The Road Oft Taken: Mileage-Based User Fees and the Future of Road Revenues

July 10, 2022
Why are we discussing road revenues?
We need our roads.
Drivers are paying less fuel tax per mile driven.
The transportation fleet is changing.

Example: North Carolina

![Graph showing fuel tax paid (average monthly by vehicle type)]

- **Low Efficiency (5-15 MPG)**: $36
- **Average Efficiency (15-25 MPG)**: $18
- **High Efficiency (25-45 MPG)**: $10
- **Hybrid (45-55 MPG)**: $7
- **Electric (Fuel Not Needed)**: $0

*Calculations are based on state fuel tax rates for North Carolina.*
Virginia: Fuel tax revenues projected to decline by 2040

~31% reduction in gas tax collections due to increased fuel efficiency

Source: KPMG Analysis
There is a gap in public understanding.

Example: Pennsylvania
We need a new & more sustainable way to fund transportation.
What is an MBUF?

Most states are looking at MBUF to replace the gas tax.

From this...

HOW MUCH GAS YOU USE

To this...

HOW MANY MILES YOU DRIVE
How MBUF (May) Work: 
Account Managers

1. Vehicle Mileage/Other Data
   - Mileage reporting device collects and transmits mileage and fuel consumption data to Account Manager.

2. Invoice
   - Account Manager performs transaction processing and sends invoice to vehicle owner.

3. Payment
   - Vehicle owner makes MBUF payment.

4. MBUF Transfer
   - Account Manager transfers MBUF to State with associated reports (e.g., aggregated data).

5. Oversight Functions
   - State provides certification, auditing, and oversight of Account Manager.

Motorist Account Manager State(s)
How MBUF (May) Work: Mileage Reporting

- Plug-in device
- Flat fee
- GPS and non-GPS options
- In-vehicle telematics
- Odometer reading
Authorized grants to states for demonstrating:

- ✔️ User-based alternative revenue mechanisms
- ✔️ Utilization of a user-fee structure
- ✔️ A solution to maintain the future long-term solvency of the Federal Highway Trust Fund

Provides $95 million over 5 years

Section 6020 of the Fixing America’s Surface Transportation Act
Why did the Coalition get engaged?
In 2016, an Eastern Seaboard voice was needed.
Who is the Eastern Transportation Coalition?

17 States + D.C. and 200+ agencies

- 40% of the U.S. population
- 38% of the nation's jobs
- 35% U.S. vehicle miles traveled
- 21% of the U.S. road miles

Connecting for Solutions
# THE COALITION STRUCTURE

## EXECUTIVE BOARD
- DOT CEOs

## COALITION STAFF
- Steering Committee & Co-Chairs

## PROGRAM TRACK COMMITTEES

### TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS
- VPP Marketplace
- Data Tools & User Groups
- Traveler Information
- Traffic Incident / Event Management
- Operations Academy

### FREIGHT
- Freight Planning
- Freight Data
- Truck Parking
- Supply Chain Performance
- Freight Academy

### INNOVATION IN TRANSPORTATION
- Connected & Autonomous Vehicle
- Tolling Reciprocity
- Mileage-Based User Fee

16 TETCOALITION.ORG
Coalition's STSFA Grant Work aims to bring the nation’s understanding of MBUF forward.

Topics explored in FIVE grants awarded to the Coalition:

- **Out-of-State Mileage**
  How will travel across boundaries be handled?

- **Tolling**
  How can lessons learned from tolling be applied to MBUF?

- **Public Acceptance**
  What is the best way to discuss and design an MBUF system?

- **Trucking**
  How does a user fee fit into current requirements?
Overview of TETC Pilot Work

4 Passenger Vehicle Pilots

1,500+ Passenger Vehicles
14 States Represented Among Participants
3,000 Public Opinion Survey Respondents

2 Commercial Vehicle Pilots

270 Commercial Trucks
11M Miles traveled in 2020-2021
48 States Traveled + Canada

Completed 3 of 5 awarded grants

Participant Surveys & Focus Groups
Geographic Equity Analysis
Tolling, Congestion Mitigation & Rate-Setting Studies

Participant Surveys & Interviews
Motor Carrier Working Group
Rate-Setting Studies

NATION’S FIRST MULTI-STATE & NATIONAL TRUCK PILOTS
2022: A Very Different MBUF Landscape

Conducted/Conducting MBUF Pilot

Legislation for Voluntary MBUF Program

MBUF Studies through RUC West Membership

MBUF Studies through Eastern Transportation Coalition

Conducted/Conducting MBUF Pilot through Eastern Transportation Coalition
Top Ten Things We’ve Learned About MBUF
01

Start the conversation by talking about values.

What the public values:
- Quality of life
- Safety
- Healthy economy
- Well maintained system

The public doesn’t view transportation as urgent and thinks funding is okay.

Link MBUF to values and the problem — and keep it simple.
The public is growing more comfortable with GPS-enabled technology.

“You carry your cellphone everywhere you go. You use your GPS most all the time. You're being tracked regardless, so one more piece of data—put to some other useful function, I think, is a better way of promoting it.”

— North Carolina Focus Group

“Even if you were tracking with GPS, my phone and other apps do that as well. I use E-Z Pass on toll roads and that tracks me.”

— New Jersey Focus Group
Choice is key.

2020-2021 Pilot with Transportation Stakeholders

83% chose GPS-based mileage reporting
89% were satisfied with the device they chose
17% chose non-GPS mileage reporting
94% were satisfied with the device they chose
Rural drivers may fare better with MBUF.

Annual Costs Under MBUF

- $9
- $13
- $34
A Tale of Two Cars

2009 Toyota Camry

25 MPG
$160 Fuel Tax Paid

2019 Toyota Camry (Hybrid)

52 MPG
$42 Fuel Tax Paid

Source: U.S. News and World Report
Calculate Your Mileage

COMPARE FOR YOURSELF

Eastern Transportation Coalition State:
Which state do you reside in?
Please select a state...

Do you drive an electric vehicle?
- Yes
- No

Mileage:
How many miles do you drive per month?
[Enter Miles]

Vehicle:
Enter your vehicle's average MPG
- I know my vehicle's average MPG
- Find my vehicle's average MPG

What is the average MPG of your vehicle? Find your vehicle's MPG [here].
[Enter MPG]

Calculate Now
• Motor carriers directly participated in the multi-state and national pilots.

• Motor Carrier Working Group has been key.

• We have also gone to where they are (Road Dog, 10-44 Podcast, State Truck Publications, Conferences (ATA, TCA)).

Bringing the trucking industry’s voice to the table is essential.
Motor Carrier Working Group

The Eastern Transportation Coalition
Motor Carrier Working Group

Regulators

Freight Shippers

TETC MCWG

Trucking Companies

Trucking Manufacturers

Trucking Associations

Kentucky

drive.ky.gov
Leveraging Technology Creates Solutions.

- Tolling
- Congestion pricing
- Out-of-state mileage
- Easy mileage reporting
**Congestion Mitigation**

**Harrisburg, Pennsylvania**

**Time of Day**
- Additional charge of 20 cents / mile on mileage accrued in Pennsylvania between AM peak (6:30-9:30 AM) and PM peak (4-6:30 PM)

**Cordon Pricing**
- Additional surcharge of $5 when entering the Harrisburg Central Business District during AM / PM peaks
AAA Study: Drivers buy EVs primarily because of environmental impact.

1/3 of Oregon’s voluntary participants are EV drivers

Plug In America supports the eventual development of a road usage charge program.

EV owners often do support MBUF.
Why? The biggest cost is fuel – not the fuel tax.

- **6.50 Average MPG More Efficient Truck**
- **3.50 Average MPG Less Efficient Truck**
- **35 Average MPG Honda Civic**
- **15 Average MPG Dodge Dakota**
The Eastern U.S. sees significant cross-state travel.

13% of 1.9 million miles traveled in our 2020-2021 pilots were accrued out of state.
Capturing miles driven by “out-of-towners” is important for Eastern U.S. states.

MBUF can rectify fuel tax shortcomings and capture payments from those purchasing gas in other states.

MBUF can account for out-of-state mileage.
The Work Needed to Move Forward
Virginia has a live MBUF program beginning July 1.

What:
- Voluntary MBUF program
- Option in lieu of Highway Use Fee

Who:
- Drivers of >25 MPG vehicles whose vehicle registration is up for renewal

How:
- Per-mile rate determined by dividing what your highway use fee would have been by 11,600 (the average number of miles driven per year by all Virginians).
- Those driving less than average Virginia driver (11,600) save money
We need pilots, focused outreach, and legislation.