OKLAHOMA

ROAD USER CHARGE TASK FORCE REPORT TO THE OKLAHOMA LEGISLATURE

DECEMBER 2023

fair miles OKLAHOMA

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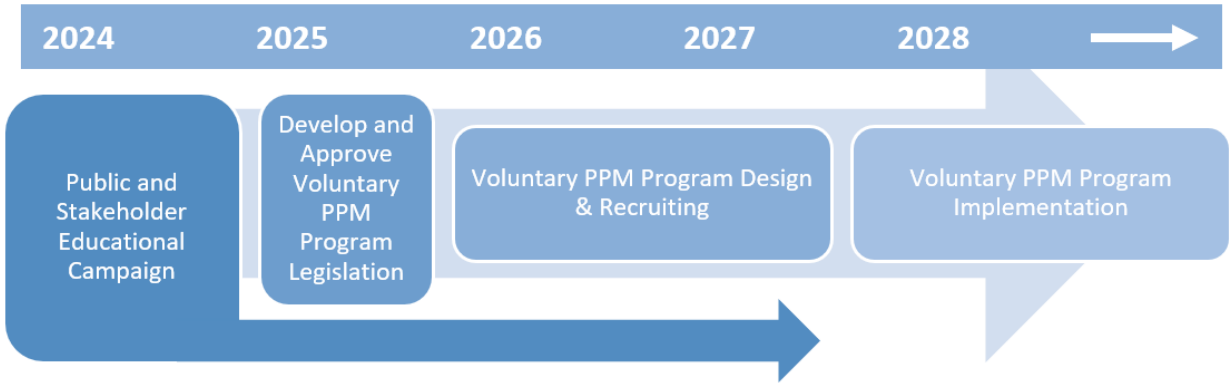
ACRONYMS

Abbreviation	Term
AM	Account Manager
CNG	Compressed Natural Gas
ConOps	Concept of Operations
DMP	Data Management Plan
EP	Evaluation Plan
EV	Electric Vehicles
FHWA	Federal Highway Administration
FY	Fiscal Year
GPS	Global Positioning System
GVWR	Gross Vehicle Weight Rating
HB	House Bill
IFTA	International Fuel Tax Agreement
IIJA	Infrastructure Investment and Jobs Act
IMS	Insurance and Mobility Solutions
iOS	iPhone Operating System
ITS	Intelligent Transportation Systems
LRTP	Long Range Transportation Plan
MPG	Miles Per Gallon
MRO	Mileage Reporting Option
NCSL	National Conference of State Legislatures
OBD	On-board Diagnostics
ODOT	Oklahoma Department of Transportation
OEM	Original Equipment Manufacturer
OTA	Oklahoma Turnpike Authority
OTC	Oklahoma Tax Commission
PHEV	Plug-In Hybrid Electric Vehicle
PII	Personally Identifiable Information
PPM	Pay-Per-Mile
PR	Public Relations
ROADS	Rebuilding Oklahoma Access and Driver Safety
RUC	Road User Charge
STSFA	Surface Transportation System Funding Alternatives
URL	Uniform Resource Locator
USDOT	United States Department of Transportation
US EPA	United States Environmental Protection Agency
VMT	Vehicle Miles Traveled
VIN	Vehicle Identification Number

ROAD USER CHARGE TASK FORCE SUMMARY OF FINDINGS AND RECOMMENDATIONS MOVING FORWARD

As directed by HB 1712, the Road User Charge Task Force (RUC Task Force) has successfully implemented a Pay-Per-Mile (PPM) Pilot and analyzed various options best suited for Oklahoma to address its declining fuel tax revenues and research a replacement that is fair for those utilizing the state's transportation infrastructure. While current technology may be cost prohibitive to implement a full-scale PPM fee structure at this time, there are several actions recommended for the Legislature moving forward.



Task Force Recommendations:

- **Public and Stakeholder Educational Campaign**: The Task Force recommends that ODOT enhance its educational efforts to provide information to the driving public on the impact of declining transportation revenues, the various funding streams that support the transportation systems in Oklahoma, the inflationary increases associated with the ongoing cost of maintaining Oklahoma's infrastructure, and the impact of this critical infrastructure on improving state commerce and our quality of life. This engagement effort would include all governmental entities, state, counties, and cities, along with all modes of transportation. Additionally, this engagement would educate Oklahomans about how transportation is currently funded and share the future challenges as motor fuel tax declines. This educational campaign would also present an opportunity to educate Oklahomans on how a PPM program could be used as an alternative to motor fuel tax and demonstrate the opportunities for fairness in its application for transportation.

- **Transition Transportation Funding Away from General Revenues Where Possible**: Aligning revenue inputs with public expectations and understanding of infrastructure needs is a critical interim step as Oklahoma discusses and develops long term prospects for generating future transportation infrastructure investment resources. The Task Force recommends that Oklahoma explore steps to fully dedicate vehicle revenues to Oklahoma's state, county and local roads and bridges, transitioning away from general revenues where possible. Options for consideration, including interim steps to help offset revenue losses and safeguard transportation funding, are presented in Section 3.

- **Develop Legislation for a Voluntary PPM Program**: While it may be cost prohibitive to implement a full-scale PPM fee structure at this time, the Task Force recommends that legislation be introduced during the 2025 session to develop and implement a voluntary PPM program in Oklahoma. This is intended to assist with technology development and further familiarize Oklahomans with this fuel tax replacement option. As vehicle technology advances, the administrative costs or "cost-to-collect" should decline over time.

Waiting until 2025 to introduce legislation will allow time for the robust public engagement and education process that should help with the successful passage of the proposal. Following the successful passage of the proposed legislation in 2025, to provide adequate time for additional public engagement and to create all the necessary system parameters and requisite policies, the PPM program would not begin before January 1, 2027.

- **Implement a Tiered Rate Scale**: The Task Force recommends that the voluntary PPM program utilize a tiered rate schedule based on vehicle weight, which could allocate fees based on impact to infrastructure as a matter of fairness. Heavier vehicles result in more wear and greater infrastructure maintenance needs than light duty vehicles and would pay a higher cost per-mile to accommodate that impact.

- **Pursue Federal Funding:** The Task Force recommends that the State of Oklahoma pursue any federal funding available for the implementation of an active, voluntary PPM program, and the utilization of available technology and processes to maintain the highest level of efficiency to ensure the successful collection and allocation of PPM revenue under the law.

- **Design a Flexible Program:** The Task Force recommends that the voluntary PPM program be flexible with indexing opportunities and scalability to address current and future funding needs for transportation.

1. INTRODUCTION

Oklahoma, like most states, is concerned about the impending decrease in the effectiveness and sustainability of its statewide motor fuel tax, a major component of funding for transportation infrastructure for the state, counties, and Tribal Nations. In addition to inflation, Oklahoma is beginning to experience a decline in motor fuel tax revenues from traditional gas and diesel vehicles becoming more fuel efficient and the increasing use of alternative fuel, electric vehicles (EV), and hybrid vehicles. Because more fuel efficient and alternative fuel vehicles pay less or no motor fuel taxes, an alternative funding mechanism will be required to meet the state's long-term transportation needs.

In 2015, Oklahoma joined the Western Road User Charge Consortium[1] (RUC West – now RUC America), a 20-member transportation consortium of western states working together to share best practices, ideas and information on PPM concepts and conduct pilot studies. Oklahoma's Secretary of Transportation, Tim Gatz, currently serves as the consortium's Chair. This active involvement has given Oklahoma first-hand access to valuable lessons learned and best practices developed from prior projects.

Recognizing that the current motor fuel tax model in its current form and rate structure is unsustainable, and to demonstrate its commitment to developing alternative transportation funding, the Oklahoma Legislature passed HB 1712 in 2021. This legislation mandated the formation of a multidisciplinary Road User Charge (RUC) Task Force whose membership includes key transportation stakeholders such as state agencies and commissions, transportation industry subject matter experts, freight industry leadership, Tribal Nation representation, municipalities, and Metropolitan Planning Organizations. The RUC Task Force was charged with evaluating user-fee-based alternative funding mechanisms, conducting a pilot PPM program, and applying for federal funding to fund this effort. The bill received overwhelming support from both the Oklahoma House and Senate. Federal funding was secured through a Surface Transportation System Funding Alternatives (STSFA) grant that was awarded for the project in early 2023.

Over the duration of the project, the Task Force met 10 times to approve procurement of a program management consultant, review the STSFA grant application, receive project updates, approve account manager procurement, approve final branding and marketing materials, approve the Concept of Operations for the pilot, provide direction to project staff and consultants and review and approve reports.

This report provides a summary of the Task Force findings, including evaluation of the existing motor fuel tax, potential interim and long-term funding solutions to consider, legislative and policy considerations, and a PPM pilot evaluation including pilot results, lessons learned, and next steps. Additional technical detail for each topic can be found in the appendices.

[1] https://www.rucwest.org/

Figure 1 – RUC Task Force Members

1.1. OKLAHOMA LEGISLATIVE MANDATE

HB 1712 established several specific objectives for the Task Force, which are the subject of this report. Table 1 (Legislative Requirement Index) lists the requirements of HB 1712 and the corresponding sections of this report that address each requirement.

Table 1 Legislative Requirements Index

HB 1712 – Legislative Requirement	Responsive Sections of Report
Consult with highway users and transportation stakeholders, including stakeholders representing vehicle users, vehicle manufacturers, and fuel distributors, to ensure fair and equitable distribution of the motor fuel tax burden across all vehicles regardless of fuel source	5.1.1 Branding and Marketing 5.3.1 Engagement and Recruiting
Study the availability, adaptability, reliability, and security of methods that may be used in recording and reporting public road usage	5. How PPM Might Work in Oklahoma – Pilot 5.2. Data Management – Privacy and Security
Study the ease and cost of administering the collection of taxes and fees as an alternative to the current system of taxing highway use through motor vehicle fuel taxes *(this includes researching options that could be collected in an efficient manner, at the wholesale level when possible and at a reasonable cost)*	3. Interim and Long-Term Options for Legislative Consideration 4.4. Policy Considerations 4.4.3 Cost-to-Collect Appendix D.2 – Funding Analysis
Ensure that the process of collecting, managing, storing, transmitting, and destroying data are in place to protect the integrity of the data and safeguard the privacy of drivers	5.2. Data Management – Privacy and Security Appendix B.4 – Data Management Plan
Collaborate with other states to seek potential interoperability opportunities to capture out-of-state drivers traveling through Oklahoma	4.3 Out-of-State Vehicles Appendix D.3 Out-of-State PPM Implementation Assessment
Develop and implement a voluntary pilot program to assess the potential for mileage-based revenue collection for Oklahoma's roads and highways as an alternative to the motor fuel tax system	5. How PPM Might Work in Oklahoma – Pilot
Through public outreach, secure a sampling of individuals willing to participate in the pilot program for testing purposes in lieu of paying certain vehicle registration fees	5.3.1 Engagement and Recruiting
Seek available federal funds for studies, demonstration projects or pilots associated with the Oklahoma Road User Charge Program's implementation	Appendix E – STSFA Grant Award, January 2023
A report of findings and recommendations determined by the Task Force on how to best implement the Oklahoma Road User Charge Program shall be submitted to the Legislature by December 31, 2023	3.1 Interim and Long-Term Options for Legislative Consideration 7. Next Steps – Options for Legislative Consideration

1.2. FEDERAL GRANT CONSIDERATIONS

As directed by the Legislature in HB 1712, in November 2021, the Oklahoma Department of Transportation (ODOT) applied for and received a Federal STSFA Grant for $1.9 million to develop and conduct a voluntary pilot program. One selection criterion considered by the U.S Department of Transportation in the competitive grant award process was that the proposed project should address challenges and opportunities that are unique to Oklahoma. To satisfy this criterion, Oklahoma identified the following characteristics that pose unique challenges and opportunities to the equitable implementation of a statewide PPM program:

Tolling Synergies - The Oklahoma Turnpike Authority (OTA), which has the most centerline miles of any single toll operator in the U.S., and is closely integrated with ODOT, has a well-established back-office system that processes over 150 million toll transactions annually. There are opportunities to leverage this existing system for data collection, data processing, and revenue collection for a PPM program in the future. This project features an assessment of OTA's back-office systems and capabilities to evaluate opportunities for PPM invoicing through the existing OTA back-office. For more detail on tolling synergies research and evaluation, please see Appendix D.4.

Tribal Impacts and Opportunities – 34 of the 39 recognized Tribal Nations are allotted a percentage of the statewide fuel tax revenues through compacts with the State of Oklahoma. As motor fuel tax revenues decrease, these tribal nations have a vested interest in the development of a fair, equitable, and sustainable revenue source. This project provided an opportunity to evaluate and understand the impact of declining motor fuel tax revenue on Tribal Nations' transportation funding and evaluate the possible impacts and benefits of a potential future PPM program. For more detail on tribal impacts, please see Appendix D.5.

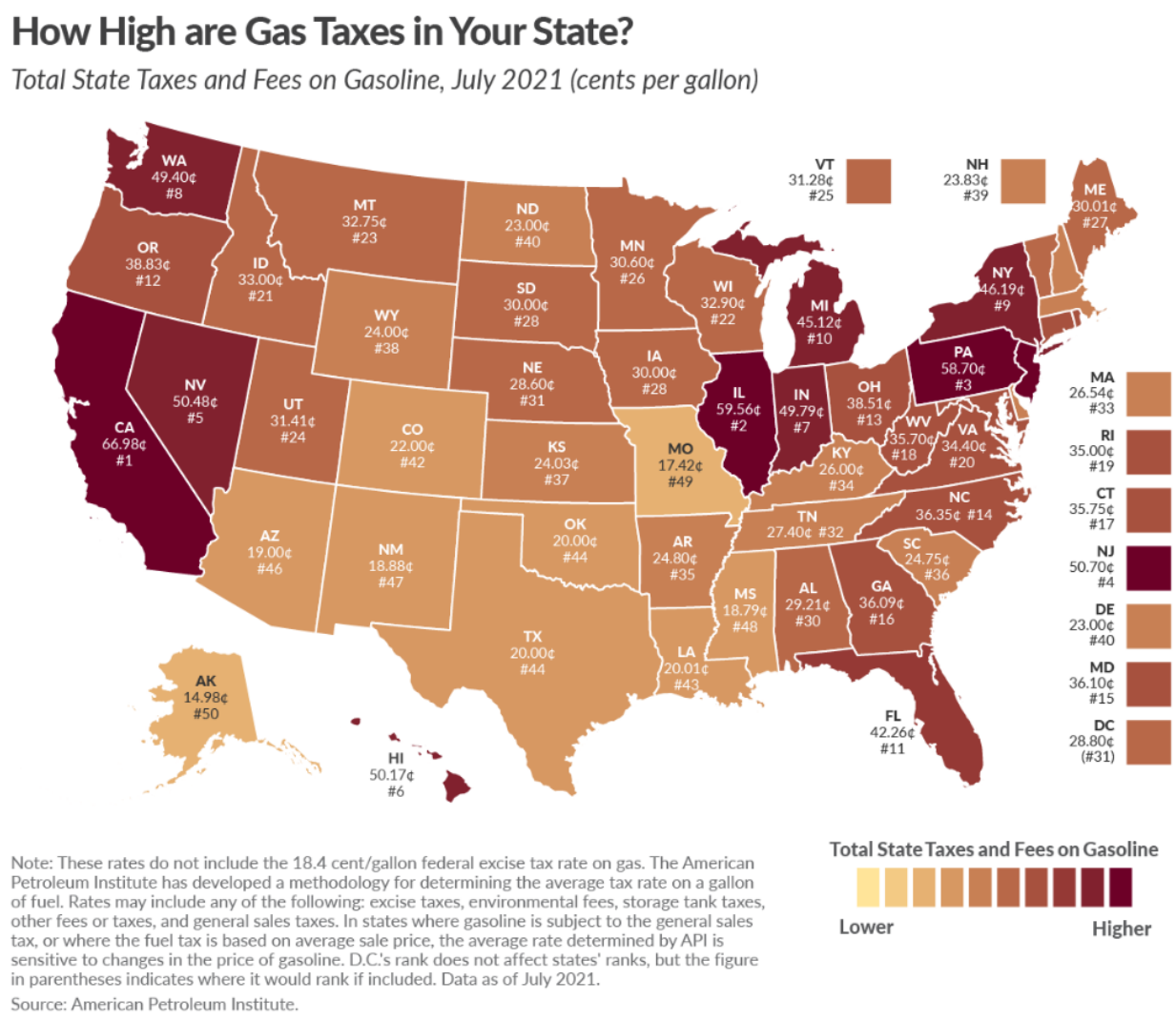
2. TRANSPORTATION FUNDING IN OKLAHOMA

2.1. THE CURRENT SITUATION

2.1.1. SOURCES

In addition to the federal motor fuel tax, state motor fuel taxes are used to fund transportation in every state in the nation and provide the necessary match to federal funds. Figure 2 (Motor Fuel Tax Graphic by State) provides motor fuel tax rates and fees for each state. As shown below, Oklahoma ranks among the lowest in state taxes and fees imposed on gasoline sales.

Figure 2 Motor Fuel Tax Graphic by State



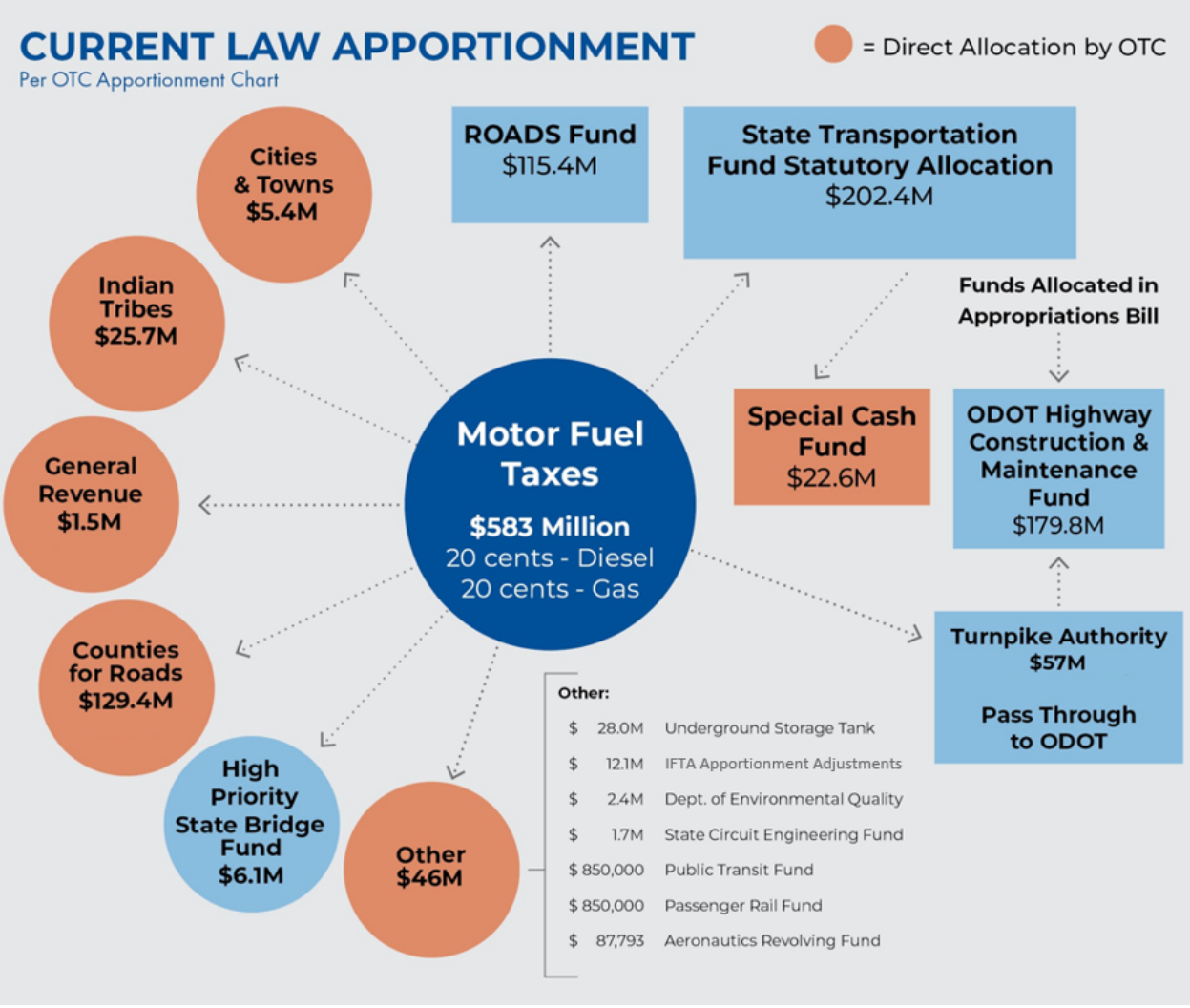
The state motor fuel tax is the single largest source of revenue for transportation in the State of Oklahoma. Oklahoma's state motor fuel tax consists of two components: a 19.0¢ per gallon tax on gasoline and a 19.0¢ per gallon tax on diesel fuel. This tax rate is augmented by a motor fuel special assessment fee of 1.0¢ per gallon dedicated to funding environmental corrective action following leaks from petroleum storage tanks. This brings the

total state collection rate to 20.0¢ per gallon for both gasoline and diesel fuel. These current rates have been in effect since July 1, 2018. The state fuel tax in Oklahoma, which began back in 1933, has only been increased once over the past three decades. The fuel tax is collected by the Oklahoma Tax Commission (OTC) from wholesale fuel vendors. The tax is then rolled into the price posted at the pump. Unlike some states, local governments in Oklahoma, including tribes who have entered into compact agreements with the state, are not permitted to add an additional fuel tax. For FY 2023, approximately $583 million was collected.

2.1.2. DISTRIBUTION

Motor fuel tax revenue is distributed among numerous recipients in accordance with state statutes. Over 84% of motor fuel tax revenue is distributed to support transportation projects at the state, city, and county level. The remaining 16% is split between participating Tribal Nations and other state funds. Figure 3 (Oklahoma Apportionment of Motor Fuel Taxes – FY 2023) denotes the apportionment of fuel tax revenues for FY 2023.

Figure 3 Oklahoma Apportionment of Motor Fuel Taxes - FY 2023



Source: Oklahoma Tax Commission Revenue and Apportionment Reports

2.2. THE PROBLEM WITH MOTOR FUEL TAXES

Modest vehicle miles traveled (VMT) growth, improving fuel efficiency, increasing use of electric and hybrid vehicles, and inflation all contribute to a decrease in the effectiveness and sustainability of motor fuel tax revenues.

2.2.1. VMT TRENDS AND PROJECTIONS

Although VMT has rebounded post-pandemic, it has largely plateaued with modest growth each year. VMT data for Oklahoma shows a slight year-over-year increase in VMT over the past 12 years. As expected, in the wake of the Covid-related shutdowns, VMT in 2020 was the lowest observed through the 12-year study period. VMT in 2020 was down over 6% from the previous year, and down nearly 9% from its previous peak in 2017. However, VMT rebounded strongly in 2021, approaching levels that were observed during the pre-pandemic period of 2016-2019. VMT leveled off in 2022, largely due to record fuel prices and elevated inflation. VMT is expected to increase by a modest 1.5% per year for the foreseeable future.

2.2.2. FLEET FUEL ECONOMY TRENDS AND PROJECTIONS

As electric and other alternative fuel vehicles grow in popularity and sales, they will comprise a growing component of the overall vehicle fleet and will increasingly erode motor fuel tax revenue. This erosion of revenue will be compounded by the new fuel economy standards announced by the U.S. Department of Transportation (USDOT) in April 2022 mandating an industry-wide average fuel economy of approximately 49 miles per gallon (MPG) for new passenger cars and light trucks in model year 2026. Over time, as these more fuel-efficient vehicles represent a growing share of the vehicle fleet, the average fuel economy will increase. This will reduce fuel consumption and lower collections of the motor fuel tax.

Oklahoma and U.S. government statistics indicate roughly 4.5% of the vehicle fleet is retired each year and the median age of a vehicle retiring from the fleet is about 15.5 years. EVs comprise about 1% of Oklahoma's vehicle fleet in 2023 and are predicted to grow to roughly 50% by 2050. Combined with the new federal fleet fuel economy standards, the overall average fuel efficiency of the fleet will improve by 0.5% annually for the twenty-year period from 2023 through 2042 with a corresponding decrease in fuel consumption.

To collect some revenue from EV and Plug-in Hybrid Electric Vehicles (PHEVs), which pay little to no motor fuel taxes, Oklahoma has imposed an annual registration fee on EVs and PHEVs. These fees vary by gross vehicle weight of the vehicle. Table 2 (Oklahoma Annual Fee Collections) shows the current fees assessed.

Table 2 – Oklahoma Annual Fee Collections

Class	Allowable Weight	Annual Fee	
		100% EV	Plug-In Hybrid
1	< 6,000 lbs.	$110	$82
2	6,000 - 10,000 lbs.	$158	$118
3 - 6	10,000 - 26,000 lbs.	$363	$272
7 & 8	> 26,000 lbs.	$2,250	$1,687

In FY 2023, the first full year in which these registration fees were collected, $1.3M was collected from 12,200 EV and PHEV registered in Oklahoma. Additionally, new legislation mandates a fee of $0.03 per kilowatt-hour at all public EV charging stations in Oklahoma. These collections are scheduled to start on January 1, 2024. It is unclear at this time how much revenue will be realized from these fees.

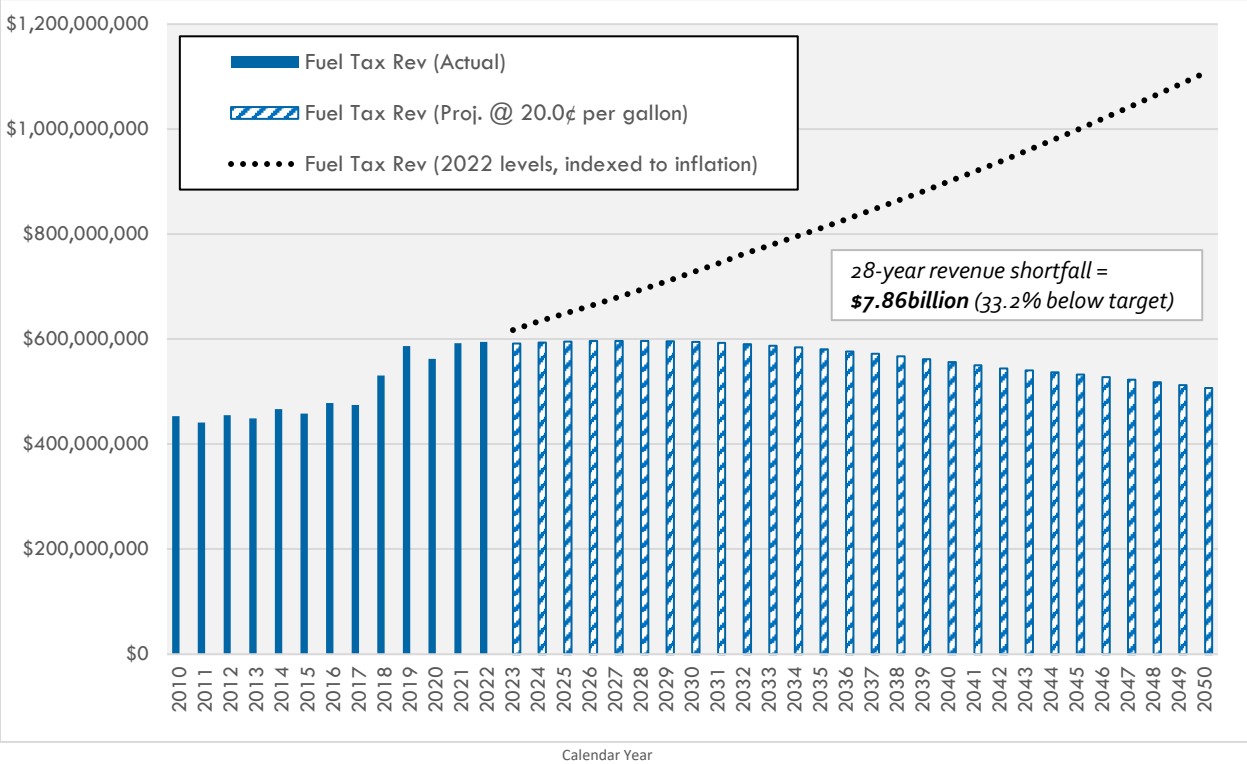
2.2.3. INFLATION CHALLENGES

Inflation is the strongest headwind faced by the current motor fuel tax. Current policies do not begin to keep pace with inflation. The current state motor fuel tax program is expected to produce a relatively flat stream of revenue that will decline in real (inflation-adjusted) value over time.

2.2.4. OKLAHOMA FUEL TAX REVENUE TRENDS AND PROJECTIONS

A motor fuel tax revenue forecast model developed for this project predicts a cumulative revenue shortfall of $7.86 billion by 2050. This model incorporates projections for VMT growth, EV adoption, average fleet fuel efficiency, fleet turnover, and inflation. It is important to note that this analysis assumes current expenditure levels and does not reflect any increases in the needs of the state for transportation projects or improvements. Figure 4 (Fuel Tax Revenue (Actual and Projected) vs. Fuel Tax Revenue (Indexed to Inflation), 2010-2050) demonstrates the actual and projected fuel tax revenue through 2050.

Figure 4 Oklahoma Fuel Tax Revenue (Actual and Projected) vs. Fuel Tax Revenue Need (Indexed to Inflation), 2010-2050



Even though VMT is expected to grow at a rate of 1.5% annually, motor fuel tax revenue growth is expected to be negligible due to offsetting increases in fleet fuel economy. Motor fuel tax revenue in current year dollars is expected to grow at a meager rate of 0.3% annually through 2030, at which point it is expected to decline. If no fuel tax policies are changed, then current-dollar fuel tax revenue in 2038 (and beyond) will be lower than it is today. Current policies do not begin to keep pace with inflation as indicated by the gap between the black dotted line and the hatched blue bars in the graph. By 2050, actual fuel tax revenue will be over 50% lower than today's level of revenue, adjusted for inflation. In short, the existing fuel tax program is expected to produce a relatively flat stream of revenue that will decline by as much as 50% in real (inflation-adjusted) value over the next 28 years.

3. INTERIM AND LONG-TERM OPTIONS FOR LEGISLATIVE CONSIDERATION

3.1 INTERIM OPTIONS FOR LEGISLATIVE CONSIDERATION

The following interim options would assist in providing a bridge for maintaining and safeguarding transportation funding in Oklahoma with current road user taxes and fees until a permanent replacement for fuel tax revenues is determined and enacted.

3.1.1. FULLY FUND THE ROADS FUND WITH CURRENT STATE ROAD USER TAXES AND FEES

State individual income tax collections are currently utilized to supplement motor vehicle taxes/fees and the motor fuel tax to reach the annual Rebuilding Oklahoma Access and Driver Safety (ROADS) Fund's statutory allocation. An option to address this would be to utilize vehicle related state sales tax collections in place of income tax resulting in fully funding the ROADS Fund with road user taxes and fees. This can be accomplished utilizing current revenues without a tax increase or an impact on the General Revenue Fund. A fiscal illustration is provided below:

Current Actual Revenue Allocations to the ROADS Fund – Fiscal Year 2023

Motor Vehicle Taxes and Fees (24.84%)	$233,270,986
Individual Income Tax Allocation	$241,254,312
Motor Fuel Tax - Gasoline (3 Cents)	$ 57,608,218
Motor Fuel Tax – Diesel (6 Cents)	$ 57,866,484
Total Current ROADS Fund Allocation	$590,000,000

Optional Revenue Allocations to the ROADS Fund (Amounts Rounded & Estimated for FY 2024)

Motor Vehicle Taxes and Fees (24.84%)	$234,500,000
State Sales Tax Allocation	$241,000,000
Motor Fuel Tax - Gasoline (3 Cents)	$ 57,000,000
Motor Fuel Tax – Diesel (6 Cents)	$ 57,500,000
Total ROADS Fund Allocation	$590,000,000

3.1.2. INDEXING THE STATUTORY ALLOCATION TO THE ROADS FUND

To help safeguard state infrastructure funding for the eight-year construction work plan and offset fuel tax revenue losses and inflationary construction and maintenance cost increases, an option would be to designate an annual indexed percentage adjustment to the ROADS fund statutory allocation. This can be accomplished with an amendment to Title 69, Section 1521 of the Oklahoma Statutes. Based on consistent annual growth revenues from motor vehicle tax and fee collections, this source should provide a substantial component of the funding for the indexing adjustment.

According to an August 2023 report from the National Conference of State Legislatures (NCSL), 23 states currently index their transportation funding revenues. Many of the other states are considering indexing to address the loss of fuel tax revenues and substantial increases in construction and maintenance costs.

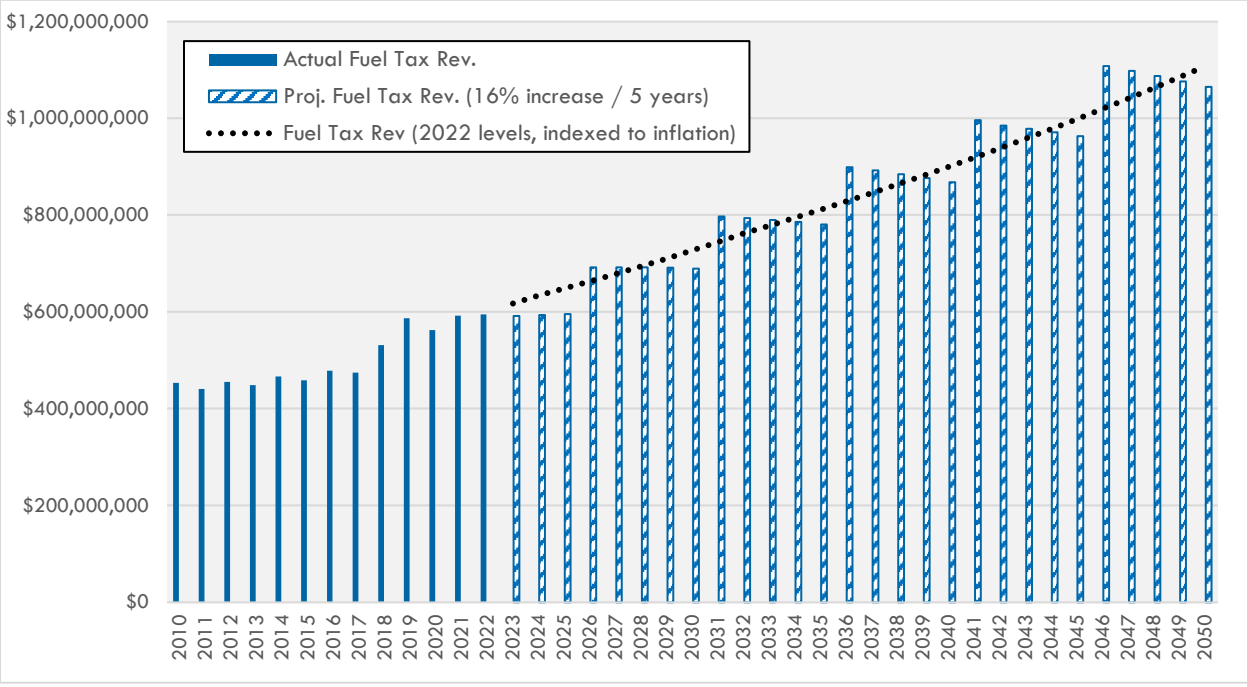
3.1.3. REMOVAL OF COUNTY MAINTENANCE FUND CAPS WITHIN THE MOTOR VEHICLE COLLECTIONS APPORTIONMENT

Counties in Oklahoma currently maintain over 83,000 miles and almost 13,000 bridges including over 1,500 classified as structurally deficient. Their percentage allocations for maintenance funds from motor vehicle taxes and fees are currently capped in Title 47, Section 1104 of the Oklahoma Statutes at FY 2015 levels. The caps currently keep these funds at a stagnant level as fuel tax revenues are declining and maintenance and construction costs are increasing significantly. A removal of those caps could help offset some of the reductions in available funding.

3.2 INCREASE AND INDEX MOTOR FUEL TAXES

Regular and substantial increases to the motor fuel tax rates would be required to keep pace with inflation in years to come. Figure 5 (Projected Fuel Tax Revenue with 16% Increase Every 5 Years) shows that a rate increase of just over 3% every year, or 16% every 5 years, starting in 2026, would be required to preserve the purchasing power of today's rates through 2050. This would result in a fuel tax rate of $0.38 per gallon by 2046. Again, this increase is necessary just to preserve the current value of today's rate. It does not account for any increases in spending over time to meet increasing needs of the state for transportation projects or improvements. Although Oklahoma increased its fuel tax rates in 2018, it still has the 6th lowest fuel tax rate in the country. While many states have indexed their fuel tax rates to keep pace with inflation, Oklahoma has not.

Figure 5 Projected Oklahoma Fuel Tax Revenue with 16% Increase every 5 Years



3.3 ALTERNATIVE TAXES AND/OR FEES TO REPLACE FUEL TAX – NOT RECOMMENDED BY TASK FORCE

Table 3 (Potential Funding Options other than a PPM Model) identifies other potential sources of revenue and the corresponding requirements for increases to cover the full revenue from the motor fuel tax. These hypothetical scenarios were developed for illustrative purposes and are NOT recommended for further consideration. As the motor fuel tax declines, these percentages would need to increase and be indexed for inflation to maintain funding at current levels. A more detailed analysis of each of these options can be found in Appendix D.2 – Funding Analysis.

Table 3 – Potential Funding Options other than a Motor Fuel Tax or PPM Model

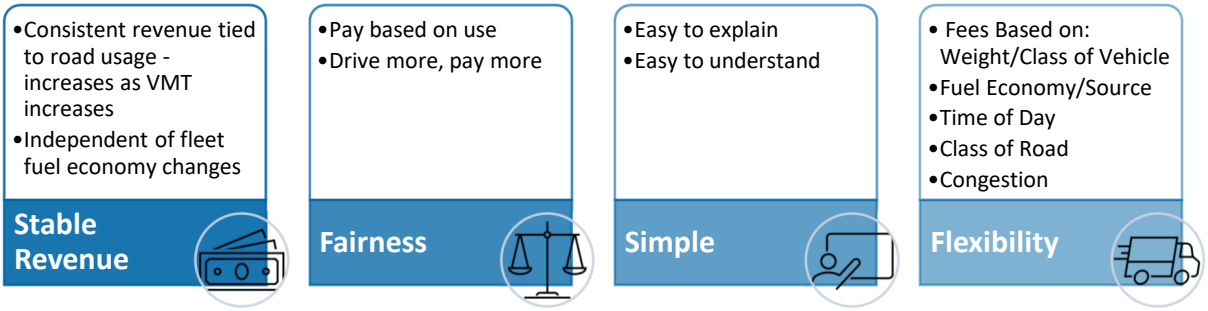
Tax/Fee	Requirements
Increase State Income Tax	• Increase overall income tax revenue by about 11.5% • Increase top marginal individual tax rate from current level of 4.75% to approximately 5.30% - 5.50% • Increase the state corporate tax rate from current level of 4.0% to approximately 4.45% - 4.60%
Increase General State Sales Tax	• Increase state sales tax revenue by about 20% • Increase the sales tax from its current level of 4.50% up to approximately 5.40%-5.50%
Increase State Motor Vehicle Sales Tax	• Increase motor vehicle sales tax revenue by about 325% • Increase the motor vehicle sales tax from its current level of 3.25% to a future level of approximately 14.0%
Increase All Motor Vehicle Fees and taxes	• Increase all motor vehicle tax and fee assessments by about 55%. This applies to all motor vehicle sales taxes, excise taxes, registration fees, and permit costs.

4. FOCUS ON PAY-PER-MILE (PPM)

4.1. WHAT IS PPM AND WHO IS DOING IT?

PPM (also called Road User Charge, Vehicle Miles Traveled, or Mileage Based User Fee) is a revenue generating mechanism whereby motorists pay for use of the roadway network based on the distance they travel, rather than the amount of fuel they purchase. The strength of PPM is that it applies equally to all users of the roadways regardless of the energy source of their vehicle. This approach provides a fair structure for all drivers, ensuring that all drivers contribute to the revenue required to build, operate, and maintain public roads in proportion to their use of the roads. PPM is gaining favor among states because it offers certain advantages over the motor fuel tax or other forms of taxes as described in Figure 6 (PPM Advantages).

Figure 6 PPM Advantages



As of 2023, more than 38 states have been involved, either directly or through a coalition, in PPM studies and pilots. From 2016 to 2023, 16 states and two coalitions have been awarded 44 federal grants representing a total of more than $90 million to study RUC and/or conduct pilots. Three states (soon to be four) have implemented PPM programs in lieu of motor fuel taxes for certain types of vehicles. Additional detail on the state of PPM programs across the country, ongoing and previously implemented pilot projects, and current PPM research is included in Appendix D.1 – Policy Framework. Also, the Federal Reauthorization Act, Infrastructure Investment and Jobs Act (IIJA), has authorized and funded a National PPM Pilot.

4.2. STATUTORY CONSIDERATIONS

Because a PPM fee is designed to replace the motor fuel tax and could also be used to replace or supplement other revenue sources such as registration fees or the taxation of electricity for charging vehicles, several sections of the state statutes will need to be reviewed and possibly revised if a complete transition from motor fuel taxes to PPM is contemplated. These include:

- Oklahoma Statutes Title 68, §500.1 thru 723: sections dealing with the 19 cents/gallon motor fuel taxation and the allocation of those taxes.
- Oklahoma Statutes Title 68, §-6501 thru 6512: sections relating to the assessment of an annual registration fee for electric and hybrid vehicles and the taxation of electricity used in charging vehicles. (These provisions become effective January 1, 2024).
- Oklahoma Statutes Title 69, §1729 and 1730: sections relating to a “backstop” provision utilizing motor fuel tax receipts for the benefit of OTA. This provision will need to be modified to ensure the “backstop” remains in place. Of note, once OTA certifies that it does not need the fuel tax money for the “backstop”, the money is transferred to ODOT for construction and maintenance.

4.3. OUT-OF-STATE VEHICLES

Oklahoma is a national transportation crossroads with a high percentage of out-of-state, pass-through traffic. Annual statistics indicate as much as 40% of all travelers utilizing Oklahoma's toll roads are from vehicles registered in other states. Several strategies were identified to potentially collect PPM fees from these non-resident vehicles. This included an exploration of whether existing tolling interoperability and reciprocity agreements could be adapted for PPM application. Collection of PPM fees from out-of-state vehicles is much more challenging than for vehicles registered within Oklahoma. The nature of this challenge is that a vehicle may be registered to a PPM account in one state but may accumulate some, or even most, of its road use mileage in other states. Alternately, a vehicle may come from a state that has no PPM program, and therefore it is not registered with any other revenue collection program. When vehicles cross state borders, or in an even more challenging situation, national borders, the complexity of user fee collection, and enforcement for PPM increases dramatically.

The successful implementation of a PPM program across state boundaries will require cooperation among state governments and agencies. This type of cooperation is not new or unique. There are several existing models of cooperative revenue collection and distribution across states borders that may be applicable to PPM. Table 4 (Model Types) provides a description and evaluation of three potential models for interstate revenue interoperability and reciprocity. More detail can be found in Appendix D.3 –Out-Of-State PPM Implementation Assessment.

Table 4 Model Types

Model Type	Methodology	Strengths	Weaknesses
Keep Revenue	The state collects PPM fees only from the vehicles registered in its own state.	Simplest to implement and allows the state complete independence in the implementation and operation of its PPM program. It does not matter where the actual road usage occurs (in or out of the state of registration).	Assumes most miles are driven in the "home" state. There is no relationship between which state the miles were driven in (with the associated wear and tear on those roads) and which state receives the PPM revenue for those miles.
Collect Revenue	Each state collects PPM fees only from vehicles operated within its borders regardless of where the vehicle is registered. Requires that each state record miles driven by visiting vehicles traveled on its roads.	Benefit of this model is that the road use fees are collected and retained by the state whose roads are used. This direct link between the fees collected and the roads used results in an equitable distribution of the PPM fees.	Requires significant coordination between states. The home state is reliant on the away state both for providing the mileage data and for enforcing the collection of the fees. Each state needs a way to directly collect the revenue from out of state vehicles that traveled in its state.
Clearinghouse	The state that collects the fees agrees to distribute that revenue to other states based on the portion of mileage accrued in those states per each state's PPM fee schedule.	Provides the platform for the exchange of mileage data to allow the calculation of the PPM fee. Allows for simpler accounting by allowing any two states to only transfer the net difference of the amounts owed to each other. Guarantees payment to the states where the miles were driven and it is up to each clearinghouse state to pursue payment of all amounts owed from drivers whose vehicles are registered in that state, regardless of where miles are driven.	Promotes fair distribution and clear enforcement mechanisms but is complex and introduces a greater demand on cooperation and agreement between the states.

Table 5 (Clearinghouse Types) provides a description and evaluation of two existing clearinghouse types that could have applicability to managing interstate PPM collections.

Table 5 Clearinghouse Types

Clearinghouse Types	Description	Strengths	Weaknesses
Toll Interoperability	The trend in tolling interoperability is to move from peer-to-peer data exchange (each agency exchanges data with every other agency) to a hub and spoke design. Each agency only exchanges data with the hub and the hub communicates with each of the other agencies, reducing the impacts of handling very large datasets between agencies.	Creates standard business rules and exchanges data via established interfaces. Fundamental to these agreements is the idea that when a home facility posts a toll amount against a transponder account from an 'away' state and transmits the details of the transaction to the away state, the away state will charge the toll to its customer and remit the amount to the home facility.	The data volume necessary to account for mileage data for every registered vehicle in multiple states, or even the entire country could be an obstacle at initial implementation.
International Fuel Tax Agreement	Operates to provide an equitable distribution of fuel-tax revenue amongst the states for larger commercial vehicles. Uses the uploaded data from these commercial vehicle operators or third parties and calculates net payments between all jurisdictions so that each jurisdiction makes a single payment or receives a single refund.	Each state receives an amount of revenue proportional to the vehicle's use of its roads, regardless of where the fuel was purchased, and taxes were originally assessed.	Challenge in meeting the significantly higher data volume. Currently the International Fuel Tax Agreement (IFTA) is only applicable to motor fuel taxes for vehicles with three or more axles or vehicles over 26,000 pounds that are engaged in interstate transport.

Although these challenges can be daunting, the tolling industry is close to a national solution which may provide a potential model for PPM cooperation among states. By learning from and expanding upon the lessons learned by tolling and motor fuel tax clearinghouses, such as the International Fuel Tax Agreement (IFTA) described in Table 4, ODOT can make informed decisions to move forward in this new era of funding.

4.4. POLICY CONSIDERATIONS

4.4.1. TARGET FUNDING AMOUNT

The calculation of the target funding amount for most mileage-based revenue models involves the total replacement of motor fuel taxes, primarily gasoline and diesel fuel taxes and fees. In state FY 2023, Oklahoma collected $400.9 million from the sale of gasoline and $182.4 million from the sale of diesel fuel that was statutorily allocated to several entities and programs that include, but are not limited to, cities, counties, and ODOT.

Focusing on passenger vehicles, generally powered by gasoline, electricity, or compressed natural gas (CNG), a PPM program would need to replace $400.9 million in revenue. However, in addition to fuel tax revenues, in state fiscal year 2023, $241.3 million was allocated from income tax collections for the highway program and $463.3 million of motor vehicle fees was allocated to several entities for transportation activities. To move Oklahoma to a true user funded transportation system, funded entirely from PPM fees, the target funding level would need to total $1.1 billion.

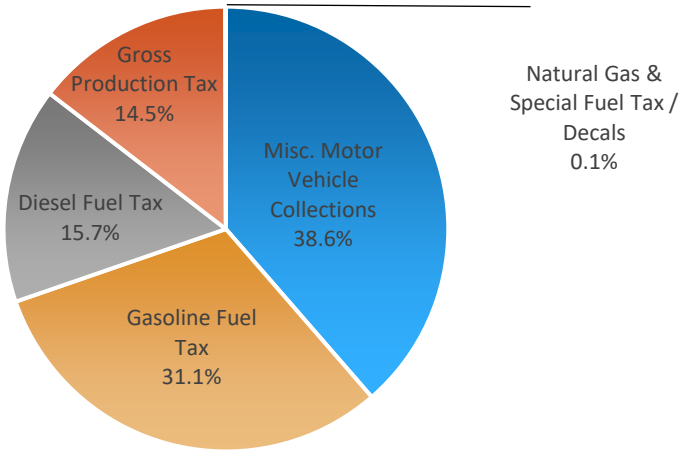
Near term inflation has had a significant impact on the state's ability to build and maintain a modern transportation system. ODOT maintains a sophisticated process for continuous tracking of costs to build and maintain roads and bridges in the state. During the period FY 2019 through FY 2023, the state has experienced cost increases totaling 63%. That level represents a loss of buying power impacting cities, counties, and ODOT in the delivery of their programs. To keep pace with inflation, and maintain the equivalent buying power of 2019, the previously mentioned $1.1 billion funding level would increase to $1.8 billion.

Further consideration should be given to the federal portion of transportation funding that Oklahoma receives annually. The revenue model funding transportation at the federal level is like the Oklahoma model. As with the state, federal fuel taxes collected do not fully support the federal transportation program(s). Since 2008, Congress has approved general fund transfers of over $270 Billion to keep the Highway Trust Fund solvent. Consequently, there is confusion and concern whether federal funding can continue at the required levels as fuel tax collections decline, marking a clear threat to spending strength for the state. ODOT's eight-year construction work plan is 50% funded by federal revenue. To maintain the momentum created by the investments made in the eight-year plan, consideration should be given to increasing the target funding amount by the anticipated amount of fuel tax decline occurring at the federal level. This would strengthen Oklahoma's position for current and future transportation needs.

4.4.2. REPLACE ALL TRANSPORTATION FUNDING WITH PPM

Though virtually all the revenue from the motor fuel tax is devoted to transportation, it is not the only source of revenue that currently funds transportation. Figure 7 (Oklahoma Transportation Funding Sources, FY2023) summarizes the various fund sources supporting transportation in Oklahoma.

Figure 7 – Oklahoma Transportation Funding Sources, FY2023



Based on funding levels in FY 2023, a universal PPM fee of 1.3¢ per-mile would be required to completely replace the current motor fuel tax. To replace all transportation funding, that fee would need to increase by 114% to 2.78¢ per-mile for all vehicles. Table 6 (Adjustments to PPM Fees to Replace All Transportation Funding) summarizes the extent to which the PPM fees would need to be adjusted to replace all transportation funding. Please note that these numbers do not reflect the additional increase necessary to cover the cost-to-collect for a PPM program. Cost-to collect is discussed in the following section. Additionally, to keep up with inflation, periodic increases of 6% every 5 years, starting in 2026, would be needed.

Table 6 – Adjustments to PPM Fees to Replace All Transportation Funding

Scenario	PPM Fee to replace motor fuel tax	PPM Fee to replace all transportation funding
All vehicles pay same PPM fee	1.30¢ / mile	2.78¢ / mile
Differential between cars and trucks	1.00¢ / mile cars 3.50¢ / mile trucks	2.14¢ / mile cars 7.48¢ / mile trucks

4.4.3. COST-TO-COLLECT

One significant concern with replacing the motor fuel tax is the cost-to-collect. The current process of collecting the motor fuel tax is extremely efficient. Preliminary estimates from the OTC suggest that it costs about $1.75 million annually to collect the motor fuel tax from a small number of wholesale fuel vendors in the state. Given that Oklahoma collects nearly $600 million in fuel taxes per year, this equates to a cost-to-collect of approximately 0.3¢ per dollar collected. In other words, for every $100 collected in fuel tax revenue, only 30¢ is consumed in the process of collecting the revenue; the remaining $99.70 is available for transportation funding. The alternatives to the motor fuel tax (increasing the income tax, increasing the sales tax, and increasing other motor vehicle fees) could likely be implemented with similar efficiency. None of these alternatives require introducing new processes; they simply involve adjusting fees associated with existing processes. Though these adjustments may require increased staffing to handle the additional revenue, the cost-to-collect increase would likely be modest.

Implementing a PPM program requires the introduction of a new set of processes to collect from individual users of the system. It would involve the development and deployment of technology, the management of extensive data, and the processing and handling of revenue. Preliminary estimates from this project and from PPM pilots around the nation suggest that the cost-to-collect would range from 6.4¢ to 27.3¢ per dollar collected. This means that, for the PPM program to generate the same net revenue as the motor fuel tax, the per-mile charge would need to increase between 6.1% to 27.0%. The actual percentage will depend on many factors, including the types of technologies used to collect and report the mileage data. If the program relies heavily on on-board devices, the cost-to-collect will be on the high end of the range. On the other hand, if the program relies more heavily on manual odometer readings, telematics, and smartphones, then the cost-to-collect will be lower. It should be noted that these cost estimates are based on pilots operating with small numbers of vehicles. It is expected that economies of scale will significantly reduce these costs as the number of participant vehicles increases. These figures also do not address the risks associated with non-compliance and non-collection, which are not a factor in voluntary pilots, but could be a significant factor in a full-scale implementation of PPM. Table 7 (Adjustments to PPM Fees Required by Cost-to-Collect) summarizes the extent to which the PPM fees would need to be adjusted to match the net revenue generated by the motor fuel tax.

Table 7 – Adjustments to PPM Fees Required by Cost-to-Collect

Scenario	Per-Mile Fee to Replace Motor Fuel Tax	Revised PPM Fee Accounting for Cost-to-Collect	
		Low-End (6.1% increase)	***High-End (27.0% increase)***
All vehicles pay same PPM fee	1.30¢ / mile	1.38¢ / mile	1.65¢ / mile
Differential between cars and trucks	1.00¢ / mile cars 3.50¢ / mile trucks	1.06¢ / mile cars 3.71¢ / mile trucks	1.27¢ / mile cars 4.45¢ / mile trucks

4.4.4. ALL VEHICLES PAY THE SAME PPM FEE

A per-mile fee of 1.38¢ to 1.65¢ per-mile applied to all vehicles on all roadways in the State of Oklahoma would yield the same revenue as the motor fuel tax in FY 2023. This revenue would escalate over time at a rate consistent with growth in VMT, but not be negatively impacted by the growth of EVs or other alternative fueled vehicles nor increasing fleet fuel economy. However, the annual growth in VMT is not sufficient to overcome inflation. To fully close the revenue gap, periodic increases of the PPM per-mile rate would be needed. The per-mile fee would need to increase by 6% every 5 years, starting in 2026.

4.4.5. DIFFERENTIAL FEE – HEAVIER VEHICLES PAY MORE

Alternatively, a higher per-mile fee could be applied to heavier vehicles, which contribute far more wear and tear to the roadway than passenger vehicles and light trucks. A per-mile fee of 1.06¢ to 1.27¢ for passenger cars and light trucks and 3.71¢ to 4.45¢ for heavy trucks would yield the same revenue as the motor fuel tax in FY 2023 and the same revenue as a 1.38¢ to 1.65¢ per-mile fee applied to all vehicles. There are numerous variations in fee structure that could be examined moving forward.

5. HOW PPM MIGHT WORK IN OKLAHOMA – PILOT

A significant part of this project was to conduct a voluntary pilot to test how PPM might be implemented in Oklahoma. Figure 8 (Fair Miles Oklahoma 8-Step Pilot) graphically shows the steps implemented to deliver a pilot program that would meet the requirements of both the STSFA requirements and HB 1712 legislation. The Oklahoma Fair Miles Pilot (Pilot) enlisted volunteers to participate in an actual demonstration of the technologies and processes to:

- Effectively and accurately measure vehicle mileage, and evaluate methods to collect PPM fees, audit collections, and enforce PPM compliance.
- Engage the public and stakeholders so a broad set of users' voices of Oklahoma's highway system are heard while developing a future Oklahoma program.
- Develop a fair and equitable solution to declining fuel tax revenues for all drivers while also providing flexibility for a variety of users and vehicle types.
- Evaluate PPM transaction costs.

Figure 8 Fair Miles Oklahoma 8-Step Pilot

5.1. PRE-PILOT ACTIVITIES

5.1.1. BRANDING AND MARKETING

Prior to Pilot initiation, Brand Visioning Workshops, a modified focus group format that can accommodate larger groups, were utilized to discover how Oklahomans perceive a PPM program. Additionally, the workshops provided a glimpse into the current opinions of the condition and upkeep of Oklahoma's roads and bridges. More than 50 people participated in five workshops held in Weatherford, Guymon, Oklahoma City, Tulsa, and Ada. An on-site workshop was also held with key staff and leadership from ODOT.

The data gathered and insights shared with the workshop moderator played a pivotal role in shaping the Fair Miles Oklahoma brand platform and crafting key messaging for public communication.

Key findings from the workshops include:

- Oklahomans rejected "road user charge," likening it to the expansion of the turnpike system.
- Oklahomans prefer "pay-per-mile" over "road user charge."
- Oklahomans prefer "fair" over "equitable."
- More than half indicated they would participate in a Pilot.
- Oklahomans are not fans of a manual reporting option, indicating it seems easy to manipulate or avoid.

Branding information and focus group results were presented to the Task Force and the Fair Miles logo and branding was approved. The final logo is shown below:

5.2. DATA MANAGEMENT – PRIVACY AND SECURITY

From the outset of the Pilot, it was clear that the data required would include personally identifiable information (PII) such as participant name, address, contact information, vehicle identification number (VIN), and, in some cases, vehicle location information. Collection of this information was necessary to be able to successfully test a PPM scenario. For participants to feel safe sharing their data with the Pilot, ODOT required a Data Management Plan (DMP) be developed to document the collection, management, privacy, and destruction of the Pilot data. During the creation of the plan, ODOT established Data Privacy and Security Principles to establish a baseline understanding among the team members and a promise to the participants.

Understanding what data elements would be collected, how they would be collected, including through what mechanism, and by whom, was essential to building out the next phase of the DMP, and a data flow for the Pilot. This allowed the Pilot team to ensure the right data was collected for evaluation purposes, identified all parties that would have access to any participant data, and provided clarity as the DMP was created.

The Account Manager and engagement team, as well as their vendors for the Pilot, had access to PII and therefore additional conversations around their internal management, access and destruction of data methods were held. The Pilot project team also identified how participant facing documents like the website, privacy policies, and terms of use would be written. Table 8 (Pilot Related Policies and Terms of Use) identifies the data management documents available for participants to review how their Pilot data was managed during the Pilot. For more detail on the data management flow, plan, and activities, please see Appendix B.4 – Data Management Plan.

Table 8 Pilot Related Policies and Terms of Use

Entity / Company	Privacy Policy	Terms of Use
Fair Miles Oklahoma Pilot	X	X
GeoToll	X	X
IMS (Insurance and Mobility Solutions)	X	
Smartcar	X	X
SurveyMonkey	X	X
Virtual Incentives	X	X

5.3. THE PILOT

5.3.1. ENGAGEMENT AND RECRUITING

The Pilot recruited and enrolled 445 volunteers, of whom 295 actively participated in the Pilot. All active participants were Oklahoma state residents using their own vehicles, which were required to be registered in Oklahoma. One "participant" equaled one registered vehicle; therefore, one Oklahoma licensed driver could enroll multiple vehicles, if desired. Table 9 (Recruitment Activities) identifies the various recruitment activities performed to sign up Pilot participants.

Table 9 Recruitment Activities

Recruitment Activities	Results
Auto Shows	Oklahoma City: 547 sign-ups, Tulsa: 52 sign-ups.
Chambers of Commerce	State Chamber reached out to local Chambers of Commerce to encourage membership to learn about the program and sign-up.
Speaking Engagements	Hosted speaking engagements at organizations/events/other to encourage sign-ups.
Other Member-based Organizations	Reached out to state and community leaders to register and share sign-up information with organizations. This group yielded the greatest number of registrations.
Website Analytics (January 18, 2023, to August 11, 2023)	• Total Unique Visitors: 4,517 • Average Session Duration: 12 minutes 42 seconds • Total Sessions: 6,225 • Devices Site Accessed: Mobile 50% (3,106), Desktop 49% (3,027), and Tablet 1% (91) • Day of the Week with Most Sessions: Thursday and Wednesday (close second) • Website Source: Direct input of the URL (3,093) followed by Google searches (1,039), Facebook (983), surveys (348), and the account manager participant website (161)
Tribal Outreach	Transportation officials of Tribal Nations were individually contacted a minimum of three times by the Pilot communications team. Fair Miles Oklahoma was added as an agenda item to an ODOT Tribal Transportation Council meeting where tribal transportation leaders were asked to help secure Tribal representation. Tribal transportation officials, or their proxies, who attended the RUC Task Force meetings met with the Pilot team following the meetings to encourage participation.
Advertising	Ads ran for two weeks in 107 papers with 214 total ad placements.
Social Media (Paid and Organic)	Social media was implemented once most participants had been registered to prevent any potential negative impacts on the recruitment efforts.
Media Relations	• March 30 – Print, online, and television • April 4 – Print, online, and television • April 4 – Radio push • April 21 – Print, online, and television

The following stakeholder engagement was initiated:

1. **Highways Users**: This was accomplished with educational talking points for Oklahoma City and Tulsa International Auto Shows attendees and through engagement with Pilot participants. All participants in the Pilot were regular highway and roadway users who were engaged through feedback surveys throughout the study.
2. **Transportation Stakeholders and Vehicle Manufacturers**: Conversations were held with individual auto dealers and the Oklahoma Association of Auto Dealers who represent vehicle manufacturers. They supported efforts to conduct the Pilot and look forward to hearing about the final insights learned from participants.
3. **Stakeholders Representing Vehicle Users:** Impromptu conversations were held with auto dealers during the Oklahoma City and Tulsa International Auto Shows. During the conversations with the Oklahoma Association of Auto Dealers, it was explained how this type of funding model would impact transportation.
4. **Fuel Distributors**: The project team engaged with the fuel distributors and marketers through a coordination meeting which included the industry organization's chairman, Scott Minton, who is also on Oklahoma's RUC Task Force.

5.3.2. ONBOARDING AND ENROLLMENT

The registration and enrollment process consisted of four steps, culminating in the participants' selection of a mileage reporting option (MRO) and reporting mileage.

1. **Pre-Registration:** Pre-registration was used at auto shows, speaking engagements, and other on-site events where participants were asked to share their name and email address. If pre-registration occurred through a bulk email from a membership-based organization or the Fair Miles Oklahoma website, participants began registration through those emails.
2. **Registration:** Participants who pre-registered were then asked to provide contact information, vehicle information, and their vehicle identification number (VIN). Using the VIN, the make, model and certain technical information about the vehicle were identified. During the final enrollment phase, only those MRO's that were compatible with the vehicle's technical specifications were offered to the participant.
3. **Enrollment:** Once a participant's information was confirmed, it was transferred to the account manager for enrollment. Each participant was asked to verify the last four digits of their VIN, open an account, select an MRO, and activate (if necessary) the reporting device.
4. **Active Participation:** During the 6-month Pilot period, these participants reported mileage, acknowledged invoices, made simulated payments and responded to surveys.

5.3.3. MILEAGE RECORDING OPTION (MRO) CHOICES

Participants were asked to select from four MRO choices:

1. Manual Reporting: Participants took a photo of their odometer at enrollment and uploaded it to the DriveSync/Fair Miles app on their iPhone operating system (iOS) or Android based smartphone. The odometer photo was processed, and the information was sent to the Fair Miles Oklahoma Back Office. Before the end of each month, participants were required to take a photo of their odometer and upload it to the app for mileage reporting. No location data is included in this MRO, so all miles are assumed to be driven within Oklahoma, and PPM fees were calculated accordingly.

2. On-Board Diagnostic (OBD) Plug-In Device: Participants were sent an OBD plug-in device that connects to the vehicle's computer with instructions on how to plug it into their vehicle. This device automatically reported mileage to the account manager as the participant drove. Participants selecting this MRO were also required to submit an odometer photo at enrollment and again at the end of the Pilot for verification purposes. There were two variations for this MRO:

    - Participants could choose to enable the global positioning system (GPS) option so the OBD plug-in device could determine where miles were driven. This allowed for calculation of a PPM fee credit for miles driven outside of Oklahoma.

    - Participants could choose not to enable the GPS option of the OBD plug-in device. In this case, all miles were assumed to have been driven in Oklahoma and no credit was available for miles driven outside the state.

3. Telematics: For participants with in-vehicle telematics available through their manufacturer, they logged into their telematics account and gave permission for the manufacturer to send the vehicle mileage to Fair Miles Oklahoma to be collected. As with the OBD plug-in device, participants selecting this MRO could choose to enable GPS location reporting or use a non-GPS reporting mode. Those who selected GPS were awarded a credit for miles driven outside Oklahoma.

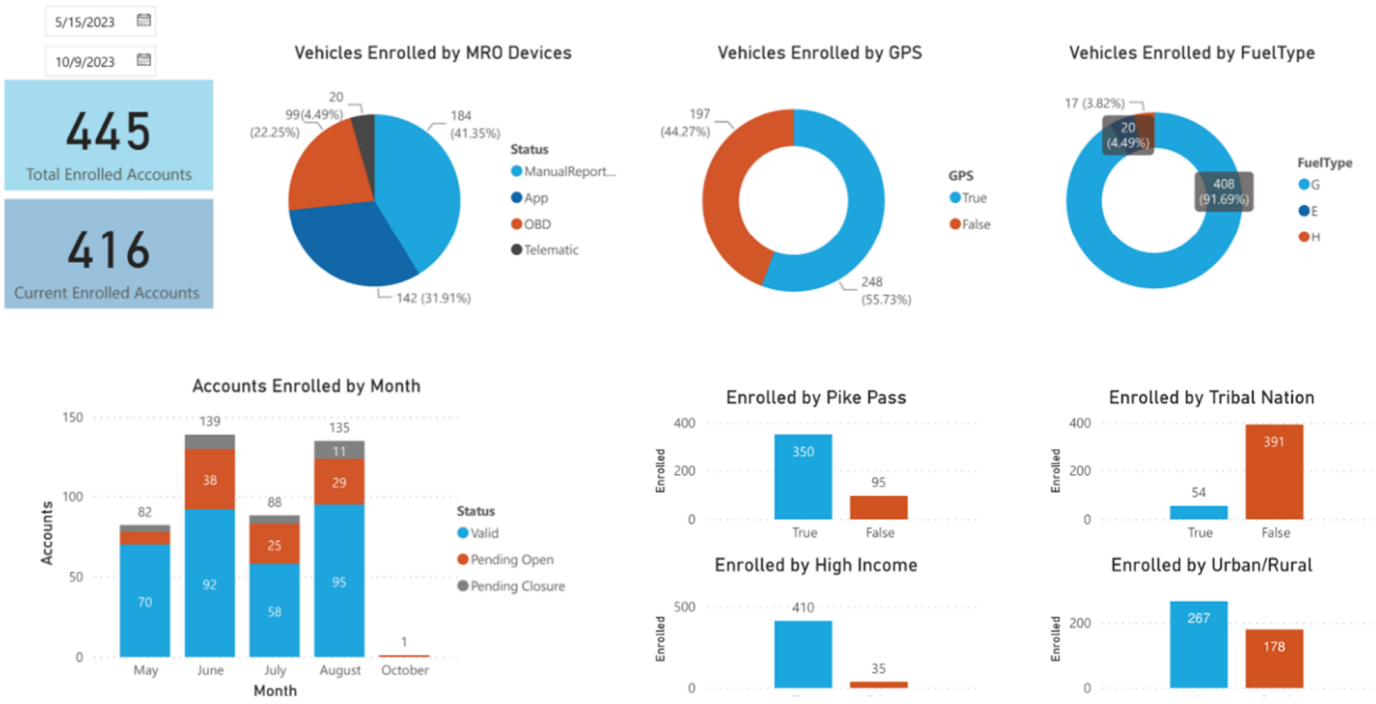
4. Mobile App: Participants downloaded the mobile app for Fair Miles on their iOS or Android based smartphone. Initial steps required a photo upload of the VIN and Bluetooth® pairing with the vehicle. The app then recorded the mileage for the Pilot as the vehicle drove. This reporting method included GPS data so participants were awarded a credit for miles driven outside Oklahoma. Participants selecting this MRO were also required to submit an odometer photo at enrollment and again at Pilot close for verification purposes.

For each option selected, participants received detailed instructions on how to set up the MRO devices, use the apps, manage their Fair Miles account, and record mileage for the Pilot. Customer service was available to all participants.

5.3.4. MILEAGE REPORTING

Mileage was reported on an ongoing basis as the Pilot operated over a six-month period. A daily report was produced and sent to the Pilot team to share the updated mileage for current enrolled participants. Figure 9 (Daily Mileage Reporting Snapshot) provides a snapshot example of one page of a typical daily report. More detail on reporting can be found in Appendix C – Pilot Operations. Additionally, daily mileage reports were available to Pilot participants through the Fair Miles Oklahoma web interface.

Figure 9 Daily Mileage Reporting Snapshot



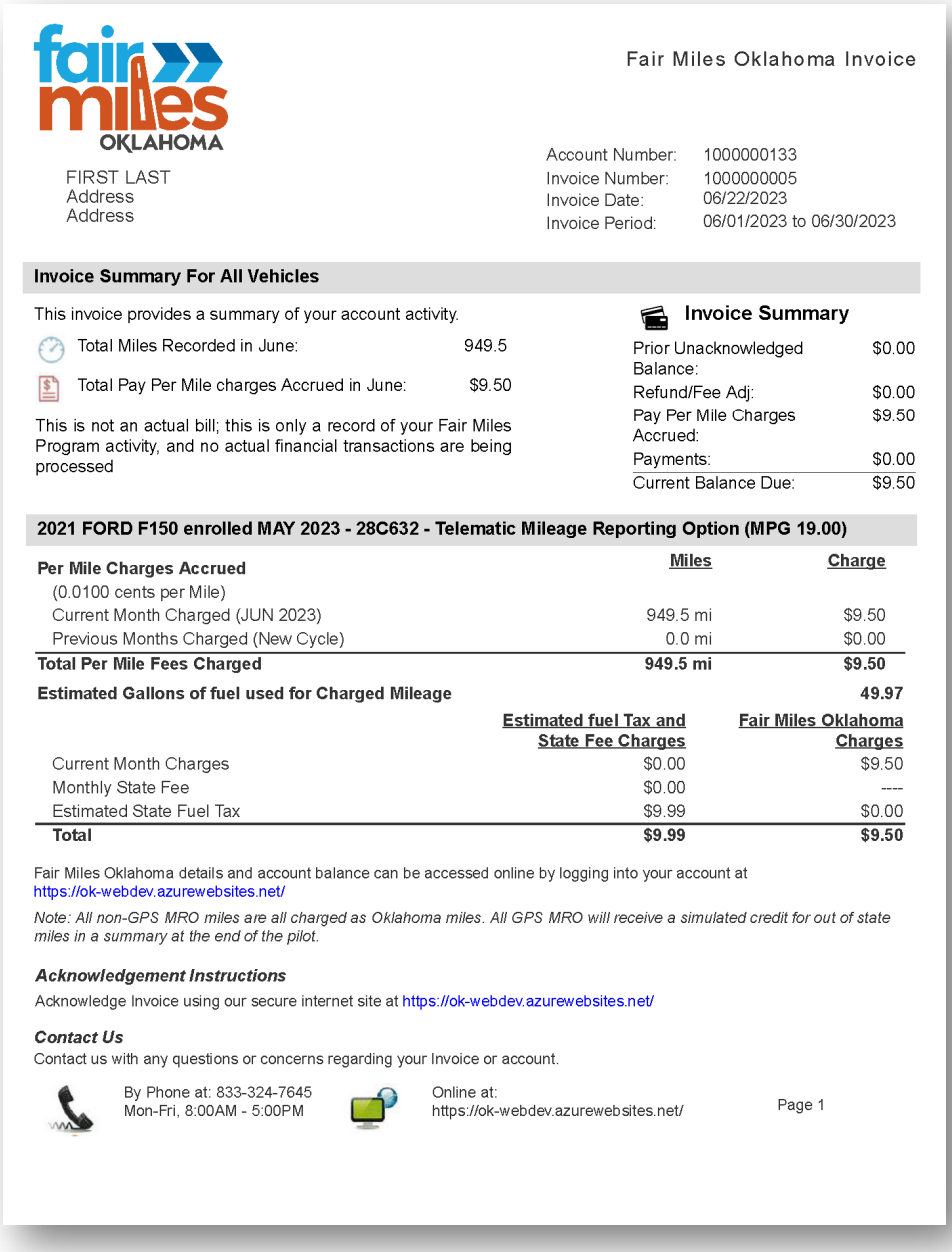
5.3.5. INVOICING AND MOCK PAYMENT

The 5th of every month, participants received an invoice with their previous month's recorded mileage as seen in the sample invoice in Figure 10 (Sample Fair Miles Oklahoma Invoice). The system allowed for participants to select their mock payment option of credit card, cash, check, Venmo, PayPal, Apple Pay, or money order. The participants' top three payment option choices were credit card (73%), cash (10%), and check (6%). Participants who chose a GPS-enabled (location enabled) MRO option were credited back for miles traveled outside of Oklahoma. The calculation of the credit was included as a table in the email participants received with the invoice as shown in Figure 11 (Sample Out of State Mileage Credit Table).

In Figure 10, the vehicle drove 949.5 miles during the month of June. This resulted in a PPM fee and balance due of $9.50 for the month. This vehicle is a 2021 Ford F-150 pickup truck using the telematics MRO. The United States Environmental Protection Agency (US EPA) estimated fuel economy for this vehicle is 19 mpg. Therefore, it is estimated that the driver used 49.97 gallons of fuel to travel the 949.5 miles, resulting in an estimated fuel tax of $9.99 for the month. In this example, the driver would have paid about $0.49 less in PPM fees than in fuel taxes for the month.

Figure 11 shows a vehicle that drove 1,450 miles during the month of June, of which 250 miles were outside the state of Oklahoma. These out-of-state miles are not charged under the Fair Miles Oklahoma Pilot, so this driver received a credit of $2.50 against their total PPM fee of $14.50.

Figure 10 Sample Fair Miles Oklahoma Invoice



Fair Miles Oklahoma Invoice

FIRST LAST
Address
Address

Account Number: 1000000133
Invoice Number: 1000000005
Invoice Date: 06/22/2023
Invoice Period: 06/01/2023 to 06/30/2023

Invoice Summary For All Vehicles

This invoice provides a summary of your account activity.

Total Miles Recorded in June: 949.5

Total Pay Per Mile charges Accrued in June: $9.50

This is not an actual bill; this is only a record of your Fair Miles Program activity, and no actual financial transactions are being processed

Invoice Summary

Prior Unacknowledged Balance:	$0.00
Refund/Fee Adj:	$0.00
Pay Per Mile Charges Accrued:	$9.50
Payments:	$0.00
Current Balance Due:	$9.50

2021 FORD F150 enrolled MAY 2023 - 28C632 - Telematic Mileage Reporting Option (MPG 19.00)

Per Mile Charges Accrued	**Miles**	**Charge**
(0.0100 cents per Mile)		
Current Month Charged (JUN 2023)	949.5 mi	$9.50
Previous Months Charged (New Cycle)	0.0 mi	$0.00
Total Per Mile Fees Charged	**949.5 mi**	**$9.50**
Estimated Gallons of fuel used for Charged Mileage		**49.97**

	Estimated fuel Tax and State Fee Charges	**Fair Miles Oklahoma Charges**
Current Month Charges	$0.00	$9.50
Monthly State Fee	$0.00	----
Estimated State Fuel Tax	$9.99	$0.00
Total	**$9.99**	**$9.50**

Fair Miles Oklahoma details and account balance can be accessed online by logging into your account at https://ok-webdev.azurewebsites.net/

Note: All non-GPS MRO miles are all charged as Oklahoma miles. All GPS MRO will receive a simulated credit for out of state miles in a summary at the end of the pilot.

Acknowledgement Instructions

Acknowledge Invoice using our secure internet site at https://ok-webdev.azurewebsites.net/

Contact Us

Contact us with any questions or concerns regarding your Invoice or account.

By Phone at: 833-324-7645
Mon-Fri, 8:00AM - 5:00PM

Online at:
https://ok-webdev.azurewebsites.net/

Page 1

Figure 11 Sample Out of State Mileage Credit Table

Out of State Miles Credit Summary	
For the period of 6/1/23 to 6/30/23	
Invoiced Total Miles Driven	1,450
Invoices Per Mile Charges	$14.50
Out of State Miles Driven	250
Out of State Per Mile Credit	**$2.50**
Total Per Mile Charges	$12.00

5.3.6. SURVEYS

Surveys were distributed to participants throughout the Pilot to gather feedback on various elements of the user experience. Each survey had a theme to correspond to the Pilot evaluation criteria and categories. Table 10 (Survey Overview) lists the surveys that were developed with the corresponding themes.

Table 10 Survey Overview

Survey Name and Time Frame (2023)	Survey Theme
Pre-Pilot Survey: (May 5th – August 15th)	Baseline Measurements
Survey #2: (July 5th – August 4th)	MRO
Survey #3: (August 5th – September 4th)	Social Media
Survey #4: (October 5th – November 4th)	Customer Service
Survey #5: (November 5th – November 20th)	Close-out

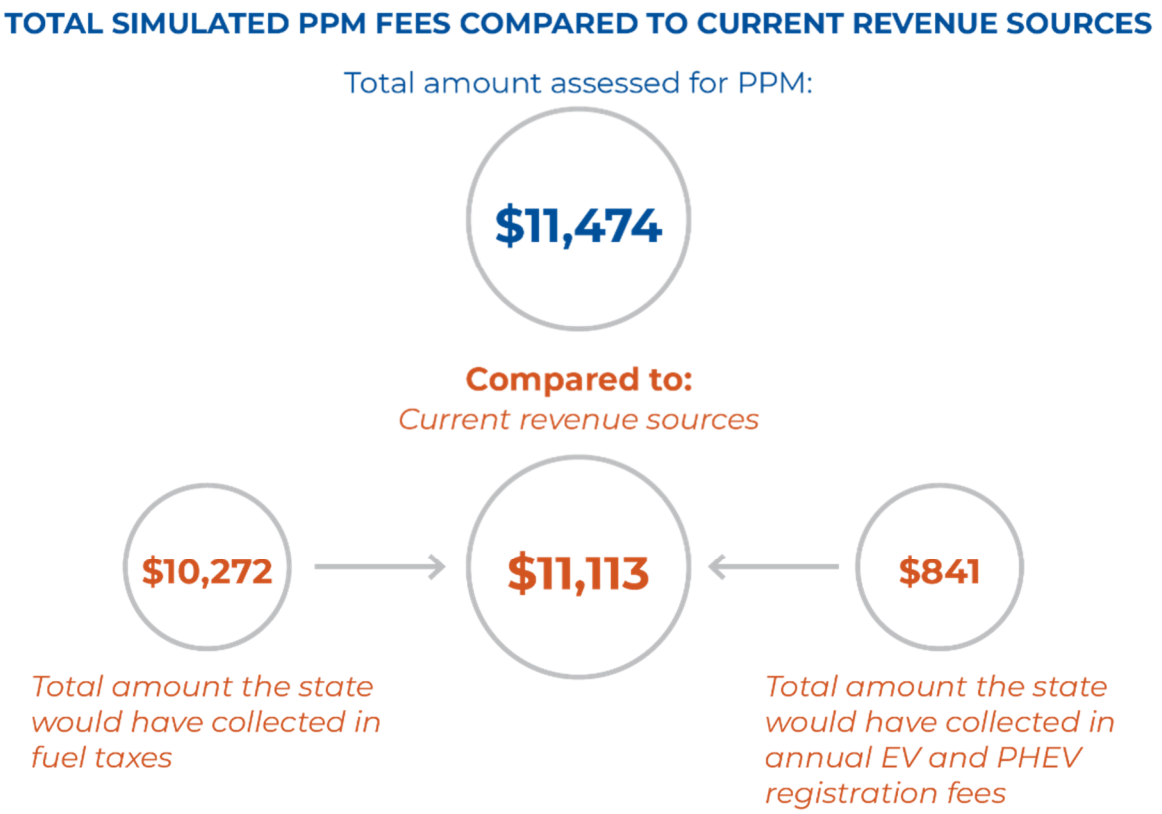
5.4. PILOT RESULTS

The Pilot results offer insights into how a PPM program in Oklahoma might operate and how it might be perceived by participants. The evaluation categories used in this Pilot included acceptance, privacy, equity, scalability, and sustainability.

5.4.1. SIMULATED PPM FEES COLLECTED

Simulated PPM fees were collected through monthly invoicing. Of the 445 Pilot enrollees, 295 actively participated in the Pilot and recorded miles. During the six months, $11,474 in simulated PPM fees ($0.01/mile) were collected from the Pilot participants. For the same participants during the six-month Pilot period, the estimated fuel tax collected would have been $10,272 and the Oklahoma annual EV and PHEV registration fees collected would have been $841. The estimated current revenue source (fuel tax and annual EV and PHEV registration fees) total would be $11,113. Figure 12 (PPM Fee Comparison) shows the difference between the PPM fees and other existing modes of collecting transportation revenues.

Figure 12 PPM Fee Comparison



Using an average annual mileage of 7,779 miles for all vehicle types, Table 11 (Estimated Annual Fee Comparison Per Participant) shows a comparison of the revenue collected using the existing fuel tax rate and the annual EV and PHEV registration fees versus the PPM fee for the same number of miles. Based on the average MPG and the assumed annual mileage of the different vehicle types, gasoline and hybrid vehicle participants would pay slightly more in a PPM system while EV and PHEV participants would pay slightly less.

Table 11 Estimated Annual Fee Comparison Per Participant

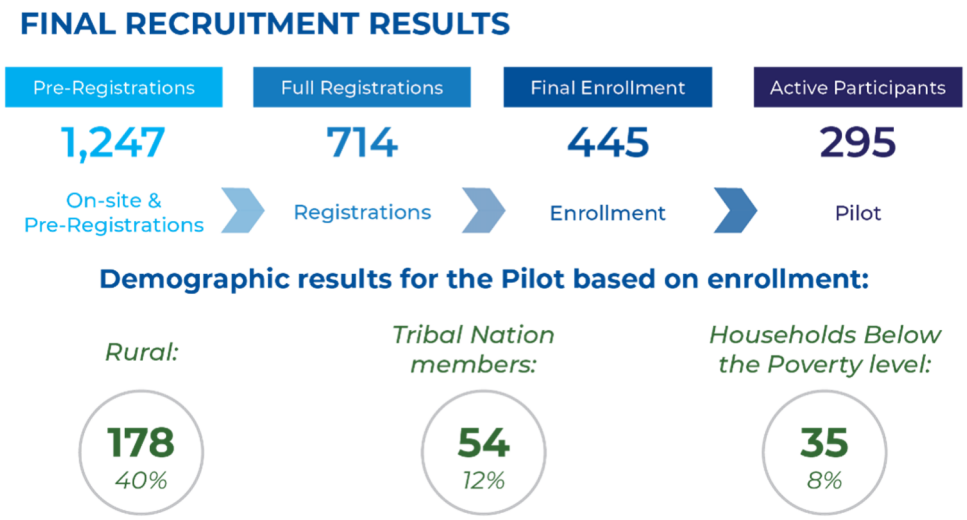
Vehicle Type	Estimated Annual PPM Fee*	Estimated Annual Fuel Tax	Annual EV & PHEV Registration Fee	Annual Difference (PPM vs. Fuel Tax and EV & PHEV Registration Fee)
Gasoline	$77.79	$68.15	$0.00	**$9.64 more**
Electric	$77.79	$0.00	$110 (EVs <6,000 lbs gross vehicle weight rating (GVWR)) $158 (EVs 6,001-10,000 lbs GVWR)	**$32.21 less** **$80.21 less**
Hybrid	$77.79	$45.41	$0.00	**$32.38 more**
PHEV	$77.79	$36.77	$82 (PHEVs <6,000 lbs GVWR)	**$40.98 less**

*Estimated based on the average 6-month Pilot participant mileage extrapolated to 1 year for a total of 7,779 miles

5.4.2. RECRUITMENT AND DEMOGRAPHIC RESULTS

Final recruitment results include numbers of pre-registrations, full registrations, final enrollment, and active participants. The final enrollment represented a wide cross-section of drivers, including individuals from Tribal Nations, low income, high income, urban, and rural Oklahoma communities. Registrations were received from all 77 counties in Oklahoma; however, attrition between recruitment (pre-registrations) and enrollment phases resulted in a total of 50 counties having active participants in the Pilot. Reference 5.3.2 Onboarding and Enrollment for definitions of pre-registrations, final registrations, and final enrollment. Figure 13 (Final Recruitment Results) shows the results of the recruitment efforts.

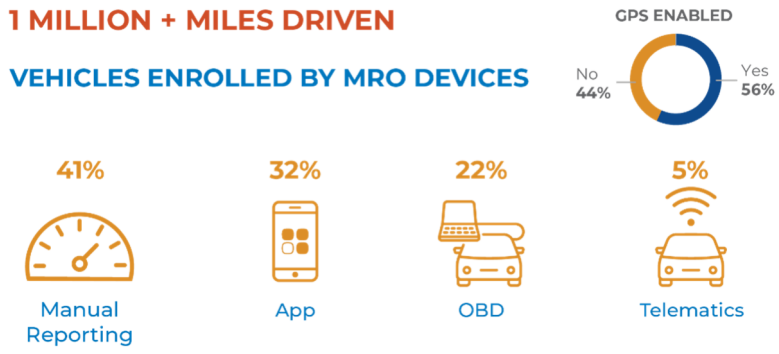
Figure 13 Final Recruitment Results



5.4.3. MILES, VEHICLES, AND MROS

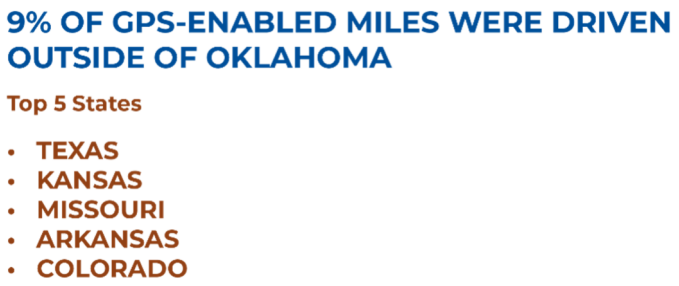
Over a million miles were recorded during the Pilot. The most popular MRO was manual reporting, with the mobile app as the second preferred choice by participants. Of the participants who selected the mobile app, OBD plug-in device, and telematics, 56% opted to have GPS-enabled to differentiate between miles recorded in-state versus out-of-state. Figure 14 (Mileage and MRO Choices) provides a summary of the Pilot miles and MROs.

Figure 14 Mileage and MRO Choices



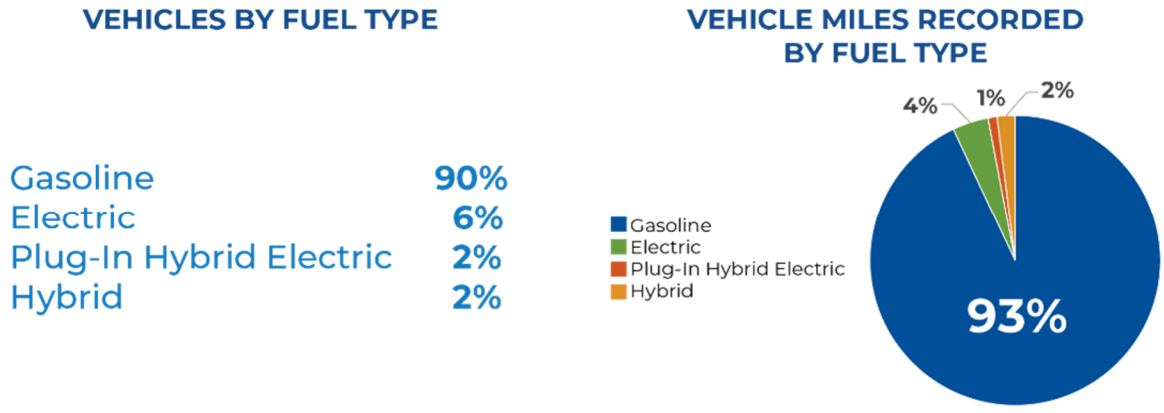
The GPS-enabled MROs differentiated between out-of-state and in-state recorded miles. Of all the Pilot miles recorded, 9% of the GPS-enabled recorded miles were out-of-state miles. No determination could be made for miles driven by vehicles that were not were not GPS-enabled. Figure 15 (Out of State Mileage) shows the top states where out-of-state miles were driven.

Figure 15 Out-of-State Mileage



The Pilot recorded miles from electric, plug-in hybrid electric, hybrid, and gasoline vehicles. There were no diesel vehicles in the Pilot. The average fuel economy of the participant fleet was about 22 mpg. For EV and PHEV, the average annual PPM fees were lower than the EV and PHEV annual vehicle registration fees (see Table 11). Figure 16 (Vehicles Enrolled and Vehicle Miles Recorded by Fuel Type) includes the breakdown of vehicles and miles recorded by fuel types.

Figure 16 Vehicles Enrolled and Vehicle Miles Recorded by Fuel Type



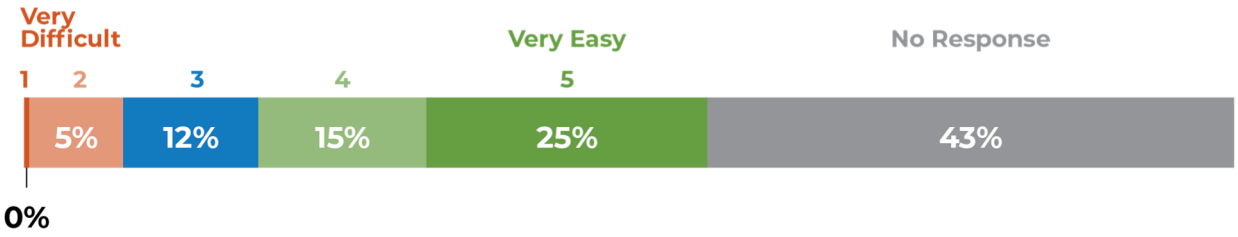
5.4.4. PARTICIPANT EXPERIENCE

Surveys distributed periodically throughout the 6-month Pilot asked questions to understand how participants felt about engaging in the Pilot PPM system. The five surveys collected a total of 676 survey responses from participants. In the survey results, the PPM system was generally described as fair/equitable, easy, and necessary. More than half of the participants felt a PPM system is fairer than the current fuel tax. The surveys showed that participants were mostly trusting of the privacy and security of their vehicle and personal data. Users indicated a relatively high ease of engaging with the system. The full survey final reports are included in the appendix. Figure 17 (Survey Results) show participants opinions regarding fairness, ease of use, and trust.

Figure 17 Survey Results

Do you feel a pay-per-mile program is fairer than the current fuel tax model?

On a scale of 1 (very difficult) to 5 (very easy), how easy is it to participate in the Fair Miles Oklahoma program?



On a scale of 1 (no trust) to 5 (full trust), how much do you trust Fair Miles Oklahoma with the privacy and security of your **personal data**?

On a scale of 1 (no trust) to 5 (full trust), how much do you trust Fair Miles Oklahoma with the privacy and security of your **vehicle mileage data**?

5.4.5. OUTCOMES

High level outcomes were developed for each Pilot evaluation category. The reporting outcomes are shown in Table 12 (Evaluation Category Reporting Outcomes).

Table 12 Evaluation Category Reporting Outcomes

Acceptance	**High Level of Support for PPM Among Pilot Participants** The average level of support for the program was 3.7 on a scale of 1 (lowest) to 5 (highest). **Pilot Participants Found it Easy to Participate** The average opinion on ease of participation was 1.9 on a scale of 1 (very easy) to 5 (very difficult).
Privacy	**Most Participants Feel their Data is Safe** The average participant trust level regarding the privacy and security of their personal data and vehicle mileage data is 3.6 on a scale of 1 (No Trust) to 5 (Full Trust).
Equity	**58% of Participants Feel the PPM Model is Fairer than the Current Fuel Tax Model** 33% are not sure, and 9% do not think it is fairer.
Scalability	**83% Invoice Response Rate** A total of 921 acknowledged invoices received out of 1,103 invoices that were distributed.
Sustainability	**$11,474 Simulated PPM Fees were Collected.** This compares favorably to $11,113 in fuel taxes and registration fees for the same vehicles. Only 26 accounts were closed throughout the Pilot.

6. PILOT CONCLUSIONS

The Fair Miles Pilot produced many valuable lessons learned for a future voluntary PPM deployment, if desired. The top four Pilot lessons learned were to have more education for Oklahomans on PPM to increase overall understanding and support, to make the PPM system as easy as possible to increase active participation, to increase incentives to keep participants engaged, and to bench test new MROs before deploying to a live PPM system. Additional lessons learned are in Figure 18 (Pilot Conclusions).

Figure 18 Pilot Conclusions

Recruitment and Retention Are Challenging

- People disengage at first sign of complexity – keep it simple to get participants signed up and engaged
- Need to recruit at least 4x the number of participants desired

Out-of-State Collections

- Collection from out-of-state vehicles is complex and challenging
- Non-GPS PPM options are favored by some participants to offset privacy concerns
- Non-GPS options do not record miles traveled out of state

Education Is Essential

- Inform about the motor fuel tax decline and need to find other revenue generating mechanisms
- Education increases public support for PPM programs

Privacy Is a Major Concern

- Early planning is critical
- Transparency and familiarity builds comfort with users
- Privacy wins over efficiency

Technology Mostly Works

- Simplicity is key
- One PPM system app (IOS and Android) is better than multiple apps and website to report miles
- Mobile app option needs more development
- OBD plug-in device works well, but it is expensive
- Telematics is easy and promising, although reliance on OEMs will create challenges for full adoption
- Manual reporting requires action on the part of participants, resulting in lower compliance in reporting miles

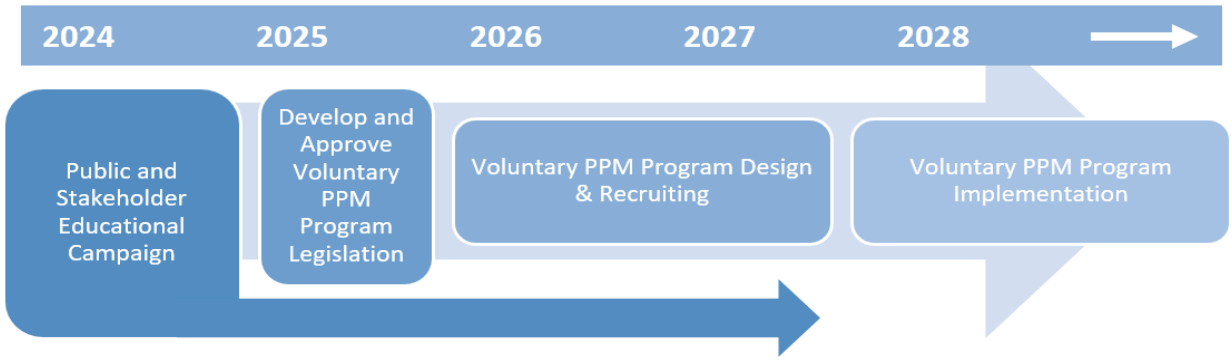
Incentives Help Motivate Engagement

- Incentives are necessary for recruitment and retention
- $50 per participant is not enough to incentivize engagement
- Incentivize through a value proposition

7. NEXT STEPS – OPTIONS FOR LEGISLATIVE CONSIDERATION

As directed by HB 1712, the RUC Task Force has successfully implemented a PPM Pilot and analyzed various options best suited for Oklahoma to address its declining fuel tax revenues and research a replacement that is fair for those utilizing the state's transportation infrastructure. While current technology may be cost prohibitive to implement a full-scale PPM fee structure at this time, there are several actions recommended for the Legislature moving forward. Figure 19 (Roadmap to Implementation) outlines the potential next steps.

Figure 19 Roadmap to Implementation



Task Force Recommendations:

- **Public and Stakeholder Educational Campaign**: The Task Force recommends that ODOT enhance its educational efforts to provide information to the driving public on the impact of declining transportation revenues, the various funding streams that support the transportation systems in Oklahoma, the inflationary increases associated with the ongoing cost of maintaining Oklahoma's infrastructure, and the impact of this critical infrastructure on improving state commerce and our quality of life. This engagement effort would include all governmental entities, state, counties, cities, and tribal entities along with all modes of transportation. Additionally, this engagement would educate Oklahomans about how transportation is currently funded and share the future challenges as motor fuel tax declines. This educational campaign would also present an opportunity to educate Oklahomans on how a PPM program could be used as an alternative to motor fuel tax and demonstrate the opportunities for fairness in its application for transportation.

- **Transition Transportation Funding Away from General Revenues where Possible**: Aligning revenue inputs with public expectations and an understanding of infrastructure needs is a critical interim step as Oklahoma discusses and develops long term prospects for generating future transportation infrastructure investment resources. The Task Force recommends that Oklahoma explore steps to fully dedicate vehicle revenues to Oklahoma's state, county and local roads and bridges, transitioning away from general revenues where possible. Options for consideration are presented in Section 3.

- **Develop Legislation for a Voluntary PPM Program**: While it may be cost prohibitive to implement a full-scale PPM fee structure at this time, the Task Force recommends that legislation be introduced during the 2025 session to develop and implement a voluntary PPM program in Oklahoma. This is intended to assist with technology development and further familiarize Oklahomans with this fuel tax replacement option. As vehicle technology advances the administrative costs or "cost-to-collect" should decline over time. Waiting until 2025 to introduce legislation will allow time for the robust public engagement and education

process that should help with the successful passage of the proposal. Following the successful passage of legislation in 2025, to provide adequate time for additional public engagement and to create all the necessary system parameters and requisite policies, the PPM program would not begin before January 1, 2027.

- **Implement a Tiered Rate Scale**: The Task Force recommends that the voluntary PPM program utilize a tiered rate schedule based on vehicle weight which could allocate fees based on impact to infrastructure as a matter of fairness. Heavier vehicles result in more wear and greater infrastructure maintenance needs than light duty vehicles and should pay a higher cost per-mile to accommodate that impact.

- **Pursue Federal Funding:** The Task Force recommends that the State of Oklahoma pursue any federal funding available for the implementation of an active, voluntary PPM program, and the utilization of available technology and processes to maintain the highest level of efficiency to ensure the successful collection and allocation of PPM revenue under the law.

- **Design a Flexible Program:** The Task Force recommends that the voluntary PPM program be flexible with indexing opportunities, and scalability to address current and future funding needs for transportation.

The research, Pilot findings, and recommendations in this report are the right steps to develop long-term, sustainable funding for transportation in Oklahoma.

APPENDICES