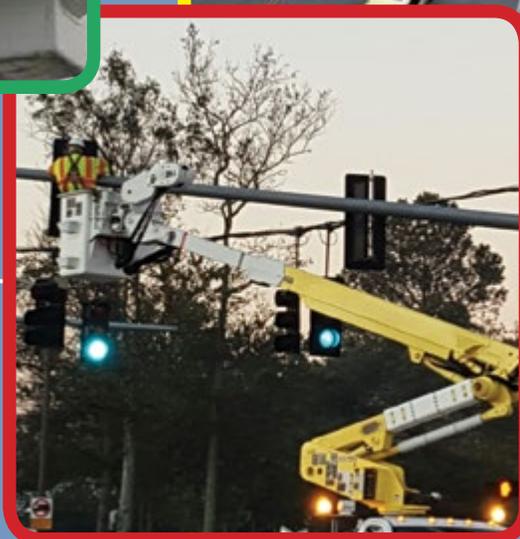




# TRAFFIC MANAGEMENT CENTER

Fourth Quarter 2020 (Oct. - Dec.)  
ITS Report



by Frank Hickman  
Monica Stone





## Fairfax County, Autonomous Electric Vehicle Demonstration in the Mosaic District, October 2020

**Fairfax County**, and several partners, launched an autonomous (self-driving) and 100% electric public transportation shuttle in October 2020. The project partners included *Fairfax County*, *Dominion Energy*, *EDENS (Mosaic District developer)*, *Virginia Department of Rail and Public Transportation (VDRPT)*, *Virginia Department of Transportation (VDOT)*, *Virginia Tech Transportation Institute (VTTI)*, and *George Mason University (GMU)*. Staff took a day trip to ride the vehicle and to discuss the project with the Fairfax County project managers. The driverless shuttle is nicknamed “**Relay**”.



The vehicle services a 2.8-mile loop between the Dunn Loring Metrorail Station and the Mosaic District.

The contingent of City staffers included Brian Solis (City Manager’s Office Special Projects Manager), **Ric Lowman** (Traffic Engineering), **George Hardin** and **Franklin Hickman** (both of Public Works Operations). The group went up to Fairfax on October 28th to get a project update. Staff met with **Dale Castellow**, former transportation coordinator for Virginia Beach (long ago) and now special advisor to the Fairfax County executive and serving as the Fairfax AEV demo project lead.



**George Hardin**, CVB ITS/Signal Timing Engineer, waiting at the vehicle boarding point.



**"Relay"** vehicle in route to the metro station from Mosaic District



**"Relay"** vehicle can hold 12 passengers (6 seated, 6 standing) in addition to the safety technician. Occupancy was limited to 4 passengers to maintain social distancing.





This pilot project will test this driverless, public transportation option to evaluate its effectiveness and safety and see how it can be used as a “first and last-mile” transit option to “relay” riders and help connect the community, activate neighborhoods, and attract businesses.

**The City of Virginia Beach** is looking at this project and others around the country in working towards building a similar pilot toward permanent program. This would also advance Council Goal #3 which is to improve the Transportation System to become a “test bed” for emerging transportation technologies.



Roadside Antenna Unit

Roadside antenna unit pictured. Unit relays traffic signal phases and timing to the “Relay” vehicle.

The traffic signal system can hold/extend the green signal indication for the approaching vehicle for up to 10 seconds.



## Snow Fighter Training, December 2020, Public Works Operations Yard

**PW Operations** hosted a snow fighter simulator training for a third time, in preparation for the upcoming winter season. Training was conducted for 64 staff members: 30 drivers from **Parks & Recreation** and 34 drivers from **Streets & Storm water divisions**. The training was conducted by **Nextgen Driver Training LLC**.



**The Streets/Storm Water** drivers took the 4 hour (per driver) advanced class, which included the basic class plus lessons stressing hazard identification, situational assessments, measuring risk factors, exploring fatigue management and distracted driving. Tandem driver training (using multiple plows working in the same direction) was also practiced.



**The Parks & Recreation** drivers took the 2 hour (per driver) basic snow fighting course which included: customized scenarios with parking lots and facility training. The training was outstanding. All the drivers received a course completion certificate. We are ready for the snow fighting season.



# Pedestrian Traffic Signal Upgrades on Princess Anne Road at Dam Neck Road and Tiffany Lane

## Princess Anne Road/Dam Neck Road Intersection

Traffic Engineering & Traffic Operations programmed a project here to improve pedestrian safety at this intersection and to answer several citizen requests for pedestrian signals & crosswalks. The work provided pedestrian signals and crosswalks at three legs of this intersection and greatly improved pedestrian access to the Landstown Commons shopping center, Farmers Market, and Princess Anne Park.

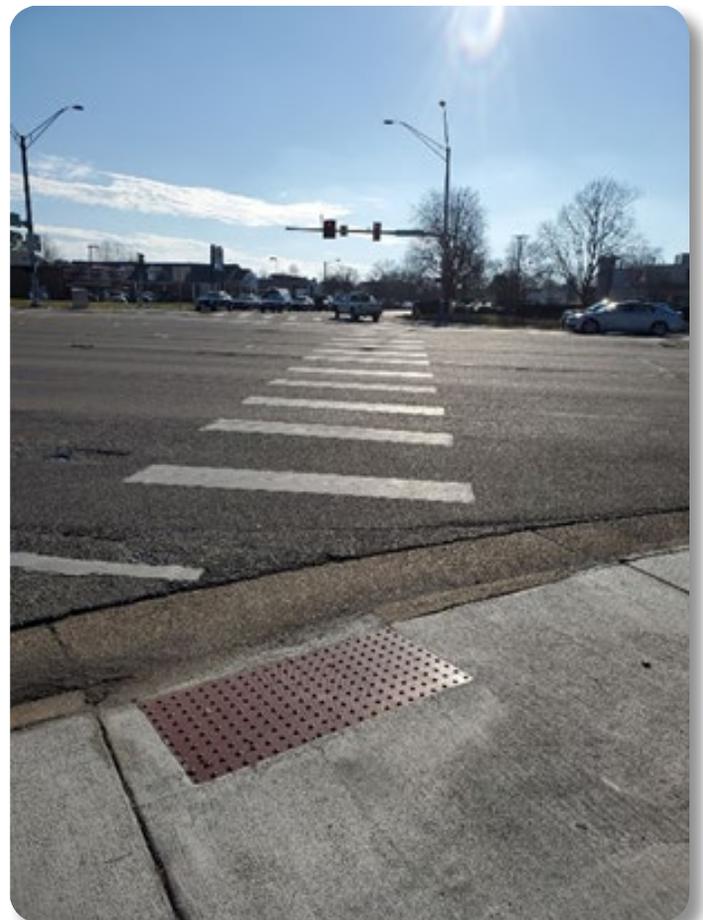
Traffic Operations work included new pedestrian signals, push buttons and crosswalks on the east & west sides of Dam Neck Road as well on the south side of Princess Anne Road. In addition, a signal phasing modification was performed to provide a right turn overlap phase with green arrow for right turn traffic from the west bound approach of Dam Neck Road onto northbound Princess Anne Road. This will increase the traffic flow and decrease delay for right turn traffic movement from Dam Neck Road onto Princess Anne Road without impacting the green times for traffic on Princess Anne Road.



## Princess Anne Road/Tiffany Lane Intersection

Staff received requests from students at Landstown High School and TCC for crosswalks & pedestrian signals at this intersection. *Traffic Engineering & Traffic Operations* programmed this pedestrian safety project.

Traffic Operations completed the installation of pedestrian signals at this intersection which included pedestrian signals, push buttons and crosswalks on all approaches of this intersection.





## Some of the vital statistical areas we addressed:

Number of Traffic Counts completed – 90

Number of Utility Locate Tickets (Miss Utility) Received/Checked/Marked – 3,168/2,659/509

Number of Traffic Signal Preventive Maintenance Actions completed - 156

Number of LED Street Lights Repaired - 7

Number of Traffic Signal Work Orders Completed - 625

Number of Traffic Sign Work Orders Completed – 345

Feet of Installed Thermoplastic paint – 4,756

## Provided event support for the following Special Events:

Holiday Lights at the Beach

KOA Lights of Holidays

