

August 7, 2012

MEMORANDUM #2012-104

TO: Hampton Roads Transportation Operations (HRT0) Members & Guests

BY: Robert B. Case, Principal Transportation Engineer

RE: HRT0 Subcommittee Meeting – August 14, 2012

An HRT0 Subcommittee meeting will be held from 9:30 a.m. – 11:30 a.m. on Tuesday, August 14, 2012, at the **Human Resources Training Room, 4th Floor, City Hall, 306 Cedar Road, Chesapeake.**

1. **Public Comment Period**
2. **Summary Minutes of June 12, 2012 Meeting**

Minutes of the previous HRT0 meeting are attached.

Attachment 2

Recommended Action: Approval

3. **Relationship Between Local Opticom Projects**

9:30 a.m. – 9:45 a.m.

Robert Lewis will report on his 8-9-12 meeting with VDOT to discuss Opticom projects UPC103004 (\$133,000) and UPC100606 (\$1,650,000).

4. **VDOT Transportation Video and Data (TVD) Project**

9:45 a.m. – 10:05 a.m.

This presentation will discuss the new VDOT 511 program, which is a state-of-the-art system that uses real-time probe data to provide traveler information through three different communication mechanisms: 1) the VDOT website, 2) telephone access using Interactive Voice Response (IVR) technology, and 3) a mobile application. Also to be covered are the technical aspects of how the data is obtained and provided, as well as how it can be used as a traffic management tool. VDOT's "Reach the Beach" effort will also be presented, specifically how the program reduces travel times for people traveling from Richmond to the beach and the Outer Banks, using dynamic message signs at key decision points, Bluetooth and INRIX data sources, and the VDOT website.

Scott Cowherd (VDOT) will introduce the TVD Project and present the 511 Program.

5. TVD Project- Data

10:05 a.m. – 10:25 a.m.

Last September, VDOT “awarded a five-year contract to Iteris, Inc. for the design, development and operation of a new enhanced phone and web-based 511 system.” A portion of that contract concerns iPeMS, a data management and performance measurement tool.

Armand Ciccarelli (Iteris) will present the iPeMS data solution to HRT0.

6. TVD Project- Video

10:25 a.m. – 10:45 a.m.

The TVD contract which VDOT awarded last September includes a new way of handling the video from VDOT’s traffic cameras, including how those images are transmitted to partnering municipal governments.

Tom Burgoon (SkyLine) will present details of this new arrangement to HRT0.

7. Tour of Chesapeake Traffic Operations Center

10:45 a.m. – 11:30 a.m.

Chesapeake has recently made improvements to its Traffic Operations Center, including a traffic adaptive signal control system.

Gary Walton (Chesapeake) will lead a tour.

8. For Your Information

- The April, May, and June newsletters of Virginia Beach’s TMC are attached.

Attachment 8-A

Attachment 8-B

Attachment 8-C

9. Next Meeting Schedule and Agenda Items

The next HRT0 meeting is scheduled for Tuesday, October 9, 2012 from 9:30 a.m. – 11:30 a.m. at Sandy Bottom Nature Park, Hampton.

Recommended Actions:

- Suggest agenda items for next meeting which will help HRT0 fulfill its information sharing/receiving, collaboration, and advisory roles.

RBC/kg

Attachments

HRT0 Subcommittee:

Kevin Abt, VPA
Stephen R. Boyce, VDOT
Rob Brown, NO
Charles Burch, JC
Alesia Cain, HRT
Kamlesh Chowdhary, HRT
Randy Cooper, NN
Michael A. Corwin, P.E., VDOT
Kevin Eppley, CH
Jeffrey Florin, VPA
Stephany Hanshaw, VDOT
Franklin Hickman, VB

Jacqueline M. Kassel, P.E., NN
Stephen P. Kopczynski, YK
Robert E. Lewis, P.E., SU
Ric Lowman, P.E., VB
Tal Luton, JC
Daniel A. Rydzewski, P.E., NO
W. Leon Sisco, WATA
Eric Stringfield, VDOT
Ed Taylor, SU
Gary E. Walton, P.E., CH
Martin Willson, HA
John Yorks, HA

HRTO Invited Guests:

Joel Acree
Jocelyn K. Bauer
R. Stephen Best, CH
Tim Breslin, CH
Chad Brooks
Robert Buckham
Leah Bush, VDH
A. Call, HA
Jimmy Carter
Mecit Cetin, ODU
Chief Chesapeake PD, CH
Jonathan Clark, Open Roads
Dwayne Cook, VDOT
Marc Copeland
Steven Cover, VB
Scott Cowherd, VDOT
Barbara Creel, WATA
William P. Dent, WM Fire
Leon Dextrateur, VB
Doug Draper, CH
Michael Felix, NO
Rusty Fitzhugh, VDOT
Eric Fly, Seamcorp
Chris Francis, VDOT
Robert K. Gey, VB
George Glazner, NO
James Gray, HA
Cynthia Hall, NO
John Hendrickson, PBQ&D
Jeffrey B. Holland, CBBTC
Robert T. Holloway, Jr., PQ
John Horner, Open Roads
Chuck Houck, NO
Amanda Jacobs, JC
Daniel E. Jenkins, P.E., FHWA

Cc: Sam Belfield
Rob Case
Dwight Farmer

Ken Jennings, DMV
Alan Jensen, P.E., NAVY
Kenneth L. Jones, NN
John Kaoudis, NN
Asad Khattak, Ph.D, ODU
Raymond Khoury, VDOT
Charles Lavene, Norfolk Airport
Stephen D. Little, Transdyn
Glenn McBride, VDH
Jake McCoury, VSP
Jim McCullough, Transdyn
Joe Moore, NN
Jessie Neal, VDOT
Mark Outlaw, SU
Shawn Pillow, VSP
Daniel Plott, VSP
Earnest Poole, VSP
Eric Reddeck, CH
Matthew Riethmiller
Iris Rodriguez, FHWA
Safety Officer, NN
Mark Sawyers
Tanya Showers, Army
Mark Solesky, CH
James Stanek, VDOT
Gregory S. Staylor, CH
David C. Sullivan, HRT
Chris Swartz, HA
Ted Tynes, VSP
Charles E. Vidrine, NAVY
Scott S. Williams, NN
Jeff Wise, NO
Nick Wooten, HA
Kevin Wyne, PQ

Keith Nichols
Camelia Ravanbakht
Stephanie Shealey

DRAFT Minutes of the June 12, 2012 HRTPO Subcommittee Meeting

Regional Building, Chesapeake, 9:30am

Attendees

Robert Case, HRTPO
Frank Hickman, Va. Beach
Sam Belfield, HRTPO
Keith Nichols, HRTPO
Daniel Rydzewski, Norfolk
Jackie Kassel, Newport News
Stephanie Shealey, HRTPO
Chris Swartz, Hampton
Iris Rodriguez, FHWA
Robert Lewis, Suffolk
David Ambrose, Suffolk
Eric Reddeck, HRFSOC
Steve Hetrick, Albeck Gerken
Mike Kimbrel, HRTPO
Farhad Pooran, Telvent
Kevin Eppley, Chesapeake

Public Comment Period

No Public Speakers

Minutes of April 10, 2011 Meeting

No modifications of the minutes – approved.

Relationship Between Opticom Projects

Rob Case (HRTPO) presented a summary of all of the Opticom projects that were in the TIP:

- UPC101280/Newport News/\$100,000/FY12
- UPC100537/Chesapeake/\$500,000/FY12
- UPC100606/Regional/\$1,650,000/FY14
- UPC103004/Regional/\$133,000/FY18

Dan Rydzewski and Robert Lewis (Suffolk) led the group discussion on how to proceed from this point. Robert Lewis noted that the \$1.65m project can include coding. The consensus was to consolidate the two regional grants under one UPC. Prior to the next meeting, committee members will meet with VDOT to discuss the project consolidation and the use of VDOT as the project administrators. Dan Rydzewski will also draft a letter to

the HRTPO's Transportation Programming Subcommittee (TPS) requesting the project consolidation.

The concept of a regional MOA for Opticom use was discussed. Eric Reddeck (HRFSOC) and Sam Bellfield (HRTPO) were asked to take this idea back to RCTO-TIM, so that the first responders get the opportunity to participate in this endeavor.

Regional Traffic Signal Assessment

Iris Rodriguez (FHWA) led the discussion. She introduced Rick Denny (FHWA) to present the program and to answer any questions the group had regarding different aspects of the program.

Mr. Denny (via teleconference) outlined the project goals and steps. He stressed the need to develop a project mission/concept so that traffic signal systems maintenance has a place in the long range regional plan. Planning for operations is a must in order to capture MPO support. He stressed the need to develop a solid basic services concept to help us articulate our goals at the political level.

The project has been scheduled to begin October 16-19. An opening plenary meeting scheduled for October 16, followed by city visits, then a close-out meeting on October 19th. Survey questionnaires will be distributed to the municipalities in advance of the meeting; anticipate August or September distributions.

The key output from this process will be the project report. This report can serve as the foundation for development of an RCTO for Traffic Signal Operations.

Chesapeake's Traffic Adaptive Signal Controls

Farhad Pooran (Telvent) led the discussion. He stated that the function of the traffic adaptive systems was to eliminate the need for traffic signal retiming by using real-time detector inputs to generate signal timing plans that meet the real-time traffic demands.

He discussed the installation/maintenance, communications, and systems maintenance costs associated with adaptive systems.

He also discussed system installations, notably Pinellas County, Florida and Chesapeake, Virginia. The Chesapeake system covers 5 corridors and 33 intersections, and includes 23 CCTV cameras and 7 DMS. The Chesapeake system is currently undergoing systems effectiveness evaluations.

RCTO-Traffic Incident Management - Update

Sam Bellfield (HRTPO) led this discussion to provide an update on the RCTO group activities. He spoke of the renewed interest in the group's activities as well as a name change. The new name is "RCTO- Traffic Incident Management", to provide a clearer indication of the group's goals and mission.

Eric Reddeck mentioned speaking in May with the Virginia Secretary of Transportation regarding the need for 0.2 mile marker signs on interstate roads in Hampton Roads. The mile markers would be used by first responders and citizens to identify their exact location on the interstates during roadside events. The Secretary took the idea to VDOT and initiated the program to be done statewide.

Next Meeting Schedule

The next HRTPO meeting is scheduled for Tuesday, August 14, 2012 from 9:30 – 11:30 a.m. at Human Resources Training Room, City Hall, Chesapeake.

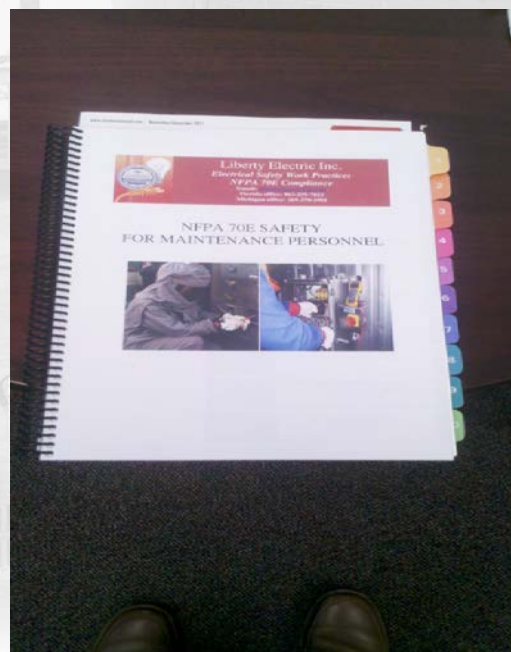


April– 2012

I. NFPA 70E Safety for Maintenance Personnel Class, April 27-30, 2012

The Traffic Management Operations Division Signal and Sign shop personnel routinely work around high power equipment and electric lines. This course was designed to inform personnel of hazards associated with electrical and instrumentation maintenance work. The course also stated the OSHA guidelines used when addressing electrical safety.

The course was divided into 2-2 day sessions and was attended by 24 personnel, including: traffic signal electronic technicians, signal electricians, sign & markings mechanics, planner-estimators, equipment mechanics. A bucket truck safety practical examination was included on the last day of training in addition to a written examination.

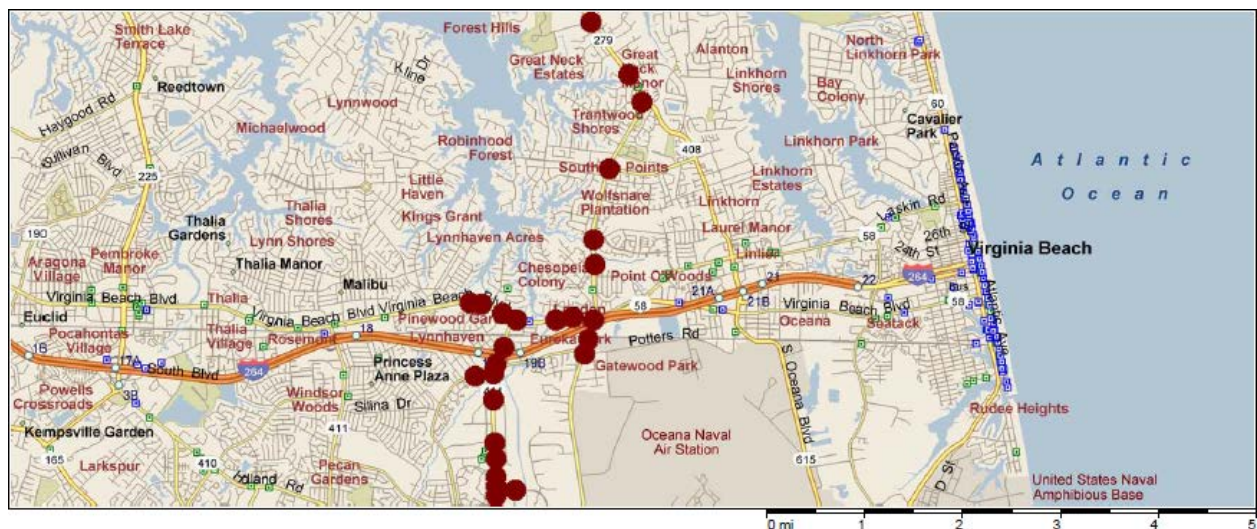


II. London Bridge Ramp Traffic Signal Retiming, April 2012

With the February 15, 2012 opening of the I-264 on and off ramps at London Bridge Road, came a major shift in traffic patterns and road way use behavior in the London Bridge Road/Great Neck Road/Virginia Beach Boulevard corridor. Staff monitored the London Bridge Road corridor daily, especially the evening peak hour timeframe, looking for opportunities to improve the traffic flows.

Staff believes that the traffic patterns have changed, not just at the three (3) intersections adjacent to the ramps, but to numerous other intersections/communities.

Our signal retiming consultant (Naztec ITS) launched into a 28 intersection study area to provide a wide area picture of the affect of the new ramps. The study area includes Lynnhaven Parkway, Virginia Beach Boulevard, Great Neck Road, and London Bridge Road. (area map attached).



Traffic volume & turn movement count data collection and preliminary timing runs began April 16th. New signal timing implementations will begin early May and extend through the end of the month. The goal is to have all the new timings implemented and the system fine tuned prior to the end of the school year.

IV. Traffic Management Operations Division Response Information

Some of the vital statistics we address each month

- 1. Number of Traffic Counts Scheduled/Completed – 27/27**
 - *In addition, we collected turning movement counts at 3 intersections*
- 2. Number of Hits on the Traffic Data Database (at www.VBgov.com/TCDS)**
 - 265 hits for the month of April 2012
 - 6156 hits since program inception (July 2009)
- 3. Number of Utility Locate Tickets (Miss Utility) Received/Checked/Marked – 2948/213/215**
- 4. Number of Traffic Signal Preventive Maintenance Actions completed –133**
- 5. Number of Traffic Signal Work Orders Received – 111**
- 6. Number of Traffic Sign Work Orders Completed – 403**
- 7. Linear feet of Thermoplastic Applied to Roadway – 40,994**



TRAFFIC MANAGEMENT CENTER *NEWSLETTER*

May– 2012

I. Dynamic Message Sign & Systems Detectors Project, May 2012

The Dynamic Message Sign & System Detector project began construction in February 2012. The goal of this project is quickly disseminate real-time traffic information on 8 dynamic message signs installed on critical arterials and collector roads around the city. This project will also install in-pavement traffic sensors to detect traffic volumes and speeds. These sensors will detect real-time traffic conditions and will allow our traffic signal controllers to select the appropriate timing plan for the present condition.

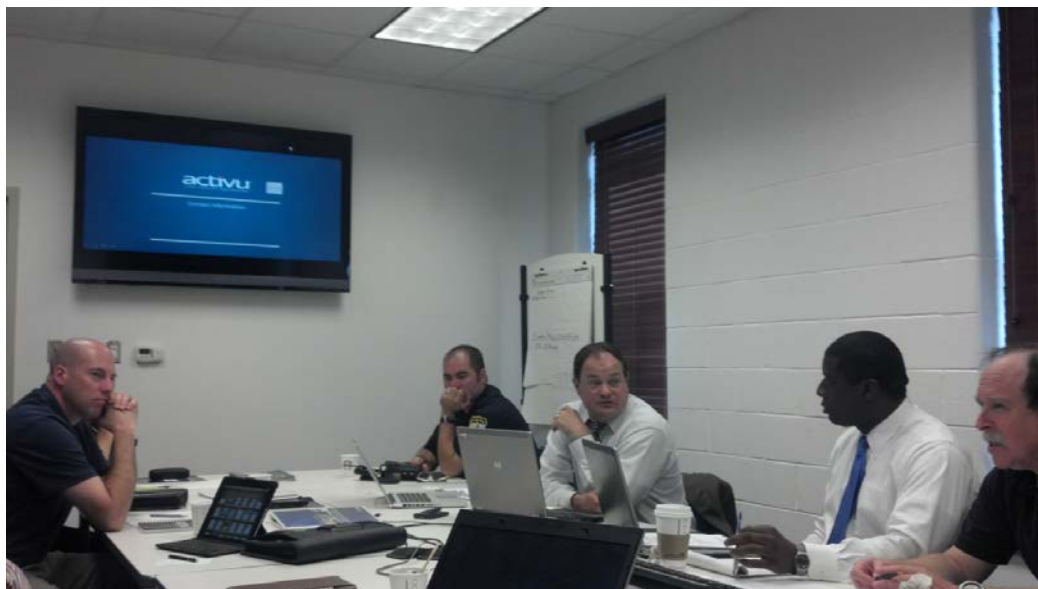
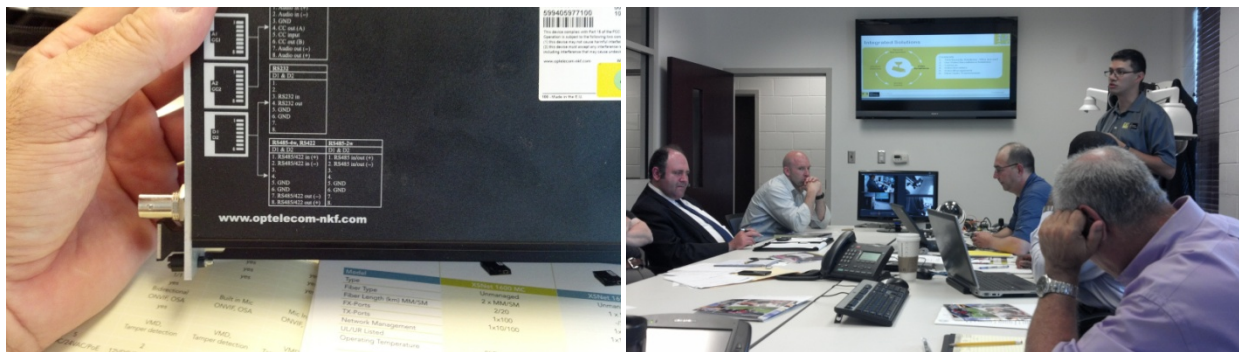
Use of this type of sensor is relatively new to the city. The prime contractor, Midasco LLC, has completed the installation at over 50 locations. Installation is very quick, no more than 15 minutes per unit. Photographs of the installation **below**.



II. Video Distribution Software Product Demonstration May 17-18 2012

On May 17-18, 2012, Grice Consulting hosted a video distribution software product demonstration at the Traffic Management Center. Also participating was Transcore (Grice sub-consultant), the City of Virginia Beach Police Department, and ComIT. Three (3) vendors (Optibase, NKV Optelcom, and Activu) participated in the demonstration. Features that we were particularly interested in were: availability of a map-based graphical interphase; ability to stream video to a smart phone (Android, I-Pad, I-Phone, First Responder Mobile Data Unit); maintenance packages available; licensing requirements.

Our goal is to use this type of technology as a force multiplier, as it has been used by other TMCs throughout the country. Send the video to call centers (like 911 center, VDOT Traffic Operations center), manned continuously, that can alert the TMC to congestions issues. The TMC can then respond and alter signal timings to flush affected corridors.



IV. Traffic Management Operations Division Response Information

Some of the vital statistics we address each month

- 1. Number of Traffic Counts Scheduled/Completed – 30/30**
- 2. Number of Hits on the Traffic Data Database (at www.VBgov.com/TCDS)**
 - 254 hits for the month of May 2012
 - 6410 hits since program inception (July 2009)
- 3. Number of Utility Locate Tickets (Miss Utility) Received/Checked/Marked – 2987/335/221**
- 4. Number of Traffic Signal Preventive Maintenance Actions completed –49**
- 5. Number of Traffic Signal Work Orders Received – 106**
- 6. Number of Traffic Sign Work Orders Completed – 322**
- 7. Linear feet of Thermoplastic Applied to Roadway – 4,600**



TRAFFIC MANAGEMENT CENTER *NEWSLETTER*

June– 2012

I. Joint Expeditionary Base Little Creek-Fort Story, State of the Base Brief and Navy Expeditionary Combat Command Capabilities Demonstration, June 21, 2012

Captain Charles L. Stuppard, Commanding Officer, Joint Expeditionary Base Little Creek-Fort Story invited local stakeholders in to update us on the status of the base as well as to experience the capabilities of one of the major commands on base, the Naval Expeditionary Combat Command (NECC). Agencies in attendance included: Norfolk Traffic Management Center; Virginia Beach City Council/Public Works/Planning/ SGA; Hampton Roads Sanitation District. We, along with our sister city Norfolk, typically work with the base to resolve any traffic issues affecting the base and adjacent city streets.

It was truly a great experience to view the capabilities of NECC, including Riverine (small boat coastal patrol), Explosive Ordnance Disposal (handling IEDs), Naval Construction Division (Seabees), Intelligence Command, Combat Camera Command, and a host of other supporting activities.

NECC provides many key units which are at the forefront in supporting Overseas Contingency Operations. The positive attitudes of the sailors we talked to, many standing out in the 95 degree heat in full battle dress were nothing short of inspiring. We, as a nation, are truly blessed to have them on our side. A few pictures of the activities are shown below.



Coastal Riverine Force (CRF) operates in harbors, rivers, across the littorals and ashore



CRF Watercraft



Naval Construction Forces (Seabees) demo of underwater construction equipment

Riverine Group Unmanned reconnaissance drones. Provides intelligence support for Seal team and amphibious group coastal operations.



Riverine craft approaching beach objective at full speed



Explosive Ordnance Disposal support demonstration. Blast deflecting Humvee **above** and weaponry used to help support Seal teams **below**.



II. Constitution Drive/Corporation Lane Signal Rehabilitation, June 23, 2012

The aging span wire installation, located behind Pembroke Mall, was replaced with a single mast arm structure. The work was performed completely with in-house staff.



Ten staff members worked on the project. Staff gathered at 12am at the Traffic Management center and completed the project by 1pm on June 23, 2012.



IV. Traffic Management Operations Division Response Information

Some of the vital statistics we address each month

- 1. Number of Traffic Counts Scheduled/Completed – 26/26***
- 2. Completed vehicle turn movement counts at 2 intersections***
- 3. Number of Hits on the Traffic Data Database (at www.VBgov.com/TCDS)***
 - 256 hits for the month of June 2012*
 - 6666 hits since program inception (July 2009)*
- 4. Number of Utility Locate Tickets (Miss Utility) Received/Checked/Marked – 2531/254/189***
- 5. Number of Traffic Signal Preventive Maintenance Actions completed –50***
- 6. Number of Traffic Signal Work Orders Received – 122***
- 7. Number of Traffic Sign Work Orders Completed – 402***
- 8. Linear feet of Thermoplastic Applied to Roadway – 4,900***