# 2050 & 2100 Sea Level Change

Eastern Shore Regional GIS Cooperative – Salisbury University

<table>
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<th>2050 MSL</th>
<th>2050 MHWW</th>
<th>2100 MSL</th>
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Methodology – USACE: Sea-Level Change Considerations for Civil Works Programs, October 2013
Sea Level Change 2050 with 10-yr Storm
Annapolis
Sea Level Change 2050 with 10-yr Storm
Annapolis
100-Year Storm in 2050 & 2100 Kent Narrows
Evaluation of High Scoring HVI Road Segments

Queen Anne’s County:
The Effects of Build Scenario 1 on Total Vehicles Traveled per 24 Hours (VEHS)

Legend

Critical Infrastructures and Roads VEHS
(Deviations from Standard Deviation)

-1.002315 - 0.901538
-0.901538 - 0.708768
-0.708737 - 0.421804
-0.421803 - 0.120786
No Change
-0.120786 - 2.987743
2.987743 - 6.136005
6.136005 - 9.224301
9.224302 - 12.694056
Removed

Greatest Decrease in VEHS

Maryland Department of Transportation
State Highway Administration
Percentage of Traversable Trace Paths in AA County with MSL SLC

![Graph showing the percentage of locotions that are reachable under different flooding scenarios and years. The x-axis represents no flooding, 10% chance, 4% chance, 2% chance, 1% chance, and 0.2% chance, while the y-axis represents the percentage of locotions that are reachable. The graph shows a decrease in reachable locotions as the chance of flooding increases. The data is represented for the years 2015, 2050, and 2100, with each year having a distinct line.](image-url)
The purpose of MDOT SHA’s proposed project for this pilot is to develop and integrate a repeatable framework for leveraging current and future extreme weather and climate change data with the transportation asset management processes currently in place.

MDOT SHA Objectives

- Develop proxy indicators to identify and address extreme weather and climate-related risks to Maryland’s critical assets
- Integrate climate-related risks and data into the TAMP processes
- Develop and modify existing lifecycle management plans to reflect climate-related data and risks
- Document the new processes
Questions

Elizabeth Habic
Office of Planning and Preliminary Engineering
ehabic@sha.state.md.us
410-545-8563

Climate Change Adaptation Plan with Detailed Vulnerability Assessment, October 2014