DRAFT HRTO Subcommittee Minutes – November 9, 2020

Meeting held via Zoom

The meeting was chaired by Robert Lewis (Suffolk). The meeting started at 9:30 am.

Pursuant to the declared state of emergency in the Commonwealth of Virginia in response to the COVID-19 pandemic and to protect the public health and safety of HRTO members, staff, and the general public, today's meeting is being held electronically via Zoom. These electronic meetings are required to complete essential business on behalf of the region.

Per the requirements of the Code of Virginia, the agenda and all supporting documentation were posted on the HRTPO website for public review, and electronic copies of this information were provided to HRTO members and other interested parties.

A recording is being made of today's meeting and will be posted on the HRTPO website. In addition, the general public was provided an opportunity to provide comments on today's meeting agenda via two options:

1. *Members of the public were invited to submit comments to the HRTO via email.*
2. *Members of the public were also invited to call into a dedicated phone line where comments could be recorded for the HRTO.*

No comments were received as of noon, November 8, 2020.

Members of the public were invited to participate in the Webinar.

Mr. Keith Nichols reviewed several housekeeping rules which are important as we complete this remote meeting:

All members are asked to keep their phones and computers muted except for when you are providing input.

Please identify yourself when speaking by providing your name and the locality you represent. Do the same should you provide a motion or a second.

All votes taken today must be made by roll call vote and recorded in the minutes.

Mr. Nichols thanked everyone for their cooperation and patience. Attendance was recorded by roll call.

A roll call vote was conducted and the following represents the attendance of the meeting:

Chesapeake - Kevin Eppley
Hampton – Leo Blades
Newport News - Randy Cooper
Norfolk - Brian Fowler
Portsmouth - None
Suffolk - Robert Lewis
Virginia Beach - Frank Hickman, Mike Shahsiah, Mike Tippin
York County - Steve Kopczynski
VDOT - Mike Corwin, Mike Miller
HRT - Kamlesh Chowdhary
HRTPO - Keith Nichols, Sam Belfield
Others - Iris Vaughn (FHWA), Steve Hetrick (Albeck Gerken)

1. **Public Comment Period**
   - No comments were received from the public.

2. **Minutes** of the August 10th meeting were reviewed. Motion for approval was made by Mike Corwin and seconded by Frank Hickman. The minutes were approved.

3. **Route 17 VDOT/Suffolk Integrated Corridor Management Test Bed**
   - Mike Miller provided a status update on the Route 17 test bed in Suffolk and Isle of Wight County. He noted that VDOT and Suffolk are setting up a meeting with Kimley-Horn to discuss setting up the test bed.
   - Mike Miller added that the current plan for the test bed is to put a new comm server in Suffolk that will pull in Route 17 SPaT data. This will allow for SPaT data to accumulate on local servers on the city's side of their firewall and will not interrupt the city's signal system.
   - Robert Lewis added by noting like everything, it's never simple. We're trying to figure out how to implement this, but it's important to let the city's system operate while implementing this. We are being slow and deliberate and are also still working on agreements on a statewide level.
   - Mike Miller noted that we're taking network security into account, not just for this Suffolk example but for all localities. Robert added that network security is in both directions, and make sure we can lock doors in both directions but can still share information. Mike Miller added that we need to involve all IT folks in this moving forward.
   - Mike Miller added that these comm devices all communicate with each other via fiber, and with VDOT's servers in Northern Virginia. We will get comm SPaT data every

second. However, if data is shared via the cloud, it adds minutes of delay. This way data can be accessed much quicker and will only be a couple of seconds old.

- Brian Fowler thought that this discussion is getting light years ahead of where we are, and asked what the committee was supposed to do with this info or whether it was just FYI.
- Mike Miller noted that other localities are looking into buying into KITS, and some localities saw an example that Kimley-Horn showed from California. Feedback was that the system was too high priced for what you get, so VDOT is looking in a different form for value. Mike Miller added that if a locality doesn't want all of the functions or what other localities want, it can be less expensive. Kimley-Horn has said it has everything to do with how you connect and set up the system.
- Robert Lewis mentioned that what we are trying to do is not drive into a box canyon. KITS connectivity between VDOT and Norfolk is different than VDOT and Suffolk. This method allows for a phased approach and allows localities to have options and flexibility and so that it works for everybody.
- Brian Fowler responded that he appreciated making sure that we don't drive into a box canyon. He also mentioned connected/automated vehicles and making sure that we at least think about them and not knowingly make a mistake. Mike Miller added that we all need to think about C/AV, and it is only a matter of time before we choose a C/AV comm template.
- Brian Fowler mentioned that architecturally it will be different for VDOT if a locality has KITS versus localities that don't. There is possibly a problem if there is too much data pulling going on.
- Mike Miller noted that controllers in each region are sharing data with vendors (over 1,000 in Nova, currently 5 or 6 in Hampton Roads). They're coming online little by little. But there are difficulties with the network security side regarding traffic signal systems. Brian Fowler added that cities are also having issues with the IT/cloud sides of it.
- Robert Lewis mentioned that at this point this item is more of an FYI and that it has not moved as fast as hoped largely due to network security issues and statewide agreements being drafted. And what works for Route 17 may not work for all localities. We're just being sure to be slow and deliberate with so many things in flux. Mike Miller added that when we get Route 17 up and running we know it will be sustainable.
- Frank Hickman mentioned that the test bed is the key and how we'll lean in the future. He added that he looked at an AV shuttle in Fairfax last week and how it ties into their signal system. It was an interesting mix of things to see up there, and Virginia Beach is thinking of doing an AV shuttle. Mike Miller added that he would definitely like to be involved as Virginia Beach moves ahead with the AV shuttle.
- Mike Corwin asked what the timeframe is, and Mike Miller responded that they will probably be testing comm with SUF by the end of November.

4. **KITS and Connected Vehicles**
   - This topic was discussed during the previous item.

5. **Cabinet Security Standards**
   - Mike Miller started the topic by noting that with all of the security conversations going on we are also looking at end unit security with cabinets. He mentioned the demo the HRTO had in Suffolk two years ago on cabinets with digital (electronic) locks, which not only provide security but also lets us know who has been in each cabinet. Mike added that VDOT is taking a long term, high level look at this and that it is a high priority for VITA, and as regional leaders we should probably also discuss cabinet security.
   - Randy Cooper asked if you see cities having to have electronic locks if we go ahead and connect with VDOT. Mike Miller responded that it's more likely part of the agreement, but that VITA and VDOT management feels like if there's a connection between localities and VDOT that the back to back firewall is adequate. Randy also noted that funding could be an issue.
   - Robert Lewis noted that his department has not had major concerns because of the firewalls. He is more concerned that someone can hack into the system and cause havoc at the cabinet, and the real issue is most cabinets still use #2 keys and can have access to the network through the controller.
   - Robert Lewis added that provisions in the statewide agreement are leaning towards requiring electronic locks. It's open as to who would pay for it, but a lot is still in the works and under consideration.
   - Brian Fowler asked if we need to reassess this if everybody just has KITS instead. Mike Miller responded that the VDOT connection to Norfolk would not be different than to Suffolk, even though Norfolk has KITS and Suffolk does not. The comm looks the same and the comm server is likely the same.
   - Brian Fowler said that he thought that we would just need a VPN connection and VDOT could have remote connectivity to Norfolk's KITS system. Mike Miller responded that this would require more comm lines to Norfolk, plus there would be different versions of KITS being operated by VDOT since VDOT and Norfolk have different versions. Brian added that he was concerned that VDOT could control our signals without them knowing, but Mike Miller and Robert Lewis responded that you'll be able to see everything, it will log it in the Norfolk version of KITS.
   - Robert Lewis said that it is probably $10-$20 million to swap out every city's systems to be the same.
   - Robert Lewis noted that VITA believes physical security is just as important as network security, which is what is driving this conversation. They're looking at it, and we may have to address if we link all of these city systems.
   - Mike Miller added that additional comm infrastructure will not be necessary with the system being considered. Even though Norfolk already has KITS, it may be one of the hardest to integrate due to IT and network security issues. VDOT's IT network is going

Attachment 2

to have to have the same security standards as the system network, and this may be an issue with localities.

- Mike Shahsiah wrapped up the topic by noting that Virginia Beach will be upgrading to digital locks in the next two years, and Brian Fowler noted that Norfolk has not changed the city's cabinet security and have no plans to implement digital locks.

6. **Hampton Roads District Travel Trends**
   - Mike Corwin provided a presentation on an analysis of the changes in volumes at select locations throughout the Hampton Roads VDOT District.
   - Robert Lewis asked if any localities have been analyzing travel trends with their local data. Mike Shahsiah noted that Virginia Beach has been analyzing their traffic count data and noticed a 50-55% decrease in traffic volumes at the height of the shutdown but are now at 75-80% of the levels compared to last year. Mike Corwin added that VDOT's data showed that a 55-60% decrease in volumes at the height of the shutdown was the norm. Robert Lewis added that Suffolk is also analyzing their traffic count data and noticed a 56-57% decrease in traffic volumes at the height of the shutdowns. Suffolk arterials are currently at about 80-85% of normal volumes, although some arterials are now seeing an increase from previous volumes.
   - Keith Nichols wrapped up the topic by noting that HRTPO will be analyzing the impacts of Covid-19 on regional daily and peak period traffic volumes in the next month.

7. **HRTPO Update**
   - Sam Belfield notified the committee that there will be an RCTO-TIM meeting on November 10th. Those that are interested in participating should get in touch with Sam to get the meeting information.

8. **For Your Information and Old/New Business**
   - Randy Cooper brought up the topic of regional emergency vehicle preemption and asked if anybody has started coding vehicles yet. Robert Lewis responded that Suffolk has started coding vehicles but has not started coding intersections.
   - Randy Cooper added that a Newport News fire chief is looking at a possible numbering convention for preemption, and it may be worth looking at now since its been years since we created our system and now we're smarter when it comes to our systems.
   - Steve Kopczynski noted that it is not good to use the actual unit number in the coding scheme because those unit numbers routinely change. He added that he has not heard of a regional numbering scheme other than what we've done, but that he would like to speak with Newport News Fire about this.
   - Robert Lewis mentioned that he and Mike Miller are available to talk to the Fire Chiefs Committee about numbering schemes and then can bring this back to the HRTO.

- Randy Cooper noted that they've had requests from private transport companies to use their preemption, and BRT could use it as well. He added that we need to make sure we have the right identification to be sure we know who is using our preemption systems quickly, but he is not sure that our current numbering scheme has this ability.

9. **Meeting Schedule**
   - The next HRTO meeting is scheduled for December 14th, 2020.

The meeting adjourned at 11:05 am.