

## FREIGHT MOVEMENT TASK FORCE

March 29, 2018

Baltimore Metropolitan Council

### SUMMARY

#### 1. WELCOME

Mr. Armand Patella, Chair, welcomed everyone to the meeting and asked for a round of introductions.

#### 2. TRADEPOINT ATLANTIC

Mr. Aaron Tomarchio, Senior Vice President of Administrative & Corporate Affairs gave the members an update on the modern industrial revival that was taking place at Tradeport Atlantic. Construction is currently underway on 2.5 million square feet of space that includes the Amazon Fulfillment Center, two port logistics centers and a 1 million square foot spec building. Also underway is the remediation of the Tin Mill Canal and a marine improvement plan to rehabilitate the Sparrows Point channel and berths. Royal Farms is the first retail tenant on-site. MTA established service to Sparrows Point with Local Link 63 and TPA is working with SHA on the reconfiguration of the Wharf Road interchange and associated bridges. They expect to have about 3,500 jobs onsite by March 2019. They have been keeping the local community and stakeholders updated through open houses with the next one slated for April 18 from 6-8 pm.

On the topic of workforce opportunity, he noted that TPA collaborated with Community College of Baltimore County and the Transportation, Distribution & Logistics Institute (TDLI) to provide workforce solutions for Tradeport Atlantic's target markets and clients. A handout is available listing the offerings TDLI has available.

Finally, Mr. Tomarchio noted that TPA was very pleased to receive a \$20 million grant from the federal government to upgrade port facilities that will make it easier to bring in ships with bulk cargo and transfer the goods to trucks or railroad cars for shipping. The grant also includes dredging to allow larger ships to use the berths at Tradeport Atlantic and federal regulators are reviewing Tradeport's request to deepen channels from 36 feet to 47 feet.

***[PowerPoint: Tradeport Atlantic Update, Handout: Transportation, Distribution & Logistics Institute Training Opportunities]***

### 3. COMMERCIAL VEHICLE HEIGHT MONITORING SYSTEM

Ms. Betty Smoot, Ombudsman, Automated Traffic Violation Enforcement System (ATVES), Baltimore City Department of Transportation, gave an update on the new commercial vehicle height monitoring (VHM) system that began on March 19.

As per Baltimore City Code (subtitle 34-1), *“Commercial vehicle monitoring system means a monitoring system authorized....to enforce local restrictions on the presence of certain vehicles in certain places during certain times.”*

- Currently the use of VHM is only authorized in Baltimore City
- No more than 6 cameras may be operational at any given time
- Vehicle height limit – not to exceed 13’6” (anything exceeding this requires a permit)
- Height will be used as the identifier of trucks traveling on restricted roadways

When a truck is detected on a prohibited route, a photo will be taken to identify the registered owner and a fine sent as follows:

- 1<sup>st</sup> violation – warning notice
- 2<sup>nd</sup> violation – up to \$250 (\$125 if paid out of court)
- 3<sup>rd</sup> and subsequent violations – up to \$500 (\$250 if paid out of court)

Ms. Smoot noted that the placement of cameras was based on the official truck route map and to deter movement through residential areas. The locations were reviewed and approved by the ATVES location selection committee and was followed by a review and approval by the DOT Director. As part of the pilot program, cameras will be operating at the following sites:

- 1400-1700 Broening Highway
- 2300-2500 Chesapeake Avenue
- 3000-3200 Boston Street
- 800-1000 Fleet Street
- 3800-4000 Pulaski Highway
- 1600-1800 E. Fayette Street

Ms. Smoot noted that city crews are installing signs to inform truck drivers and motorists about these cameras and her team is working on collecting and evaluating the next set of locations.

***[PowerPoint: Commercial Vehicle Height Monitoring System, Handout: Baltimore City Official Truck Routes]***

#### **4. MARYLAND STRATEGIC GOODS MOVEMENT PLAN**

Ms. L’Kiesha Markley, Assistant Division Chief, Freight Coordinator, MDOT-SHA, briefed members on statewide freight planning efforts for Maryland’s National Highway Freight Network. She displayed several maps showing the truck networks – state and federal – and the critical urban and rural freight corridors that were developed in close consultation with the MPOs.

Ms. Markley touched upon the freight financial plan required under the FAST Act that provides \$6.3 billion in freight formula funding over 5 years, specifically for freight projects on the National Highway Freight Network (NHFN). Of this, Maryland’s allocation will be \$17-20 million over 5 years (2016-2020). The State Goods Movement Plan update includes a freight financial plan to show how MDOT plans to allocate the freight formula funds over the 5-year timeframe.

***[PowerPoint: Maryland Strategic Goods Movement Plan Update]***

#### **5. CONNECTED AND AUTONOMOUS VEHICLES (CAV) AND FREIGHT**

This is an area receiving a lot attention lately and the members got two very interesting presentations – one from Ms. Candice Ottley-Francois with JMT Technology Group and the other from Ms. Nicole Katsikides, Associate Research Scientist, Texas A & M Transportation Institute.

Ms. Ottley-Francois demonstrated how truck platooning works using a video developed by the Peloton technology group. Among the benefits of platooning are safety, fuel savings, additional capacity (closer spacing between trucks) and added convenience for drivers. It is anticipated that this would also help with truck driver shortages expected in the very near future. There are several major players currently experimenting with connected and autonomous vehicles (CAV) – such as Daimler, Uber, Tesla, Volvo and others. Among states actively taking part, Wyoming DOT has a CV pilot program, the I-10 Corridor Coalition includes Arizona, California, New Mexico and Texas, Virginia recently tested a 3-truck platoon on I-66 with FHWA. Maryland is conducting truck platooning at Aberdeen Proving Ground and MDOT recently convened a CAV freight sub-group.

Ms. Katsikides participated in the three-truck platoon that was part of the FHWA-led test on I-66 in Virginia. Ms. Katsikides experienced the technology firsthand. Here is how it works:

- Uses Cooperative Adaptive Cruise Control (CACC) to drive with shorter gaps than under conventional, manual driving,
- CACC is an enhancement to Adaptive Cruise Control (ACC) technology that provides closer and more accurate control of the gap and speed differences between trucks,
- Uses forward-looking radar sensors and electronic actuation of engine and brakes of the conventional ACC system but adds 5.9 GHz Dedicated Short Range Communications (DSRC) Vehicle-to-Vehicle (V2V), and
- The CACC system exchanges operational information between the trucks at 10 Hz and can adjust engine and brakes to maintain longitudinal control (speed/separation). Drivers are responsible for lateral control (steering and lane keeping).

Ms. Katsikides also touched upon some of the benefits of CAV and truck platooning such as:

- Safety
- Energy savings
- Reduced emissions
- Improved congestion
- Reduced delivery time
- Higher driver retention, Reduced workload and fatigue
- Reduced operating costs
- Significant increase of capacity of a dedicated truck lane facility
- Benefits for goods movement to and from the major ports, long-haul cross-country routes

There are opportunities in Maryland to work with groups such as the I-95 Corridor Coalition, Aberdeen Proving Grounds and FHWA, freight operations at the Port of Baltimore, and potential eastern shore trucking firms.

***[PowerPoint: Truck Platooning 101 and FHWA's Truck Platooning Project]***

## **6. SHRP2 C20 FREIGHT MODEL**

Mr. Brian Ryder, BMC, provided an update on a project meant to enhance the freight modeling capabilities of both BMC and SHA. This effort replaces the 2001 truck model in the BMC travel demand model with a multimodal Freight Modeling System (FMS). The working model was delivered in January 2018 and BMC and SHA are reviewing and testing it as well as looking for feedback and application suggestions from stakeholders such as the members of the FMTF.

Mr. Ryder noted several datasets that were used to build this model such as the 2012 Freight Analysis Framework (FAF), truck counts from SHA, MDTA and BMC, 2012 state port cargo movement data, etc. His presentation included a series of maps showing origins and destinations of truck trips in the region for 2012 and a dashboard demo for 2040. Moving forward, the freight model will be integrated with the passenger model and validation and scenario testing will be done on potential future conditions.

***[PowerPoint: SHRP2 Freight Modeling System]***

## **ATTENDANCE**

### ***Members and Guests***

Armand Patella – Pi Corp (Chair)

Kwame Arhin – Federal Highway Administration (FHWA), MD Division

Marlee Baucom – Norfolk Southern Railroad

Louis Campion – Maryland Motor Truck Association

Larry Collins – Baltimore Development Corporation (BDC)

Dan Janousek – Maryland Department of Transportation/Office of Planning & Capital Programming

Richard Johnson – Federal Motor Carrier Safety Administration  
Rick Johnson – Baltimore County Department of Economic Development  
Nicole Katsikides – Texas A&M Transportation Institute  
Jamie Kendrick – Sabra Wang & Associates  
Keith Kucharek - AECOM  
L’Kiesha Markley – State Highway Administration (SHA)  
Parto Mazdeyasni – Maryland Port Administration (MPA)  
Bobbi Moser – Carroll County Department of Planning  
Roxane Mukai – Maryland Transportation Authority (MDTA)  
Candice Ottley-Francois - JMT  
Natasha Pavlovich – MPA  
John Rotz – State Highway Administration/Motor Carrier Division  
Jon Scherman – Metropolitan Washington Council of Governments  
Nanette Schieke – Motor Vehicle Administration - Driver Safety  
Dominic Scurti – MPA  
Betty Smoot – Baltimore City Department of Transportation  
Dave Thomas - MPA  
Aaron Tomarchio – Tradepoint Atlantic  
Russell Walto – MDTA  
Kevin Wells - BDC

***Staff***

Bala Akundi – Baltimore Metropolitan Council (BMC)  
Regina Aris - BMC  
Charles Baber – BMC  
Blake Fisher – BMC  
Brian Ryder – BMC  
Terry Freeland – BMC  
Sanghyeon Ko – BMC  
Crystal McDermott – BMC  
Todd Lang - BMC