



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

March 26, 2025

MEMORANDUM #2025-45

TO: Hampton Roads Transportation Operations (HRTO) Members & Guests

BY: Keith M. Nichols, PE – Principal Transportation Engineer

RE: HRTO Subcommittee Meeting – April 2, 2025

The next HRTO Subcommittee meeting is scheduled for Wednesday, April 2, 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.hamptonroads.com/locations/723-Woodlake-Drive).

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.

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Attachments

**Hampton Roads Transportation Operations (HRTO) Subcommittee
Agenda
April 2, 2025
757 Room, The Regional Building**

The April 2, 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 March 5, 2025, Meeting

Minutes of the previous HRTO Subcommittee meeting are attached.

Recommended Action: Approval

Attachment 2

3. Lidar Vehicle Detection

11:30 AM – 12:00 PM

Lidar vehicle detection systems have many advantages over conventional video-based systems. While video-based systems rely on 2D bounding boxes, Ouster lidar creates 3D bounding boxes around detected objects so it can distinguish between objects like trucks, sedans, pedestrians, and cyclists. Lidar also eliminates blind spots caused by camera perspective distortions, ensuring precise location and distance measurements. Ouster lidar technology can also provide valuable insights into near-miss incidents, vehicle-pedestrian interactions, and more.

Mr. Patrick Dominick, Traffic Systems and Technology (TS&T), will discuss this item with the HRTO.

4. Automated Traffic Signal Performance Metrics

12:00 PM – 12:45 PM

A number of states are using public-facing dashboards to provide automated traffic signal performance metrics. Examples of states using these dashboards include the Georgia Department of Transportation (GDOT) and the Utah Department of Transportation (UDOT).

Mr. John Bisnett, VDOT Hampton Roads District Operations, will initiate a discussion of this item by providing a review of the GDOT and UDOT dashboards.

5. FHWA, VDOT, HRTPO, and Locality Updates

12:45 PM – 1:00 PM

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

6. For Your Information and Old/New Business

7. Next Meeting Schedule, Location, and Agenda Items

HRT0 Subcommittee Minutes – March 5, 2025

The meeting was held in person and was chaired by Mr. Miller. The HRT0 meeting started at 11:30 am.

The following represents the attendance of the meeting:

Chesapeake – Kevin Eppley
Hampton – Leo Blades
Newport News - Randy Cooper
Norfolk – Keith Darrow
Portsmouth - None
Suffolk – None
Virginia Beach – None
York – None
FHWA – None
HRT – None
VDOT – John Bisnett, Mike Miller (co-chair), Ken Reynard
WATA – Ben Goodill
HRTPO – Sam Belfield, Theresa Brooks, Keith Nichols
Others – Scott Keyes (Affordable Towing of Hampton Roads), Karen McPherson (VHB)

1. Approval of Agenda

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

2. Minutes

The meeting minutes of the February 5, 2025, meeting were reviewed. Motion for approval was made by Mr. Blades, and Mr. Goodill seconded the motion. The minutes were approved.

3. VDOT Hampton Roads District Operational Challenges

- Mr. Miller introduced Mr. Reynard to the committee.
- Mr. Reynard made a presentation on VDOT Hampton Roads District operational strategies. Highlights of his presentation included:
 - An inventory of facilities and technologies in the VDOT Hampton Roads District.
 - A detailed description of the waterway crossings in the region.
 - A description of the Hampton Roads Express Lane Network (HRELN).
 - Details on traffic incidents in the region.
 - Highlights of regional VDOT operations and mitigation efforts.

- Mr. Goodill asked about the amount of traffic on the MMMBT related to Shipyard traffic. Mr. Reynard replied that nearly half could be.
- Ms. McPherson asked about the ratio of planned to unplanned bridge openings at the James River Bridge. Mr. Reynard replied that 2/3rd of openings are planned and the other 1/3rd are unplanned. Mr. Bisnett added that peak period openings are extremely impactful.
- Mr. Cooper noted that there used to be a preemption transmitter in the James River Bridge corridor. He added that comm between the bridge and Newport News signals would be helpful. Mr. Miller added that there is an ITTF project submitted this year related to this.
- Ms. McPherson asked how long openings of the James River Bridge take. Mr. Reynard responded that it depends on the bridge tender and boat captains. Some are more cautious than others. Weather conditions can also impact this time.
- Mr. Reynard noted that federal law dictates the James River Bridge operating schedule. Mr. Cooper added that there are many openings during the PM peak that lead to blockages throughout the corridor. Once the bridge is open, the city can run 4-6 minute cycles to try to clear the backups. Mr. Bisnett added that peak traffic can be extended by an hour when there is a bridge opening.
- Mr. Belfield asked about the Express Lanes, noting that some people are uncomfortable with the flex posts being close to the inner lanes and that some people drive through gaps in between the flex posts. Mr. Reynard replied that there was a discussion of using flex posts versus using technology to operate the Express Lanes. After talking with other state DOTs, they decided that the technology wasn't good enough to use when the lanes were designed. Mr. Reynard added that the goal is to eventually replace the flex posts with technology.
- Mr. Darrow asked about the difference between concrete and asphalt with the epoxy for flex posts. Mr. Reynard replied that the epoxy on concrete is not lasting as long as they would like, and they might need to use bolts. Mr. Darrow added that Norfolk is seeing the same issue with flex posts for bike lanes.
- Mr. Reynard noted that there are currently 17,000 flex posts in place, and there will eventually be more than 50,000 once the Network is complete. He added that he would rather spend funding on technology than on maintenance for flex posts.
- Mr. Cooper asked if tolls could be removed from the Express Lanes during incidents. Mr. Reynard replied that they could but that police and fire use the Express Lanes to access the scene, and many times park in the Lanes.
- Mr. Reynard noted that they are seeing an issue with slow cars in the Express Lanes being passed by faster cars on the shoulder.
- Mr. Cooper asked if there has been a study on the number of crashes in the Express Lanes. Mr. Reynard noted that they are seeing higher speeds and crashes with impacts to the guardrail. Some crashes are also occurring in the general purpose lanes but spilling over into the Express Lanes.

- Mr. Cooper asked about connecting signal systems. Mr. Reynard replied that there are many rules for connecting onto the state's network. There have been many attempts to hack VDOT ATMS systems recently, so rules have changed in the last 18 months.
- Mr. Belfield asked about issues with electric vehicle fires, particularly if trucks become more electrified. Mr. Reynard noted the issues with putting out electric vehicle fires and the need for a new kind of firefighting device to put these out due to not having access to the amount of water required to put these out.
- Ms. Brooks asked about repeat overheight truck offenders at the tunnels. Mr. Reynard replied that they do see many repeat offenders, largely due to many tickets either being dismissed or greatly reduced. Mr. Blades and Mr. Cooper noted that they hear similar issues from their city's police.
- Mr. Nichols asked if the HRBT project would help with the overheight truck issue. Mr. Reynard replied that they are aiming to improve the ceiling of the old tunnels by a couple of inches. Mr. Reynard added that rental trucks and moving lines are also a big part of the overheight truck problem.

4. FHWA, VDOT, HRTPO, and Locality Updates

- Mr. Bisnett mentioned that he continues to meet with locality staff on the detour tool. VDOT is digitizing detour route information into a user-friendly GIS tool. This will allow for easily adjusting and documenting routes. The tool will include every locality and all exits. Mr. Bisnett noted the GIS tool is currently being refined and that hopefully it can be shared with additional localities in the next month or two.
- Mr. Cooper asked committee members about counting systems. He noted that both Newport News and VDOT count roadways in their locality, and overlap in many places. He asked if it could be done more efficiently, and Mr. Bisnett replied that he would pose the question to the appropriate VDOT staff.
- Mr. Cooper stated that there is an issue where the city can no longer use tubes, so they are using data collected at signals in many cases. Mr. Bisnett added that VDOT is testing cameras for counts but that it has not been successful. Mr. Eppley added that Chesapeake has also found this unsuccessful.
- Mr. Bisnett asked if there was still a desire to aim for shared operations or the ability to see each other's systems, or if that was desired for after-hours operations. Multiple committee members replied that there was still a desire for that ability. Mr. Cooper added that it would be good to have the ability to comm what is coming at them and have an automated incident management timing plan implemented.
- Mr. Miller asked if committee members wanted to discuss this at upcoming meetings or in a workshop.
- Mr. Bisnett noted that if the desire is to see each other's systems that they should be able to figure out how to make it happen. Anybody with an account could see the system, but physically getting a connection into the system

probably can't happen. He added that this only really happens with very small towns and cities with small networks and high diversion rates.

- Multiple members noted that they currently are calling each other when something occurs on key corridors.
- Mr. Bisnett noted that this might be able to be done with a dashboard if they could get the right security credentials. The dashboard could provide notifications when speeds decrease below a selected level.
- Mr. Darrow noted that the city has issues with fiber being cut and not working. Mr. Bisnett replied that this tool is based on INRIX travel times so that is not an issue.
- Mr. Miller and Mr. Bisnett wrapped up the topic by noting that they will get together to discuss how to present this with the HRTO at a future meeting or workshop.

5. For Your Information and Old/New Business

- Mr. Miller mentioned the Bridge Road Corridor ICM pilot project. He noted that the project cannot happen as designed, due to the physical connection through system firewalls. He added that the task order was closed out and that the UPC is still open with \$172,000 left.
- Mr. Miller asked the committee their thoughts on the remaining funding. Mr. Bisnett replied that the HRTO could workshop ideas at the next meeting, but that many projects close to the original pilot project could be feasible.
- Mr. Miller noted that we will leave the funding untouched for now and further discuss at a future meeting.
- Mr. Goodill stated that by this summer the HRTO may want to discuss what each locality is considering for U.S. 250th birthday celebrations.

6. Meeting Schedule

The next HRTO meeting is tentatively scheduled for April 2, 2025, at 11:30 am. Mr. Nichols will send out a "Save the Date" for the meeting.

The meeting adjourned at 1:05 pm.