



Michael J. Hipple, Chair | Richard W. West, Vice-Chair
Robert A. Crum, Jr., Executive Director/Secretary

February 26, 2025

MEMORANDUM #2025-29

TO: Hampton Roads Transportation Operations (HRTO) Members & Guests
BY: Keith M. Nichols, PE – Principal Transportation Engineer
RE: HRTO Subcommittee Meeting – March 5, 2025

The next HRTO Subcommittee meeting is scheduled for Wednesday, March 5, 2025, at 11:30 AM. The agenda and related meeting materials are attached. This meeting will be held in person in the 757 Room of the Regional Building, located at [723 Woodlake Drive, Chesapeake, VA 23320](https://www.google.com/maps/place/723+Woodlake+Drive,+Chesapeake,+VA+23320/@37.08118,-75.9111,17z).

Lunch will be provided. Please let us know if you will or will not be able to attend.

If you have any questions or need additional information, please do not hesitate to contact me.

KN/tj

Attachments

**Hampton Roads Transportation Operations (HRTO) Subcommittee
Agenda
March 5, 2025
757 Room, The Regional Building**

The March 5, 2025, HRTO Subcommittee meeting will be held in person in the 757 Room of the Regional Building located at 723 Woodlake Drive, Chesapeake, VA 23320 from 11:30 AM to 1:30 PM. The meeting will be chaired by Mr. Robert Lewis (Suffolk), HRTO Co-Chair.

- 1. Approval of Agenda**
- 2. Summary Minutes of February 5, 2025, Meeting**

Minutes of the previous HRTO Subcommittee meeting are attached.

Recommended Action: Approval

Attachment 2

- 3. VDOT Hampton Roads District Operational Challenges**
11:30 AM – 12:30 PM

VDOT faces many unique challenges in Hampton Roads to keep Virginia moving on a daily basis. The nearly ten thousand lane miles that make up the regional network, the three critical waterway crossings that connect the Peninsula and Southside, the fifteen special structures to include moveable bridges and tunnels that VDOT operates and maintains, the 24/7 Jamestown-Scotland Ferry system, and the development of the Hampton Roads Express Lanes Network (HRELN) are essential to quality of life and economic growth in our region.

The presentation will include updated operational statistics and involve a discussion of the challenges of operating and maintaining Hampton Roads transportation infrastructure.

Mr. Ken Reynard, VDOT Hampton Roads District Traffic Operations Director, will discuss this item with the HRTO.

- 4. FHWA, VDOT, HRTPO, and Locality Updates**
12:30 PM – 1:00 PM

HRTO members will be given the opportunity to provide an update to the committee on operations-related matters in their agencies and localities.

- 5. For Your Information and Old/New Business**
- 6. Next Meeting Schedule, Location, and Agenda Items**

HRTO Subcommittee Minutes – February 5, 2025

The meeting was held in person and was chaired by Mr. Miller. The HRTO meeting started at 11:45 am.

The following represents the attendance of the meeting:

Chesapeake – Kevin Eppley
Hampton – None
Newport News - Randy Cooper
Norfolk – Brian Stewart
Portsmouth - None
Suffolk – Jason Souders
Virginia Beach – Frank Hickman, Michael Quirin, Mike Shahsiah
York – None
FHWA – Karen King, Iris Vaughn
HRT – None
VDOT – John Bisnett, Mike Miller (co-chair)
WATA – Ben Goodill
HRTPO – Sam Belfield, Theresa Brooks, Keith Nichols
HRPDC – Emma Corbitt, Ben McFarlane
Others – Oliver Burke (VHB)

1. Approval of Agenda

Motion for approval of the agenda was made by Mr. Souders, and Mr. Hickman seconded the motion. The agenda was approved.

2. Minutes

The meeting minutes of the June 5, 2024, meeting were reviewed. Motion for approval was made by Mr. Souders, and Mr. Stewart seconded the motion. The minutes were approved.

3. Regional Roadway Flooding Sensor Network

- Mr. McFarlane made a presentation on the Hampton Roads Roadway Flooding Sensor Network. Highlights of his presentation include:
 - Provided details on the pilot project, which included 20 sensors installed in 2022. These were largely funded through a grant from the Office of Local Defense Community Cooperation.
 - Noted that the HydroSphere portal will be discontinued this June.
 - Noted that two different types of sensors were used in the pilot project – pressure level sensors and radar level sensors.
 - Described how the information is shared via Waze and provided on the HydroSphere data portal.

- Described lessons learned from the pilot project. These include:
 - Radar level sensors required less maintenance and were less expensive than pressure level sensors.
 - Waze integration was successful.
 - Data integration was limited due to the lack of an API.
 - Maintenance was more expensive than expected, and there was confusion regarding roles and responsibilities.
 - Sites were not surveyed, which required frequent recalibration.
- Noted that the HRPDC applied last month for a Community Flood Preparedness Fund (CFPF) grant in order to install approximately 50 additional ultrasonic sensors and to join the Virginia Flood Monitoring System (VFMS) portal.
- Described the site selection for the sensors in the CFPF grant. HRPDC staff plan to meet with locality staff to discuss locations. A prioritization methodology may also need to be developed if more than 50 locations are recommended.
- Described the funding mechanisms, which include a 50% match from the HRPDC Coastal Resiliency Reserve. Three years of maintenance would be included in the grant funding.
- Described proposed roles and responsibilities.
- Noted that HRPDC is planning to submit an application for a federal PROTECT grant to investigate solutions for flood detection in more locations and with predictive models. This grant application deadline is in late February.
- Mr. Cooper noted that in addition to tidal and river flooding, the City of Newport News has two underpasses that can get flooded. He asked if these types of locations can also be included in the network? Mr. McFarlane replied that there is a candidate location list but that they will work with localities to determine the best locations.
- Mr. Belfield stated that it is important that any prioritization of locations need to look at a number of benefits in addition to just the amount of time flooded, such as volumes and those locations that can be cut off due to flooding.
- Mr. Goodill asked about the API and public facing site. Mr. McFarlane replied that the new sensor network will need to have an API as a capability in order not only to continue integrating with Waze but also other sites, such as a GFTS feed that WATA uses, as well as an integration with signal systems, changeable message signs, or other technologies.
- Mr. Miller noted that they need to coordinate with the Central Office to determine appropriate sites. Mr. Miller then asked what the maintenance will look like and if it can be coordinated with state maintenance contracts. Mr. McFarlane responded that VDEM has a group that works on maintenance, and localities can pay Green Stream to do it. He added that he is not sure how often lane closures are required.

- Mr. Miller noted that the permitting is interesting. Maintenance activity will also require a separate permit, so Green Stream should probably be named on the permit.
- Mr. Miller stated that we need to make sure that the API works so that we can tie it into other systems.
- Mr. McFarlane noted that the maintenance costs include the data portal, API integration, and on call maintenance. He added that sensors currently have a service life of 5 to 10 years, and radar sensors have very little maintenance needs.
- Mr. Nichols asked if the 20 percent match for the PROTECT grant would come from the Coastal Resiliency project fund. Mr. McFarlane replied yes, but that it would be spread over future fiscal years. Mr. McFarlane added that in kind work by staff also counts towards the match.
- Mr. Belfield asked if the old sensor sites can be reused. Mr. McFarlane replied that they are discussing this with Green Stream.
- Mr. Nichols asked if localities can see real time flooding notifications in their systems. Mr. Cooper replied that Newport News has had three sensors tied into their system, including ones at the Newport News Reservoir and the Main Street underpass. Flooding is also a problem on Buxton Avenue.
- Mr. McFarlane wrapped up this item by noting that he will be sending out emails to individual localities over the next several months to set up conversations regarding this program.

4. VDOT, HRTPO, and Locality Updates

- Mr. Nichols noted that the HRTPO Update item on the agenda has been expanded to include updates from VDOT, HRTPO, and locality staff.
- Mr. Belfield provided a summary of the RCTO-TIM meeting held on November 14, 2024. Speakers at the meeting included:
 - Brian Mosier, VDOT District Traffic Operations Manager, regarding responders being hit while responding to incidents.
 - Jim Gower, VDOT District Incident Management Coordinator, regarding the Towing and Recovery Incentive Program.
 - Rodney Higgs, VDOT Safety District Manager, regarding VDOT Safety Initiatives.
 - Virginia State Police Lieutenant J. Ambrosio described 2024 to date crashes and traffic stops.
 - George Mahone gave an update from the Towing Alliance.
 - Corey Thompson, Safety Service Patrol (AECOM), made a few remarks about SSP program safety.
 - Jim Stankiewicz provided an update on SHRP 2 TIM training.
 - An update on roadway construction projects was also provided.
- Mr. Belfield noted that an upcoming First Responders Leadership meeting will be held on May 8, 2025.

- Mr. Hickman notified the committee that the City of Virginia Beach is looking to upgrade their traffic signal control network and will be testing four different controllers in the next couple of months. Mr. Shahsiah added that they need to make sure that IT will accept the controllers.
- Mr. Miller asked if the consultant will be providing a white paper at the conclusion of the test. Mr. Shahsiah replied that he would be happy to share any information learned from the test with the HRTO, including a future presentation after the ITSVA meeting in May.
- Mr. Shahsiah noted that it is easier for localities to use the VDOT qualifying contract for these controllers and can save as much as six months in procurement. Mr. Bisnett added that signal controllers and other IT purchases such as laptops should not be treated the same in these contracts.
- Mr. Hickman added that there can be an issue with the existing ATMS firewall, particularly with LINUX-based systems. Mr. Bisnett added that they are having similar conversations at VDOT.
- Mr. Bisnett notified the committee that VDOT is currently digitizing the detour route pdfs, and that they will share the routes with localities as they progress.
- Mr. Bisnett also asked locality members to provide feedback to VDOT if there are any events that they are not being coordinated with that they think they should be.
- Committee members were asked if there were items that they would like to see presented at a future meeting. Recommendations included updates on major regional projects, tunnel management, items from RCTO-TIM meetings, and the Operations presentation provided to the TTAC at their February meeting.

5. For Your Information and Old/New Business

- No information or old/new business was shared under this item.

6. Meeting Schedule

The next HRTO meeting is tentatively scheduled for March 5, 2025, at 11:30 am. Mr. Nichols will send out a “Save the Date” for all of the possible HRTO meeting dates in 2025.

The meeting adjourned at 1:12 pm.