	6P	DAY	DRY			OTHER	ES na	UNKNOWN OR OTHER CAUSE
2.91	✓	010704	2 Inj.	6A	DAY	DRY			RREND	ES ES	FAIL TO YIELD RIGHT OF WAY
2.91	✓	043005	PROPERTY	2P	DAY	WET			RREND	ES EL	TOO FAST FOR CONDITIONS
2.91	✓	011805	2 Inj.	1P	DAY	DRY			RREND	ES EL	FAIL TO GIVE FULL TIME/ATTENT
2.92	✓	052303	1 Inj.	4P	DAY	WET			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
2.92		042704	1 Inj.	2A	NIGHT	DRY	✓	11	FXOBJ	ES na	UNDER INFLUENCE OF ALCOHOL
2.93		031305	PROPERTY	6P	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
2.95		081103	PROPERTY	6P	DAY	WET			OTHER	UU UU	TOO FAST FOR CONDITIONS
2.99		061704	1 Inj.	5P	DAY	WET			RREND	ES ES	FAIL TO YIELD RIGHT OF WAY
3.00		091404	PROPERTY	9A	DAY	DRY			OTHER	UU UU	UNKNOWN OR OTHER CAUSE
3.01		102803	PROPERTY	3A	NIGHT	DRY			RREND	ES ES	EXCEEDED SPEED LIMIT
3.01		091205	PROPERTY	6A	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
3.01		080405	3 Inj.	3P	DAY	DRY			OPDIR	WS ES	FAIL TO GIVE FULL TIME/ATTENT
3.03		110704	1 Inj.	5P	DAY	DRY			OTHER	ES na	UNKNOWN OR OTHER CAUSE
3.05		101703	PROPERTY	9P	NIGHT	DRY			OTHER	WS na	UNKNOWN OR OTHER CAUSE
3.05		110704	PROPERTY	5P	DAY	DRY			PARKD	ES ES	FAIL TO GIVE FULL TIME/ATTENT
3.05	✓	013105	PROPERTY	6A	NIGHT	WET		05	FXOBJ	ES na	UNKNOWN OR OTHER CAUSE
3.07		121003	PROPERTY	5P	NIGHT	WET			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
3.15		060305	PROPERTY	6P	DAY	WET			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
3.16		073103	PROPERTY	3P	DAY	DRY			OTHER	UU UP	UNKNOWN OR OTHER CAUSE

FXOB(01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence
(08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construc. Barrier (13)=Crash Attenuator

ADC Combined Logmile History Output Continued...

LOGMILE	IR	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	FK OB	CLSN TYPE	MOVE V1 V2	PROBABLE CAUSE
3.16		101604	PROPERTY	6P	NIGHT	WET			RREND	ES ES	FOLLOWED TOO CLOSELY
3.35		080603	1 Inj.	10A	DAY	DRY		04	FXOBJ	ES na	TOO FAST FOR CONDITIONS
3.41		032803	2 Inj.	2P	DAY	WET			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
3.41		010605	PROPERTY	1P	DAY	WET			RREND	SS SS	TOO FAST FOR CONDITIONS
3.52		061504	PROPERTY	3P	DAY	DRY			RREND	ES EL	FAIL TO GIVE FULL TIME/ATTENT
3.62		021705	PROPERTY	5P	DAY	DRY			OPDIR	ES WS	FAIL TO GIVE FULL TIME/ATTENT
3.63		051304	PROPERTY	9A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
3.63		040505	2 Inj.	5P	DAY	DRY			OPDIR	ES WS	FAIL TO YIELD RIGHT OF WAY
3.67		013104	PROPERTY	11A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
3.73		121903	1 Inj.	8A	DAY	DRY			RREND	ES EL	FAIL TO GIVE FULL TIME/ATTENT
3.73		081404	PROPERTY	11A	DAY	DRY			OTHER	ER UU	UNKNOWN OR OTHER CAUSE
3.88		020605	3 Inj.	12P	DAY	DRY		03	FXOBJ	ES na	FAIL TO GIVE FULL TIME/ATTENT
3.88		020605	3 Inj.	12P	DAY	DRY		03	FXOBJ	ES na	FAIL TO GIVE FULL TIME/ATTENT
3.91		010505	1 Inj.	5P	NIGHT	WET			RREND	ES ES	TOO FAST FOR CONDITIONS
3.93		121705	2 Inj.	1A	NIGHT	DRY	/		OPDIR	ES WS	UNDER INFLUENCE OF ALCOHOL

FXOB(01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence
 (08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construc. Barrier (13)=Crash Attenuator

Maryland State Highway Administration
 Office of Traffic and Safety - Traffic Development and Support Division
 SHA 52.1 ADC Combined Summary Output rev. 06/2006-1

Name: William Matheny
 Date: 10/31/2006

Location: MD0295 From PG COUNTY To L PUYT Logmile: From 000.00 To 003.50 Length: 3.50
 County: Anne Arundel Period: January 1, 2003 To December 31, 2005 Note(s):

SEVERITY	Fatal	Injury	P-Damage	Total	DAY OF THE WEEK							UNK
Accidents		6	9	15	SUN	MON	TUE	WED	THU	FRI	SAT	UNK
Veh Occ		7			4	4	1	1		3	2	
Pedestrian												

MONTH OF THE YEAR													CONDITION: DRIVER	PED	
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	Normal:	ALCOHOL:	Other:
	1		3	2	1	2	3	2			1		10	1	4

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK	VEHICLES INVOLVED PER ACCIDENT							
AM:	1		1	1		1				1	1	1		1	2	3	4	5	6+	UNK	TOTAL
PM:		2		1	2		1	2							7	6	1	1			26

VEHICLE TYPE	SURFACE	MOVEMENTS												
		NORTH			SOUTH			EAST			WEST			
2 M_Cycle/Moped	Trk_Trailer	1 WET	LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
13 Passenger Veh	Passenger Bus	13 DRY												
5 Light Truck	School Bus	1 SNOW/ICE	8			9								
1 Heavy Truck	1 Emergency Veh	MUD												
4 Other Types		OTHER	OTHER MOVEMENTS 9											

PROBABLE CAUSES		COLLISION TYPES					
1 Inf. of Drugs	Improper Parking	OPPOSITE DIR	RELATED:	FAT	INJ	PROP	TOTAL
2 Inf. of Alcohol	Passenger Interfere/Obstr.	UNRELATED:					
Inf. of Medication	Illegally in Roadway	REAR END	RELATED:				
Inf. of Combined Substance	Bicycle Violation	UNRELATED:			1	2	3
Physical/Mental Difficulty	Clothing not Visible	SIDESWIPE	RELATED:				
Fell Asleep/Painted etc.	Smog, Smoke	UNRELATED:			1		1
3 Fail to give full attent.	Sleet, Hail, Prz. Rain	LEFT TURN	RELATED:				
Lic. Restr. Non-comply	Blowing Sand, Soil, Dirt	UNRELATED:					
1 Fail to Yield Rightofway	Severe Crosswinds	ANGLE	RELATED:				
Fail to Obey Stop Sign	Rain, Snow	UNRELATED:					
Fail to Obey Traffic Sig	Animal	PEDESTRIAN	RELATED:				
Fail to Obey Other Contr.	Vision Obstruction	UNRELATED:					
Fail to Keep Right of Ctr	Vehicle Defect	PARKED VEH.	RELATED:				
Fail to Stop for Sch. Bus	Wet	UNRELATED:			1		1
Wrong Way on One Way	Icy or Snow Covered	OTHER CT	RELATED:				
Exceeded Speed Limit	Debris or Obstruction	UNRELATED:			2	5	7
1 Too Fast for Conditions	Ruts, Holes, Bumps	F BRIDGE	01				
Followed too Closely	Road Under Construction	I BUILDING	02				
Improper Turn	Traffic Cntrl Device Inop.	X CULVERT/DITCH	03				
Improper Lane Change	Shoulders Low, Soft, High	S CURB	04				
Improper Backing		D GUARDRAIL/BARRIER	05		1		1
Improper Passing	7 Other or Unknown	E EMBANKMENT	06				
Improper Signal		O FENCE	07				
		B LIGHT POLE	08				
		J SIGN POST	09			1	1
		E OTHER POLE	10				
		C TREE/SHRUBBERY	11		1		1
		T CONSTR. BARRIER	12				
		S CRASH ATTENUATOR	13				
		OTHER FIXED OBJECT					

WEATHER	ILLUMINATION	TOTALS	
14 CLEAR/CLDY	10 DAY		
FOGGY	2 DAWN/DUSK		
1 RAINING	2 DARK - LIGHTS ON	2003	5
SNOW/SLEET	1 DARK - NO LIGHTS	2004	6
OTHER	OTHER	2005	4

Maryland State Highway Administration
 Office of Traffic and Safety - Traffic Development and Support Division
 SHA 52.1 ADC Combined Logmile History Output rev. 06/2006-1

Name: William Matheny
 Date: 10/31/2006

Location: MD0295 From PG COUNTY To L PUYT
 County: Anne Arundel Period: January 1, 2003 To December 31, 2005 Logmile: From 000.00 To 003.50 Length: 3.50
 Note(s):

LOGMILE	IR	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	FX OB	CL&N TYPE	MOVE VI V2	PROBABLE CAUSE
MD0295											
0.00		090304	PROPERTY	7P	DAY	DRY			OTHER	SS na	FAIL TO GIVE FULL TIME/ATTENT
0.10		041704	1 Inj.	10A	DAY	DRY			OTHER	NS na	TOO FAST FOR CONDITIONS
0.17		072603	1 Inj.	3A	NIGHT	DRY	✓	05	FXOBJ	NS na	UNDER INFLUENCE OF ALCOHOL
0.22		081703	2 Inj.	6P	DAY	DRY			SDSWP	NS NS	UNDER INFLUENCE OF ALCOHOL
0.24		042505	PROPERTY	3P	DAY	DRY			RREND	NS NS	FAIL TO GIVE FULL TIME/ATTENT
0.76		020804	1 Inj.	12A	NIGHT	ICE			OTHER	SS SS	FAIL TO GIVE FULL TIME/ATTENT
1.50		070305	1 Inj.	11A	DAY	DRY			OTHER	SS SS	FAIL TO GIVE FULL TIME/ATTENT
1.55		080803	PROPERTY	2A	NIGHT	DRY		11	FXOBJ	NS na	UNDER INFLUENCE OF DRUGS
2.25		051704	PROPERTY	1P	DAY	DRY			OTHER	UU UU	UNKNOWN OR OTHER CAUSE
2.41		121503	PROPERTY	4P	DAY	DRY			OTHER	NS na	UNKNOWN OR OTHER CAUSE
2.50		121503	PROPERTY	4P	DAY	DRY			OTHER	UU UU	UNKNOWN OR OTHER CAUSE
2.50		050203	PROPERTY	5A	DAY	DRY		09	FXOBJ	SS na	UNKNOWN OR OTHER CAUSE
2.50		062004	1 Inj.	7P	DAY	DRY			RREND	SS SS	FAIL TO YIELD RIGHT OF WAY
2.50		083004	PROPERTY	1P	DAY	WET			OTHER	SS na	UNKNOWN OR OTHER CAUSE
2.56		041205	PROPERTY	9A	DAY	DRY			PARKD	UP UU	UNKNOWN OR OTHER CAUSE
3.00		090705	PROPERTY	4P	DAY	DRY			RREND	SS SS	UNKNOWN OR OTHER CAUSE

FXOB(01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence
 (08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construc. Barrier (13)=Crash Attenuator

Maryland State Highway Administration
 Office of Traffic and Safety - Traffic Development and Support Division
 SHA 52.1 ADC Study Worksheet Output rev. 06/2006-1

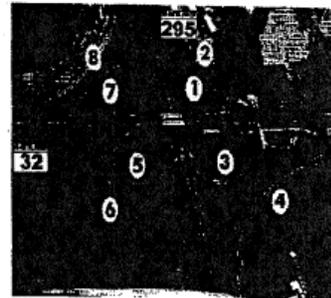
Name: William Matheny
 Date: 10/31/2006

Location: MD0295 From PG COUNTY To L PUYT
 County: Anne Arundel Period: January 1, 2003 To December 31, 2005
 Type Controls: 1U-100t

Logmile: From 000.00 To 003.50 Length: 3.50
 Note(s):

* Significantly Higher than Statewide

YEAR ▶	2003	2004	2005	TOTAL	STUDYRATE	STWDRATE
FATAL					0.0	0.4
No. KILLED						
INJURY	2	3	1	6	1.7	21.5
No. INJURED	3	3	1	7		
PROP DAMAGE	3	3	3	9	2.6	32.8
TOTAL ACC	5	6	4	15	4.3	54.7
RATE	4.5	5.2	3.4			
WAADT	87600	90900	92700			
VMT(millions)	111.8	116.4	118.4	346.7		
OPPOSITE DIR					0.0	0.3
REAR END		1	2	3	0.9	21.5
SIDESWIPE	1			1	0.3	7.2
LEFT TURN					0.0	0.1
ANGLE					0.0	0.3
PEDESTRIAN					0.0	0.2
PARKED VEH			1	1	0.3	1.3
FIXED OBJECT	2		1	3	0.9	14.2
OTHER	2	5		7	2.0	4.9
U-TURN						
BACKING						
ANIMAL						
RAILROAD						
EXPL./FIRE						
OVERTURN						
OTHER/UNK	2	5		7		
TRUCK REL ACC			1	1	0.3	9.2
NIGHTTIME	2	1		3	20 %	32 %
WET SURFACE		1		1	6 %	28 %
ALCOHOL REL	1			1	6 %	8 %
INTERSBC REL						
TOTAL VEH	8	8	10	26		
TOTAL TRUCKS			1	1		
PERCENT TRKS	0.0	0.0	10.0	3.8		
Comments:						



3 Year Interchange History Sheet

Location: MD32 (Savage Rd) @ MD 295 (Baltimore Washington Pkwy)

County: Anne Arundel

Photo Taken: 2000

ID No: 02MD0032010

Years: 1998 thru 2000

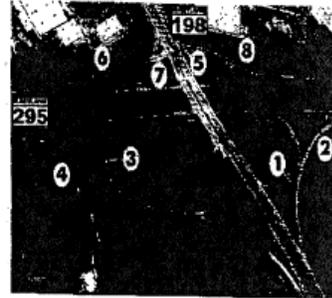
	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	3	0	1	3(100%)	1(33%)	0(0%)	0(0%)	0(0%)
Ramp: 1	2	0	0	2(100%)	1(50%)	0(0%)	0(0%)	0(0%)
Ramp: 3	1	0	1	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)

Years: 1999 thru 2001

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	6	0	3	3(50%)	2(33%)	0(0%)	0(0%)	1(17%)
Ramp: 1	2	0	0	2(100%)	1(50%)	0(0%)	0(0%)	0(0%)
Ramp: 3	1	0	1	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 8	3	0	2	0(0%)	1(33%)	0(0%)	0(0%)	1(33%)



3 Year Interchange History Sheet



Location: MD198 (Laurel-Ft Meade Rd) @ MD 295 (Baltimore Washington Pkwy)
 County: Anne Arundel Photo Taken: 2000 ID No: 02MD0198011

Years: 2000 thru 2002

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	6	0	3	4(67%)	3(50%)	0(0%)	0(0%)	1(17%)
Ramp: 1	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 3	5	0	3	3(60%)	3(60%)	0(0%)	0(0%)	1(20%)

Years: 2001 thru 2003

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	13	0	5	6(46%)	4(31%)	0(0%)	0(0%)	0(0%)
Ramp: 1	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 3	6	0	3	4(67%)	2(33%)	0(0%)	0(0%)	0(0%)
Ramp: 4	2	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 5	1	0	0	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 6	2	0	1	1(50%)	2(100%)	0(0%)	0(0%)	0(0%)
Ramp: 8	1	0	0	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)

Years: 1994 thru 1996

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	6	0	1	1(17%)	3(50%)	0(0%)	0(0%)	0(0%)
Ramp: 1	1	0	0	1(100%)	1(100%)	0(0%)	0(0%)	0(0%)
Ramp: 2	2	0	0	0(0%)	1(50%)	0(0%)	0(0%)	0(0%)
Ramp: 8	3	0	1	0(0%)	1(33%)	0(0%)	0(0%)	0(0%)

Years: 1995 thru 1997

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	11	0	3	2(18%)	4(36%)	0(0%)	0(0%)	0(0%)
Ramp: 1	1	0	0	1(100%)	1(100%)	0(0%)	0(0%)	0(0%)
Ramp: 2	1	0	0	0(0%)	1(100%)	0(0%)	0(0%)	0(0%)
Ramp: 4	3	0	1	0(0%)	1(33%)	0(0%)	0(0%)	0(0%)
Ramp: 5	1	0	0	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 6	1	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 8	4	0	1	1(25%)	1(25%)	0(0%)	0(0%)	0(0%)



3 Year Interchange History Sheet



Location: MD198 (Laurel-Ft Meade Rd) @ MD 295 (Baltimore Washington Pkwy)
 County: Anne Arundel Photo Taken: 2000 ID No: 02MD0198011

Years: 1996 thru 1998

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	9	0	2	2(22%)	4(44%)	0(0%)	0(0%)	0(0%)
Ramp: 1	1	0	0	1(100%)	1(100%)	0(0%)	0(0%)	0(0%)
Ramp: 2	1	0	0	0(0%)	1(100%)	0(0%)	0(0%)	0(0%)
Ramp: 4	4	0	1	0(0%)	2(50%)	0(0%)	0(0%)	0(0%)
Ramp: 5	1	0	0	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 6	1	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 8	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)

Years: 1997 thru 1999

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	8	0	2	1(13%)	3(38%)	0(0%)	0(0%)	0(0%)
Ramp: 2	1	0	0	0(0%)	1(100%)	0(0%)	0(0%)	0(0%)
Ramp: 4	4	0	1	0(0%)	2(50%)	0(0%)	0(0%)	0(0%)
Ramp: 5	1	0	0	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 6	1	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 8	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)

Years: 1998 thru 2000

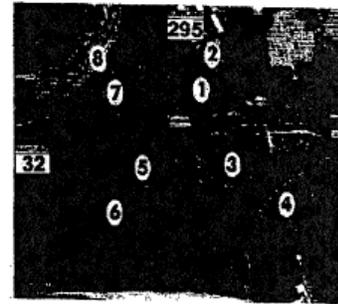
	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	3	0	1	0(0%)	3(100%)	0(0%)	0(0%)	1(33%)
Ramp: 2	1	0	0	0(0%)	1(100%)	0(0%)	0(0%)	0(0%)
Ramp: 3	1	0	1	0(0%)	1(100%)	0(0%)	0(0%)	1(100%)
Ramp: 4	1	0	0	0(0%)	1(100%)	0(0%)	0(0%)	0(0%)

Years: 1999 thru 2001

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	3	0	3	1(33%)	1(33%)	0(0%)	0(0%)	1(33%)
Ramp: 3	3	0	3	1(33%)	1(33%)	0(0%)	0(0%)	1(33%)



3 Year Interchange History Sheet



Location: MD32 (Savage Rd) @ MD 295 (Baltimore Washington Pkwy)
 County: Anne Arundel Photo Taken: 2000 ID No: 02MD0032010

Years: 2000 thru 2002

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	7	0	4	3(43%)	1(14%)	0(0%)	0(0%)	1(14%)
Ramp: 1	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 2	1	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 3	1	0	1	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 4	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 8	3	0	2	0(0%)	1(33%)	0(0%)	0(0%)	1(33%)

Years: 2001 thru 2003

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	7	0	4	1(14%)	2(29%)	0(0%)	0(0%)	1(14%)
Ramp: 2	1	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 4	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 8	5	0	3	0(0%)	2(40%)	0(0%)	0(0%)	1(20%)

Years: 1994 thru 1996

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	0	0	0	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)

Years: 1995 thru 1997

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	2	0	1	1(50%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 3	1	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 4	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)

Years: 1996 thru 1998

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	2	0	1	1(50%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 3	1	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 4	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)

Years: 1997 thru 1999

	Total Accidents	Fatal Accidents	Injury Accidents	Wet Surface	Nighttime	Truck Overturn	Trucks	Alcohol Involved
Total Ramp Accidents	3	0	1	2(67%)	1(33%)	0(0%)	0(0%)	0(0%)
Ramp: 1	1	0	0	1(100%)	1(100%)	0(0%)	0(0%)	0(0%)
Ramp: 3	1	0	1	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Ramp: 4	1	0	0	1(100%)	0(0%)	0(0%)	0(0%)	0(0%)

RT 198 (BETWEEN POST
BOUNDARY & 32 CIRCLE)
PERIOD COVERED:
1 JAN 04 - 30 NOV 06

DATE	DAY	TIME	FATAL	INJURY	PROPERTY DAMAGE	JE
22-Jan-2004	Thu	0030			1	
1-Mar-2004	Mon	0244				1
17-Mar-2004	Wed	1145			1	
6-May-2004	Thu	0730			1	
10-May-2004	Mon	0730			1	
14-May-2004	Fri	1730		1		
31-May-2004	Mon	1125				1
11-Jun-2004	Fri	1735				1
12-Jan-2005	Wed	0855				1
11-Feb-2005	Fri	1540			1	
26-Feb-2005	Sat	1539				1
4-Mar-2005	Fri	2350		1		
9-Apr-2005	Sat	1345		1		
30-May-2005	Mon	1515			1	
21-Jun-2005	Tue	1015			1	
29-Jul-2005	Fri	1020				1
16-Sep-2005	Fri	0650		1		
17-Oct-2005	Mon	1743		1		
20-Dec-2005	Tue	0936		1		
9-Jan-2006	Mon	1924		1		
22-Apr-2006	Sat	1607			1	
15-Jul-2006	Sat	1700		1		
18-Sep-2006	Mon	0730				1
30-Sep-2006	Sat	1530			1	
17-Oct-2006	Tue	1910				1
23-Nov-2006	Thu	0900			1	
TOTALS			0	8	10	8

REMARKS

- 1 - THE NUMBERS SHOW THE NUMBER OF ACCIDENTS; NOT THE NUMBER OF PERSONS INJURED O
- 2 - INJURIES INCLUDE ALL INJURIES (A COMPLAINT OF A HEADACHE IS AN INJURY ACCIDENT FOR U
- 3 - PROPERTY DAMAGE IS ACCIDENTS THAT WEE DID REPORTS ON
- 4 - JE REFERS TO ACCIDENTS THAT THE DRIVERS WERE PERMITTED TO EXCHANGE INFORMATION
MINOR DAMAGE

APPENDIX B

ENVIRONMENTAL INVENTORY

EXISTING CONDITIONS

Land use in the study consists primarily of industrial, institutional, with commercial at the western end, and natural features concentrated at the eastern/western ends of the project area. Future land use in the study area anticipates growth in medium density residential, and loss of natural features at the eastern end.

There are three master plans that govern land use in the study area: the Anne Arundel County General Development Plan (GDP) (1997), the Jessup/Maryland City Small Area Plan (2004), and the Odenton Small Area Plan (2003). The project falls mostly within the Jessup/Maryland City Small Area Plan. Both the GDP and the Jessup/Maryland City Small Area Plan recommend capacity improvements along MD 198 through the project area. The MD 198 project is located almost entirely within a Priority Funding Area. There are no public parks, schools, or associated respective public recreational uses. However the Patuxent Research Refuge, a national wildlife refuge with public ball fields, is located in the southern portion of the project area. Fort Meade Military Reservation is located within the project area along with Tipton Airport. Tipton Airport is operated by the Tipton Airport Authority, a state-chartered public corporation. Any encroachment on a publicly-owned and used park/recreation area/associated trail and/or a significant historic site/archeological resource that requires preservation in place will require development and evaluation of avoidance/minimization alternatives under Section 4(f) of the US DOT Act of 1966, as federal funds are being used for this project.

Based on an initial review of census data, Environmental Justice populations were not identified within the project area. Further research of the socioeconomic resources and characteristics will be conducted to ensure that SHA is not disproportionately or adversely affecting any EJ communities. Both air and noise studies will be conducted once detailed alternatives become available.

There is a gas station, two car service centers, as well as various auto salvage yards throughout the project area. These facilities typically generate, handle, or store hazardous materials. Although no hazardous waste sites have been previously identified throughout the majority of the study area, the potential for unexploded ordnance exists on and in the vicinity of Fort Meade. Prior to any testing or technical studies that require ground disturbance, coordination must be initiated with the fort.

An assessment of archeological potential identified the presence of one recorded archeological site within the project area: an Early Woodland and historic period artifact scatter, 18AN1147. The assessment revealed sections of the project area within the vicinity of the Little Patuxent River and its tributaries have a high potential to contain prehistoric archeological resources, therefore a Phase I archeological survey will be warranted.

Previously identified historic resources within the project area include the Baltimore Washington Parkway. The parkway, owned and operated by the National Park Service, is listed as a historic district on the National Register of Historic Places (NRHP) and is designated as a state scenic byway. Woodland Job Corps Center (8 buildings), Oak Hill Youth Center (circa 20 buildings), and a cemetery, all located north of MD 198 within the D. C. Children's Center will require survey and evaluation for listing on the NRHP. Tipton Airfield, mentioned previously, is historically part of Fort Meade, and will also require evaluation for listing on the NRHP. Coordination with the Maryland Historical Trust will continue throughout project planning to determine the effect of the project on significant cultural resources. Coordination with the Maryland Scenic Byways Program will also be initiated to determine potential effects of the proposed improvements on the scenic byway.

Coordination with the Maryland Department of Natural Resources (DNR) identified the section of the Little Patuxent River which flows through the study area as a spawning location for both white perch (*Morone americana*) and herring (*Alosa sp.*). DNR also identified the state-listed threatened Glassy Darter (*Etheostoma vitreum*) as being present south of the MD 198 Fort Meade Dam. Due to the small population of the Glassy Darter, DNR recommended that stream habitat protection focus on the minimization of sedimentation and water quality impacts to downstream locations. The Little Patuxent River and its tributaries are classified as Use I streams. Generally, no instream work is permitted in Use I streams from March 1 through June 15, inclusive, during any year. The fish populations identified by DNR should be adequately protected by the Use 1 work prohibition period. According to the U.S. Fish and Wildlife Service, there are no federally-listed threatened or endangered species in the project area. A review of the Federal Emergency Management Agency 100-year floodplain mapping reveals that the Little Patuxent River 100-year floodplain crosses the project area. Review of National Wetland Inventory and DNR non-tidal wetland mapping indicates that palustrine/emergent wetlands are located throughout the project area. In addition, DNR identified the portion of the Little Patuxent River south of MD 198 as a Nontidal Wetland of Special State Concern. Should there be disturbance within wetland or instream areas, including modifications to existing drainage structures, permits will be required from Maryland Department of the Environment and the US Army Corps of Engineers.

