

# COASTAL RESILIENCY COMMITTEE MEETING

## *VDOT RESILIENCE EFFORTS*

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# Update on VDOT's Resilience Efforts

- Project Development and Design Process
  - Update Precipitation Estimates
  - Identify Existing At-Risk Infrastructure
  - Incorporate into New Construction Design Process
  - Collaboration with Stakeholders

# Update Precipitation Estimates

- Collaborate with VTRC, Admiral Phillips' Team and DEQ
  - Funding assistance for NOAA Atlas 14
  - Funding assistance for predictive IDF Curves
- Use of Predictive IDF Curves
  - TBD
  - Presumably the preferred dataset

# Identify Existing At-Risk Infrastructure

Virginia Institute of Marine Science (VIMS) currently studying potential impacts of sea level rise and other climatic factors on existing infrastructure

## Task 1: Determine Transportation Infrastructure Vulnerability

- historical recurrent road flooding maps
- Road network analysis to better understand potential disruptions to mobility
- Develop an interactive planning portal for VDOT

# Incorporation into New Construction Design Process

## Recent Updates

- Chapter 33 of the Structure and Bridge Design Manual, effective 02/2020
- Virginia Drainage Manual to bring consistency with Chapter 33

## Pending Updates

- Incorporation of a holistic risk-based design approach
  - Identify at-risk projects early in design process (pre-scoping or scoping)
  - Consider constraints/limitations
  - Incorporate the appropriate level of adaptive design to protect asset during its expected lifespan

Aligns with recent legislative from the 2021 General Assembly

# Collaboration with Stakeholders

- VDOT Workgroup
- Office of Intermodal Planning and Investment
- Governor's Office for Coastal Adaptation and Protection
  - Master Planning Framework TAC
- Hampton Roads PDC
- Commonwealth Center for Recurrent Flooding Resiliency
- Resilient Fairfax Infrastructure Advisory Group
- EPA's Chesapeake Bay Program
  - Urban Stormwater Workgroup

# Questions

## **Alex Forasté (Leading VDOT's efforts for Resilience)**

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