

RESPONSE TO A REQUEST FROM THE TASK FORCE ON THE ADMINISTRATION OF STATE TRANSPORTATION AND DEVELOPMENT SERVICES, AND THE LOUISIANA ELECTRIC VEHICLE TASK FORCE



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February 13, 2023

The Honorable Patrick Page Cortez,
President of the Senate
The Honorable Clay Schexnayder,
Speaker of the House of Representatives

Dear Senator Cortez and Representative Schexnayder:

This informational report provides answers to questions raised during the October 19, 2022, joint meeting of the task force on the Administration of State Transportation and Development Services, and the Louisiana Electric Vehicle task force. This report is intended to provide timely information related to an area of interest to the legislature.

Respectfully submitted,

Michael J. "Mike" Waguespack, CPA

Legislative Auditor

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ELECTRIC VEHICLE TASK FORCE



## **Louisiana Legislative Auditor**

Michael J. "Mike" Waguespack, CPA

Supplemental Information on Louisiana's

Transportation Trust Fund



Response to a Request from the Task Force on the Administration of State Transportation and Development Services, and the Louisiana Electric Vehicle Task Force

February 2023

Audit Control # 40230008

## Introduction

During the October 19, 2022, joint meeting of the task force on the Administration of State Transportation and Development Services, and the Louisiana Electric Vehicle Task Force, our office was asked to provide answers to additional questions from members after discussing our audit, Sufficiency of the Transportation Trust Fund in Meeting the State's Transportation Needs, issued on September 1, 2022. The purpose of that audit was to evaluate the sufficiency of Transportation Trust Fund (TTF) in meeting Louisiana's transportation needs and to identify ways to increase that funding.

Louisiana TTF includes revenues from motor fuel taxes (gasoline, diesel, and special fuels), federal Highway Trust Fund (HTF) receipts (from federal motor fuel taxes), motor vehicle license taxes, aviation fuel sales taxes, miscellaneous fees and fines, and interest earnings. TTF received approximately \$2.2 billion in revenue in fiscal year 2022, with \$621.2 million coming from the motor fuel tax. The state motor fuel tax rate is \$0.20/gallon and last increased in 1990.

In that report, we found that TTF funding has not been sufficient because motor fuel taxes, which are the TTF's largest revenue source, have not increased since 1990 and are not indexed for inflation, unlike other states. We also found that increased efficiencies in vehicle technology will decrease the amount the Department of Transportation and Development (DOTD) receives from motor fuel taxes and will continue to result in DOTD's inability to meet Louisiana's

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<sup>&</sup>lt;sup>1</sup> The purpose of the Administration of State Transportation and Development Services task force is to study national best practice models for the efficient and effective administration of state transportation departments. The purpose of the Louisiana Electric Vehicle Task Force is to study the economic impact of electric vehicles and to recommend any action or legislation that the task force deems necessary or appropriate.

<sup>&</sup>lt;sup>2</sup>https://bit.ly/3CH2BrF

transportation needs.<sup>3</sup> Unlike Louisiana, other states have diversified their transportation revenue sources to adjust for vehicle trends and declining motor fuel tax revenues. Exhibit 1 summarizes Louisiana's Fiscal Year (FY) 2022 TTF revenue amounts, and Appendix B provides a description of each revenue source.

Exhibit 1 Fiscal Year 2022 TTF Revenue Summary (in millions)				
Revenue Source	Amount	Percent		
Highway Trust Fund (HTF)- Federal Receipts*	\$858.9	39.0%		
TTF - Regular	616.6	28.0%		
Transportation Infrastructure Model for Economic Development (TIMED) Account**	124.2	5.6%		
Construction Subfund***	104.2	4.7%		
Mega Projects Leverage Fund****	500.0	22.7%		
Total	\$2,203.9	100.0%		

<sup>\*</sup>This funding is only available on a reimbursement basis and upon meeting specific conditions established by the federal government.

**Source**: Prepared by legislative auditor's staff using information from LaGov.

The purpose of this informational report is to answer additional questions the task force had in regards to the state's transportation funding and how these funds are used by DOTD. We answered the following questions:

### **TTF Uses for DOTD Operations**

- 1. How much TTF funding goes toward DOTD Operations, and specifically for unclassified employees? (pp.8-12)
- 2. At what point in the future will DOTD's salaries and benefits hit the budgetary ceiling so that no TTF funds would be left for construction projects? (pp.12-14)

## Potential Revenue Sources to Eliminate State Transportation Backlog and Motor Fuel Tax

- 3. If the Motor Fuel Tax is not increased, what would road usage fees on internal combustion engine, electric, and hybrid vehicles need to be to fully eliminate the current state transportation backlog over a 30-year period? (pp.15-17)
- 4. If the state charged a flat fee on all vehicles (internal combustion engine and electric) and eliminated the Motor Fuel Tax, what would this fee need

<sup>3</sup> DOTD 2021 State Highway and Bridge Needs report (i.e., the state transportation backlog) identified \$18.8 billion in unmet transportation infrastructure needs in Louisiana.

<sup>\*\*</sup>Act 16 of the 1989 First Extraordinary Legislative Session authorized the additional 4-cent tax on motor fuels to finance 16 specific projects.

<sup>\*\*\*</sup> The majority of FY 2022 revenues in the Construction Subfund came from non-recurring revenues per Act 167 of the 2022 Regular Legislative Session.

<sup>\*\*\*\*</sup>Established by Act 505 of the 2022 Regular Legislative Session.

- to be, and what impact would it have on out-of-state vehicles traveling on Louisiana's roads? (pp.18)
- 5. Can federal mineral royalties be used to pay for transportation projects, and what percentage of federal mineral royalties are allocated to Louisiana compared to other states? (pp.19-21)

### **Electric Vehicle Road-Usage Fees**

- 6. How are other states collecting electric vehicle fees, what would be the most efficient way to collect electric vehicle fees in Louisiana, and what is the difference in the amount of damages caused to roads by heavier vehicles? (pp.22-23)
- 7. Can the state charge fees for using electric charging stations based on the amount of power required to charge each electric vehicle? (pp.23-24)

The answers to these questions are discussed in detail throughout the remainder of the report. This report has the following appendices:

- Appendix A provides our scope and methodology.
- Appendix B provides the FY 2022 TTF Revenue Summary (Actuals), with a description of each revenue source.
- Appendix C provides HTF-Federal and TTF-Regular Disbursements (Actuals) for FY 2015 through FY 2022.
- Appendix D provides HTF-Federal and TTF-Regular Uses (Actuals) for DOTD Operations, by Program, for FY 2022.
- Appendix E provides HTF-Federal and TTF-Regular Uses for DOTD Operations (Actuals) by Expense Category for FY 2022.
- Appendix F provides HTF-Federal and TTF-Regular Uses (Actuals) for DOTD Operations by Expense Category for FY 2015 through FY 2022.
- Appendix G provides HTF-Federal and TTF-Regular Uses (Actuals) for DOTD Salaries, Other Compensation, and Related Benefits for FY 2015 through FY 2022.
- Appendix H provides Mineral Royalty Disbursements to Louisiana, by Mineral Royalty Source, for 2015 through 2022.
- Appendix I provides Mineral Royalty Rates and Disbursements to States.
- Appendix J provides Mineral Royalty Disbursements by State for 2015 through 2022.

- Appendix K provides Electric and Hybrid Vehicles Fees/Taxes and Collection Mechanisms in Other States.
- Appendix L provides the Comparison of Selected Specifications for BEVs, HEVs, and ICEVs in Luxury and Standard Classes.

Informational reports are intended to provide more timely information than standards-based performance audits. While these informational reports do not follow Government Auditing Standards, we conduct quality assurance activities to ensure the information presented is accurate. Appendix A summarizes our methodology.

## **Executive Summary**

Overall, we found the following:

### **TTF Uses for DOTD Operations:**

1. How much TTF funding goes toward DOTD Operations, and specifically for unclassified employees?

In FY 2022, the Louisiana Department of Treasury disbursed \$554.0 million (39.2%) from TTF for DOTD operations and \$794.3 million (56.3%) for DOTD capital outlay (transportation projects) of the \$1,411.7 million total disbursed. During FY 2022, DOTD expended \$376.6 million (68.0%) of the \$553.8 million on personnel expenditures, of which \$1.8 million was used for salaries of 16 unclassified positions and \$231.0 million for salaries of 3,978 classified positions, as well as \$143.8 million to employees for related benefits and other compensation.

2. At what point in the future will DOTD's salaries and benefits hit the budgetary ceiling so that no TTF funds would be left for construction projects?

Based on prior-year trends in DOTD's expenditures, we estimate that DOTD's salaries and expenditures would exceed DOTD's available *HTF-Federal* and *TTF-Regular* funding by FY 2036.

## Potential Revenue Sources to Eliminate State Transportation Backlog and Motor Fuel Tax

3. If the Motor Fuel Tax is not increased, what would road usage fees on internal combustion engine, electric, and hybrid vehicles need to be to fully eliminate the current state transportation backlog over a 30-year period?

The answer to this question depends on certain assumptions about how much of DOTD's capital outlay budget goes toward the state transportation backlog, and how much progress DOTD is able to make towards completing projects in the state transportation backlog each year. As of 2021, DOTD identified \$18.8 billion in state highway and bridge needs (i.e., state transportation backlog). We identified seven scenarios based on several assumptions to estimate what would road usage fees on internal combustion engine, electric, and hybrid vehicles need to be to fully eliminate the current state transportation backlog over a 30-year period (FY 2024 to FY 2053). For example, for the baseline scenario, the amount per vehicle would range from \$116 per year for internal combustion engine vehicles to \$271 per year for battery electric vehicles, with all other factors remaining constant.

4. If the state charged a flat fee on all vehicles (internal combustion engine and electric) and eliminated the Motor Fuel Tax, what would this fee need to be, and what impact would it have on out-of-state vehicles traveling on Louisiana's roads?

If the legislature chooses to eliminate the state's Motor Fuel Tax, to make up the \$621.2 million that the state received in FY 2022 from motor fuel taxes, the fee would need to be approximately \$161 per year per vehicle. However, the fee could be further refined by vehicle categories to account for difference in taxes paid by heavier vehicles, especially heavy trucks, that consume more fuel per mile and cause greater damage to roads. The fee would also need to be indexed to inflation to maintain its purchasing power over time. Eliminating the motor fuel taxes and replacing them with road usage fees would result in vehicles registered in other states not financially supporting the construction and maintenance of the state's highway system, even if they use the highways. Furthermore, according to the state's bond counsel, if the legislature statutorily eliminated the Motor Fuel Tax, the state would have to first refund and reissue the remaining bonds secured by the state's motor fuel taxes to avoid creating an impairment of contract.

5. Can federal mineral royalties be used to pay for transportation projects, and what percentage of federal mineral royalties are allocated to Louisiana compared to other states?

The majority of federal mineral royalties Louisiana receives are from the Gulf of Mexico Energy Security Act (GOMESA) offshore royalties, and Louisiana is limited in its use of GOMESA mineral royalties on transportation projects<sup>4</sup> unless the federal law is changed.

### **Electric Vehicle Road-Usage Fees**

6. How are other states collecting electric vehicle fees, what would be the most efficient way to collect electric vehicle fees in Louisiana, and what is the difference in the amount of damages caused to roads by heavier vehicles?

- Of the 31 states we evaluated that have an electric vehicle fee as of September 2022, Louisiana is the only state in which the entity collecting vehicle registration fees is not the one which collects electric vehicle fees.
- According to a memorandum issued in January 2023 by the Louisiana Transportation Research Center on a review of the extent of damage to pavements caused by the different classes of vehicles, the typical consumer vehicle (i.e., sedans, vans, SUVs, pick-up trucks, etc.) are known to cause minimal damage

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<sup>&</sup>lt;sup>4</sup> As denoted in 43 U.S.C. §1331 note (Gulf of Mexico Energy Security), it appears that the state may be authorized to expend GOMESA funds on transportation projects to the degree that the transportation infrastructure was directly affected by coastal losses, or the transportation infrastructure project mitigates impact of the Outer Continental Shelf oil and gas activities.

to the pavement. Busses and trucks (vehicle classes 4 to 13) are mainly responsible for pavement damage which is caused by stresses and strains induced by loads from individual axles directly in contact with the road.

## 7. Can the state charge fees for using electric charging stations based on the amount of power required to charge each electric vehicle?

According to the Louisiana Department of Revenue's *Ruling No. 22-004* issued on December 6, 2022, sales of electricity to consumers charging their cars at charging stations are subject to state sales tax. According to DOTD, most charging occurs at residential and business locations of vehicle owners. However, residential utilities are currently exempt from the state sales tax.

## TTF Uses for DOTD Operations

## Question 1. How much TTF funding goes toward DOTD Operations, and specifically for unclassified employees?

In FY 2022, the **Louisiana Department of** Treasury disbursed \$554.0 million (39.2%) from TTF for DOTD operations and \$794.3 million (56.3%) for **DOTD** capital outlay (transportation projects) of the \$1,411.7 million total disbursed. During FY 2022, DOTD expended \$376.6 million (68.0%) of the \$553.8 million on personnel expenditures, of which \$1.8 million was used for salaries of 16 unclassified positions and \$231.0 million for salaries of 3,978 classified positions, as well as \$143.8 million for related benefits and other compensation. Exhibit 2 summarizes the flow of the TTF funds to DOTD for operations.

The Louisiana
Department of Treasury
disburses collected TTF
revenues for the
constitutionally-allowed
purposes. Specifically, of the
\$2,203.9 million TTF revenues

**Exhibit 2** Flow of TTF Funds to DOTD for Operations **FY 2022** The Louisiana The Louisiana Department of Department of Treasury Disbursed Treasury Received TTF Revenues from the Revenues from HTF-Federal and TTF-HTF-Federal and TTF-Regular Regular \$1,475.5 Million \$1,411.7 Million **Amount DOTD** Expended for Amount Department Administration and of Treasury Disbursed **Enginnering and** to DOTD for Operations Operations \$554.0 million \$553.8 million Amout DOTD Expended on Salaries and Benefits \$376.6 million of \$553.8 million **Source:** Prepared by legislative auditor's staff using

information from LaGov and DOTD.

in FY 2022, \$1,411.7 million<sup>5</sup> (64.1%) was disbursed for DOTD Capital Outlay, DOTD Operations, Parish Transportation Trust Fund (PTF), and TIMED debt service in excess of the 4-cent motor fuel tax dedicated for the TIMED projects. Exhibit 3 summarizes HTF-Federal and TTF-Regular disbursements during FY 2022. Appendix C shows TTF disbursements for FY 2015 through FY 2022.

<sup>&</sup>lt;sup>5</sup> TIMED revenues were used to pay debt service (i.e. principal, interest, and premiums) associated with bonds used to fund the TIMED projects. There was no withdrawal of funds from the Construction Subfund and the Mega Projects Leverage Fund that are earmarked for specific projects.

нт	Exhibit 3 HTF-Federal and TTF-Regular <i>Disbursements</i> (Actuals) Fiscal Year 2022 (in millions)					
Disbursements	Explanation	HTF- Federal	TTF- Regular	Total (\$)	Total (%)	
DOTD Capital Outlay	Provides funding for the construction or renovation of state transportation infrastructure, including funding for the Highway Priority Program; the Facilities Program; the Airport Priority Program; the Flood Control Program; the Ports Priority Program; Non-Federal Aid State Roads and Highways; various large-scale infrastructure projects; and motor vessels and equipment.	\$684.7	\$109.6	\$794.3	56.3%	
DOTD Operations	Provides funding for the day-to-day expenses of DOTD agencies and seven programs administered by these agencies (i.e. Office of the Secretary, Office of Management and Finance, Engineering, Planning, Operations, Aviation, Multimodal Commerce).	153.7	400.3	554.0	39.2%	
Parish Transportation Fund	Provides funding to local government entities for road systems maintenance, mass transit, and to serve as local match for off system roads and bridges.		46.4	46.4	3.3%	
TIMED Debt Service	Provides additional monies in excess of the 4-cent motor fuel taxes dedicated for the TIMED projects to pay debt service (i.e. principal, interest, and premiums) associated with bonds used to fund the TIMED projects.		17.0	17.0	1.2%	
Total		\$838.4	\$573.3	\$1,411.7	100.0%	

DOTD expended \$553.8 of the \$554.0 million disbursed for its operations in FY 2022 to fund seven DOTD programs within two DOTD agencies: *Administration* and *Engineering and Operations*, as shown in Appendix D. The legislature appropriates funds for DOTD Operations in HB1 added by Expenditure Category, such as salaries and related benefits, professional services, etc., as shown in Exhibit 4. Appendix E shows the breakdown of HTF-federal and TTF-Regular Uses for DOTD Operations by Fund for FY 2022, while Appendix F shows the breakdown of HTF-federal and TTF-Regular Uses for DOTD Operations for FY 2015 through FY 2022.

**Source:** Prepared by legislative auditor's staff using information from LaGov.

# Exhibit 4 HTF-Federal and TTF-Regular *Expenditures* for DOTD Operations (Actuals) Fiscal Year 2022 (in millions)

Expenditure Category	Examples	Total Amount for DOTD Operations	Percent of Total DOTD Operations (\$553.8 Million)	Percent of Total HTF-Federal and TTF- Regular Revenues (\$1,475.5 Million)
Salaries	Salary funding for classified and unclassified employees, including overtime.	\$232.8	42.0%	15.8%
Other Compensation	Wage earning employees that are neither classified nor unclassified (student workers, part-time, temporary, and seasonal employees).	0.6	0.1%	0.0%
Related Benefits	Employee benefits funding for retirement, insurance, Federal Insurance Contributions Act (FICA), Medicare, fringe benefits, unemployment, post retirement, etc.	143.2	25.9%	9.7%
Travel	Travel within the state and out of state for trainings, inspections, emergency work, etc.	3.4	0.6%	0.2%
Operating Services	Printing services (reproduction); all utilities (gas, water, electricity); maintenance of buildings & property as well as equipment, janitorial, data processing equipment, as well as software, automotive repairs; Louisiana Equipment and Acquisition Fund (LEAF) financing of equipment; internet provider costs; dues & subscriptions; rentals of equipment; and postage.	19.1	3.4%	1.3%
Supplies	Paper, asphalt, office furniture, spare parts for equipment, pavement marking, signing materials, etc.	30.2	5.5%	2.0%
Professional Services	Specialized or highly technical services such as staff augmentation services, appraisal services, training services, traffic data management services, data collection services, structural bridge repairs, etc.	24.2	4.4%	1.7%

# Exhibit 4 HTF-Federal and TTF-Regular *Expenditures* for DOTD Operations (Actuals) Fiscal Year 2022 (in millions)

Expenditure Category	Examples	Total Amount for DOTD Operations	Percent of Total DOTD Operations (\$553.8 Million)	Percent of Total HTF-Federal and TTF- Regular Revenues (\$1,475.5 Million)
Other Charges	Contract maintenance (includes Contract Mowing & Litter; city mowing & litter Agreements; city signal agreements; rest area security, maintenance & operations; guardrail repairs & maintenance; attenuator repairs & maintenance; contract sweeping, tree removal, drainage projects, pavement markings, debris removal, loop repair & ditch cleaning; bridge handrail repair; and bridge deck drains). Also includes Motorists Assistance Patrol Program; Federal Transportation Administration (FTA) program's operating assistance - training, maintenance of equipment and repairs and direct purchases of specially equipped vehicles for elderly and disabled and rural transit programs.	\$32.2	5.8%	2.2%
Acquisitions	Purchase of lab, classroom, research, and video equipment, highway radar speed displays, inspection equipment for dams and levees, traffic data collection equipment, the purchase of heavy moveable equipment for the districts, etc.	6.4	1.2%	0.4%
Interagency Transfers	Payments to the Office of Risk Management, Office of Technology Services, Civil Service, Office of Telecommunications management, etc.	61.7	11.1%	4.2%
Total		\$553.8*	100.0%	37.5%

\*DOTD spent \$553.8 million out of the \$554.0 million disbursed, as shown in Exhibit 2. **Source:** Prepared by legislative auditor's staff using information from LaGov.

During FY 2022, DOTD expended \$376.6 million on personnel expenditures, of which \$1.8 million was used for salaries of 16 unclassified positions and \$231.0 million for salaries of 3,978 classified positions, as well as \$143.8 million for related benefits and other compensation. In FY 2022, DOTD personnel expenditures (i.e., salaries, other compensation, related benefits) accounted for 68.0% of DOTD Operations (\$376.6 million out of \$553.8 million) and for 25.5% of Total HTF-federal and TTF-Regular revenues (\$376.6 million out of \$1,475.5 million), as shown in Exhibit 5. Appendix G provides HTF-Federal and TTF-Regular Uses for DOTD Personnel Expenditures for FY 2015 through FY 2022.

Exhibit 5 HTF-Federal and TTF-Regular Uses (Actuals) for DOTD Personnel Expenditures Fiscal Year 2022 (in millions)					
TTF Uses	Percent as of Percent as of Total Total Total DOTD HTF-Federal and TTF-				
Salaries –Classified (3,978 headcount)	\$231.0	41.7%	15.7%		
Salaries – Unclassified (16 headcount)	1.8	0.3%	0.1%		
Other Compensation	0.6	0.1%	0.0%		
Related Benefits	ated Benefits 143.2 25.9% 9.7%				
Total Personnel \$376.6 68.0% 25.5%					
Source: Prepared by legislative auditor's staff using information from LaGov.					

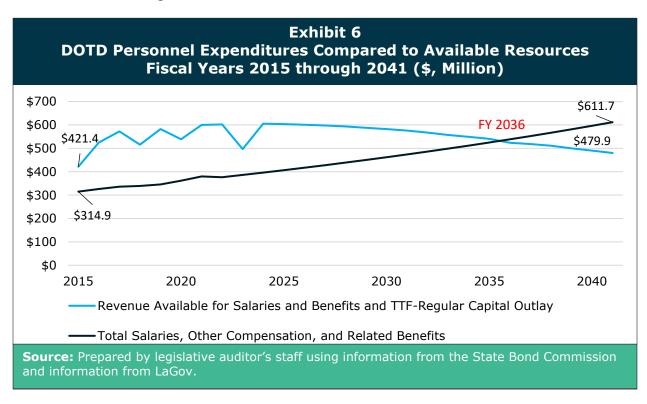
## Question 2. At what point in the future will DOTD's salaries and benefits hit the budgetary ceiling so that no TTF funds would be left for construction projects?

Based on prior-year trends in DOTD's expenditures, we estimate that DOTD's salaries and expenditures would exceed DOTD's available HTF-Federal and TTF-Regular funding by FY 2036. Louisiana has several revenue streams that are constitutionally and statutorily dedicated to TTF for state highway funding, such as motor fuels taxes, vehicle registration fees, and, beginning in FY 2024, a percentage of motor vehicle sales taxes. From FY 2015 through FY 2022, the state's Motor Fuel Tax was the largest source of revenue in the TTF regular, and motor fuel tax revenues increased at an annual rate of 0.3% per year, from \$485.1 million to \$496.9 million, and we project that external electric charging and increased fuel efficiency will negatively impact this growth rate in future years. On the other hand, DOTD's personnel expenditures in the form of salaries, overtime, and related benefits paid out of HTF-Federal and TTF-Regular funds

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<sup>&</sup>lt;sup>6</sup> The percentage of motor vehicle sales taxes dedicated to the Construction Subfund of the transportation trust fund starts out at 30% in FY 2024 and increases to 60% in FY 2025.

increased by 2.6% per year over the same period, from \$314.9 million to \$376.6 million. As shown in Exhibit 6, DOTD's personnel expenditures will exceed DOTD's revenues available to pay personnel expenditures and capital outlay out of HTF-Federal and TTF-Regular funds in FY 2036.



Although the motor vehicle sales taxes dedicated to the TTF beginning in FY 2024 have more growth potential since the price of vehicles sold (and subject to sales tax) will increase with inflation, these revenues are dedicated to the Construction Subfund and cannot be used for DOTD salaries and benefits. Likewise, although the owners of hybrid and electric vehicles are required to pay the road usage fees established by the Act 578 of the 2022 Regular Legislative Session, these fees are dedicated to the Construction Subfund and the Parish Transportation Fund and cannot be used for DOTD operations. As a result, DOTD personnel expenditures associated with transportation administration, planning, and maintenance have a higher growth rate than the dedicated transportation revenues available to pay for DOTD operations.

Although DOTD salaries, overtime, and benefits increased from FY 2015 to FY 2022, the actual headcount and full-time equivalent employees decreased from 4,157 to 3,994. Even though DOTD's average salary for all employees out of TTF has increased from \$45,929 to \$54,537 in FY 2015 and FY 2022, respectively, the agency still has difficulty attracting and retaining employees, resulting in 253 positions remaining vacant as of June 30, 2022. Mobile equipment operators, with

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 $<sup>^7</sup>$  Specifically, motor vehicle sales taxes increased from \$396.2 million in FY 2015 to \$564.4 million in FY 2022, a 5.2% annual growth rate.

an average minimum salary of \$27,922, were the type of job with the largest number of vacancies, accounting for 72 of DOTD's vacancies as of June 30, 2022. This budgetary ceiling would be reached sooner if DOTD's costs for salaries, overtime, and benefits increased faster. For example, if the growth rate were 3.6% instead of 2.6%, the ceiling would be reached in FY 2034 instead of FY 2036.

## Potential Revenue Sources to Eliminate State Transportation Backlog and Motor Fuel Tax

Question 3. If the motor fuel tax is not increased, what would road usage fees on internal combustion engine, electric, and hybrid vehicles need to be to fully eliminate the current state transportation backlog over a 30-year period?

The answer to this question depends on certain assumptions about how much of DOTD's capital outlay budget goes toward the state transportation backlog, and how much progress DOTD is able to make towards completing projects in the state transportation backlog each year. Currently, DOTD's state transportation backlog report includes the number of miles and dollar values associated with different backlog categories each year, but the report does not break down the change from year to year with new projects that were added to the list and old projects that were removed from the list as projects are completed. Furthermore, DOTD's capital outlay budget does not break down the amount spent on projects that specifically address the state transportation backlog versus projects that address other priorities. The percentage of DOTD capital outlay spending allocated to the state transportation backlog is important because a higher percentage would result in a lower fee being necessary to address the existing state transportation backlog.

Without this information, we can only estimate the impact of the state's capital outlay spending on the state transportation backlog and what the road usage fees would need to be to eliminate the current backlog over a 30-year period. As of 2021, DOTD has identified \$18.8 billion in state highway and bridge needs (i.e., the state transportation backlog) needed to ensure that the state's highways and bridges meet certain established thresholds for capacity, road condition, safety, and other characteristics. The state transportation backlog continued to increase from \$13.1 billion in 2015 to \$18.8 billion in FY 2021, a growth rate of 6.2% per year. As a result, current transportation funding has not been sufficient to reduce the state transportation backlog.

We identified seven scenarios based on several assumptions to estimate what road usage fees on internal combustion engine, electric, and hybrid vehicles would need to be to fully eliminate the current state transportation backlog over a 30-year period (FY 2024 to FY 2053). We estimated these fee amounts to pay for the most recent state transportation backlog determined by DOTD as of 2021. Over time, as sections of roadway continue to deteriorate physically and as capacity needs in certain areas increase and require lane additions, new projects will be added to the state transportation backlog. A higher fee than what we estimated in Exhibit 7 would be needed to pay for these additional needs.

In our analysis, we assume that newly estimated road usage fees will replace the Act 578 of the 2022 Regular Legislative Session road usage fees and will be entirely used toward the state transportation backlog with no dedications toward the Parish Transportation Fund. We also assume for all but one scenario that 40% of capital outlay is used to decrease the state transportation backlog. Exhibit A.1 in Appendix A shows how this percentage affects the road usage fee amount necessary to eliminate the existing state transportation backlog, which ranges from \$7 to \$195 per ICEV in the most extreme scenarios. As demonstrated in Exhibit 7 in scenario 1, the state could impose additional road usage fees on a per-vehicle basis to raise additional revenues to pay down the current state transportation backlog of projects over a 30-year period (FY 2024 to FY 2053), with the amount per vehicle ranging from \$116 per year for internal combustion engine vehicles (ICEV) to \$271 per year for battery electric vehicles (BEV). This differential in fees accounts for the difference in motor fuel tax collected from ICEVs, BEVs, plug-in hybrid electric vehicles (PHEVs), and hybrid electric vehicles (HEVs), and is designed to equalize the amount paid per vehicle per year in FY 2024.

As a result of inflation adjustments and further changes in fuel efficiency, the amount paid per vehicle per year will differ between vehicle types over time. While this fee is estimated to generate enough revenue to pay for the state transportation backlog existing as of 2021, it may not be sufficient to pay for subsequent needs that arise in later years, for example, as a result of physical deterioration of highway and bridge infrastructure through wear and tear or exposure to the elements. Additional revenue would be required to address both the state transportation backlog as of 2021 and subsequent needs. We assume that 40% of the motor vehicle sales taxes dedicated to the TTF will be used to address the state transportation backlog. Exhibit 7 shows various assumptions and the road usage fees that would be required in each scenario.

## Exhibit 7 Road Usage Fees Needed to Complete Projects in State Transportation Backlog Scenarios Illustrating Impact of Assumptions

		Scenarios II	lustrating	Impact of	Assumptio	ns	
Scenario	Scenario 1: Baseline	Scenario 2: Increase Capital Outlay Percentage to Backlog	Scenario 3: No Indexing of Fee to Inflation	Scenario 4: No Increase in Fuel Efficiency	Scenario 5: Increased Sales of HEVs and BEVs	Scenario 6: Increased Highway Construction Cost Inflation	Scenario 7: Slower Growth in Motor Vehicle Sales Tax
			Assui	nptions			
Capital Outlay % to Backlog	40%	50%	40%	40%	40%	40%	40%
Rate of Increase in Fee for Inflation Indexing*	2.5%	2.5%	0%	2.5%	2.5%	2.5%	2.5%
Annual Increase in Fuel Efficiency	0.7%	0.7%	0.7%	0.0%	0.7%	0.7%	0.7%
Percent of New HEVs or BEVs Sold in 2030	30	30	30	30	50	30	30
Highway Cost Inflation per Year	4.4%	4.4%	4.4%	4.4%	4.4%	5.4%	4.4%
Motor Vehicle Sales Tax Growth	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	0.1%
				<mark>r Vehicle in F</mark>			
ICEVs	\$116	\$94	\$174	\$113	\$101	\$153	\$119
BEVs	\$271	\$249	\$328	\$270	\$256	\$308	\$273
PHEVs	\$234	\$213	\$292	\$233	\$219	\$271	\$237
HEVs	\$188	\$166	\$245	\$186	\$173	\$225	\$190

**Note:** We estimated these fee amounts to pay for the most recent state transportation backlog determined by DOTD as of 2021. Over time, as sections of roadway continue to deteriorate physically and as capacity needs in certain areas increase and require lane additions, new projects may be added to the state transportation backlog. A higher fee than what we estimated above would be needed to pay for these additional needs.

<sup>\*</sup> We assumed that fees will be indexed to the Consumer Price Index, which averaged to 2.5% over the period of 2016 to 2021. However, the dollar amount of the state transportation backlog is assumed to increase based on the National Highway Construction Cost Index, which averaged to 4.4% over the period of 2016 to 2021.

Question 4: If the state charged a flat fee on all vehicles (internal combustion engine and electric) and eliminated the Motor Fuel Tax, what would this fee need to be, and what impact would it have on out-of-state vehicles traveling on Louisiana's roads?

If the legislature chooses to eliminate the state's Motor Fuel Tax, to make up the \$621.2 million<sup>8</sup> that the state received in FY 2022 from motor fuel taxes, the fee would need to be approximately \$161 per vehicle per year. However, the fee could be further refined by vehicle categories to account for differences in taxes paid by heavier vehicles, especially heavy trucks, that consume more fuel per mile and cause greater damage to roads. The fee would also need to be indexed to inflation to maintain its purchasing power over time. According to the Federal Highway Administration, Louisiana had 3,861,204 motor vehicles registered at some point during calendar year 2020, which includes automobiles, buses, trucks, and motorcycles. However, according to the state's bond counsel, if the legislature statutorily eliminated the Motor Fuel Tax, the state would have to first refund and reissue the remaining bonds secured by the state's motor fuel taxes to avoid creating an impairment of contract. The state would also incur issuance fees associated with this transaction. The state owes \$3.7 billion in principal and interest on outstanding bonds that are secured by the state's motor fuel taxes. These bonds will not mature until 2045.

Eliminating the motor fuel taxes and replacing them with road usage fees would result in vehicles registered in other states not financially supporting the construction and maintenance of the state's highway system, even if they use the highways. Under the current system, these vehicles would financially support the state's highway system if they purchased gasoline or other taxable fuels in Louisiana. Furthermore, all states currently levy gasoline taxes, so Louisiana motorists who drive in other states would still pay gasoline taxes to other states. As a result, this change would shift more of the burden of funding Louisiana's roads to Louisiana residents.

 $<sup>^8</sup>$  The \$621.2 million is the amount the state received in FY 2022 from *only* motor fuel taxes. The \$740.8 million includes *TTF-Regular* and *TIMED* revenues, including fees and earned interest.

## Question 5: Can federal mineral royalties be used to pay for transportation projects, and what percentage of federal mineral royalties are allocated to Louisiana compared to other states?

The majority of federal mineral royalties Louisiana receives are from **Gulf of Mexico Energy Security Act (GOMESA)** offshore rovalties since 2018, and Louisiana is limited in its use of **GOMESA** mineral royalties on transportation projects unless the federal law is changed. In 2022, Louisiana received a total of \$118.9 million in mineral royalties from the federal government, with \$111.8 (94.1%) million coming from GOMESA offshore

Exhibit 8 Federal Mineral Royalties Disbursements to Louisiana 2015 and 2022(\$, Million)					
Mineral Royalty Source					
8(g) Offshore*	\$11.9	\$3.9	(67.6%)		
GOMESA Offshore	0.8	111.8	13,591.5%		
Onshore 1.7 3.2 83.6%					
Total					

<sup>\*</sup> The 8(g) zone is the offshore region within three miles of a state shoreline.

sources, as shown in Exhibit 8. Of these \$111.8 million in GOMESA mineral royalties, the state received \$89.4 million (80.0%), and 19 parishes received \$22.4 million (20.0%). Appendix H provides mineral royalty disbursements to Louisiana by mineral royalty source for 2015 through 2022, and Appendix I provides information on mineral royalty rates and disbursements to states. However, Louisiana is limited in its use of GOMESA mineral royalties on transportation projects unless the federal law is changed. Federal law provides that state and local GOMESA funds can only be used for specific purposes:

 Projects and activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection, and infrastructure directly affected by coastal wetland losses.

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<sup>\*\*</sup>Based on exact amounts (not rounded to the nearest million). **Source:** Prepared by the legislative auditor's staff using information from the Office of Natural Resources Revenue within the U.S. Department of Interior.

<sup>&</sup>lt;sup>9</sup> Assumption (\$0.7 Million), Calcasieu (\$1.2 Million), Cameron (\$1.5 Million), Iberia (\$1.2 Million), Jefferson (\$1.8 Million), Lafourche (\$1.2 Million), Livingston (\$0.9 Million), Orleans (\$1.5 Million), Plaquemines (\$2.2 Million), St. Bernard (\$1.1 Million), St. Charles (\$0.8 Million), St. James (\$0.7 Million), St. John the Baptist (\$0.7 Million), St. Martin (\$0.8 Million), St. Mary (\$1.0 Million), St. Tammany (\$1.3 Million), Tangipahoa (\$0.9 Million), Terrebonne (\$1.7 Million), and Vermilion (\$1.2 Million).

<sup>&</sup>lt;sup>10</sup> As denoted in 43 U.S.C. §1331 note (Gulf of Mexico Energy Security), it appears that the state may be authorized to expend GOMESA funds on transportation projects to the degree that the transportation infrastructure was directly affected by coastal losses, or the transportation infrastructure project mitigates impact of the Outer Continental Shelf oil and gas activities.

<sup>&</sup>lt;sup>11</sup> The Office of Natural Resources Revenue within the U.S. Department of Interior collects revenue from natural resources extraction on federal lands and waters and distributes that revenue according to federal law. This process is called "disbursement."

<sup>&</sup>lt;sup>12</sup> 43 U.S.C. §1331 note (Gulf of Mexico Energy Security).

- Mitigation of damage to fish, wildlife, or natural resources.
- Implementation of a federally approved marine, coastal, or comprehensive conservation management plan.
- Mitigation of the impact of Outer Continental Shelf activities through the funding of onshore infrastructure projects.
- Planning assistance and the administrative costs of complying with GOMESA (no more than 3% of a state or parish's GOMESA revenues may be used for this purpose).

In addition to the federal mandates, Louisiana Legislature established through R.S. 49:214.6.6 additional requirements on the expenditure of GOMESA funds for infrastructure projects, <sup>13</sup> requiring proposed infrastructure projects to be submitted to the Coastal Protection and Restoration Authority Board for consideration and incorporation into the State's Annual Plan.

Federal laws treat revenues from offshore natural resources and onshore natural resources differently. According to the Office of Natural Resources Revenue within the U.S. Department of Interior, in most cases, each state determines how to use the onshore and 8(g) offshore funds disbursed to them. Federal law provides that states may use their onshore federal mineral royalty receipts for planning, construction and maintenance of public facilities, and provision of public services. Louisiana chooses to use revenues from offshore and onshore natural resources in the Louisiana Education Quality Trust Fund and the Coastal Protection and Restoration Fund. In fiscal year 2021, Wyoming allocated \$174.8 million (48.1%) of its federal mineral royalties to K-12 education, \$172.7 million (47.5%) to its general fund, and the remaining \$16.0 million (4.4%) to other funds.

During federal fiscal year 2022, of the 33 states that received mineral royalties, Louisiana received the fifth-largest mineral royalties' disbursements, as shown in Exhibit 9. Appendix J provides mineral royalties disbursements by state from 2015 through 2022.

<sup>&</sup>lt;sup>13</sup> Louisiana Revised Statute (R.S.) 49:214.2 defines "infrastructure" as facilities or system in the coastal area that are negatively impacted by coastal land loss or rising seas, and that serve a critical public purpose and are consistent with the priorities stated in the master plan and the eligible uses of the Gulf of Mexico Energy Security Act of 2006. The term shall not include levee, hurricane protection, or coastal restoration systems.

<sup>&</sup>lt;sup>14</sup> 30 U.S.C. § 191(a). <sup>15</sup> R.S. 17:3801 and R.S. 49:214.5.4

2022	Exhibit 9 2022 Federal Mineral Royalties Disbursements by State				
Number	State	Disbursements (\$)	Disbursements (%)		
1	New Mexico	\$2,738,659,933.8	62.88%		
2	Wyoming	785,726,556.8	18.04%		
3	North Dakota	163,646,101.2	3.76%		
5	Colorado Louisiana	142,599,469.7 118,875,920.2	3.27% 2.73%		
6	Utah	89,592,227.3	2.06%		
7	Texas	77,311,421.2	1.78%		
8	California	54,188,096.7	1.24%		
9	Alaska				
10	Alabama	45,063,882.8	1.03% 0.94%		
		40,894,177.7			
11	Mississippi	37,809,767.6	0.87%		
12	Montana	35,066,491.4	0.81%		
13	Nevada	9,380,215.1	0.22%		
14	Idaho	4,990,427.8	0.11%		
15	Oklahoma	4,806,060.2	0.11%		
16	Missouri	2,448,020.2	0.06%		
17	Arkansas	1,197,291.1	0.03%		
18	Ohio	968,149.2	0.02%		
19	Kansas	870,543.7	0.02%		
20	South Dakota	469,446.9	0.01%		
21	West Virginia	215,060.5	0.01%		
22	Michigan	133,699.3	0.00%		
23	Illinois	111,634.5	0.00%		
24	Kentucky	77,690.2	0.00%		
25	Virginia	52,211.7	0.00%		
26	Oregon	36,808.6	0.00%		
27	Nebraska	25,451.6	0.00%		
28	Florida	9,971.2	0.00%		
29	Minnesota	3,740.7	0.00%		
30	Washington	2,211.3	0.00%		
31	South Carolina	785.1	0.00%		
32	Arizona	168.2	0.00%		
33	North Carolina	111.8	0.00%		
Total		\$4,355,233,745.3	100.00%		

**Source:** Prepared by legislative auditor's staff using information from the Office of Natural Resources Revenue within the U.S. Department of Interior.

## Electric Vehicle Road-Usage Fees

Question 6. How are other states collecting electric vehicle fees, what would be the most efficient way to collect electric vehicle fees in Louisiana, and what is the difference in the amount of damages caused to roads by heavier vehicles?

Louisiana is the only state we evaluated that is not required to collect the electric vehicle fee along with the vehicle registration fees. 16 Act 578 of the 2022 Regular Legislative Session enabled the state to begin collecting road usage fees from hybrid electric vehicles (HEV), plug-in hybrid electric vehicles (PHEV), and battery electric vehicles (BEV) on January 1, 2023. Specifically, the Act<sup>17</sup> created an annual road usage fee of \$110 for all-electric vehicles (BEVs), and \$60 for all hybrid vehicles (HEVs and PHEVs), to be collected by the Louisiana Department of Revenue (LDR) and deposited into the TTF (70%) and parish transportation trust fund (30%) for local governments. Since this fee will be collected by LDR and not along with the vehicle registration fees, there may be a risk that these funds will not be reported and subsequently collected unless LDR establishes a process to ensure that all individuals with electric or hybrid vehicles will report and pay the fee.

We evaluated 30<sup>18</sup> states, not including Louisiana, that have an electric vehicle fee as of September 2022. For all 30 states, the entity that collects vehicle registration fees also collects electric vehicle fees. Appendix K summaries the collection mechanism for these states. The Louisiana Office of Motor Vehicles (OMV) is responsible for collecting and maintaining vehicle registration fees. Instead of LDR collecting EV fees, a better option may be to identify a way for OMV to collect the EV fee in a process that is separate from the vehicle registration fee collection process. This is because OMV already collects and maintains vehicle registration data. According to OMV, capturing a fuel type in its database would allow for assessment and collection of the EV fee, as well as allow the customer to contest the classification of the customer's vehicle as electric or hybrid. However, according to OMV, its current legacy computer system does not capture vehicle fuel type. While OMV is waiting for its computer system upgrade to be completed, the agency stated that a field can be added to its current legacy computer system that will allow for manually capturing a one-digit fuel type character. However, it will take a minimum of 12 months to implement this change, and OMV would also require the appropriate funding to start performing this function.

<sup>&</sup>lt;sup>16</sup> According to LDR, LDR will promulgate rules later this year for the implementation of Act 578 of the 2022 Regular Legislative Session to begin collecting the fee by the new fee's initial due date of May 15, 2024.

<sup>&</sup>lt;sup>17</sup> Codified as R.S. 32:461.

<sup>&</sup>lt;sup>18</sup> Alabama, Arkansas, California, Colorado, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

In addition, according to a memorandum issued by the Louisiana Transportation Research Center (LTRC) in January 2023 on a review of the extent of damage to pavements caused by the different classes of vehicles, the typical consumer vehicle (i.e., sedans, vans, SUVs, pick-up trucks, etc.) are known to cause minimal damage to the pavement. Busses and trucks (vehicle classes 4 to 13) are mainly responsible for pavement damage which is caused by stresses and strains induced by loads from individual axles directly in contact with the road. For example, this LTRC memorandum reported that relative damage significantly increases for each additional axle over five. This research also stated that the damage caused by trucks operating beyond the legal weight is significantly higher and also noted that a savings of \$4.50 is made in pavement repairs for every \$1 invested in mobile enforcement of legal weight limits.

Even though electric and hybrid vehicles may not cause more damage, electric and hybrid vehicle owners still use the state's highway system, and the fees collected from these owners provide for the construction and ongoing maintenance of the state's highway system. Appendix L shows a comparison of selected specifications, including weight, for BEVs, HEVs, and ICEVs in luxury and standard classes.

## Question 7: Can the state charge fees for using electric charging stations based on the amount of power required to charge each electric vehicle?

According to the Louisiana Department of Revenue's Ruling No. 22-004 issued on December 6, 2022, sales of electricity to consumers charging their cars at charging stations are subject to state sales tax. The electricity is tangible personal property being sold at retail. There are currently no state fees established for using electric charging stations in Louisiana. Additional fees for idle time are not subject to state sales tax, if separately stated. However, this sales tax on electric charging stations is currently not dedicated to TTF. To avoid double taxing the electricity used for electric vehicle charging, the sale of the electricity to the consumer of the charging station is taxed, but not when the owner of the charging station purchases the electricity from the electric company. According to DOTD, most charging occurs at residential and business locations of vehicle owners. However, residential utilities are currently exempt from the state sales tax.

We found that at least four states — Iowa, Kentucky, Oklahoma, and Pennsylvania — enacted a per-kilowatt hour fee on users of public electric vehicle charging stations based on the energy they consume to charge their vehicle

batteries. According to the National Conference of State Legislatures, <sup>19</sup> states are employing this strategy to address declining motor fuel tax revenues. These four states have allocated most of the revenue collected to transportation infrastructure projects such as road and bridge maintenance.

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<sup>&</sup>lt;sup>19</sup> The National Conference of State Legislatures, December 2022, *Road Worries: Sagging Gas Tax, Rising Traffic Safety Woes*, <a href="https://www.ncsl.org/news/details/road-worries-sagging-gas-tax-rising-traffic-safety-woes">https://www.ncsl.org/news/details/road-worries-sagging-gas-tax-rising-traffic-safety-woes</a>

### APPENDIX A: SCOPE AND METHODOLOGY

This informational report answers additional questions raised by the Task Force on Administration of State Transportation and Development Services, and the Louisiana Electric Vehicle Task Force in regards to the state's transportation funding and how these funds are used by the Department of Transportation and Development (DOTD). This report covered fiscal year 2015 through fiscal year 2022. We answered the following questions:

### **TTF Uses for DOTD Operations**

- 1. How much TTF funding goes toward DOTD Operations, and specifically for unclassified employees?
- 2. At what point in the future will DOTD's salaries and benefits hit the budgetary ceiling so that no TTF funds would be left for construction projects?

## Potential Revenue Sources to Eliminate State Transportation Backlog and Motor Fuel Tax

- 3. If the motor fuel tax is not increased, what would road usage fees on internal combustion engine, electric, and hybrid vehicles need to be to fully eliminate the current state transportation backlog over a 30-year period?
- 4. If the state charged a flat fee on all vehicles (internal combustion engine and electric) and eliminated the motor fuel tax, what would this fee need to be, and what impact would it have on out-of-state vehicles traveling on Louisiana's roads?
- 5. Can federal mineral royalties be used to pay for transportation projects, and what percentage of federal mineral royalties are allocated to Louisiana compared to other states?

## **Electric Vehicle Road-Usage Fees**

- 6. How are other states collecting electric vehicle fees, what would be the most efficient way to collect electric vehicle fees in Louisiana, and what is the difference in the amount of damages caused to roads by heavier vehicles?
- 7. Can the state charge fees for using electric charging stations based on the amount of power required to charge each electric vehicle?

#### To answer the above questions, we performed the following:

Researched and reviewed state Revised Statutes applicable to TTF.

- Researched and reviewed federal laws and regulations relevant to mineral royalties.
- Analyzed TTF financial data from LaGov Louisiana's integrated system that includes Financials, Logistics, Human Resources/Payroll and Business Intelligence. The LaGov ERP system consolidates multiple legacy systems and many agency-specific systems providing improved transparency and standardized processes.
- Analyzed ZP116 reports to obtain headcounts of DOTD employees as of June 30 for each fiscal year in our scope.
- Obtained and reviewed TTF revenue projections from the Louisiana Revenue Estimating Conference.
- Obtained and reviewed DOTD's 2021 State Highway and Bridge Needs Report.
- Conducted research regarding how other states collect electric vehicle fees (e.g., upon registration, through self-reporting, etc.).
- Interviewed staff in DOTD, the Office of Motor Vehicles, and the Department of Revenue.
- Obtained the number of motor vehicles registered in Louisiana at some point during calendar year 2020 from the Federal Highway Administration's website (https://www.fhwa.dot.gov/policyinformation/statistics/2020/pdf/mv1.pdf).
- Obtained mineral royalty disbursements by state from the Office of Natural Resources Revenue within the U.S. Department of Interior (<a href="https://revenuedata.doi.gov/">https://revenuedata.doi.gov/</a>).
- Obtained the Louisiana Department of Revenue's *Ruling No. 22-004* issued on December 6, 2022, from the department's website (<a href="https://revenue.louisiana.gov/">https://revenue.louisiana.gov/</a>).
- Obtained and reviewed the 2022 EPA Automotive Trends Report from the U.S. Environmental Protection Agency's website (<a href="https://www.epa.gov/system/files/documents/2022-12/420r22029.pdf">https://www.epa.gov/system/files/documents/2022-12/420r22029.pdf</a>).
- Researched selected specifications and weight for ICEV, HEV, PHEV, and BEV vehicles using information from the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy (<a href="https://fueleconomy.gov/">https://fueleconomy.gov/</a>); Car and Driver digital magazine (<a href="https://www.caranddriver.com">https://www.caranddriver.com</a>); and Toyota website (<a href="https://www.toyota.com">https://www.toyota.com</a>).

- Obtained the State of Wyoming's Annual Comprehensive Financial Report for fiscal year ended June 30, 2021 (<a href="https://sao.wyo.gov/wp-content/uploads/2022/06/ACFR-FY2021-5.31.22.pdf">https://sao.wyo.gov/wp-content/uploads/2022/06/ACFR-FY2021-5.31.22.pdf</a>).
- Researched fee collection strategies for users of public electric vehicle charging stations from the National Conference of State Legislatures.
- Estimated the growth trend in TTF revenue sources beyond the REC forecast window and the growth trend in salaries and benefits paid from TTF to estimate the point at which salaries and benefits would exceed available resources, assuming a continuation of prior-year trends.
  - First, we included all revenues in the TTF, including gas tax (regular and TIMED), motor vehicle license tax, aviation fuels, DOTD special permit fees, state police, weights and standards, miscellaneous fees and fines, and interest earnings. We also included federal Highway Trust Fund revenues. We did not include motor vehicle sales tax revenues since R.S. 48:77 dedicates these funds to the Construction Subfund and La. Const. Art. VII § 27(B)(2) prohibits DOTD from using the subfund for the payment of wages and related benefits or employee retirement benefits.
  - Next, we subtracted the constitutionally required [La. Const. Art. VII § 27(B)(1)] 1-cent dedication of motor fuel tax to the Parish Transportation Fund, TIMED debt service, the federally-funded portion of capital outlay, and the federally-funded portion of DOTD's non-personnel costs (i.e., costs other than salaries and related benefits). This left the amount available to pay salaries and related benefits.
  - Finally, we estimated future federally- and state-funded salaries and benefits, with a 2.6% annual growth rate that was based on prior-year trends.
- Estimated the fee necessary to pay off all state highway and bridge needs (i.e., the state transportation backlog) existing as of FY 2021 over a 30-year period beginning in FY 2024.
  - We assumed that newly estimated road usage fees will replace the Act 578 of the 2022 Regular Legislative Session road usage fees and will be entirely used toward the state transportation backlog with no dedications toward the Parish Transportation Fund.
  - We started with the \$18,771,000,000 state transportation backlog reported in DOTD's 2021 State Highway and Bridge Needs report.

- In each year, we assumed that 40% of the state's capital outlay budget payable from the TTF is allocated towards paying down the state transportation backlog, along with the full amount of road usage fees collected on a per-vehicle basis for internal combustion engine, battery electric, hybrid electric, and plug-in hybrid electric.
  - As statutory dedications of motor vehicle sales taxes to the TTF take effect in FY 2024 and subsequent years, we apply the same 40% figure that we applied to capital outlay to estimate the amount that will go towards the state transportation backlog.
  - Although R.S. 48:77.1 dedicates up to \$160 million of the dedicated motor vehicle sales taxes to the Megaprojects Leverage Fund, DOTD officials noted that one of these projects (the I-10 Calcasieu River Bridge) is included in the backlog, while portions of another (the I-49 South expansion) are also included in the backlog. As a result, at least 25% of the \$160 million dedicated to the Megaprojects Leverage Fund will address state transportation backlog projects.
  - To estimate a minimum and maximum potential impacts of capital outlay on the estimated road usage fee necessary to eliminate the state transportation backlog, we calculated what the road usage fee would be with 4% of capital outlay going towards the state transportation backlog and also with up to 90% of capital outlay going to the state transportation backlog.
    - The minimum amount of 4% is based on the dedication of \$40 million annually in motor vehicle sales tax to the I-10 Calcasieu River bridge, which is included in the backlog, out of a total of \$1.1 billion in estimated capital outlay spending from TTF-Regular and Federal for FY 2025.
    - The maximum amount of 90% is based on the average of \$755.9 million in TTF-Regular and TTF-Federal capital outlay spending over FY 2015 through 2022, less the \$76.8 million appropriated for ports, aviation, and statewide flood control.
  - Exhibit A.1 shows the road usage fee needed for each vehicle type to pay down the backlog existing as of 2021 by FY 2053. The "40% to Backlog" and "50% to Backlog" scenarios correspond to scenarios 1 and 2 in Exhibit 7. For each percentage point increase in the percentage of

TTF-Federal and TTF-Regular capital outlay allocated toward backlog projects, we estimated that the road usage fee would decrease by \$2.18 for each vehicle type.

Exhibit A.1 Fee to Eliminate Existing Backlog Under Capital Outlay Scenarios					
Vehicle Type					
ICEV	\$195	\$116	\$94	\$7	
BEV	349	271	249	162	
PHEV	313	234	213	125	
HEV	266	188	166	79	

**Source:** Prepared by legislative auditor's staff based on an analysis of data from the Federal Highway Administration and DOTD, as well as information from LaGov.

 Exhibit A.2 provides a summary of how we derived the growth rates for consumer prices, highway construction costs, motor vehicle sales taxes, and fuel efficiency that were used in the analysis.

Exhibit A.2 Growth Rates Used in Analysis of Projections					
Series Starting Level Ending Level Annualized - 2016 - 2021 Growth Rate					
Consumer Price Index	240.01	270.97	2.5%		
National Highway Construction Cost Index	1.66	2.06	4.4%		
Motor Vehicle Sales Tax	\$523.6 million	\$554.2 million	1.1%		
Fuel Efficiency	16.5 mpg*	17.3 mpg	0.7%		

<sup>\*</sup> The base year for fuel efficiency was 2014, consistent with our 2022 performance audit on the "Sufficiency of the Transportation Trust Fund in Meeting the State's Transportation Needs," Report ID No. 40210029.

**Source:** Prepared by legislative auditor's staff using information from the Bureau of Labor Statistics, Bureau of Transportation Statistics, Revenue Estimating Conference, and Federal Highway Administration.

 Exhibit A.3 provides a summary of the number of vehicles, by type, that we used to estimate the fee amount per vehicle needed to pay off the state transportation backlog existing as of 2021 by FY 2053.

Exhibit A.3 Number of Vehicles by Type				
Vehicle Type	2022	2053		
ICEV	3,795,198	1,722,641		
BEV	9,669	577,618		
PHEV	5,442	1,533,592		
HEV	50,895	27,353		
Total	3,861,204	3,861,204		

**Source**: Prepared by legislative auditor's staff based on analysis of data from the U.S. National Highway Traffic Safety Administration, as well as unaudited data from the Office of Motor Vehicles.

 Sent the results of our analysis and the report to DOTD for review and feedback.

## **APPENDIX B: FY 2022 TTF REVENUE SUMMARY**

Revenue Source	Explanation	Amount (\$, Million)	Percent
Highway Trust Fund (HTF)- Federal Receipts*	Federal motor fuels taxes of \$0.184 per gallon for gasoline and \$0.244 per gallon for diesel fuel are deposited into the federal HTF. The HTF funds are then allocated to states based upon a formula and on a reimbursement basis, provided that the state meets federal requirements, including a state match for capital projects.	\$858.9	39.0%
TTF - Regular	Louisiana's motor fuel taxes of \$0.16 per gallon are deposited into TTF. In addition, proceeds from aviation fuel taxes, motor vehicle license taxes, miscellaneous fees and fines, as well as interest earnings are deposited in TTF unless they are dedicated to the Construction Subfund by state law.	616.6	28.0%
Transportation Infrastructure Model for Economic Development (TIMED) Account**	Louisiana's motor fuel taxes of \$0.04 per gallon are deposited into the TIMED Account and dedicated to debt service associated with TIMED projects.	124.2	5.6%
Construction Subfund***	Any new tax levied on motor fuels that become effective on or after July 1, 2017, must be deposited into this subfund. In addition, a portion of proceeds of the state motor vehicle sales and use tax as well as any revenues collected by DOTD for issuance of special permits in excess of \$20 million are dedicated to the Construction Subfund by state law.	104.2	4.7%
Mega Projects Leverage Fund***	Act 505 of the 2022 Regular Legislative Session dedicates 75% of the portion of the avails of the tax on the sale, use, or lease of motor vehicles, not to exceed \$160 million in any fiscal year. The Act also creates four special accounts in the Megaprojects Leverage Fund, into each of which shall be deposited 25% of the amount deposited into the Megaprojects Leverage Fund each year as well as any other monies appropriated to each special account each year.	500.0	22.7%
Total		\$2,203.9	100.0%

<sup>\*</sup>This funding is only available on a reimbursement basis and upon meeting specific conditions established by federal government.

\*\*Act 16 of the 1989 First Extraordinary Legislative Session authorized the additional 4-cent tax on

**Source:** Prepared by legislative auditor's staff using information from LaGov.

<sup>\*\*</sup>Act 16 of the 1989 First Extraordinary Legislative Session authorized the additional 4-cent tax or motor fuels to finance 16 specific projects.

\*\*\* The majority of fiscal year 2022 revenues in the Construction Subfund and the Mega Projects

<sup>\*\*\*</sup> The majority of fiscal year 2022 revenues in the Construction Subfund and the Mega Projects Leverage Fund came from the non-recurring revenues per Act 167 of the 2022 Regular Legislative Session.

#### APPENDIX C: HTF-FEDERAL AND TTF-REGULAR DISBURSEMENTS (ACTUALS) FOR FY 2015 THROUGH FY 2022

Disbursements To	FY15	FY16	FY17	FY18	FY19
DOTD Capital Outlay	\$667,149,560.9	\$815,250,783.2	\$746,291,445.9	\$701,745,019.1	\$820,017,489.9
DOTD Operations	486,267,308.9	496,208,577.6	512,502,610.6	521,802,785.8	522,944,305.3
Parish Transportation Fund	46,400,000.0	46,400,000.0	46,400,000.0	45,166,373.2	46,400,000.0
TIMED Debt Service*	20,668,972.5	20,052,483.4	15,456,238.7	17,301,086.8	18,181,777.8
Office of State Police	62,390,000.0	43,210,000.0			
General Fund	47,174,173.0	18,103,138.0			
Total	\$1,330,050,015.3	\$1,439,224,982.2	\$1,320,650,295.2	\$ <b>1,286,015,264.9</b>	\$1,407,543,573.0

Disbursements To	FY20	FY21	FY22	% Change FY15-FY22
DOTD Capital Outlay	\$716,755,094.8	\$785,279,102.3	\$794,345,591.9	19.1%
DOTD Operations	533,269,769.9	541,339,154.3	553,994,977.3	13.9%
Parish Transportation Fund	46,005,562.1	43,634,749.2	46,400,000.0	0.0%
TIMED Debt Service*	19,763,011.9	34,344,909.8	16,965,223.	(17.9%)
Office of State Police				(100.0%)
General Fund				(100.0%)
Total	\$ <b>1,315,793,438.7</b>	\$1,404,597,915.6	\$1,411,705,792.2	6.1%

<sup>\*</sup>Provides additional monies in excess of the 4-cent motor fuel taxes dedicated for the TIMED projects to pay debt service (i.e. principal, interest, and premiums) associated with bonds used to fund the TIMED projects.

## APPENDIX D: HTF-FEDERAL AND TTF-REGULAR USES (ACTUALS) FOR DOTD OPERATIONS BY PROGRAM FOR FY 2022 (\$, MILLION)

DOTD Program	Program Description	HTF- Federal	TTF- Regular	Total (\$)	Total (%)
	Administration  Provides administrative leadership, direction, and accountability	\$10.3	\$40.8	\$51.1	9.2%
Office of the Secretary	for all DOTD programs in support of its mission. The program administers and implements labor compliance with DOTD and contractors, provides legal services, provides certification and support services for Disadvantaged Business Enterprise, oversees all litigation related to right-of-way (ROW), construction and contract claims as well as damage claims impacting the agency, coordinate public events and supports public outreach efforts by the department.	1.5	8.5	\$10.0	
Office of Management and Finance	Programs are comprised of multi-disciplinary staffs responsible for supporting the agency in the following areas: Information Services, Financial Services, Procurement, Budget Management, Business Services, Audit, and Human Resources.	8.8	32.3	41.1	
	Engineering and Operations	143.4	359.3	502.7	90.8%
Office of Engineering	Activities include but are not limited to; provide direction through policy and the creation of statewide initiatives; identify, enhance, implement transportation related technology; design pavement structures and bridges, foundations for bridges, embankmentsfor the statewide transportation system; provide oversight for construction projects; coordinate the proposal and contract preparation for all of DOTD contracts; advertise to solicit bids; perform environmental clearance; assist communities with funding for flooding; and provide oversight of the design and construction/modification of dams.	32.6	51.8	84.4	
Office of Planning	Functions include, but limited to, managing the annual detailed State Planning and Research (SPR) Work Program; implement paperwork for obligation of all SPR and Planning Funds; facilitate the identification, prioritization, and selection of highway construction projects; develop the Federal Highway program called the State Transportation Improvement Program	21.6	5.8	27.4	

DOTD Program	Program Description	HTF- Federal	TTF- Regular	Total (\$)	Total (%)
	(STIP) and coordinate with the Metropolitan Planning Organizations (MPOs); maintain the pre-construction status database (the letting schedule) for all projects; determine a scope and budget for all Capacity Infrastructure projects; create all projects in Project Systems (PS) for DOTD to be funded with House Bill 2 capital outlay and/or FHWA federal funds; provide technical review; secure funding; implement safety programs; work with the public and media with the goal of institutionalizing non-motorized transportation; provide multi-year funding for the surface transportation programs; develop and update State Management Plans for all Public Transportation Programs; monitor the performance of all highways in the state by measuring the pavement condition and optimizing repair strategies for pavement rehabilitation and maintenance.				
Office of Operations	Functions include, but not limited to, pothole patching, leveling, chip sealing, spot surface replacement, curb repair, mill-out patching, and other bituminous surface repair; joint repair; aggregate surface road maintenance; perform: erosion control and repair; fence repair; litter management; debris management, removal, and disposal; landscape maintenance; lime and herbicide application; tree and brush trimming and removal; management of mowing contractors; inspection of rest area maintenance contractors; stump removal, drainage installation, maintenance, and repair; ditch maintenance and repair; inlet installation and replacement; manage painting, joint repair, and lubrication of movable bridges; manage movable bridge repair, stringer repair, pile repair, channel repair and protection, fender repair, patching, guardrail and crash protection repair, tunnel cleaning repair and maintenance, navigational locks repair, storm water pump station repair, bridge cap repair, timber deck repair, and structural repair; install striping, reflective tape, raised markers, and rumble strips; perform roadside enhancements, earthwork and grading, minor betterments construction, construction of bridges over 20 feet, control-of-access fence	89.2	298.3	387.5	

DOTD Program	Program Description	HTF- Federal	TTF- Regular	Total (\$)	Total (%)
	construction, drainage construction, shoulder construction, and base and surface construction; and operate and maintain DOTD warehouse and inventory.				
Office of Aviation	Duties include, but are not limited to, ensuring a safe, modern system of airports which provide convenient and efficient access to the state transportation system; provide administrative and management oversight and funding for capital improvements at Louisiana airports; serve to identify and develop strategies for the acquisition of land and/or retaining of a land easement to facilitate the removal of hazardous obstructions from the Runway Protection Zones and Approach Corridors; assist with aircraft accident investigations; perform annual inspection of all of general aviation public-use landing facilities throughout the state.		1.6	1.6	
Office of Multimodal Commerce	Functions include, but are not limited to, formulating state commercial trucking transportation policies, goals, and objectives; advising DOTD leadership on national and state commercial trucking related issues; serving as DOTD's liaison with the commercial trucking industry, building relationships and conveying needs of the industry and efforts of the Department; overseeing and managing rail projects throughout the state; coordinating with FRA, railroads, and interested parties; develops a Statewide Rail Plan; review and evaluate applications for Port Priority funding; prepare and execute funding agreements and letters for funded projects; review advertising and bid documents; conduct final inspections; and facilitate the continuous improvement of Louisiana's marine transportation infrastructure for passenger and freight movement.		1.8	1.8	
Total		\$153.7	\$400.1	\$553.8	100.0%
	by the legislative auditor's staff using information from LaGov.	<b>410017</b>	<b>4.0011</b>	7555.0	

# APPENDIX E: HTF-FEDERAL AND TTF-REGULAR USES FOR DOTD OPERATIONS (ACTUALS) BY EXPENSE CATEGORY FOR FY 2022 (\$, MILLION)

TTF Uses	Examples	HTF Federal	TTF Regular	Total, \$	Total, %
Salaries	Salary funding for classified and unclassified employees, including overtime.	\$66.0	\$166.8	\$232.8	42.0%
Other Compensation	Wage earning employees that are neither classified nor unclassified (student workers, part-time, temporary, and seasonal employees.)	0.3	0.3	0.6	0.1%
Related Benefits	Employee benefits funding for retirement, insurance, FICA, Medicare, fringe benefits, unemployment, post retirement, etc.	35.9	107.3	143.2	25.9%
Travel	Travel within the state and out of state for trainings, inspections, emergency work, etc.	0.8	2.6	3.4	0.6%
Operating Services	Printing services (reproduction); all utilities (gas, water, electricity); maintenance of buildings & property as well as equipment, janitorial, data processing equipment, as well as software, automotive repairs; LEAF financing of equipment; Internet Provider costs; Dues & Subscriptions; Rentals of Equipment; and Postage.	4.6	14.5	19.1	3.4%
Supplies	Paper, asphalt, office furniture, spare parts for equipment, pavement marking, signing materials, etc.	1.9	28.3	30.2	5.5%
Professional Services	Specialized or highly technical services such as staff augmentation services, appraisal services, training services, traffic data management services, data collection services, structural bridge repairs, etc.	16.2	8.0	24.2	4.4%
Other Charges	Contract maintenance (includes Contract Mowing & Litter; City Mowing & Litter Agreements; City Signal Agreements; Rest Area Security, Maintenance & Operations; Guardrail Repairs & maintenance; Attenuator Repairs & maintenance; Contract Sweeping, Tree Removal, Drainage Projects, Pavement markings, Debris Removal, Loop Repair & Ditch Cleaning; Bridge handrail repair; and Bridge Deck Drains). Also includes Motorists Assistance Patrol Program; Federal Transportation	10.1	22.1	32.2	5.8%

TTF Uses	Examples	HTF Federal	TTF Regular	Total, \$	Total, %
	Administration (FTA) program's operating assistance - training, maintenance of equipment and repairs and direct purchases of specially equipped vehicles for elderly and disabled and rural transit programs).				
Acquisitions	Purchase of lab, classroom, research, and video equipment, highway radar speed displays, inspection equipment for dams and levees, traffic data collection equipment, the purchase of heavy moveable equipment for the districts, etc.	\$4.2	\$2.2	\$6.4	1.2%
Interagency Transfers	Payments to the Office of Risk Management, Office of Technology Services, Civil Service, Office of Telecommunications management, etc.	13.7	48.0	61.7	11.1%
Total		\$153.7	\$400.1	\$553.8	100.0%

#### APPENDIX F: HTF-FEDERAL AND TTF-REGULAR USES (ACTUALS) FOR DOTD OPERATIONS BY EXPENSE CATEGORY FOR FY 2015 THROUGH FY 2022

TTF Uses	FY15	FY16	FY17	FY18
Salaries	\$200,232,674.8	\$204,142,997.9	\$209,250,690.5	\$206,769,968.2
Other Compensation	844,415.0	757,258.3	583,390.2	658,791.4
Related Benefits	113,854,864.9	121,163,225.8	126,274,636.6	131,842,578.5
Travel	2,688,376.8	3,077,200.7	3,319,914.0	3,554,679.1
Operating Services	21,373,675.3	20,385,123.3	21,223,760.5	17,610,890.9
Supplies	34,792,052.9	30,974,835.3	34,900,497.2	33,108,024.4
Professional Services	26,622,834.4	26,126,443.9	26,390,813.4	24,377,267.2
Other Charges	40,990,911.01	36,384,880.7	35,072,688.5	40,249,601.8
Acquisitions	700,986.0	1,320,315.0	4,460,701.6	9,663,121.7
Interagency Transfers	44,172,025.6	51,666,019.3	51,021,077.1	53,967,862.6
Total	\$486,272,816.7	\$495,998,300.2	\$512,498,169.6	\$521,802,785.8

TTF Uses	FY19	FY20	FY21	FY22	% Change FY15-FY22		
Salaries	\$211,903,088.7	\$219,695,962.1	\$233,958,368.9	\$232,778,507.0	16.3%		
Other Compensation	791,511.6	650,692.3	543,180.0	623,487.8	(26.2%)		
Related Benefits	133,022,177.4	141,435,880.9	145,330,643.0	143,170,603.5	25.7%		
Travel	3,520,238.9	2,963,934.1	2,764,774.4	3,419,994.1	27.2%		
Operating Services	16,186,385.1	16,933,250.2	16,085,138.3	19,108,848.1	(10.6%)		
Supplies	34,227,888.8	28,559,555.9	20,720,021.7	30,170,070.9	(13.3%)		
Professional Services	21,867,479.6	19,186,538.3	23,125,732.9	24,239,044.9	(9.0%)		
Other Charges	37,265,910.9	33,233,455.9	30,246,955.4	32,151,976.0	(21.6%)		
Acquisitions	3,896,703.7	6,118,647.8	3,130,078.3	6,432,345.1	817.6%		
Interagency Transfers	59,900,287.3	64,490,902.9	65,434,261.4	61,663,393.4	39.6%		
Total	\$522,581,672.0	\$533,268,820.4	\$541,339,154.3	\$553,758,270.8	13.9%		
Source: Prepared by the legislative auditor's staff using information from LaGov.							

# APPENDIX G: HTF-FEDERAL AND TTF-REGULAR USES (ACTUALS) FOR DOTD SALARIES, OTHER COMPENSATION, AND RELATED BENEFITS FOR FY 2015 THROUGH FY 2022 (\$, MILLION)

TTF Uses	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	% Change FY15-FY22
			Sa	laries - C	lassified				
Salaries	\$198.6	\$202.5	\$207.6	\$205.0	\$210.2	\$218.1	\$232.0	\$231.0	16.3%
Headcount	4,138	4,173	4,182	4,119	4,136	4,110	4,111	3,978	(3.9%)
			Sal	aries - Un	classified	i			
Salaries	\$1.6	\$1.6	\$1.7	\$1.7	\$1.7	\$1.6	\$1.9	\$1.8	11.9%
Headcount	19	17	18	18	17	18	16	16	(15.8%)
	Oth	ner Comp	ensation	- Neither	Classifie	d nor Un	classified	i	
Other Compensation	\$0.8	\$0.8	\$0.5	\$0.7	\$0.8	\$0.7	\$0.5	\$0.6	(26.2%)
Re	elated Be	nefits - (	Classified	, Unclassi	fied, and	Wage-Ea	arning En	nployees	
Related Benefits	\$113.9	\$121.2	\$126.3	\$131.8	\$133.0	\$141.4	\$145.3	\$143.2	25.7%
Total	\$314.9	\$326.1	\$336.1	\$339.2	\$345.7	\$361.8	\$379.7	\$376.6	19.6%
Total Headcount	4,157	4,190	4,200	4,137	4,153	4,128	4,127	3,994	(3.9%)
Source: Prepared	by the legi	slative audi	tor's staff ι	ısing inform	ation from	LaGov.			

#### APPENDIX H: MINERAL ROYALTY DISBURSEMENTS TO LOUISIANA BY MINERAL ROYALTY SOURCE FOR 2015 THROUGH 2022

<b>Mineral Royalty Source</b>	2015	2016	2017	2018	2019
8(g) Offshore	\$11,925,900.5	\$6,313,683.3	\$7,554,499.5	\$6,052,631.0	\$3,736,426.3
GOMESA Offshore	816,728.9	102,713.7	321,562.7	82,839,655.8	94,728,191.8
Onshore	1,734,869.3	904,498.0	1,010,739.1	2,153,237.5	2,862,668.7
Total	\$14,477,498.7	\$7,320,895.0	\$8,886,801.3	\$91,045,524.3	\$101,327,286.8

Mineral Royalty Source	2020	2021	2022	% Change FY15-FY22
8(g) Offshore	\$821,329.9	\$989,954.5	\$3,867,849.5	(67.6%)
GOMESA Offshore	155,718,470.0	109,948,761.6	111,822,094.7	13,591.5%
Onshore	2,548,752.5	2,546,224.8	3,185,976.0	83.6%
Total	\$159,088,552.4	\$113,484,940.9	\$118,875,920.2	721.1%

**Source:** Prepared by the legislative auditor's staff using information from the Office of Natural Resources Revenue within the U.S. Department of Interior.

### APPENDIX I: MINERAL ROYALTY RATES AND DISBURSEMENTS TO STATES

Source	Federal Mineral Royalty	Federal Disbursements to States
Offshore	• 12.5% of production value for leases located in water depths less than 200 meters. • 18.75% of production value for leases located in water depths of 200 meters or deeper.	Most offshore areas are under the jurisdiction of the federal government. As a result, offshore revenues make up the majority of disbursements to the U.S. Treasury. All the funds disbursed to The Land and Water Conservation Fund and Historic Preservation Fund come from offshore revenues.  • 8(g) Offshore: A portion (27%) of revenue from leases in the 8(g) zone (the first three nautical miles of the Outer Continental Shelf) are distributed to the respective states that border the zone.  • This equates to 3.4% to 5.1% of production value, depending on the water depth where the lease is located.  • GOMESA-Offshore: The Gulf of Mexico Energy Security Act (GOMESA) of 2006 specifies that 50% of revenues from certain gulf leases be directed to the U.S. Treasury. 37.5% of revenue from certain leases in the Gulf of Mexico are shared with Alabama, Louisiana, Mississippi, and Texas. The revenues allocated to states based on each state's distance to the leased tracts, with closer states receiving a higher share. The act also directs a portion of gulf revenue be distributed to the Land and Water Conservation Fund.  • In federal FY 2022, the state of Louisiana and its local governments received 44.3% of the revenues allocated to states, equating to 16.6% of federal revenues, or 2.1% to 3.1% of production value depending on the water depth where the lease is located.

Source	Federal Mineral Royalty Rates	Federal Disbursements to States
Onshore	12.5% of production value in royalties	<ul> <li>Except for Alaska, states receive 50% of extractive revenues paid to the federal government from leases on federal land in that state. Alaska receives 90%, dating back to the Alaska Statehood Act.</li> <li>40% of onshore revenues go to the Reclamation Fund. These funds are to be used for infrastructure projects, such as dams and power plants.</li> <li>10% goes to the general fund of the U.S. Treasury, where Congress can appropriate it for programs and services. 2% of the above revenue are withheld and used for administrative purposes.</li> </ul>

**Note:** 100% of revenue collected from resource extraction on Native American lands is disbursed back to tribes, nations, and individuals. **Source:** Prepared by the legislative auditor's staff using information from the Office of Natural Resources Revenue within the U.S. Department of Interior.

## APPENDIX J: MINERAL ROYALTY DISBURSEMENTS BY STATE FOR 2015 THROUGH 2022

State	2015	2016	2017	2018	2019
Alabama	\$5,306,940.1	\$1,900,708.5	\$1,392,221.4	\$30,538,598.5	\$34,037,446.3
Alaska	18,158,676.0	13,259,281.2	12,431,185.8	35,880,858.0	25,913,942.0
Arizona	14,769.3	55,271.4	10,046.0	9,069.7	7,664.4
Arkansas	1,375,212.4	920,844.2	1,151,448.3	854,176.2	854,119.4
California	64,345,635.9	38,841,434.0	36,241,899.3	44,891,375.9	47,265,793.7
Colorado	123,861,022.3	83,895,364.3	92,040,307.7	112,567,173.7	108,050,475.1
Florida	36,855.3	73,540.2	593,587.9	476,560.9	611,413.2
Idaho	6,971,143.6	5,521,235.5	5,160,451.0	4,368,183.8	3,713,807.0
Illinois	78,438.8	277,233.8	54,868.8	76,415.9	74,636.3
Indiana	5,403.0	5,263.0	5,257.4	3,694.0	
Kansas	695,040.8	453,748.0	561,249.5	639,045.5	666,194.5
Kentucky	72,699.5	106,112.7	185,904.5	120,512.2	339,158.3
Louisiana	14,477,498.7	7,320,895.0	8,886,801.3	91,045,524.3	101,327,286.8
Massachusetts	23,835.1	23,835.1	23,835.1		23,835.1
Michigan	216,504.1	96,175.0	77,778.9	147,823.3	44,851.2
Minnesota	13,854.4	12,504.6	11,649.5	11,554.3	105,617.6
Mississippi	1,514,815.5	690,824.9	1,033,797.5	28,675,399.9	33,175,361.1
Missouri	2,589,888.9	1,808,750.8	2,020,169.1	2,299,269.8	1,760,238.9
Montana	33,984,475.5	23,008,074.0	24,033,546.2	25,686,291.8	29,991,520.4
Nebraska	14,539.0	8,554.2	8,113.9	28,700.6	22,947.9
Nevada	5,980,484.1	4,612,559.1	5,124,716.7	5,352,679.0	6,813,610.9
New Mexico	496,043,426.4	368,616,183.4	455,099,904.1	634,990,861.6	1,165,963,635.6
North Carolina	109.9	110.4			
North Dakota	47,164,776.7	32,521,124.1	39,922,536.2	53,223,774.7	93,654,132.0
Ohio	162,664.1	71,846.4	1,600,454.8	862,521.5	285,310.4
Oklahoma	4,850,761.0	6,682,274.3	2,625,438.9	7,867,081.7	3,431,820.1
Oregon	187,719.5	159,368.6	69,187.5	71,204.4	46,631.3
Pennsylvania	35,842.2	18,528.4	23,914.0	9,880.1	17,185.3

State	2015	2016	2017	2018	2019
Rhode Island	\$170.1	\$170.1			
South Carolina	514.6	775.9	\$775.1	\$ 518.4	\$780.9
South Dakota	1,303,351.3	306,901.2	396,178.0	564,521.8	479,110.5
Texas	7,031,638.6	3,342,135.9	4,911,640.8	60,099,221.8	65,121,458.2
Utah	116,366,543.3	68,060,351.0	73,628,513.0	76,192,139.6	71,694,836.6
Virginia	48,958.8	23,235.4	28,181.8	39,194.8	49,018.5
Washington	6,310.5	6,451.1	7,164.8	10,115.4	7,308.8
West Virginia	225,605.9	184,630.9	108,373.0	470,583.4	92,881.2
Wisconsin				233.4	234.5
Wyoming	885,980,925.5	664,312,371.4	669,010,220.2	563,955,987.7	641,109,255.6
Total	\$1,839,147,050.7	\$1,327,198,668.0	\$1,438,481,318.0	\$1,782,030,747.6	\$2,436,753,519.6

State	2020	2021	2022	% Change 2015-2022
Alabama	\$50,290,253.6	\$35,207,269.4	\$40,894,177.7	670.6%
Alaska	21,044,787.8	30,297,770.4	45,063,882.8	148.2%
Arizona	699.2	715.6	168.2	(98.9%)
Arkansas	527,339.2	946,953.4	1,197,291.1	(12.9%)
California	36,917,952.0	37,047,352.4	54,188,096.7	(15.8%)
Colorado	57,115,433.0	90,875,874.0	142,599,469.7	15.1%
Florida	111,592.4	159,705.5	9,971.2	(72.9%)
Idaho	4,575,240.8	4,328,967.9	4,990,427.8	(28.4%)
Illinois	56,811.9	65,008.3	111,634.5	42.3%
Indiana				(100.0%)
Kansas	455,965.2	465,748.7	870,543.7	25.3%
Kentucky	65,155.3	63,305.6	77,690.2	6.9%
Louisiana	159,088,552.4	113,484,940.9	118,875,920.2	721.1%
Massachusetts				(100.0%)
Michigan	143,234.6	83,076.7	133,699.3	(38.2%)
Minnesota	95,042.6	95,928.4	3,740.7	(73.0%)
Mississippi	53,073,987.9	37,744,893.0	37,809,767.6	2396.0%
Missouri	1,728,230.4	2,056,051.5	2,448,020.2	(5.5%)

State	2020	2021	2022	% Change 2015-2022
Montana	\$20,580,018.9	\$19,231,824.5	\$35,066,491.4	3.2%
Nebraska	13,278.7	16,979.1	25,451.6	75.1%
Nevada	7,750,788.0	6,712,843.4	9,380,215.1	56.8%
New Mexico	706,963,499.5	1,103,310,207.8	2,738,659,933.8	452.1%
North Carolina	37.2	111.8	111.8	1.7%
North Dakota	66,717,834.3	83,389,364.9	163,646,101.2	247.0%
Ohio	610,514.2	208,183.7	968,149.2	495.2%
Oklahoma	6,412,975.3	3,123,247.5	4,806,060.2	(0.9%)
Oregon	37,931.1	37,433.6	36,808.6	(80.4%)
Pennsylvania	5,491.0			(100.0%)
Rhode Island				(100.0%)
South Carolina	783.3	1,046.7	785.1	52.5%
South Dakota	325,595.2	323,531.9	469,446.9	(64.0%)
Texas	99,356,657.4	73,118,174.1	77,311,421.2	999.5%
Utah	53,902,021.6	55,144,536.6	89,592,227.3	(23.0%)
Virginia	44,608.2	30,950.8	52,211.7	6.6%
Washington	40,578.8	39,100.8	2,211.3	(65.0%)
West Virginia	379,179.2	195,630.0	215,060.5	(4.7%)
Wisconsin				
Wyoming	\$457,474,033.5	479,888,613.3	785,726,556.8	(11.3%)
Total	\$1,805,906,103.7	\$2,177,695,342.2	\$4,355,233,745.3	136.8%

**Source:** Prepared by the legislative auditor's staff using information from the Office of Natural Resources Revenue within the U.S. Department of Interior.

#### APPENDIX K: ELECTRIC AND HYBRID VEHICLES FEES/TAXES AND COLLECTION MECHANISMS IN OTHER STATES

State	Description (as of September 2022)	Collection Mechanism		
Louisiana	Annual road usage fee of \$110 for all electric vehicles and \$60 for all hybrid vehicles.	Fees to be collected by the Department of Revenue.		
Alabama	\$200 additional registration fee for battery electric vehicles and \$100 additional registration fee for plug-in hybrid electric vehicles. (effective January 2020).  In addition, starting in 2023, the fee will increase by \$3 every four years.	Fees/taxes collected with registration and renewal. Fees collected by license plate or tag issuing officials in the Alabama Department of Revenue's Vehicle Licensing Offices in each county.		
Arkansas	\$200 additional annual fee for electric vehicles and \$100 additional annual fee for hybrid vehicles.	Fees/taxes collected with registration and renewal.  Annual registration fees collected by the Department of Finance and Administration's Motor Vehicle Division.		
California	\$100 additional annual fee for zero-emission vehicles model year 2020 or later. Effective January 2021 and every year after, the fee will increase in accordance with the Consumer Price Index.	Fees/taxes collected with registration and renewal. The Department of Motor Vehicles collects the Road Improvement fee at the time of registration renewal.		
Colorado	\$50 additional annual fee for plug-in electric motor vehicles.  Beginning fiscal year 2023, annual fee is adjusted for inflation only if the rate of inflation is positive and the adjustment must be the lesser of the actual rate of inflation or five percent.	Fees/taxes collected with registration and renewal.  The Department of Revenue's Division of Motor Vehicles collects the annual fee at registration and renewal.		
Georgia	The current additional annual fees reflect a statutory base fee that is automatically adjusted according to a statutory formula (effective July 2016). Effective July 1, 2021, annual non-commercial alternative fuel vehicle fee is \$213.70 (\$200 base fee).	Fees/taxes collected with registration and renewal. The Department of Revenue's Motor Vehicle Division collects annual vehicle registration and renewal fees.		

State	Description (as of September 2022)	Collection Mechanism
Hawaii	\$50 annual surcharge for electric vehicles.	Fees/taxes collected with registration and renewal.  Annual vehicle registration fee is collected with first registration renewal, online by the Hawaii DMV or through county offices.
Idaho	\$140 additional annual fee for all-electric vehicles. \$75 additional annual fee for plug-in hybrid vehicles.	Fees/taxes collected with registration and renewal.  Fee is collected in addition to all other vehicle registration fees by the Idaho Transportation Department's Division of Motor Vehicles.
Illinois	\$100 additional annual fee for electric vehicles.	Fees/taxes collected with registration and renewal.  The Secretary of State's Vehicle Services Department collects the additional annual fee in addition to registration fees.
Indiana	\$150 annual fee for electric vehicles and \$50 annual fee for plug-in hybrid electric vehicles and hybrid electric vehicles PHEVs and HEVs. The fee is indexed to the same inflation mechanism as their state's motor fuel tax.	Fees/taxes collected with registration and renewal.  The Bureau of Motor Vehicles collects the annual fee along with other registration fees.
Iowa	On or after January 1, 2022, \$130 for battery electric vehicles BEVs and \$65 for plug-in hybrid electric motor vehicles PHEVs.	Fees/taxes collected with registration and renewal. The Department of Transportation's Motor Vehicle Division collects the annual fee in addition to registration fees.
Kansas	\$100 total annual registration fee for all-electric vehicles. \$50 total annual registration fee for electric hybrid and plug-in electric hybrid vehicles.	Fees/taxes collected with registration and renewal.  The Department of Revenue's Division of Vehicles regulates license plates and vehicle registrations.  Citizens can pay online or through Kansas' 105 county treasurers, who handle vehicle, registrations, tags and renewals.
Michigan	\$135 additional annual fee for "electric vehicles," or battery electric vehicles BEVs, up to 8,000 pounds. \$235 additional annual fee for "electric vehicles" over 8,000 pounds.	Fees/taxes collected with registration and renewal. The Department of State collects the annual fee along with registration fees.

State	Description (as of September 2022)	Collection Mechanism
	\$47.50 additional annual fee for certain plug-in hybrid electric vehicles PHEVs up to 8,000 pounds. \$117.50 additional annual fee for certain plug-in hybrid electric vehicles over 8,000 pounds. Michigan indexes its electric vehicles EV fees based on the motor vehicle fuel tax.	
Minnesota	\$75 additional annual fee for nonhybrid, "all-electric" vehicles.	Fees/taxes collected with registration and renewal. The Department of Public Safety, Driver and Vehicle Services collects the EV fee along with other registration fees.
Mississippi	\$150 additional annual fee for electric vehicles. \$75 additional annual fee for hybrid vehicles. Beginning July 1, 2021, fees are will be indexed to inflation.	Fees/taxes collected with registration and renewal.  Local county tax collectors collect the annual fee along with registration fees.
Missouri	Effective January 1, 2022, additional annual fee for electric, propane (LP), and natural gas: \$90 for passenger motor vehicles up to 18,000 lbs. \$120 for 18,001 lbs-36,000lbs with "F" tab on plate. \$180 for 18,001 lbs-36,000lbs without "F" tab on plate. \$275 for 36,001 lbs or more with "F" tab on plate. \$1,100 for 36,001 lbs or more without "F" tab on plate. \$90 for school bus. \$180 for local bus, commercial bus, and transit bus. Beginning January 1, 2022, the fees are increased by 20% of the fee in effect on August 28, 2021, per year for a period of five years.	Special decal purchased annually.  Owners of motor vehicles that operate with alternative fuel must annually purchase a special fuel decal and pay the annual decal fee to the Department of Revenue.

State	Description (as of September 2022)	Collection Mechanism
	Effective January 1, 2022, additional annual fee for plug-in electric vehicle: \$45 for passenger motor vehicles up to 18,000 lbs. \$60 for 18,001 lbs-36,000lbs with "F" tab on plate. \$90 for 18,001 lbs-36,000lbs without "F" tab on plate. \$137.50 for 36,001 lbs or more with "F" tab on plate. \$550 for 36,001 lbs or more without "F" tab on plate. \$45 for school bus. \$90 for local bus, commercial bus, and transit bus. Beginning January 1, 2022, the fees are increased by 10% of the fee in effect on August 28, 2021 for motor vehicles with a licensed gross vehicle weight in excess of 36,000 lbs for a period of five years.	
Nebraska	\$75 additional annual fee for alternative fuel vehicles.	Fees/taxes collected with registration and renewal.  The Department of Motor Vehicles collects the annual fee on alternative fuel vehicles.
North Carolina	\$140.25 additional annual fee for plug-in electric vehicles.	Fees/taxes collected with registration and renewal.  The Division of Motor Vehicles collects the annual fee at vehicle registration and renewal.
North Dakota	\$120 additional annual road use fee for electric vehicles. \$50 additional annual road use fee for plug-in hybrid vehicles. \$20 for each electric motorcycle registered.	Fees/taxes collected with registration and renewal. The Department of Transportation's Motor Vehicle Division collects the road use fees along with registration fees.
Ohio	\$200 additional annual fee for plug-in electric motor vehicles. \$100 additional annual fee for hybrid motor vehicles.	Fees/taxes collected with registration and renewal. The Bureau of Motor Vehicles collects the annual fee along with registration fees.

State	Description (as of September 2022)	Collection Mechanism
Oklahoma	Annual license fee for all electric vehicles (except plug-in hybrid electric vehicles PHEVs), in addition to other registration fees, depending on vehicle weight: Under 6,000 lbs. (Class 1) – \$110; 6,000-10,000 lbs. (Class 2) - \$158; 10,000-26,000 lbs. (Class 3-6) - \$363; Over 26,000 lbs. (Class 7-8) - \$2,250 There is a similar but reduced fee schedule for plug-in hybrids (PHEVs): Under 6,000 lbs. (Class 1) – \$82; 6,000-10,000 lbs. (Class 2) - \$118; 10,000-26,000 lbs. (Class 3-6) - \$272; Over 26,000 lbs. (Class 7-8) - \$1,687	Fees/taxes collected with registration and renewal.  Service Oklahoma, a division of the Office of Management and Enterprise Services, collects the annual fee along with registration fees.
Oregon	As of January 1, 2022, additional fees are assigned by miles per gallon (mpg) as follows: \$20 for vehicles with 0-19 mpg. \$25 for vehicles with 23-29 mpg. \$35 for vehicles with 40 mpg or greater. \$115 additional annual fee for electric vehicles. Note that these fees increase in 2021. An electric vehicle or vehicle with a rating of 40 miles per gallon or greater can enroll in the road usage charge program and not be subject to the additional registration fees.	Fees/taxes collected with registration and renewal.  The Department of Transportation's Driver and Motor Vehicle Services division collects the additional fees along with registration fees.
South Carolina	\$120 additional biennial fee for electric vehicles. \$60 additional biennial fee for hybrid vehicles.	Fees/taxes collected with registration and renewal.  The Department of Motor Vehicles collects the fees along with registration fees.
South Dakota	EV owners must pay an additional \$50 annual fee at the time of registration. This does not apply to hybrid vehicles.	Fees/taxes collected with registration and renewal.  Local county treasurer's offices collect the annual fee along with registration fees. Registration and renewal can also be accomplished online through the Department of Revenue's Motor Vehicle Division.

State	Description (as of September 2022)	Collection Mechanism
Tennessee	\$100 additional annual fee for electric vehicles.	Fees/taxes collected with registration and renewal.  Local county clerks collect the annual fee along with registration taxes and fees.
Utah	Beginning January 1, 2021: \$120 additional annual fee for electric motor vehicles. \$120 additional annual fee for vehicles fueled by a source other than motor fuel, diesel fuel, natural gas or propane. \$52 additional annual fee for plug-in hybrid electric motor vehicles. \$20 additional annual fee for hybrid electric motor vehicles. Beginning Jan. 1, 2022, fees will be indexed to the consumer price index. Electric vehicle owners can opt to participate in the state's road usage charge program in lieu of the annual fee. New legislation H.B.186 of 2022 General Session, effective January 2023, reduces the registration fees and levies the road usage charge cap on electric, hybrid and alternative fuel vehicles.	Fees/taxes collected with registration and renewal. The Division of Motor Vehicles collects all vehicle registration fees.
Virginia	\$64 additional annual license tax for alternative fuel vehicles or electric motor vehicles.  Effective July 1, 2020, electric vehicles are required to pay a fixed highway use fee, which is currently \$109.00 (will be updated on a yearly basis), to reflect the amount in fuels taxes electric vehicles will not pay during a single year due to not purchasing motor fuel.  Effective July 1, 2022, owners of vehicles subject to the highway use fee may choose to pay a mileage-based fee in lieu of the highway use fee.	Fees/taxes collected with registration and renewal.  The Department of Motor Vehicles collect all registration fees, including the electric vehicle registration fee and/or the highway use fee.
Washington	\$150 additional annual registration fee for electric vehicles (except for electric motorcycles).	Fees/taxes collected with registration and renewal.

State	Description (as of September 2022)	Collection Mechanism
	\$75 additional Hybrid Vehicle Transportation Electrification fee to fund electric vehicle charging stations. New legislation Senate Bill 5085 of 2022 Legislative Session, effective November 1, 2022, increases the annual registration fee by \$30.	The Department of Licensing collects the annual fee along with registration fees.
West Virginia	\$200 additional annual fee on electric vehicles. \$100 additional annual fee on vehicles operating on a combination of electricity and petrochemical fuels. \$200 additional annual fee for a vehicle fueled with hydrogen or natural gas.	Fees/taxes collected with registration and renewal. The Department of Transportation's Division of Motor Vehicles collects the annual fee along with registration fees.
Wisconsin	\$100 additional annual fee on nonhybrid electric vehicles at a gross weight of not more than 8,000 pounds.  \$75 additional annual fee on hybrid electric vehicles at a gross weight of not more than 8,000 pounds.	Fees/taxes collected with registration and renewal. The Department of Transportation's Division of Motor Vehicles collects the fee along with registration fees.
Wyoming	\$200 total annual fee for plug-in electric vehicles.	Special decal purchased annually. Local county treasurer offices issue the annual decal and collect the fees.

**Source:** Prepared by legislative auditor's staff using information from the National Conference of State Legislatures and other states' websites.

## APPENDIX L: COMPARISON OF SELECTED SPECIFICATIONS FOR BEVS, HEVS, AND ICEVS IN LUXURY AND STANDARD CLASSES

	Luxury Cars:						
	2022 Tesla Model 3 RWD	2022 BMW 530e Sedan	2022 BMW 330i Sedan				
	Electric Vehicle	Plug-in Hybrid Vehicle Gasoline-Electricity	Gasoline Vehicle				
Specifications							
	Automatic (A1)	2.0 L, 4 cyl, Automatic (S8),	2.0 L, 4 cyl, Automatic (S8),				
		Turbo	Turbo				
	MSRP: \$46,990	MSRP: \$55,550	MSRP: \$41,450				
EPA Fuel	Electricity	Elec + Gas Prem. Gas	Premium Gasoline				
Economy	<b>■132</b> MPGe 138 126	\$64 MPGe ■ 26 MPG	<b>30</b> MPG 26 36				
Leonomy	combined city highway	combined city/highway	combined city highway city/highway				
1 gallon of	city/highway 25 kWh/100 mi	.0 gal/100mi of gas 3.8 gal/100mi + 49 kWh/100mi	3.3 gal/100mi				
gasoline=33.7	25 kWn/100 mi	49 KWII/100III	3.0 98/ 200111				
kWh	Electricity	Gasoline Only	Gasoline				
	272 miles	21 miles 340 miles Elec + Gas Total Range	468 miles				
	Total Range	All Elec: 0-21 mi	Total Range				
<b>EPA Size Class</b>	Midsize Cars	Compact Cars	Compact Cars				
Drive	Rear-Wheel Drive	Rear-Wheel Drive	Rear-Wheel Drive				
		Premium Gasoline					
Fuel Type	Electricity	(Recommended) and	Premium Gasoline Recommended				
		Electricity					
Electric							
Motor/	192 kW AC 3-Phase	80 kW PMSM					
Battery							

Miles per gallon of gasoline- equivalent (MPGe)	132 MPGe		64 MPGe 26 MPG		3	0MPG
Miles of range per hour of charge	26.2	26.2		7		
Time to Charge Battery	10.4 hrs at 24 (standard charg 5.8 hrs at 240 (with 48A high power connector optic	jer) V charger	3 hrs at 240V			
Tank Size	, ,		12.1 gallons		15.6 gallons	
Annual Fuel Cost*	\$550		Electricity + Gasoline: \$1,700		\$2,050	
Weight	3,648 lb		4,222 lb		3,	582 lb
		St	andard Car	S		
Specifications	2022 Mazda MX-30  Electric Vehicle	2022Toyo Prius Prin	ta	2022 Toyota Camry Hybrid LE Hybrid Vehicle Gasoline		oyota LE/SE Gasoline Vehicle

<b>EPA Fuel</b>	Electricity	Elec + Gas Reg. Gas	Regular Gasoline	Regular Gasoline
Economy  1 gallon of gasoline=33.7 kWh	#92 MPGe 98 85 combined city highway city/highway 37 kWh/100 mi	133 MPGe combined city/highway  .0 gal/100mi of gas + 25 kWh/100mi  Gasoline Only  25 miles Elec + Gas All Elec: 0-25 mi	S2 MPG 51 53 combined city highway 1.9 gal/100mi  Gasoline  686 miles Total Range	Gasoline  32  MPG 28 39 combined city highway 3.1 gal/100mi  506 miles Total Range
Fuel Type	Electricity	Regular Gasoline and Electricity	Regular Gasoline	Regular gasoline
<b>EPA Size Class</b>	Midsize Cars	Midsize Cars	Midsize Cars	Midsize Cars
Electric Motor/ Battery	81 kW AC Permanent magnet synchronous motor (PMSM)	22 and 53 kW Alternating current (AC) Induction		
Miles per gallon of gasoline- equivalent (MPGe)	92 MPGe	133 MPGe 54 MPG	52MPG	32 MPG
Miles of range per hour of charge	18.9	12.5		
Time to Charge Battery	5.3 hrs at 240V	2 hrs at 240V		
Tank Size		11.4 gallons	13.2 gallons	15.8 gallons
Annual Fuel Cost*	\$750	Electricity + Gasoline: \$700	\$950	\$1,550
Weight	3,655 lb	3,365 lb	3,480 lb	3,310 lb

<sup>\*</sup>Based on 45% highway, 55% city driving, 15,000 annual miles and current fuel prices.

**Source:** Prepared by the legislative auditor's staff using information from the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy (<u>fueleconomy.gov</u>); Car and Driver digital magazine (<u>https://www.caranddriver.com</u>); and Toyota website (<u>https://www.toyota.com</u>).