

—THE EASTERN
TRANSPORTATION
COALITION

An aerial photograph of a multi-lane highway with several cars driving. A large, dark blue semi-transparent shape is overlaid on the right side of the image, serving as a background for the title text.

FY2020 YEAR IN REVIEW

A Letter From the Executive Director



Fiscal Year 2020 was an exciting year for the Coalition in so many ways.

While celebrating 25 years of serving our members, we have changed our name to The Eastern Transportation Coalition to better reflect our expanding mission and focus.

Two new members have joined this year, Alabama and Tennessee, bringing our total membership to 17 states plus the District of Columbia.

As in previous years, the Executive Board provided active oversight of the Coalition by meeting in person several times during the year and holding regular calls. By sharing insights with peers and providing strategic direction to the Coalition, our cross jurisdictional work got even stronger.

Through several successful grant requests, we also secured additional revenue during the year to enhance our ability to connect and guide members in developing innovative transportation solutions for their regions.

Coalition staff were able to visit all regions during the year to bring first-hand information, data and tools to our members. During these unprecedented times, we have demonstrated our ability to remain flexible and nimble by continuing to bring value to our members through numerous on-line peer-to-peer exchanges, workshops and meetings.

I am happy to provide this 2020 FY Year in Review to further summarize our efforts during the past twelve months and look forward to working with you as we continue to bring our members together to connect for solutions to our pressing transportation challenges.

Dr. Patricia Hendren
Executive Director

PROGRAM TRACKS

The Coalition includes three program tracks, each guided by a corridor-wide committee of active members and focused on multi-state collaboration and exchange of ideas, practices, and technologies. Each program track includes core activities primarily supported through member dues. These include corridor-wide or regional coordination and regularly scheduled events and programming such as peer to peer exchanges, workshops and meetings. Each program track also includes special projects that allow for in-depth research, development, and delivery of multi-state solutions to address specific member needs.

1. TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS

Transportation Systems Management and Operations (TSMO) is an integrated set of strategies focused on operations improvements to maximize the safety, mobility and reliability of the transportation system. The Coalition's TSMO program focuses on strategies such as Incident Management, Traveler Information as well as Emergency Operations and Congestion Management through in person events, webinars, and the development of data tools to address reliability, mobility and congestion challenges amongst the member states.

2. FREIGHT

Freight is a critical force in the nation's economy, made up of a vast network of interstate highways, state and local roads, airports, ports and waterways, and pipelines. The Coalition states account for 35 percent of U.S. gross domestic product and moves 4.6 billion tons of freight valued at more than \$6 trillion each year. The Intermodal Freight program is actively engaged in working with members on freight related transportation issues that will improve the safety, mobility and efficiency of the movement of goods across jurisdictions and modes.

Focus areas include:

- Working with states to facilitate real-time travel information to truckers, including truck parking,

by convening agencies to share research and deployment strategies and connecting truckers to Corridor states' information via the Coalition's on-line Commercial Vehicle Operations portal.

- Supporting states in freight planning through sharing of best practices in planning processes and use of freight data
- Building public sector knowledge about the freight industry through training, information and resource sharing.

3. INNOVATION

The Coalition's work in the area of Innovation supports our members as they address new and emerging transportation challenges in new technologies, policies, and multi-state partnerships. Through webinars, workshops, working groups and pilot programs, we provide a forum for our members to find solutions including:

- Testing new technologies
- Develop regional approaches to address tolling issues
- Supporting work toward interoperability of connected and autonomous vehicles
- Exploring sustainable transportation funding approaches.

NEWSLETTERS

March 2020

Coalition Co-Chairs Newsletter

March 2020

TSMO-CAV Happenings

November 2019

TSMO-Freight Happenings

TRAINING

The Coalition provides annual training events for our members.

OPERATIONS ACADEMY

The Operations Academy is a two-week, total immersion transportation management and operations program. It was developed in response to the increasing demand for personnel with skills in these areas. A cooperative effort



between the Coalition and the Consortium for Innovative Transportation Education (CITE), the program uses a mix of classroom instruction, workshops, and analysis of existing systems to ensure the retention of the principles presented. It provides opportunities to practice and internalize the principles learned which is not possible in traditional classes and short courses.

FREIGHT ACADEMY

The Freight Academy is a unique, comprehensive immersion program for public agency personnel focused on goods movement. The goal of this nationally recognized program is to ensure current and future public-sector decisions and investments are made with an understanding of the comprehensive supply chain. Each Freight Academy class consists of participants selected from a pool of applicants across the Corridor and nationally. Students represent personnel from federal, and state Departments of Transportation, Metropolitan Planning Organizations, Port and Toll Authorities, and other transportation related entities whose work impacts

goods movement. Attendees are exposed to the innermost workings of the goods movement system, including marine terminals, distribution centers of major corporations, air cargo, trucking, and rail operations.

Academy participants also undertake a Capstone Project on important and timely multi-modal freight related subjects. Capstone Project findings are reviewed by mentor panels comprised of subject matter freight peers including senior executives from transportation and other agencies throughout the United States including past Freight Academy graduates.



THE CONSORTIUM FOR INNOVATIVE TRANSPORTATION EDUCATION (CITE)

CITE is an organization of university and industry partners with a primary mission to increase the overall number of properly educated transportation management & operations (TSMO) professionals. The Coalition and CITE have a long history of collaboration. The Coalition has created a pooled fund available to members to take online CITE classes.

PEER EXCHANGES

In-person events with cross-cutting topics were also held during the year

August 14, 2019

A Severe Weather Event Scenario: Preparation, Response and Recovery—Managing Passenger/Freight Movement and Expectations

The Mid-Atlantic HOGs held a regional workshop in Philadelphia, Pennsylvania to discuss severe weather operations. Private company freight needs were first presented to the group as a baseline for discussion. A severe weather exercise scenario was then provided and TMC to TMC operations were discussed. Working groups developed a framework for the appropriate preparation and response to the scenario.



October 16, 2019

New England Connected and Automated Vehicle Working Group

Held in Lawrence, MA, this meeting brought together the New England CAV Working Group members to share best practices and lessons learned on two key topics: 1) terminology and education, and 2) data access requirements and data use. MassDOT staff shared details about their experience administering a workshop to local law enforcement and first responders. Rhode Island

presented lessons learned and challenges related to data collection and access in the Little Road AV shuttle project. The group also discussed opportunities and a framework for establishing data requirements for vendors interested in testing projects.

November 14, 2019

WAZE Technical Meeting

Held in New Jersey, this meeting was to discuss potential product enhancements to the WAZE platform. Representatives from the Coalition member agencies reviewed the operational functionality of the WAZE platform prior to this meeting and developed product recommendations to improve the customer experience. The focus was on improving the traveler information disseminated to those traveling along the roadway network, spanning from Maine to Florida. The discussion at the technical meeting focused on the best way to utilize WAZE data for various applications, such as safety analysis and traffic incident management, and identify ways to improve customer experience, motorist safety, and operations within the corridor's Transportation Management Operations Centers.



PEER EXCHANGES

December 4, 2019

Best Practices & Lessons Learned in Heavy Towing

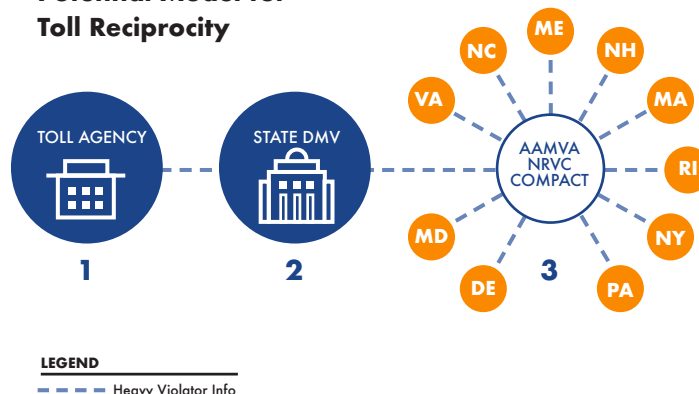
As a result of an I-95 Executive Board Strategic Planning briefing, the Vermont Agency of Transportation, under the umbrella of the New England Highway Operations Group (HOGs), expressed interest in having the I95 Corridor Coalition conduct an Information Exchange workshop on the subject of Heavy Towing. The meeting brought together incident responders from agencies in New York, Connecticut, Vermont and the Ministry of Quebec in an effort to discuss how they could improve TIM operations in the respective regions. Held in Berlin, Vermont it provided a forum for discussing towing in the context of Quick Clearance Policies. The Vermont State Police, DMV and the state Towing Associated presented the State of Practice in VT and representatives from Pennsylvania presented their best practices and lessons learned.

December 10, 2019

Toll Violation and Enforcement Reciprocity (TVER) Working Group Meeting

The TVER Working Group met to share best practices and identify new approaches to reducing the occurrence of two types of heavy (or frequent) violators: those that are evading toll payments from within the state (in-state) where they are registered, and those that are evading toll payments out-of-state. The one-day workshop gathered 37 representatives from 18 agencies (tolling authorities, DOTs, DMVs) in Washington, D.C. In addition, representatives from the American Association of Motor Vehicle Administrators (AAMVA) and the International Bridge, Tunnel, and Turnpike Association (IBTTA) attended. The day began with a summary of best practices from around the US and recommendations to addressing heavy violators followed by members working in small groups to further discuss these strategies. The meeting concluded by prioritizing next steps to continue to advance the mission of the TVER Working Group.

Potential Model for Toll Reciprocity



April 30, 2020

Toll Violation and Enforcement Reciprocity (TVER) Working Group Meeting

The TVER Working Group met via a virtual workshop to explore payment method technologies and opportunities. The workshop was attended by almost 40 individuals representing 21 agencies. Aligned with the larger goal of reducing toll violations, group members are interested in tools that will make it easier for their customers to make toll payments. This topic, has been elevated in priority due to COVID-19 concerns. The workshop included an overview of toll payment innovations and details about vendors currently offering solutions of different types. Five tolling agencies (Georgia State Road & Tollway Authority, Pennsylvania Turnpike, North Carolina Turnpike, Virginia DOT, and Florida's Turnpike Enterprise) then shared their experiences with toll payment methods. The workshop ended with a clear direction to explore regional approaches to the adoption and implementation of app-based tolling methods.

TOPIC DRIVEN SPOTLIGHT PRESENTATIONS

Agency presentations that showcase diverse, cross cutting topics are listed below for each meeting.

July 11, 2019

Mobility as a Service (MaaS): Understanding the Concept, Current Status and the Role of Data

- Understanding the Concept & Current Status of MaaS
- San Francisco County Transportation Authority experiences with TNCs and Data

August 22, 2019

Managing Arterials—Three Case Studies from a Statewide to City perspective

- 10 years of Transit Signal Priority—Lessons Learned in New York City
- Arterial Management Toolkit—Experiences from Washington, DC
- Florida's Statewide Arterial Management Program (STAMP)



September 26, 2019

Connected and Automated Vehicles

- Regulating the Unknown: Balancing Safety and Promoting Innovation
- Vermont's Automated Vehicle Testing Act

January 30, 2020

Emerging Technologies in Transportation Management

- The Use of Artificial Intelligence in Transportation Management Centers (AI)
- Breaking Ground: Toward a National ICM Strategy (ICM)



March 13, 2020

Inside the MAASTO Truck Parking Information Management System

- MAASTO Project Overview
- Iowa TPMIS
- Truck Parking Technologies: Private Sector
- Minnesota DOT Truck Parking Project

April 30, 2020

Southern Hurricane Planning

- VA, NC, SC, GA, FL, TN, AL
- Confirm chains of command communication
- Confirm process for road closure notification
- Highlight new technology to be used (e.g., 2019 NC drone use)
- Living with COVID in Hurricane Season



May 28, 2020

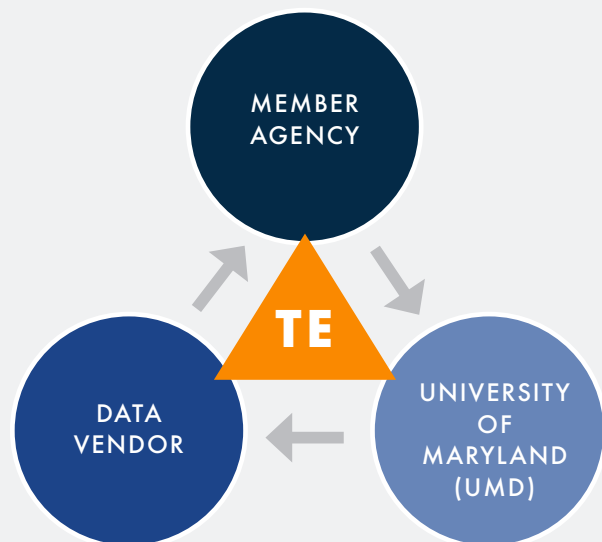
Protecting our Infrastructure

- Tuscarora Tunnel Traffic Management. System—PA Turnpike
- Weigh in Motion System Integration—MDTA



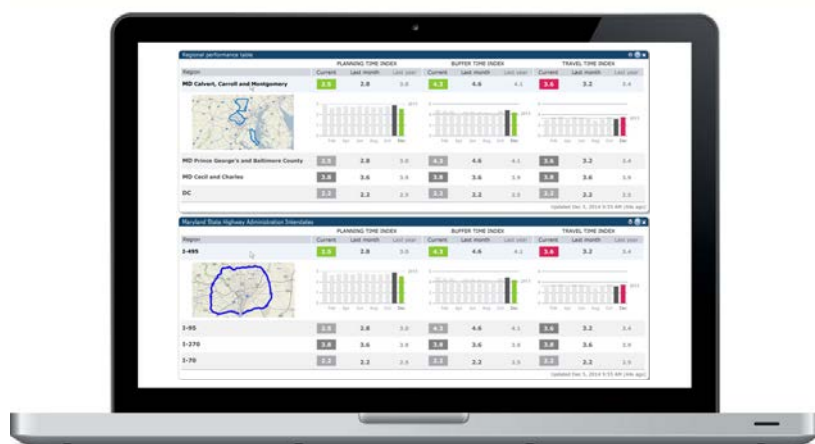
EXPANDING ACCESS TO DATA

VEHICLE PROBE DATA MARKETPLACE PROGRAM



For many years the Coalition has negotiated on behalf of its members cost savings on vehicle probe data and products through the Vehicle Probe Data “Marketplace.” In 2019, the Coalition successfully negotiated additional savings including zero overhead fees charged on the procurement of probe data and any ancillary products provided by INRIX, HERE and TomTom. Coalition staff also provide valuable contract management and data validation to ensure the members are receiving quality data on which to base key operational and capital investments.

DATA TOOLS AND USER GROUPS



RITIS - PDA SUITE

The Regional Integrated Transportation Information System (RITIS) is an automated data fusion and dissemination system that provides an enhanced overall view of the transportation network. Participating agencies are able to view transportation and related emergency management information through innovative visualizations and use it to improve their operations and emergency preparedness.

The Probe Data Analytics Suite (PDA), an optional component of RITIS, gives users the capability to evaluate system performance in support of planning, operations, research and other activities. PDA uses 3rd party probe data fused with other agency transportation data to provide a true “big data” analytics platform. These data are then leveraged by nine different apps to generate actionable data summaries, maps, graphs, charts and unique visualizations. User group meetings are held four times per year via webinar to showcase how members are using this data platform for their own agency needs

PDA SUITE FOLLOW UP

February/March 2020

RITIS User Group/PDA Suite User Group

October 2019

RITIS User Group/PDA Suite User Group

July/August 2019

RITIS User Group/PDA Suite User Group

July 25, 2019

RITIS PDA Suite User Group

- Prioritizing Project Selections for Operations
- Using RITIS to Support Project Prioritization in Georgia
- What's New & What's Coming

October 3, 2019

RITIS PDA Suite User Group

- Data Enforced: An Exploratory Analysis on the Impacts of Automated Speed Enforcement in the District of Columbia
- PennDOT: Using the PDA Suite for Holiday Travel: Operations and Traveler Information
- Using PDA Suite Tools to Make Holiday Travel Advisories

February 6, 2020

RITIS PDA Suite User Group

- Integrating RITIS-PDA Suite analytics into Esri's ArcGIS Platform
- TDADS Project Update

May 7, 2020

RITIS PDA Suite User Group

- Leveraging the new “Trip Analytics” to Better Understand Truck Trip Origins & Destinations within Rhode Island
- Probe Data Analytics Applications for Evaluating Operations and Safety in Washington DC

COALITION WORKING GROUPS

The Coalition manages Working Groups to focus on topic areas of interest.

CONNECTED & AUTOMATED VEHICLE REGIONAL WORKING GROUPS

The Coalition's CAV program is structured around three working groups: New England, Mid-Atlantic, and Southeast regions. These smaller groups meet quarterly (in-person once per year) to share updates, focus on mutual areas of interest, and pursue opportunities at a regional scale. For example, the New England CAV group was recently awarded funding through the New England Transportation Consortium to conduct a connected and automated vehicle legal and regulatory assessment.



HIGHWAY OPERATIONS GROUPS

Highway Operations Group (HOG) forums are conducted in five regional areas (New England, Tri-State, Delaware Valley, Potomac, and Southern). Member agencies meet in person to discuss challenges and identify operational strategies that extend within a state, across jurisdictional boundaries, and often across state lines. HOGs are unique in that they bring together policy, planning, operations, maintenance, and first responder personnel for discussions on how to improve TSMO strategies and program.



COALITION WORKING GROUPS

TOLLING VIOLATION ENFORCEMENT AND RECIPROCITY (TVER) WORKING GROUP



Members of the TVER Working Group include tolling authorities, state DOTs, and DMVs from throughout the Coalition region. Initially convened to advance tolling reciprocity agreements among Corridor states to support the collection of out-of-state tolls, the focus of the group has since expanded with the mission of helping member agencies increase revenue by improving toll collection methods. The group is working toward this goal with

four strategies: exploring opportunities for regional smart payment options, collaborating with DMVs and AAMVA, advancing violation enforcement reciprocity agreements, and increasing awareness of toll payment options and reduction of toll violations for motor carriers. The TVER Working Group convenes 2-3 times per year to focus on relevant topics. During FY2020, the workshops concentrated on addressing heavy toll violators, and toll collection methods to make it easier for customers to pay. For each event a white paper was prepared to provide context and background, and member agencies shared insights, lessons learned, and identified opportunities for progress through collaboration.

TRUCK PARKING WORKING GROUP

The Truck Parking working group is comprised of Coalition agency members including from planning, operations and maintenance who are working on various activities related to addressing truck parking needs. Coalition hosted webinars/conference calls are held on a periodic basis, combining presentations on truck parking activities with “roundtable” information exchange among states to provide updates on upcoming or current truck parking studies, experiences with truck parking information technologies or capacity projects underway as well as bringing members insight into new approaches in the public and private sector to address capacity needs.



FUNDED PROJECTS

To address specific member needs, the Coalition conducts special projects that enable in-depth research, development, and delivery of multi-state solutions.

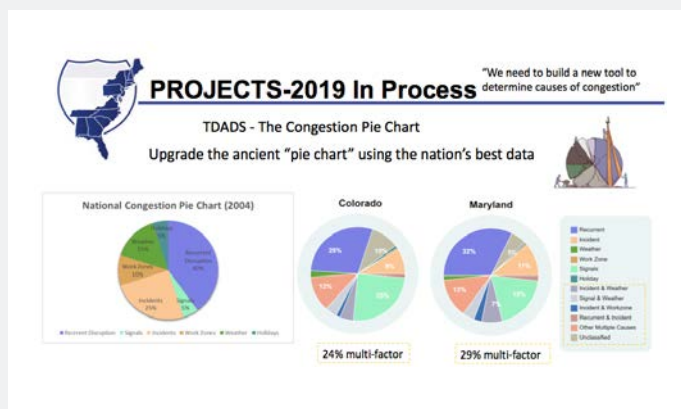
TRANSPORTATION DISRUPTION AND DISASTER STATISTICS (TDADS) PROJECT

The TDADS Project was initiated in 2019 and is led by the Coalition in partnership with the University of Maryland Center for Advanced Transportation Technology (CATT) using grant funding from the U.S. Bureau of Labor Statistics. The scope of the project is to develop and promote the use of an online tool for transportation analysts to access, analyze, and visualize data for monitoring and evaluating transportation network disruptions.

MULTI-STATE TRUCK PILOT PROJECT

The Coalition is expanding its multi-state truck pilot project. The next phase will launch in the summer of 2020 and will be the largest trucking-focused Mileage Based User Fee (MBUF) pilot ever conducted in the United States. The project began looking at the existing reporting requirements of motor carriers and analyzed how MBUF could fit into the existing system, highlighted potential challenges, and looked at potential positive synergies in the data that was collected. Lessons learned from the implementation of the ELD mandate and the differences between passenger vehicles and commercial vehicles were just two examples.

The project will continue the constructive conversation with stakeholders of varying viewpoints to identify and highlight concerns and recommendations of the industry to ensure they are being considered when policymakers discuss a potential mileage-based user fee system.



PROTOTYPE APPROACH FOR REGIONAL ASSESSMENT OF READINESS FOR AUTOMATED VEHICLES

This project explores the use of infrastructure readiness assessment methodologies in developing methods for assessing a multi-state region's readiness for automated vehicles. The intended outcome of this project is to develop and test a prototype assessment process, which could include adapting current related infrastructure readiness methodologies for other systems such as electric vehicle infrastructure. Given the current lack of information on the capabilities of AVs, part of the investigation will assess if the impacts of AVs are sufficiently understood to support development of a prototype approach. Insights from this project will be considered within the context of other FHWA and related research on the broader question of AV impacts on infrastructure and how they may be addressed. The project will be kicked-off with a web-based workshop in June, 2020. Project work will continue into FY2021.

FUNDED PROJECTS

VOLUME AND TURNING MOVEMENT PROJECT

The focus of this project is to research how probe data can be used to estimate volumes throughout a highway network, which is then used for both operations and planning purposes. The Coalition has worked with member states to create the opportunity to compare probe GPS trace methodology to actual data. The results of this continued work will lead to the development of a volume estimate product that will give agencies the ability to move from estimating volumes from point data to using ubiquitous traffic volume data. The VTM Steering Committee updates members on the results and status of the product development through webinars.

November 13, 2019

Ubiquitous Traffic Volume from Probe Data Webinar

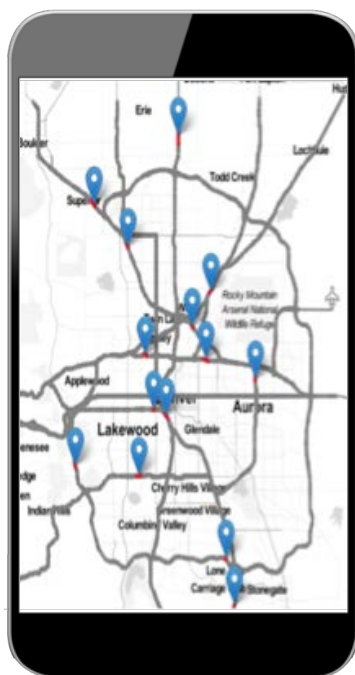
- Ubiquitous Estimation of Traffic Volumes – National Renewable Energy Lab
- Traffic Volume Estimation using GPS Traces

April 21, 2020

Volume Estimation using Machine Learning Approaches & Probe Vehicle Data

- Harrisburg, Pennsylvania Freeway Results NREL—TomTom Data
- Traffic Volume Estimation Using GPS Traces: Greater Harrisburg
- Harrisburg, Pennsylvania Off-freeway Results

FROM POINT DATA



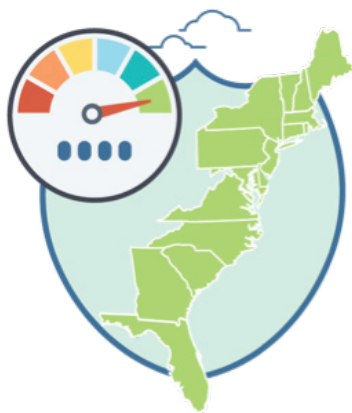
TO

UBIQUITOUS TRAFFIC VOLUME DATA



MILEAGE-BASED USER FEE EXPLORATION

The Coalition is leading the exploration of mileage-based user fees (MBUF) along the eastern seaboard.



The purpose of the work is to assess if MBUF could be a replacement for the fuel tax. As fuel efficiency increases and more electric vehicles are on the road, the amount motorists pay to use our transportation system is linked to the type of vehicle they drive versus the number of

miles they drive. An MBUF provides a different approach: pay for what you use.

In 2019 the Coalition led an expanded passenger vehicle pilot to bring the insights and concerns of the general public into the national discussion of how to establish a sustainable transportation funding source. The Pilot ran from July through October and included nearly 900 participants in Pennsylvania and Delaware. Educational materials, including focus groups and surveys were developed and used to bring the public into the conversation. Findings included 67% support for MBUF implementation, 13% of miles were driven outside participants home state, 65% of participants learned more about how transportation is funded and concerns for data privacy and security notably decreased.

“““

YOU JUST NEED TO SAY, ‘YOU’RE DRIVING ON THE ROAD, SO YOU NEED TO PAY FOR IT.’ IT’S A VERY SIMPLE IDEA.

— PENNSYLVANIA RESIDENT —

“““

I UNDERSTAND THAT THE CARS ARE GETTING MORE EFFICIENT, BUT THE PROBLEMS ARE STILL THE SAME. WE STILL HAVE TO FIX STUFF AND WE HAVE TO PAY FOR IT.

— DELAWARE RESIDENT —

Simultaneously, the Coalition conducted the nation’s first multi-state truck pilot. The motor carriers are heavy users and payers of the transportation system. Given this, the Coalition made it an early priority to directly engage the trucking industry in MBUF work. The 2019 Multi-State Truck Pilot used real-world data compiled from 55 vehicles that traveled over 1.4 million miles across 27 states. The six-month pilot highlighted how the trucking operating environment is different and complex, how the International Fuel Taxation Agreement and the International Registration Plan are potential MBUF implementation frameworks, how one MBUF per-mile rate will not work for trucks and the need for educational material that communicates the need for sustainable transportation funding.



The Coalition is committed to bringing the unique characteristics of the eastern seaboard and our key stakeholder into the national pursuit of sustainable funding, but for now is neutral regarding MBUF as the ultimate solution for transportation funding.

—THE EASTERN
TRANSPORTATION
COALITION



5000 COLLEGE AVENUE SUITE 2200
COLLEGE PARK, MD 20742

www.TETcoalition.org

Dr. Patricia Hendren

Executive Director

phendren@tetcoalition.org

Patty Reich

Program Manager

preich1@tetcoalition.org

Mai Quynh Le

Associate Program Manager

mql@tetcoalition.org

Marygrace Parker

Director, Freight Program

mgparker@tetcoalition.org

Denise Markow

Director, Transportation Systems Management
& Operations Program

dmarkow@tetcoalition.org

Virginia Reeder

Program Associate, Innovation Program

vreeder@tetcoalition.org

PREPARED BY

