

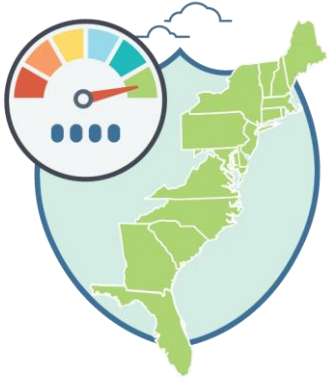


# Future of Funding

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Trish Hendren, Executive Director,  
I-95 Coalition

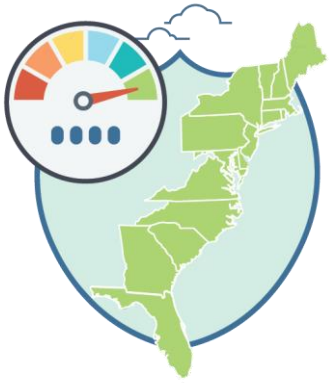
**#WeTheStates**



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# Mileage-Based User Fees (MBUF) in an Electrified World

*Dr. Patricia Hendren,  
Executive Director - I-95 Corridor Coalition*



# The Next 20 Minutes....

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1. The revenue problem
2. MBUF exploration
3. MBUF and EVs
4. Issues to consider

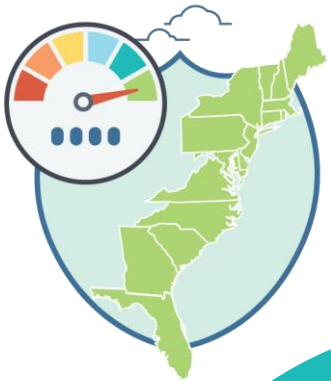




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# THE PROBLEM

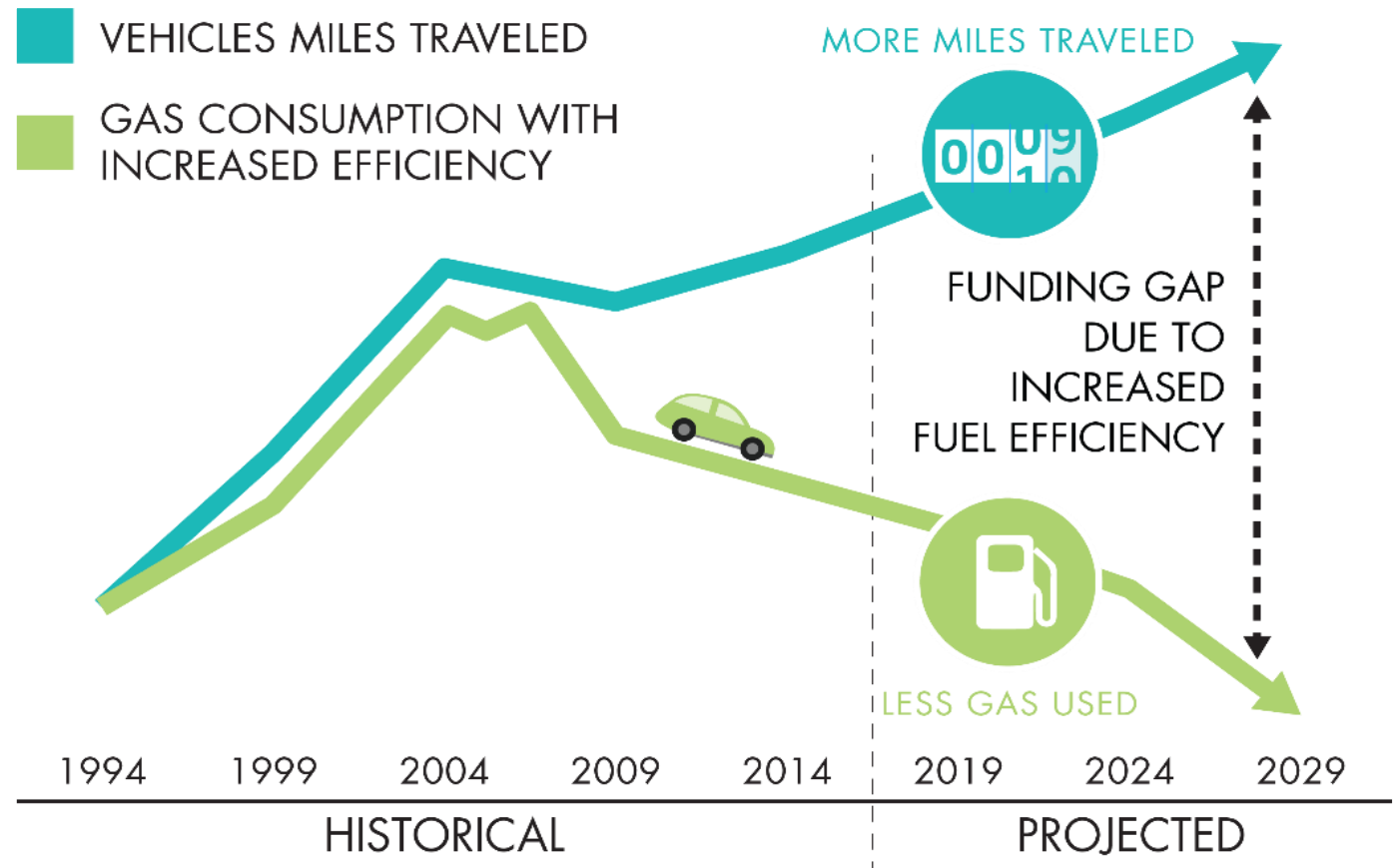
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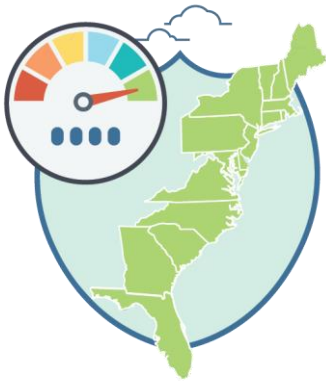


# Transportation Revenues are Declining

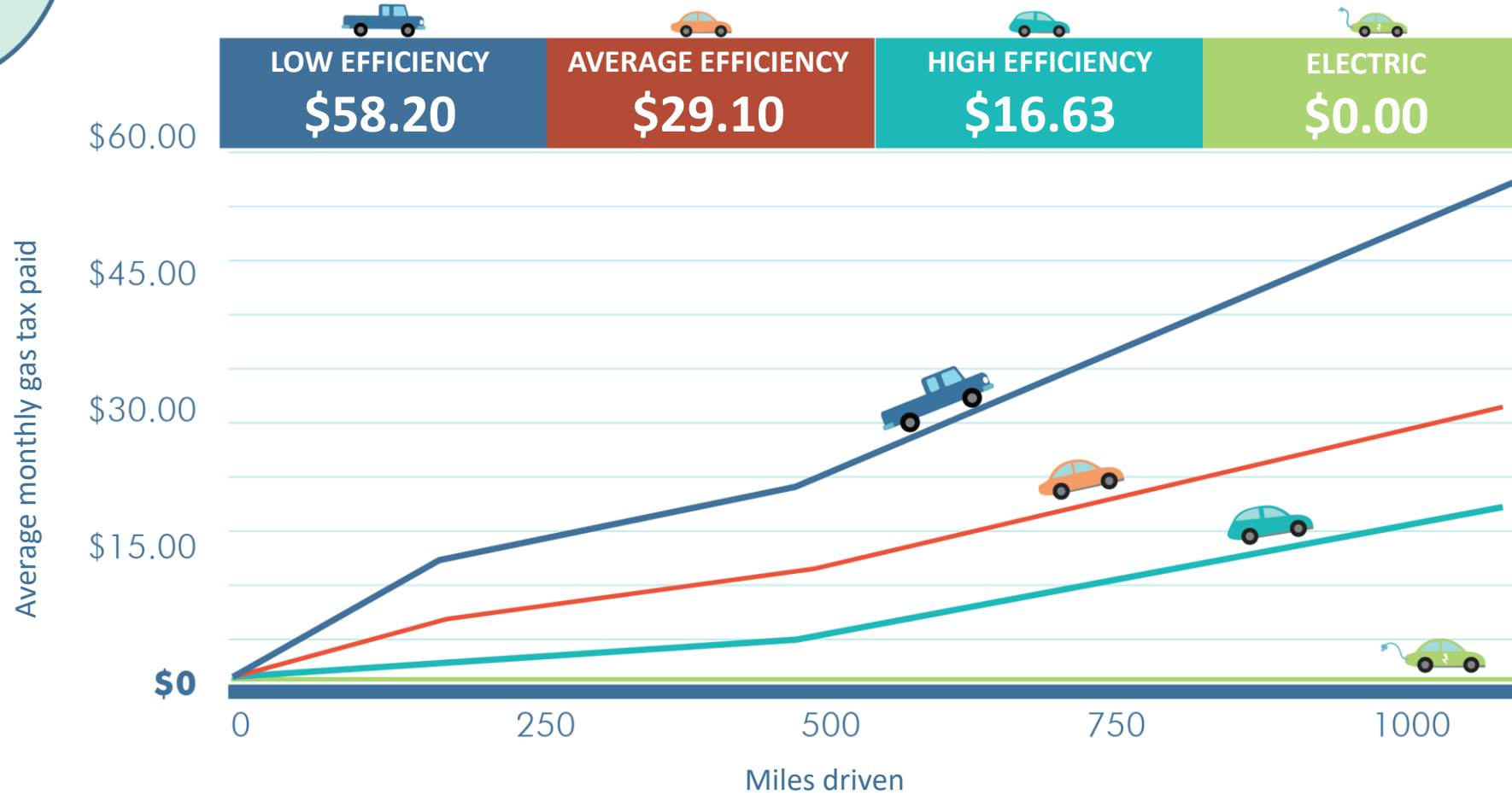
39%

Decrease in purchasing power of federal fuel tax since 1993





# Transportation Fleet is Changing



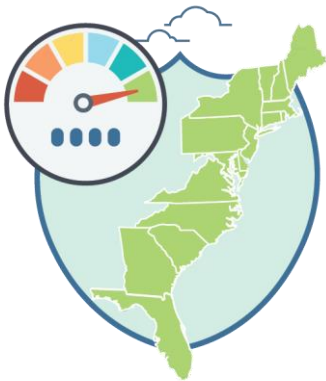
〜(ツ)〜

**Drivers have no idea  
how much they are  
paying in fuel tax.**

# EXPLORATION







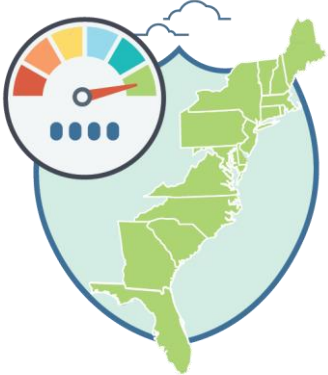
# STSFA Grant Program

*The Surface Transportation System Funding Alternatives (STSFA) program under Section 6020 of the Fixing America's Surface Transportation (FAST) Act .....*

- **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**

**50-50**

**Match  
Required**

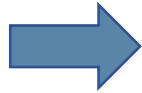


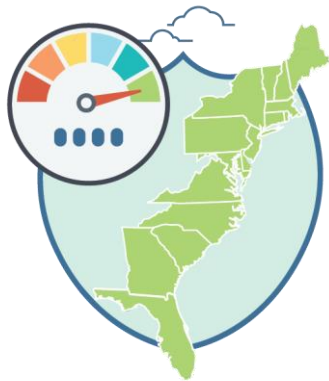
# Mileage-Based User Fees (MBUF)

FROM THIS.....



TO THIS.....

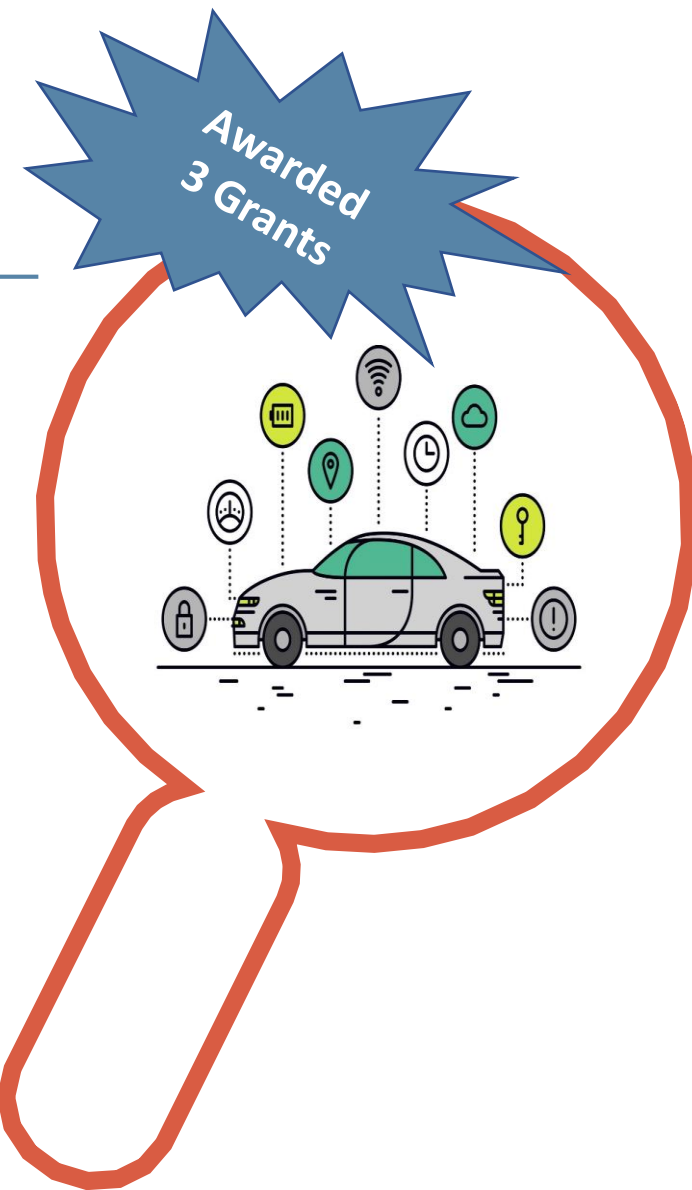




# I-95 Coalition STSFA Grants

***Purpose:** Explore the feasibility of replacing the gas tax with a mileage-based user fee program in a multistate environment*

- **OUT-OF-STATE MILEAGE**  
How will travel across boundaries be handled?
- **TOLLING**  
What is the relationship between tolling and MBUF?
- **TRUCKING**  
How does a user-fee fit into current requirements?
- **AMENITIES**  
Will value-added amenities help with public acceptance?





# I-95 MBUF PROJECT



# 16 states + D.C.

In the Corridor

**3<sup>rd</sup>**

Largest Economy in the World

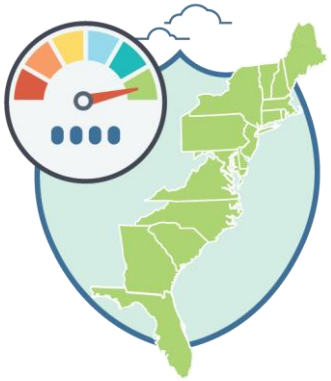
\$7.4 Trillion  
xx% of US GDP

**33%**

of US total employment:  
55.9 Million jobs

**46**

Major Seaports  
\$395 Billion in  
International Exports



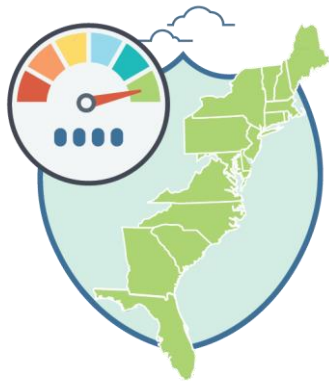
# More than I-95

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**Multi-modal • Multi-jurisdictional • Multi-disciplinary**

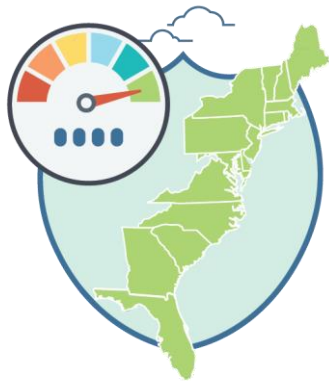


**The I-95 Corridor Coalition is a partnership of multi-state, multi-modal public agencies working together to create a seamless and efficient transportation system.**



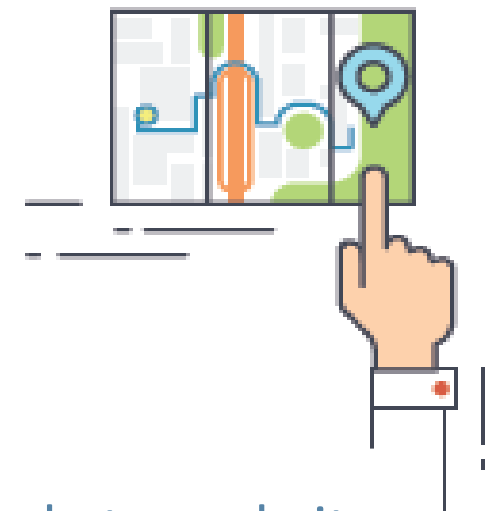
# I-95 Coalition MBUF – Phase 1

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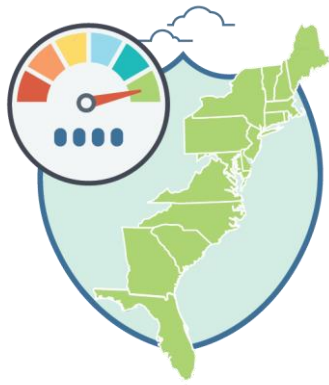


## Phase 2 & 3: More Exploration

- Hear from the public through an expanded multi-state Pilot with up to 1,000 volunteers
- Further test the tolling concept
- Explore privacy concerns and equity across urban and rural areas
- NEW Partner: Transurban (VA)
  - Explore MBUF for congestion management
- NEW Partners: NJDOT and NCDOT
  - Focused pilot to begin exploration / education
- Education & Outreach
  - Surveys, Focus groups, interviews, video, briefing packets, website







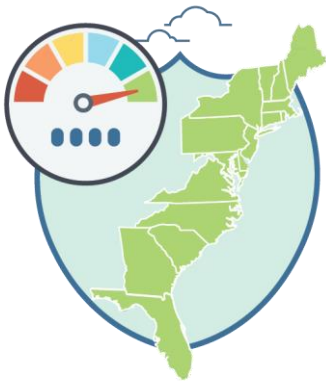
## Phase 2 & 3: Multi-State Truck Pilots

- October 1<sup>st</sup>, 2018 – March 31<sup>st</sup>, 2019
- EROAD is the technology partner
- Pilot purpose:
  - Explore feasibility of existing regulations and technology as a framework for a MBUF
  - Gain a better understanding of motor carriers needs and viewpoints.

### Next Steps

- Compile insights from IFTA Auditors Workshop
- Interviews with motor carriers
- Motor Carrier Working Group





## Important to Remember:

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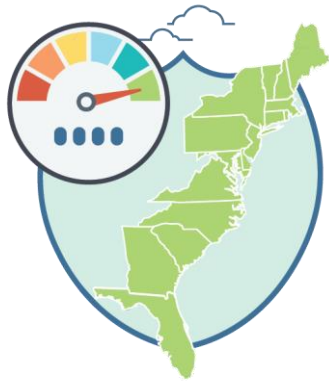
The I-95 Corridor Coalition members want to promote a better understanding of why investing in transportation is important, and why the current fuel tax does not provide a long-term and equitable solution in this regard. The Coalition, representing transportation agencies along the entire Eastern Seaboard, believes exploring the feasibility of a MBUF solution is important; for now, however, the Coalition is neutral if MBUF is the ultimate solution.



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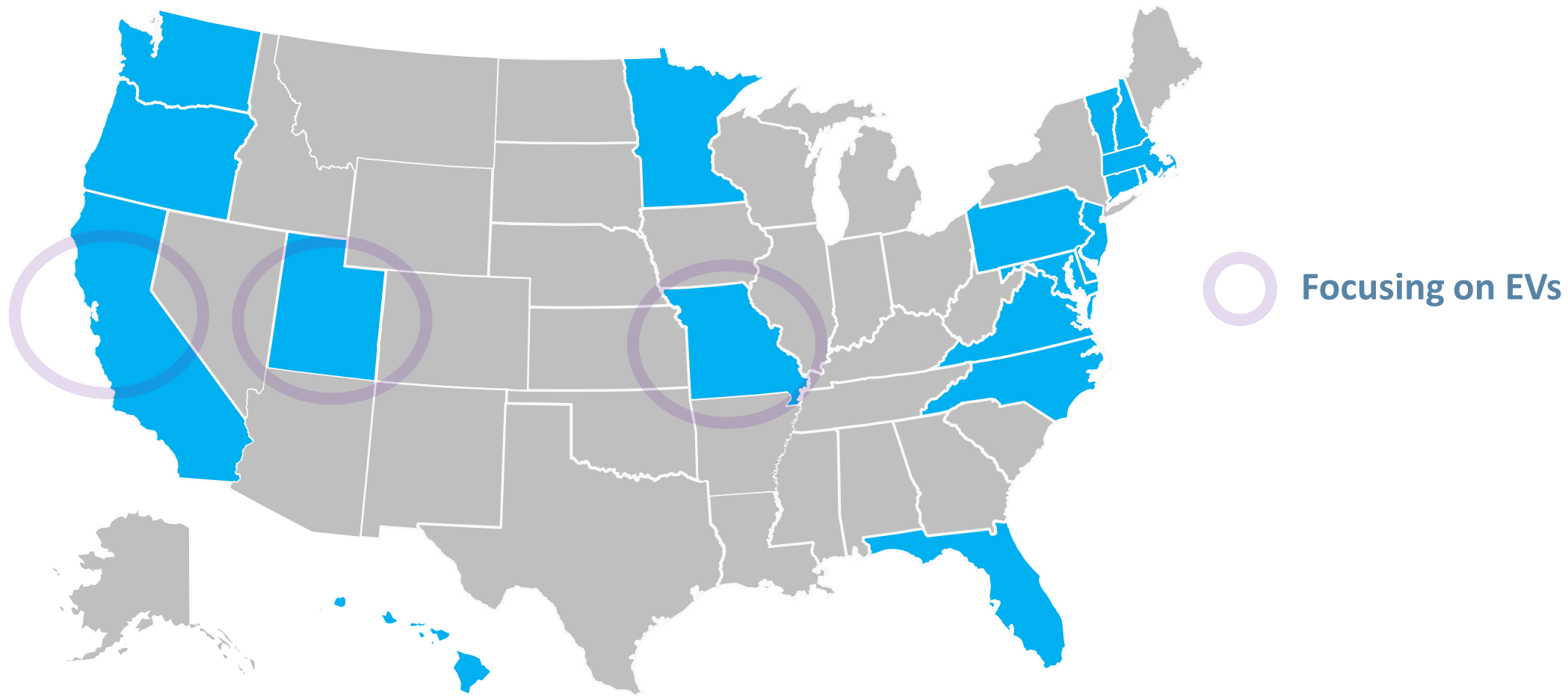
# EVs AND MBUF

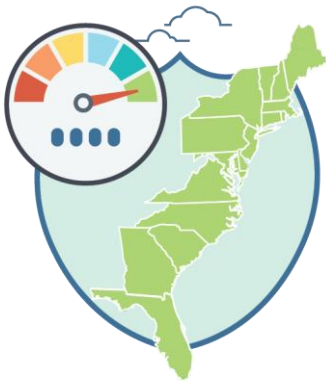
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# States with MBUF Pilots Activity

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# Other STSFA Grants Addressing EVs

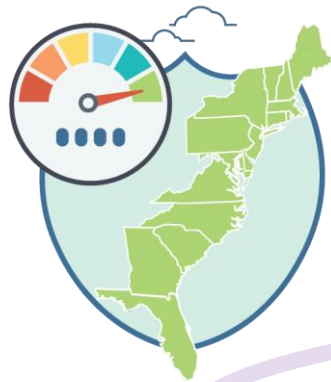
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## Missouri

- Exploring if vehicle registration fees can use vehicles' fuel efficiency (MPG) to assess a fair and equitable user charge
- Grant work designed to capture lost fuel tax revenues due to increasingly fuel efficient vehicles
  - Ex: < 29 MPG no additional fees while > 61 MPG pay over \$200

## California

- Can MBUF technology capture fees at the point of sale?
  - Both fuel pumps and charging stations



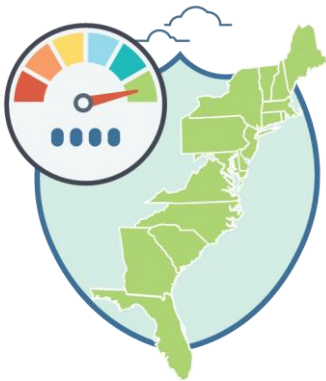
# Utah



Legislation passed to charge flat fees for alternative fuel vehicles

- MBUF may be used in lieu of flat fee
  - Enrollment starts Jan 1, 2020
  - Enroll with account manager using plug-in device or in-vehicle telematics
  - Out of state miles exempted
  - Odometer “true-up” at annual registration
  - MBUF amount can not be greater than flat fee

Year	Vehicle Type		
	Electric	PHEV	Gas Hybrid
2019	\$ 60	\$ 26	\$ 10
2020	\$ 90	\$ 39	\$ 15
2021	\$ 120	\$ 52	\$ 20



# Financial Analysis

## What if we only focus on EVs?

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### I-95 Corridor Coalition Analysis

- Looked at DE & PA
- 15-year horizon assuming 10% annual growth in EV / PHEVs
- Additional administrative costs of MBUF 16% would need to be covered by relatively few vehicles

**➔ Decrease in Total Net Revenues**

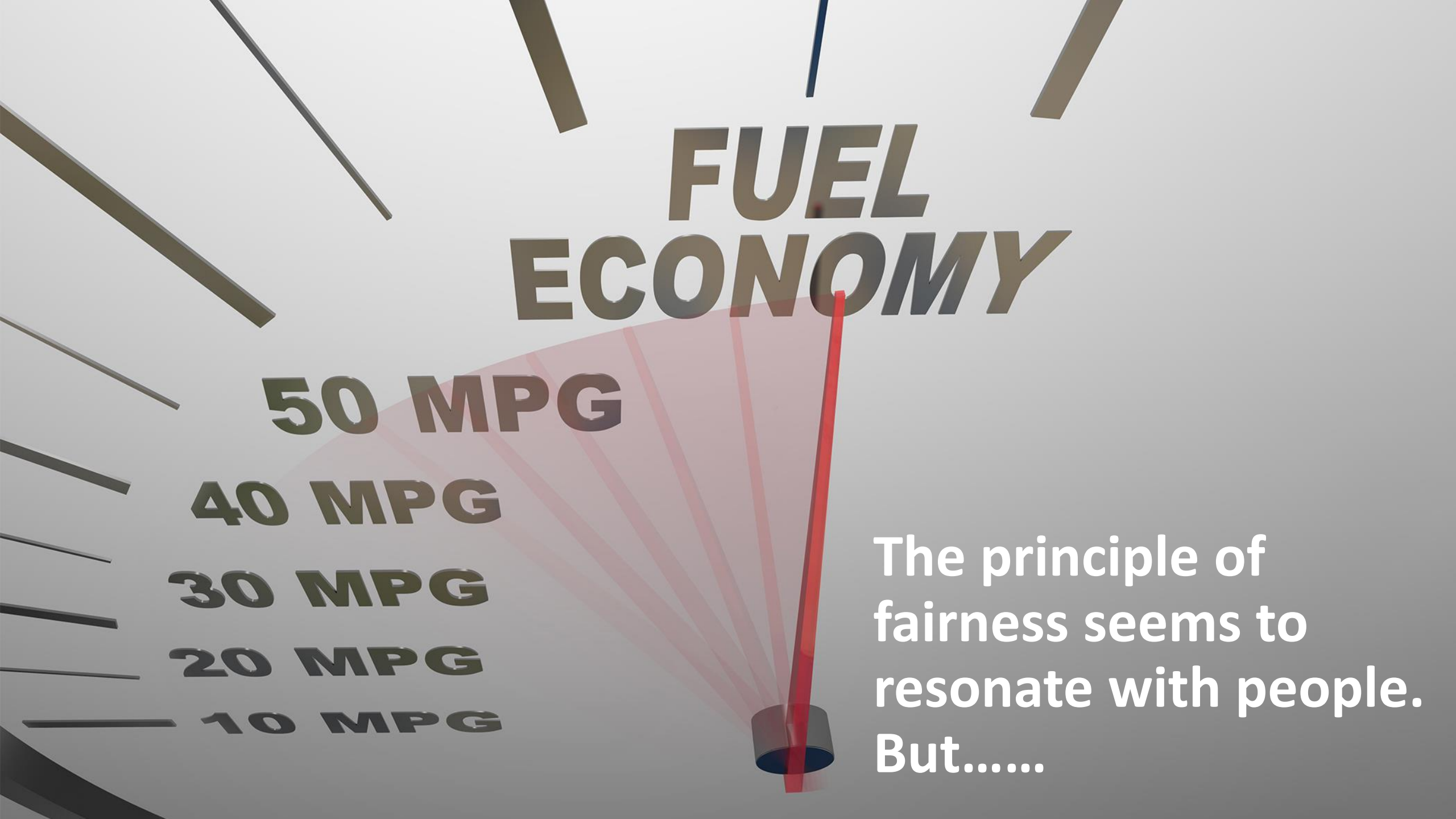
### Analysis of increased EV registration fee in CA (UC-Davis)

- The fee recovers part of the decrease in fuel tax revenue; but it is “unsustainable” in the long run



**ISSUES TO  
CONSIDER**





# **FUEL ECONOMY**

**50 MPG**

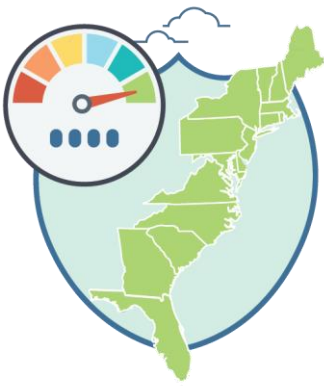
**40 MPG**

**30 MPG**

**20 MPG**

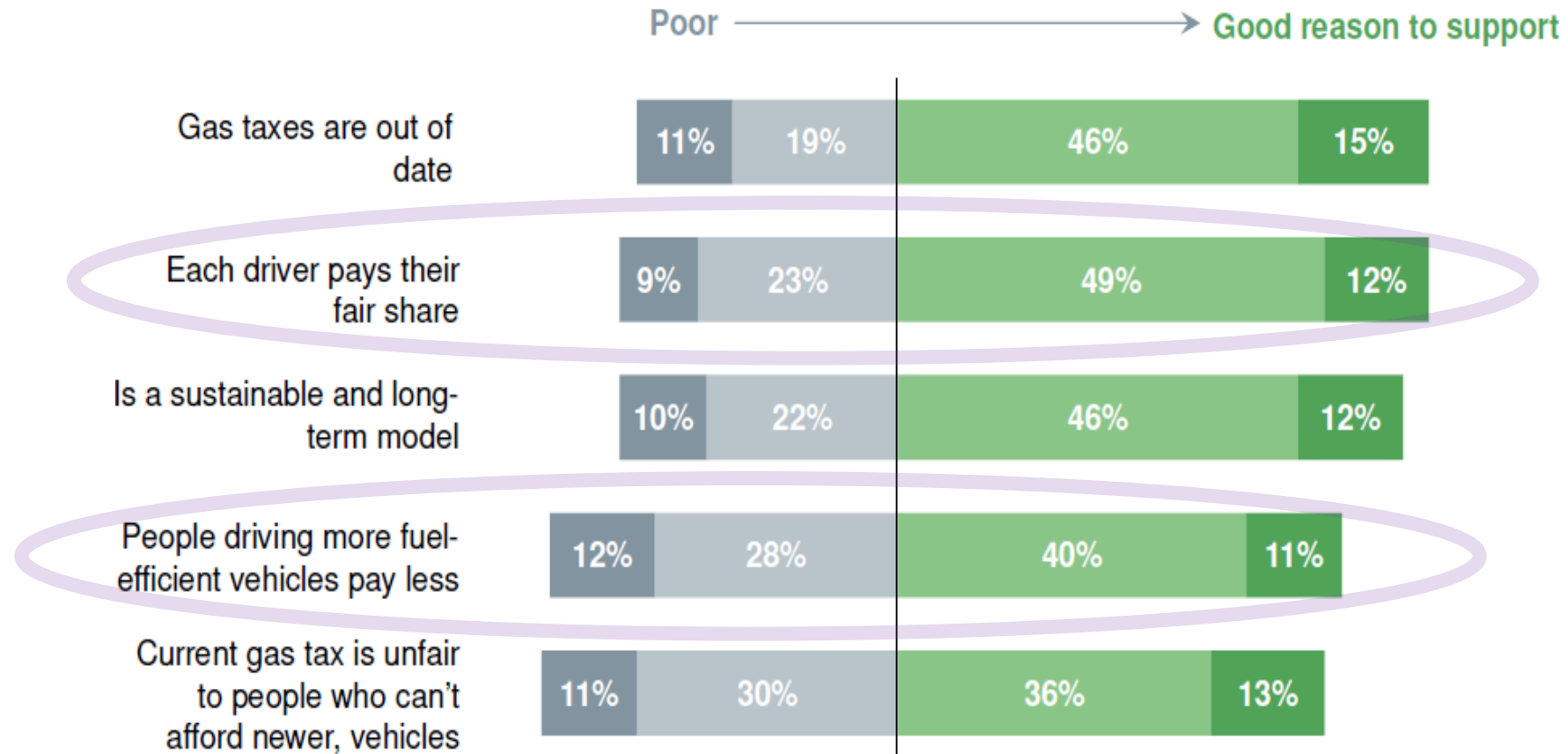
**10 MPG**

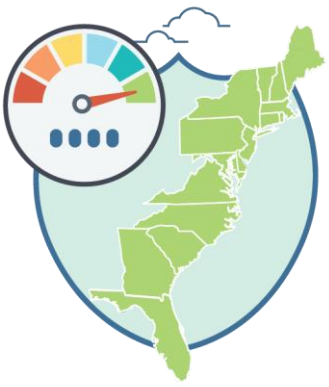
The principle of  
fairness seems to  
resonate with people.  
But.....



# Results from a Recent Statewide Survey (DE & PA)

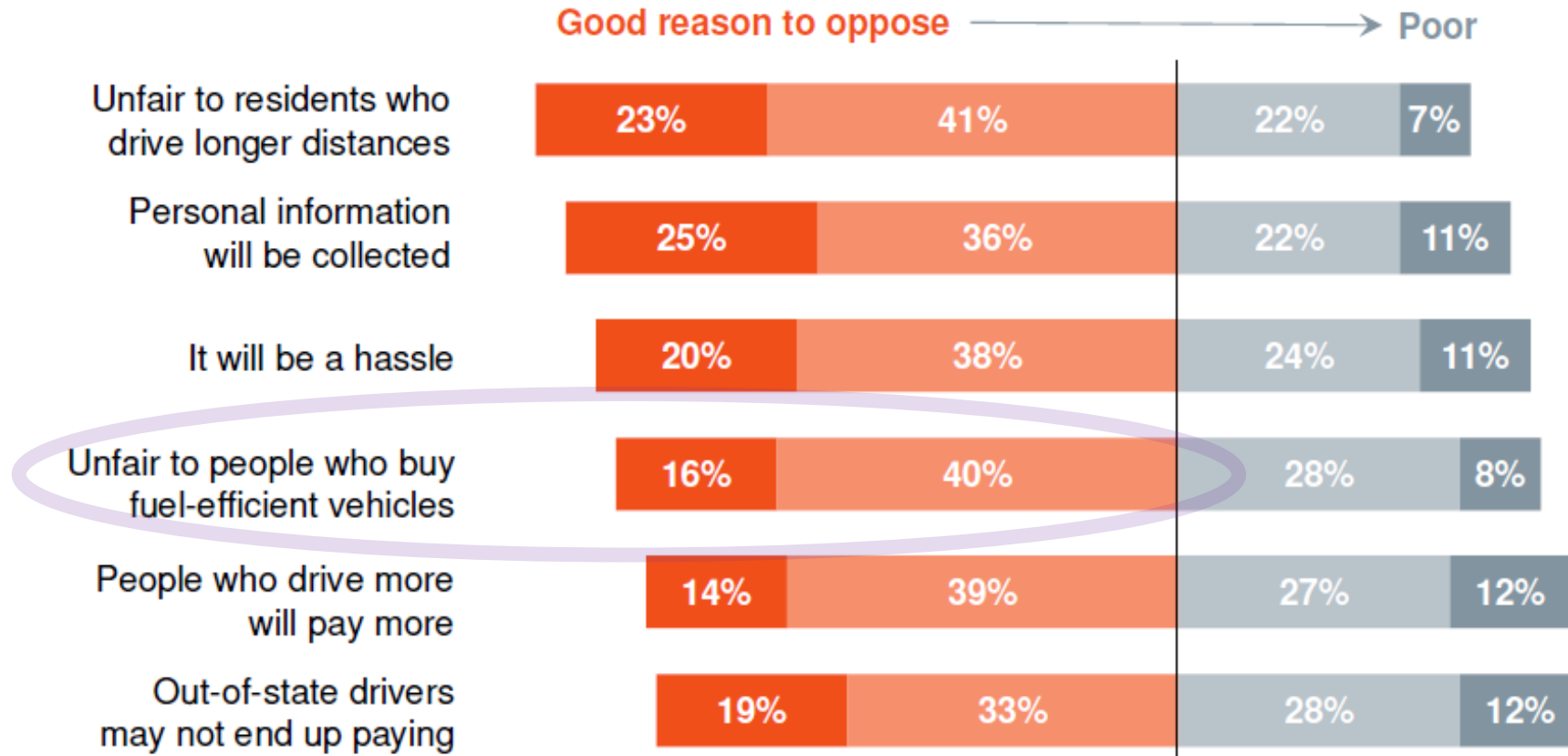
## Messages to Support MBUF

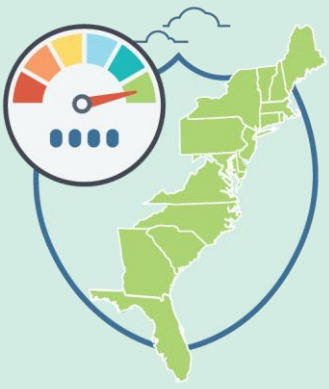




# Results from a Recent Statewide Survey (DE & PA)

## Messages to Oppose MBUF





# Why are Drivers Interested in Buying EVs?

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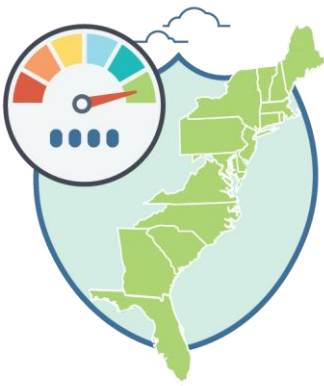
## Per AAA Survey in 2018

- Concern for environment (80%)
- Lower long-term costs (67%)
- Cutting edge technology (54%)
- Access to car pool lane (35%)

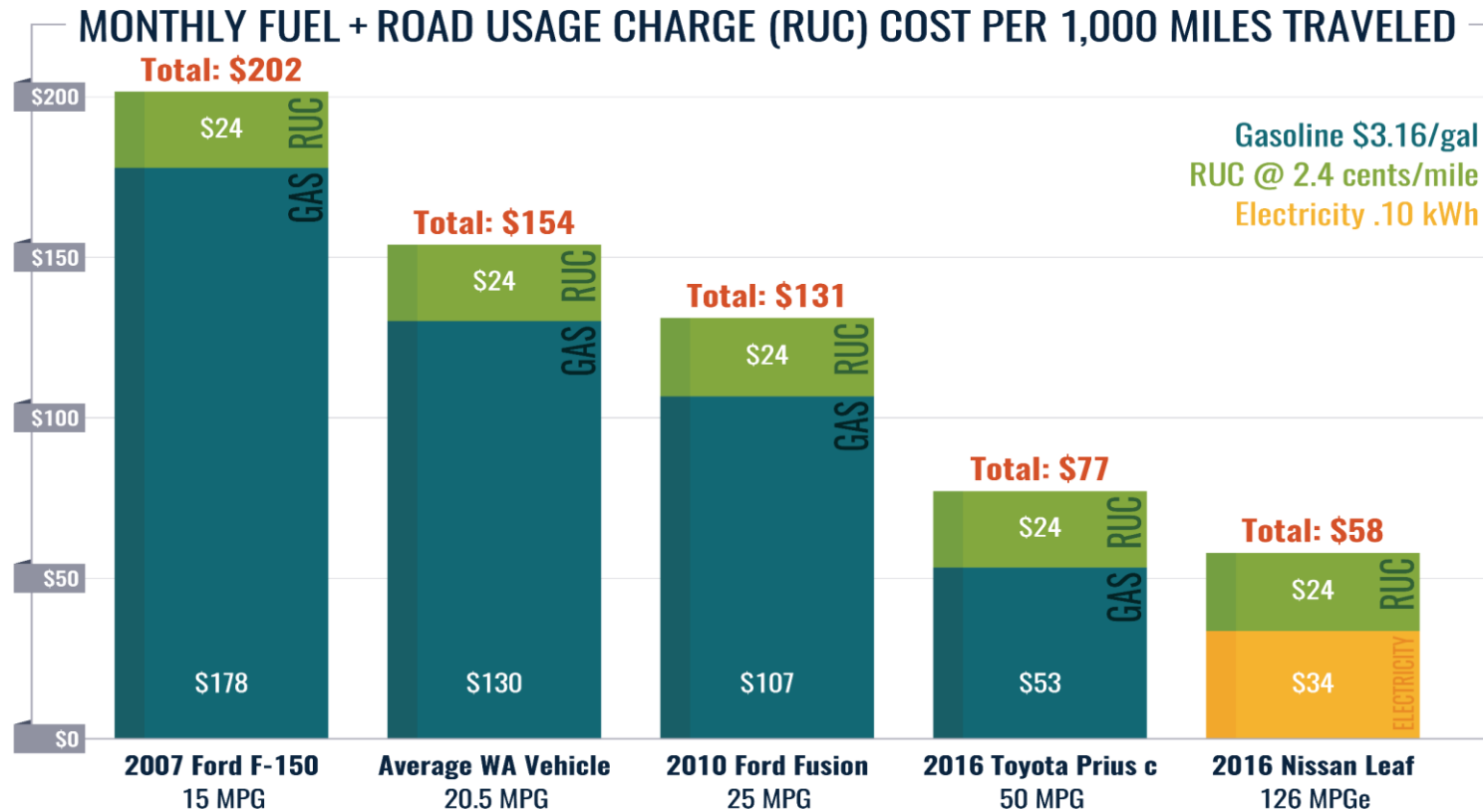
~20%

of fuel cost is  
federal and state  
taxes





# Fuel Tax (or RUC) as a Portion of Total Fuel Costs



While RUC does result in drivers of fuel efficient vehicles paying a little more in taxes for transportation as compared to the gas tax, the overall cost advantage of owning a fuel efficient, hybrid, or EV remains significant.

For example, under RUC, owners of a Prius will pay \$125 dollars per month less than the Ford pickup truck driver.



Washington State  
Transportation Commission

# An MBUF Could Allow Room for Policy Flexibility

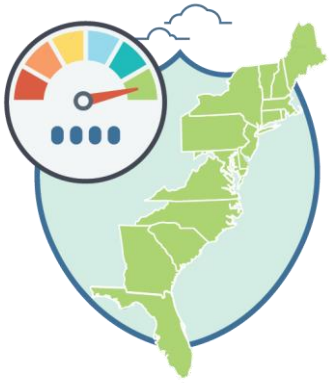


GASOLINE

ELECTRIC



**KEEP IN  
MIND  
WHY  
WE'RE  
EXPLORING**



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# Thank You!

*Learn more at:  
[www.I95CoalitionMBUF.org](http://www.I95CoalitionMBUF.org)*

