Tuesday, March 15, 2016
6:30 PM - 8:30 PM
(There will be no formal presentation.)

Great Mills High School
21130 Great Mills Road, Great Mills, MD 20634

*Snow Date – Tuesday, March 29, 2016
*Meeting will be held on snow date if county public schools are closed or if the county’s snow emergency plan is in effect.

Project No. SM210A11
Questions or comments following the workshop may be directed to any of the team members listed below:

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Office of Planning and Preliminary Engineering  
Maryland State Highway Administration  
707 N. Calvert Street, Mailstop C-411  
Baltimore, MD 21202

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Project Management Division  
Maryland State Highway Administration  
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For additional information on this project please visit our website at www.roads.maryland.gov and click on Projects and Studies, SHA Projects Page, St. Mary’s County, and MD 5, Point Lookout Road, MD 246 to MD 471, or use the QR Code below.
Introduction

The Maryland Department of Transportation’s State Highway Administration (SHA) is conducting a Project Planning study on MD 5 (Point Lookout Road) between MD 246 (Great Mills Road) and MD 471 (Indian Bridge Road) along MD 5 for a distance of approximately 0.26 miles including the intersections with MD 246 and MD 471 in St. Mary’s County.

Purpose of the Study

The purpose of the MD 5 Great Mills Improvement study is to develop a transportation solution along MD 5, between MD 246 and MD 471 that improves existing traffic operations, design deficiencies, and safety.

This project is funded for Project Planning and Final Design only; it is not currently funded for Right-of-Way Acquisition, or Construction. This project is in Stage 1 of the Project Planning Process, which consists of three stages:

- **Stage 1**—Develop preliminary alternatives and select Alternatives Retained for Detailed Study (ARDS), begin collecting data for Final Engineering;
- **Stage 2**—Conduct detailed analyses, conduct engineering studies, assess environmental impacts of the ARDS, complete a draft environmental document and hold a public hearing; and
- **Stage 3**—Select a Preferred Alternative, begin final engineering up to 30% design level, complete a final environmental document, and obtain Location and Design Approvals.

Final Design will begin once Project Planning and Preliminary Engineering is complete. Beginning with Geometric Design Approval at the 30% Design Milestone, the Final Design continues with design milestones of 65% Semi-Final Design, 90% Final Design, and culminating with Final Engineering Completion with construction documents ready for Advertisement.

Purpose of the Workshop

The purpose of the Alternatives Public Workshop is to familiarize interested persons with the project planning process and the project’s Purpose and Need, present current findings of the environmental studies, and display and receive comments on the preliminary alternatives and options.

The workshop is being conducted in an interactive open house format to enable attendees to conduct self-paced reviews of project information. Maps and other exhibits depicting preliminary alternatives under consideration, traffic data, and potential environmental impacts will be on display for public viewing. Team members will be available to answer project-related questions and receive comments. There will be no formal presentation. You may arrive at any time during workshop hours.
Project Background

St. Mary’s County has experienced rapid population growth since the early 2000s and future growth and development is anticipated to continue at a relatively steady pace. The county has the fastest growing workforce in the state, mostly attributed to growth at the Naval Air Station Patuxent River (NAS) and to population moving from the Washington, DC area. This growth has resulted in increased traffic volumes in the MD 5 Great Mills area. The increase in traffic volumes creates congestion, delays for commuters, and safety concerns due to multiple access points along MD 5 and the intersection movements at MD 246. An additional concern within Great Mills is flooding that occurs on MD 5 near the bridge crossing the St. Mary’s River.

In January 2015, SHA completed the MD 5 Great Mills Feasibility Study to identify transportation improvements to the section of MD 5 in Great Mills from MD 471 to MD 246. The feasibility study compiled data from existing sources and documented new information (such as traffic data) to effectively provide a roadmap for future phases of a SHA project planning study. The primary goal of the concepts developed in the feasibility study was to explore options to improve traffic operations, and secondly to alleviate roadway capacity and design deficiencies. The feasibility study concluded that long-term improvements along MD 5 are required to increase capacity and alleviate recurring congestion. Subsequent to completion of the Feasibility Study in January 2015, Project Planning and Preliminary Engineering followed with the National Environmental Policy Act (NEPA) activities.

Project Need

Within the study area, MD 5 is currently failing to adequately accommodate existing traffic volumes and is predicted to continue to fail in the future. This is indicated by level of service (LOS) which is a measure of congestion experienced by drivers. LOS ranges from “A” (free flow, with little or no congestion) to “F” (failure, with stop-and-go conditions). The need for this project is based on the following identified problems:

- The intersections of MD 5/MD 471 and MD 5/MD 246 are projected to experience failing Levels of Service (LOS) in the design year of 2040.
- There are multiple mile-long traffic queues at these intersections during peak hours.
- The study area overall crash rate is significantly higher than the statewide average for similar roadways. Specifically, the rear-end, left-turn, and sideswipe collisions within the study area are significantly higher than the statewide average.
- The intersection of MD 5/MD 471 has a skew angle of 30 degrees, which impacts traffic operations and creates safety concerns because some vehicles have difficulty negotiating turns.
- The majority of the study area is within the 100-year floodplain of the St. Mary’s River. The approaches to the bridge from each direction flood multiple times each year, causing safety concerns for motorists, bicyclists, and
pedestrians. This requires MD 5 to be shut down for through traffic, forcing vehicles on a long detour.

- Most of this section of MD 5, through the residential and commercial district of Great Mills, does not have continuous accommodations for pedestrians and bicyclists.

**Existing Conditions**

Within the study area, MD 5 is a two-lane road classified as an Urban Other Principal Arterial. The roadway alternates between open sections with a wide shoulder and no sidewalks, and sections with curbs and sidewalks, with uncontrolled access to various residential and commercial properties along to the MD 5 roadway. The posted speed limit on MD 5 is 45 mph in the study area.

MD 5 includes single left-turn lanes at the 4-way signalized intersection with MD 471. This intersection with MD 471 is at a 30-degree skew angle. This skew impacts traffic operations and creates sight line concerns. This section of MD 5 between MD 471 and MD 246 provides the most convenient roadway connection for the residents of Drayden, Piney Point, Tall Timbers, Valley Lane, and Callaway to reach northern and eastern destinations including the Great Mills High School, Lexington Park, NAS and St. Mary’s City.

MD 471 is a two-lane road classified as an urban collector with a posted speed limit of 40 mph. The road is an open section, including two lanes with no paved shoulders within the study area.

MD 246 intersects with MD 5 to the north only, at a 3-way signalized intersection approximately 1,400 feet east of MD 471. Eastbound MD 5 has double left-turn lanes to northbound MD 246 and southbound MD 246 has double right-turn lanes to westbound MD 5. This intersection also includes a spur (Old Great Mills Road) between MD 246 and MD 5, which services a small commercial area and accesses MD 5 at a right-in/right-out access point about 350 feet west of the traffic signal. MD 246 is classified as a four-lane urban principal arterial with a posted speed limit of 40 mph.

The majority of the study area is within the floodplain of the St. Mary’s River. The approach roadway on either side of the bridge floods multiple times each year, which closes the road to vehicular and pedestrian traffic.

There are no dedicated bicycle facilities on any roadway within the study area. Sidewalks are provided on the bridge and on the roadway to the east, although the sidewalks on the bridge structure itself are not ADA-compliant. Sidewalks west of the bridge are scattered and do not provide continuous path of travel.

St. Mary’s Transit System (STS) operates the Route 3 buses along MD 5 and MD 246 between Leonardtown and Lexington Park via Great Mills, Monday to Friday, 6 am to 6 pm, in one-hour intervals. However, the transit riders currently
have no amenities such as bus shelters, benches, or sidewalk connectivity within the study area.

There are no convenient nearby Park and Ride lots for ride-share users. The NAS operates one weekday round-trip shuttle bus from the base to Reagan National Airport and Bethesda Naval Hospital. There are no other shuttle services currently planned or in operation for use of the employees of the NAS.

**Traffic Operations**

The existing traffic patterns indicate that most traffic travels eastbound on MD 5 to northbound MD 246 in the morning peak-hours and westbound on MD 5 from southbound MD 246 in the evening peak-hours. Traffic counts were compiled by SHA for two consecutive 24-hour periods, and average daily traffic (ADT) volumes and traffic delays were calculated for both intersections within the study area (Table 1). In addition, peak period observations (7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM) were performed in the study corridor to examine existing traffic operations, in particular vehicular queues.

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Traffic Volume (vehicles/day)</th>
<th>Average Delay (seconds)</th>
<th>Overall Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM Peak Hour</td>
<td>PM Peak Hour</td>
</tr>
<tr>
<td>MD 471/MD 5</td>
<td>19,475</td>
<td>59</td>
<td>46</td>
</tr>
<tr>
<td>MD 246/MD 5</td>
<td>18,600</td>
<td>44</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: SHA 24-Hour Traffic Counts, 2013

Traffic volumes are projected to increase by approximately 30% by the year of 2040. This projection is based on the calibrated regional travel forecast model developed by SHA, which accounts for projected development, employment, and population growth. Therefore traffic operations would worsen at the MD 471 intersection, while the overall traffic operation remains the same at the MD 246 intersection.

<table>
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<tr>
<td></td>
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<td>AM Peak Hour</td>
<td>PM Peak Hour</td>
</tr>
<tr>
<td>MD 471/MD 5</td>
<td>Approx. 25,300</td>
<td>122</td>
<td>142</td>
</tr>
<tr>
<td>MD 246/MD 5</td>
<td>Approx. 24,200</td>
<td>53</td>
<td>48</td>
</tr>
</tbody>
</table>
Safety

Crash data within the study area has been collected and analyzed by SHA during the period of 2010 to 2012 and again for the period of 2012 to 2014. The crash rate is typically expressed in terms of crashes per 100 million vehicle-miles travelled on a particular road. The overall crash rate from 2012 to 2014 within the study area is 315 per 100 million vehicle-miles, which is significantly higher than the statewide crash rate of 170 for similar roadways. Moreover, most of the collision types have a significantly higher crash rate in comparison to statewide crash rates. Rear-end, sideswipe, and left-turn collisions, in particular, occurred frequently with a crash rate of 174, 22, and 33 respectively, compared to 55, 11, and 13 statewide rates for similar roadways. These crash rates have not significantly changed since the 2010 through 2012 data.

![Pie chart showing crash types for MD 5 Great Mills Crashes 2012-2014]

58 Total police-reported crashes during period
*Crash types significantly higher than statewide average
( ) – Approximate number of crashes

Notes:
- Truck-Related crashes accounted for 3.5% of total
- No crashes for Opposite Direction, Pedestrian, or Parked Vehicles occurred during this period

During the years 2010 to 2012, 42% were rear-end collisions, and 21% were sideswipe collisions. The data collected for the 2012 to 2014 period indicates that rear-end collisions accounted for 55% of all collisions, 12% were sideswipe collisions, and 10% were left-turn collisions. The total crash rate for this area, and the rates for rear-end, left-turn, and sideswipe collisions are significantly higher than statewide rates for state maintained highways with similar functional...
classifications. In addition, during the 2012 to 2014 period, truck-related (22%) and wet surface (34%) crash rates were significantly higher than statewide rates (11% and 21% respectively) for similar roadways.

**Alternatives and Options under Consideration**

**Preliminary Conceptual Alternatives**
Five potential alternatives are proposed for the MD 5 Great Mills Improvement Study with additional options that could be implemented in combination with any alternative. **Detailed mapping will be available online and at the meeting.**

**Alternative 1 – No-Build**
No major improvements are proposed under Alternative 1, the No-Build Alternative. Minor short-term improvements would occur as part of routine maintenance and safety operations. The No-Build Alternative does not address the purpose and need for the project. It serves as a baseline for comparing the impacts and benefits associated with the build alternatives.

**Alternative 2 – Two Lanes with Existing Bridge (TSM/TDM)**
This alternative is commonly known as a Transportation System Management and Transportation Demand Management (TSM/TDM) alternative. This alternative proposes to investigate managing and optimizing the existing facilities to increase efficiency, and explore ways to manage traffic demands. The types of TSM improvements may include signal timing improvements and synchronization and queue storage extensions. The types of TDM improvements may include strategies that promote and improve access to ride-share and available transit options.

**Alternative 3 – Four Lanes on Existing Bridge**
This alternative proposes a four-lane roadway section between MD 471 and MD 246 with 12-foot outside travel lanes, 11-foot inside travel lanes. Minor roadway widening and reconstruction would be proposed to accommodate the additional lanes. The bridge would remain in place, and the roadway would be restriped to accommodate the additional lanes. No major improvements to bicycle or pedestrian facilities would be proposed.

**Alternative 4 – Four Lanes on New Bridge with Sidewalks**
This alternative proposes a four-lane roadway section between MD 471 and MD 246 with 13-foot outside travel lanes for shared bicycle and vehicular use, 11-foot inside travel lanes, curbs, and ADA-compliant 5-foot sidewalks. The bridge would be replaced in the same location with a slightly wider structure to accommodate the proposed roadway width and ADA-compliant sidewalks. The outer through lanes would be bicycle-compatible shared-traffic lanes.

The posted speed for MD 5 would be lowered from 45 mph to 35 mph in order for the proposed design changes of this alternative to comply with accepted engineering practice.
Alternative 5 – Five Lanes on New Bridge with Sidewalks

This alternative proposes a five-lane section with four 11-foot travel lanes, a 12-foot center-turn lane, 5-foot shoulders, which can accommodate bicycles, curbs, and ADA-compliant 5-foot sidewalks. The existing bridge would be replaced with a wider and longer structure that would accommodate the five roadways lanes, shoulders, and sidewalks at a higher elevation to reduce flooding.

The posted speed for MD 5 would be lowered from 45 mph to 35 mph in order for the proposed design changes of this alternative to comply with accepted engineering practice.

Options to the Alternatives

Three options have been developed for the MD 5/Md 471 intersection, and one option has been developed for changes near the MD 246 intersection. The MD 5/Md 471 intersection options are applicable to any alternative, but have been developed based on Alternative 5, while the Old Great Mills Road option can be applied to any combination of alternative and options.

Option 1 - Relocated MD 471 (400’ West)

This option to Alternative 3 would shift the existing intersection of MD 5 and the north leg of MD 471 approximately 400 feet west of its current location to a new signalized intersection. Access from MD 5 to the existing Great Mills Trading Post would remain as a right-in/right-out only. The existing southern leg of MD 471 would remain in place with a modified traffic signal, which would be coordinated with the existing signal. This option would eliminate the acute skew angle of the MD 471 north leg, and it would provide additional distance between this intersection and the MD 246 intersection, improving traffic operations.

Option 2 - Relocated MD 471 (1100’ West)

This option to Alternative 3 would shift the existing intersection of MD 5 and the north leg of MD 471 approximately 1100 feet west of its current location to a new signalized intersection. The existing southern leg of the intersection, Flat Iron Road, would remain in place with a modified traffic signal. The new intersection with MD 471 north leg would be signalized, but would allow eastbound traffic to free-flow without a stop signal. This option would eliminate the acute skew angle of the MD 471 north leg, and it would provide additional distance between this intersection and the MD 246 intersection, improving traffic operations.

Option 3 – Close Old Great Mills Road Access to MD 5

This option closes the existing right-in/right-out intersection of Old Great Mills Road and westbound MD 5. This would eliminate an existing signal and traffic conflict point. The existing intersection at the northern end of Old Great Mills Road with MD 246 would be retained without modification, allowing full access for vehicles to the existing businesses.
ALTERNATIVE 2 – MD 5 PROPOSED CONDITIONS (TSM/TDM)

ALTERNATIVE 2 – MD 5 PROPOSED BRIDGE CONDITIONS (TSM/TDM) (LOOKING EAST)
ALTERNATIVE 5 - MD 5 PROPOSED CONDITIONS (LOOKING EAST)

ALTERNATIVE 5 - MD 5 BRIDGE CONDITIONS (LOOKING EAST)
Environmental Summary

SHA has conducted research and field reviews to identify conditions and resources within the study area. A preliminary assessment of impacts that could result from the alternatives and options will be available at the workshop. SHA will perform an in-depth evaluation of environmental impacts associated with each of the alternatives retained for detailed study as part of the next stage of the project planning process.

Land Use

Land use within the vicinity of the MD 5 Great Mills Project Planning Study is predominately commercial and residential with interspersed wooded areas. Residential dwellings are mostly located along MD 5, west of the St. Mary’s River crossing. Institutional and public land uses in the study area include the Old Holy Face Church, the Great Mills Post Office, and the Little Flower School. Smaller areas of other land uses are spread throughout the study area.

The Smart Growth Priority Funding Areas Act of 1997 was enacted to limit sprawl and direct state funding for growth-related projects toward county-designated Priority Funding Areas (PFAs). PFAs are geographic growth areas defined by state law and designated by local jurisdictions as targets for economic development. MD 5, within the study area, is located within a PFA; however, the PFA border is along MD 471 north of MD 5. Any proposed work west of MD 471 is not within the PFA and would be subject to Smart Growth Consistency Coordination with the Maryland Department of Planning.

Socioeconomic Resources

The Lexington Park Development Master Plan has designated that most of the MD 5 Great Mills study area is within the Great Mills Road Corridor (MD 246) Focus Area. The District Master Plan identifies the Great Mills Road Corridor, along with the Downtown focus area, as providing the gateway to NAS. In addition, the plan identified the corridor as one of the focus areas having significant existing development that would benefit from infill development, redevelopment, and design and infrastructure enhancements.

In compliance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, SHA will avoid disproportionately high and/or adverse effects on minority and/or low-income populations throughout the study area. A preliminary review of Census data reveals the presence of minority and low-income populations within the project study area. Further public outreach and additional research of study area demographic and economic characteristics will be completed as the study progresses.

Cultural Resources

The study area includes several 20th century residences and commercial buildings along MD 5 and MD 246 that may need additional evaluation for
National Register of Historic Places (NRHP) eligibility. Additionally, the Cecil’s Mill Historic District, located one-quarter mile north of MD 5 along MD 471, is listed in the NRHP. The MD 5 crossing is at the former head of the St. Mary’s River estuary and the surrounding terraces have high prehistoric potential. Additional archaeological surveys would be required as the project progresses.

As design plans for the area are further developed, SHA will continue to coordinate with Maryland Historical Trust to determine the possible impacts the alternatives may have on significant historic or archeological sites. In accordance with the Section 106 procedures of the National Historic Preservation Act, this workshop provides the opportunity for public comment regarding project impacts on historic properties.

Natural Environmental Features

A portion of the study area is within a broad area identified by the Maryland Department of Natural Resources (DNR) as a Sensitive Species Project Review Area (SSPRA). The federally listed threatened Northern Long-eared Bat habitat includes nearly all of Maryland west of the Chesapeake Bay. Records for the state-listed threatened Flier and the state-listed endangered Eastern Narrow-mouthed Toad are documented in the study area.

The study area is located within the Lower Potomac River watershed, with tributaries draining to the St. Mary’s River. Johns Creek within the study area is a designated high quality watershed. National Wetland Inventory and DNR mapping identifies wetlands located along MD 5, east of MD 246, as well as wetlands within the vicinity of MD 471, both north and south of MD 5. Field delineations were completed in October 2015.

The majority of the study area is located within the St. Mary’s River and Johns Creek 100-year floodplain. SHA records indicate that MD 5 needs to be closed for traffic one to two times per year due to roadway flooding during tropical storms or hurricane events. The water levels on MD 5 can be in the range of 2” to 16” during these events. The areas that have been closed due to flooding include MD 5 from MD 246 to the western edge of the study area, and north along MD 264 and MD 471 approximately one-third of a mile.

A Forest Interior Dwelling Species habitat is present on the north and south side of MD 5 within the study area. The study area falls within a Green Infrastructure corridor on the north side of MD 5, but not within a Green Infrastructure hub.

Other Environmental Considerations

Analysis indicates that the bridge would be overtopped by flood water in a five-year storm event, and a two-year storm would raise the water elevation to reach the bottom of the bridge structure. A more detailed hydraulic analysis will be completed as part of the planning process.

There are potential hazardous waste sites within the study area that include a
gas station and a large industrial facility located along MD 471, just north of the MD 5 intersection. An Initial Site Assessment (ISA) would be required as the project progresses. If required, coordination with MDE will occur before and/or during construction to minimize the potential for adverse effects as a result of treatment, storage, cleanup, or disposal of hazardous waste.

The study area is not located in a designated nonattainment area and there are no known air quality concerns within the study area. Similarly, there are no known noise concerns within the study area however a noise analysis would be completed once detailed alternatives are developed.

**Next Steps**

The following steps are required to complete the Project Planning and Preliminary Engineering Process:

- Evaluate and address public and agency comments resulting from the existing studies and the Alternatives Public Workshop (Spring 2016)
- Identify Alternatives Retained for Detailed Study (ARDs) and complete detailed engineering/ environmental analysis (Winter 2016-2017)
- Complete draft environmental document and conduct Location/Design Public Hearing (Winter 2017-2018)
- Identify the SHA Preferred Alternative and Conceptual Mitigation (Summer 2018)

A detailed schedule for the final engineering will be developed as the NEPA activities progress through the ARDS stage, when study team anticipates to have a better understanding of the schedule risks involved with this project.

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

For information concerning non-discrimination in federally assisted and state-aid programs, please contact:

Ms. Wanda Dade, Director
Office of Equal Opportunity
Maryland State Highway Administration
707 North Calvert Street, Mail Stop C-406
Baltimore, Maryland 21202
Telephone: (410) 545-0327
Toll-free in Maryland: 1-888-545-0098
Email: wdade@sha.state.md.us
Right-of-Way and Relocation Assistance

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

Ms. Jennifer Armes, Chief
District 5, Office of Real Estate
Maryland State Highway Administration
138 Defense Highway
Annapolis, MD 21401
Telephone: 410-841-1067
Toll-free within Maryland: 1-800-331-5603
Email: jarmes@sha.state.md.us

Public Involvement

SHA and St. Mary’s County will maintain public involvement throughout the MD 5 Great Mills Project Planning Study. Agency and County representatives are available to meet with community groups, civic associations, and other organizations. To request a meeting, please contact Dr. Jawad Abdullah (SHA) using the information provided inside the front cover of the brochure.

The MD Relay Service can assist teletype users at 7-1-1. Persons requiring assistance to participate, such as an interpreter for hearing/speech disabilities or assistance with the English language, should contact Dr. Abdullah by March 10, 2016.

Project Mailing List

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

This workshop offers members of the public the opportunity to discuss their thoughts and concerns about the project and to provide oral and/or written comments. The project team will carefully review and consider the concerns and preferences expressed at the workshop. 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.

Thank You

Thank you for participating in the MD 5 Great Mills Improvement Project Alternatives Public Workshop. Your feedback is important to us. Should you have questions or concerns, please contact any project team member by mail, telephone, or email. For more information about this project and others, visit the internet site at www.roads.maryland.gov and click on Projects. The project team is available to meet with community organizations, business groups or other organizations by contacting Dr. Abdullah.