

Motor Vehicle Division Informational Memo # 19-27

2019 Legislation – Battery Electric and Plug-in Hybrid Motor Vehicle Registration Fees

DATE: January 8, 2020

FROM: Angel Robinson, Director, Vehicle and Motor Carrier Services

TO: All Vehicle and Motor Carrier Services staff, Iowa County Treasurers and County Treasurer's staff

SUBJECT

This informational memo explains 2019 legislation that adds special annual vehicle registration fees for “battery electric vehicles” (BEVs) and “plug-in hybrid electric vehicles” (PHEVs). The legislation also imposes a special annual vehicle registration fee for motorcycles that are BEV or PHEV models. These fees are in addition to annual registration fees normally due for passenger cars, pick-ups, sport utility trucks, light trucks, motorcycles and other vehicles with an unladen weight of less than 10,000 pounds. For ease of reference, BEVs and PHEVs (including BEV and PHEV motorcycles) will be collectively referred to as “electric vehicles” throughout the memo, except where distinguishing among the types is appropriate.

This memo was originally issued July 15, 2019, and was revised January 8, 2020 to incorporate additional guidance in the question and answer section.

SUMMARY

House File 767 adds a new section 321.116 to the Iowa Code. This section adds two new special types of annual registration fees – “an annual battery electric motor vehicle registration fee” and “an annual plug-in hybrid electric motor vehicle registration fee.” Both of these fees are in addition the annual registration fee assessed based on a vehicle’s weight and value under section 321.109 of the Iowa Code. The legislation also amended section 321.117 of the Iowa Code to add a new “annual electric motorcycle registration fee” for BEV or PHEV motorcycles; this fee is also in addition to the usual annual registration fees that are due for motorcycles based on model year under section 321.117. There are three fee levels for electric vehicles, depending upon vehicle type (BEV, PHEV or BEV/PHEV motorcycle). **These additional annual registration fees for electric vehicles are phased-in over three successive years, with the first additional fee required for vehicles with a registration period starting January 1, 2020 and for vehicles with a first registration on or after January 1, 2020.**

In addition to adding special registration fees for electric vehicles, the legislation also authorizes the collection of a per kilowatt hour (kWh) fuel excise tax for electric vehicle charging that is completed at non-residential locations, and adds a hydrogen fuel excise tax for vehicles powered by hydrogen. Both of these will be collected at the point of sale. The new per kWh excise tax is \$0.026 per kWh and becomes effective July 1, 2023. The new hydrogen excise tax is \$0.65 per diesel gallon equivalent (2.49 pounds of hydrogen) and becomes effective January 1, 2020.

LINK TO LEGISLATION

<https://www.legis.iowa.gov/docs/publications/LGE/88/HF767.pdf>

CURRENT

Current law assesses the annual registration fee for electric vehicles in the same manner as a vehicle powered by a traditional internal combustion (i.e., gas-powered) engine. However, unlike a traditional gas-powered vehicle, an electric vehicle currently pays very little to no fuel tax.

NEW

The new legislation requires a special annual registration fee for an electric vehicle that is in addition the annual registration fee assessed based on a vehicle's weight and value. The legislation also establishes an additional registration fee for BEV or PHEV motorcycles above and beyond the registration fees based on model year.

BACKGROUND

Iowa motor fuel taxes are the largest single source of revenue for road and bridge funding in Iowa. However, fuel tax revenue is declining as average fuel efficiency is increasing and electric vehicles are entering the market. As a result, we have predicted increasing and significant losses to critical state road and bridge funding, especially as more electric vehicles are purchased and their usage increases. The following tables show the sources of state road and bridge funding in Iowa and the predicted impact of increased electric vehicle use.

Funding Source	FY 2019 (estimated)	Percent of Total
Fuel Tax	\$656 million	39 percent
Annual Registration Fee	\$592 million	36 percent
Fee for New Registration	\$341 million	20 percent
Other*	\$84 million	5 percent
Total	\$1.673 billion	

*Figure 1 – Sources of state road & bridge funding. *Other includes driver's license fees, title fees, trailer registration fees, and other miscellaneous fees.*

YEAR	LOW LOSS SCENARIO	MEDIUM LOSS SCENARIO	HIGH LOSS SCENARIO
2018	-\$317,000	-\$317,000	-\$317,000
2020	-\$488,000	-\$520,000	-\$564,000
2025	-\$1,858,000	-\$2,684,000	-\$11,117,000
2030	-\$7,083,000	-\$14,207,000	-\$45,221,000
2035	-\$19,603,000	-\$47,748,000	-\$129,260,000
2040	-\$39,975,000	-\$115,200,000	-\$241,316,000

Figure 2 – Predicted losses to state road & bridge funding due to loss of fuel tax revenue caused by increased use of electric vehicles. Loss scenarios were based on low, medium, and high adoption rates for electric vehicles.

The new additional fees for electric vehicles help sustain road and bridge funding in Iowa by making up for fuel tax revenue lost due to the use of electric vehicles.

BUSINESS IMPACT

This legislation will require us to create new registration fees and tax type in ARTS and a new fuel type ID. The registration fee calculator will be updated for each successive increase in the electric vehicle annual registration fee and affected annual vehicle registration renewal notices will be changed to incorporate the new fee requirements. Finally, the International Fuel Tax Agreement (IFTA) tax returns and rate tables for commercial vehicles will be updated to account for the new fuel types (electric and hydrogen) and the new excise taxes.

The purpose of this informational memo is to make you aware of the legislation that was passed and generally outline the requirements. As we continue to work on implementation of this legislation, we may issue additional guidance closer to the implementation date. Since the first electric vehicles impacted are in the renewal period starting January 1, 2020, the affected renewal notices will be mailed starting in late November and will be eligible to be paid on December 1, 2019.

QUESTIONS AND ANSWERS

The following questions and answers provide additional information that will be helpful to you and to customers.

WHAT ARE THE NEW REGISTRATION FEES FOR ELECTRIC VEHICLES AND WHEN ARE THE NEW FEES EFFECTIVE?

Vehicle Type	January 1, 2020 Fee	January 1, 2021 Fee	January 1, 2022 Fee
Battery Electric (BEV)	\$65.00	\$97.50	\$130.00
Plug-in Hybrid Electric (PHEV)	\$32.50	\$48.75	\$65.00
Motorcycle (BEV or PHEV)	\$4.50	\$6.75	\$9.00

WHY WERE NEW REGISTRATION FEES ADDED? WHY NOT JUST RELY ON THE TAX ON ELECTRIC VEHICLE CHARGING?

Most electric vehicle charging (between 80% and 90%) occurs at residential locations that are not equipped to collect a fee or differentiate between electricity used for electric vehicle charging or other residential uses. Commercial locations that offer high-speed charging, on the other hand, can be equipped to account for electric vehicle charging and to account for the per kWh excise tax due. Relying only on a per kWh fee to make up for lost fuel tax revenue would miss residential charging and still result in substantial losses of road and bridge funding. The electric vehicle registration fees were calculated to approximate the fuel tax that would be paid if residential charging was assessed a per kWh fee.

HOW WERE THE ADDITIONAL ELECTRIC VEHICLE REGISTRATION FEES DETERMINED?

The fees were based on the average fuel tax vehicles generate in a year, and then reduced proportionally to account for the per kWh fee that will be collected when charging away from a residence. BEV registration fees are higher because BEVs rely entirely on electricity and

consume no traditional fuel, while PHEVs still consume fuel and still pay traditional fuel taxes (although in a lower amount annually). It's estimated about half their use will be powered electrically. Motorcycle fees are lower still because motorcycles are typically operated at fewer annual miles and have much higher fuel efficiency. There is no distinction between BEV and PHEV motorcycle models because the difference in impact at those low rates was marginal.

IS THERE AN ESTIMATE OF HOW MANY VEHICLES WILL BE IMPACTED BY THESE NEW FEES?

At this time, we estimate that there are approximately 3,000-4,000 vehicles statewide that will be impacted by this new fee. However, some counties may have a larger share of electric vehicle customers than others. Industry forecasts indicate continued growth in new electric vehicle ownership in the future – some estimates predict electric vehicles could make up as much as 60% of the vehicle fleet by 2040 or 2050.

DO THE NEW FEES PENALIZE ELECTRIC VEHICLE OWNERS?

No, the new fees are not intended to penalize electric vehicles owners or discourage or disincentivize their use. Electric vehicles use the same roads and bridges as conventional fuel vehicles and need to contribute to their support in the same proportion – allowing them to avoid contributing to road and bridge funding would over time significantly erode the funding needed to maintain the very roads and bridges they operate on. The fees do not increase or grow state road and bridge funding, but only assure it is maintained at consistent levels over time.

WHAT IS THE DIFFERENCE BETWEEN A BEV AND PHEV?

The key difference is the lack or presence of an internal combustion engine – BEVs do not have one, and PHEVs do. The legislation defines a BEV as a vehicle that is equipped with electrical drive train components and not equipped with an internal combustion engine and that is propelled exclusively by one or more electrical motors using electrical energy stored in a battery or other energy storage device that can be recharged by plugging in to an electrical outlet or an electric vehicle charging station. A PHEV is defined as a vehicle equipped with electrical drive train components, an internal combustion engine and a battery or other energy storage device that can be recharged by plugging into an electrical outlet or other electric vehicle charging station.

An example of an BEV is a Tesla Model 3 or a Nissan Leaf. An example of a PHEV is a Chevy Volt. Some models, like the Honda Clarity, can be either a BEV or a PHEV.

WHAT IS THE DIFFERENCE BETWEEN A PHEV AND A “CONVENTIONAL” HYBRID VEHICLE?

A “conventional” hybrid vehicle, such as most Toyota Prius models (the Toyota Prius Prime is a PHEV), combines a gasoline powered engine with battery powered operations but does not have the ability to be plugged in to recharge the battery pack. Conventional hybrid vehicles are not subject to the new electric vehicle registration fees.

ARTS currently categorizes vehicles only as a “hybrid” in the fuel field. One of the changes we will be programming is to distinguish between PHEV and “conventional” hybrid vehicles.

ARE THERE ANY ELECTRIC MOTORCYCLES CURRENTLY ON THE MARKET?

Yes. There are some BEV or PHEV motorcycles already registered in Iowa including the brand Zero Motorcycles. Harley-Davidson has also announced that its new LiveWire electric motorcycle line will be available for purchase in the fall of 2019.

HOW WILL WE KNOW IF A VEHICLE IS AN ELECTRIC VEHICLE?

We anticipate that all existing and new electric vehicles will be identifiable through the VIN and that our current VIN decoding contractor will identify the vehicles and allow us to update the registration rate tables in ARTS. We still need to investigate whether motorcycle VINs will accurately contain the BEV or PHEV designation, but we will develop rate tables as needed.

WILL THE ADDITIONAL ANNUAL REGISTRATION FEES FOR ELECTRIC VEHICLES BE A SEPARATE LINE ITEM ON THE REGISTRATION RECEIPT AND REGISTRATION RENEWAL LETTER?

Yes. The new, additional annual registration fees for electric vehicles will display a new line item on the registration receipt. Like other line items that already appear on these documents, the electric vehicle annual registration fee line item will display a zero for a vehicle that is not impacted by the new fee. i.e., a traditional gas-powered motor vehicle.

We will be working with the county treasurer renewal committee regarding adding the new information to the renewal notices.

WHAT IF A CUSTOMER’S REGISTRATION RENEWAL IS DUE IN JANUARY 2020, BUT THEY WANT TO DO AN EARLY RENEWAL IN DECEMBER 2019? WILL THEY BE SUBJECT TO THE NEW FEE?

If the customer owns an electric vehicle subject to the new additional registration fee, and their registration renewal period begins January 1, 2020 or after, they will be assessed the additional fee even if they seek an early registration of their renewal in December 2019. This is because the legislation states the additional registration fee for electric vehicles is “for the period beginning January 1, 2020...” Accordingly, the registration renewal notices that are mailed out in December for the January renewals will contain the new fee.

Conversely, if a customer’s registration renewal period is in December 2019, and they seek a late registration in January 2020, they will not be subject to the new annual registration fee because their renewal was not “for the period beginning January 1, 2020...”

WILL THE NEW ADDITIONAL REGISTRATION FEE FOR ELECTRIC VEHICLES BE ELIGIBLE FOR A REFUND IF THE LICENSE PLATES ARE RETURNED?

Yes. The new, additional electric vehicle registration fees are in essence an “up-front” payment of fuel taxes expected to have been paid if the vehicle had been operated throughout the registration year, so it’s equitable to include the additional electric vehicle registration fees in

the unexpired registration fees that may be refunded under Iowa Code section 321.126(1). This is because an owner would not continue purchasing fuel and paying fuel taxes if they no longer continued to own or operate a vehicle, so it would be unfair to retain registration fees that stand in the place of those fuel taxes. The reasons refunds may be authorized remain the same and are outlined in section 321.161(1) and in Iowa DOT administrative rule 761—400.50.

WILL THE NEW ADDITIONAL REGISTRATION FEE FOR ELECTRIC VEHICLES BE SUBJECT TO THE 5% PENALTY FOR DELINQUENT REGISTRATION?

Yes. The new, additional electric vehicle registration fee will be included in the total annual registration fee upon which the 5% penalty will be calculated in accordance with Iowa Code section 321.134.

WILL COUNTY TREASURERS RETAIN 4% OF THE NEW ADDITIONAL REGISTRATION FEE FOR ELECTRIC VEHICLES?

No. Again, the new electric vehicle registration fees are special fees that are intended to stand in the place of fuel taxes that would otherwise be paid if the vehicle was powered by traditional fuel. Fuel taxes are not subject to retention by county treasurers for deposit in county general funds, so subjecting these new fees to retention and deposit in the county general fund would diminish the fuel tax replaced and the amount of funding designated for road and bridge funding in Iowa and would undermine the intent of the legislation. Accordingly, we do not interpret the new, additional fees as being subject to county retention under Iowa Code section 321.152. However, it's important to remember that counties still benefit from the registration of electric vehicles. County treasurers will continue to retain 4% of the usual annual registration fees based on value, weight, and model year, and perhaps more importantly, all counties receive a direct benefit from the new, additional electric vehicle registration fees – the new fees are deposited in Iowa's Road Use Tax fund, which supports all roads and bridges in Iowa. After some off-the-top allocations, receipts into the Road Use Tax Fund are distributed according to a statutory formula that dedicates 47.5 percent for the primary road system, 32.5 percent for county roads, and 20 percent for city streets.

ROAD USE TAX FUND

(FY 2019 - \$1.45 billion)

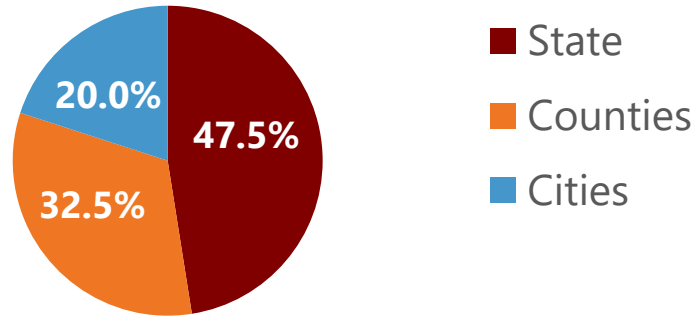


Figure 3 – Road Use Tax Fund (RUTF) estimated FY19 receipts and distribution.

HOW DO THE NEW FEES IMPACT NEW REGISTRATIONS?

Any electric vehicle with a first registration (purchased or brought into the state) on or after January 1, 2020, will be subject to the new fees. If a customer picks a registration renewal that results in an initial registration period of fewer than 12 months, then the electric vehicle supplemental fee will be prorated based on the registration period.

HOW WILL WE IDENTIFY WHETHER THE NEW FEE APPLIES TO A NEW REGISTRATION?

We will maintain the registration rate tables and the fee estimators to properly identify electric vehicles and account for the new fees. The Title and Registration application Form 411007 already includes a space for fuel type under vehicle information, although this is optional and may not always be completed.

WILL THERE BE ANY IMPACT TO THE ONLINE REGISTRATION RENEWAL PROCESS?

The on-line registration renewal process will be adjusted to include the additional registration fee that will already be noted on the registration renewal notice.

WHAT IF A CUSTOMER DISPUTES THE FUEL DESIGNATION OF A VEHICLE?

We will actively maintain the vehicle registration rate table to clearly identify whether a vehicle is BEV, PHEV, conventional hybrid or gasoline powered. We anticipate that all automobiles, multi-purpose vehicles and trucks will be identifiable with the VIN. We will maintain the BEV and PHEV motorcycle information and anticipate that the number of impacted models will be limited.

If a customer still disputes the fuel designation of a vehicle, the county may contact Vehicle Services for final resolution. Iowa DOT decisions regarding fuel designation would be subject to administrative appeal under Chapter 17A of the Iowa Code.

WILL WE PROVIDE ANY EDUCATIONAL MEDIA REGARDING HOW THE NEW FEES WILL BE USED?

All the electric vehicle additional registration fees will be deposited into the Road Use Tax Fund to support road investments across Iowa and will be distributed in accordance with Iowa Code requirements as described above. We will provide information about this use on our web site and may develop additional communication materials that counties and DOT staff may provide to customers who ask about the fee and its use.

WILL THERE BE ANY OUTREACH TO DEALERS REGARDING THE NEW ADDITIONAL REGISTRATION FEE FOR ELECTRIC VEHICLES?

Yes. We will reach out to dealers to make them aware of the new annual registration fee being imposed on electric vehicles, but we do not anticipate any significant impact on the dealers because of this change.

There will be no change to the title and registration application form. There may be minor updates needed to the Electronic Registration & Title (ERT) system to ensure that the three vehicle classes are recognized and noted. The registration fee estimator will be updated to recognize the electric vehicles effective January 1, 2020.

ARE ANY ELECTRIC VEHICLES GRANDFATHERED IN UNDER A PRIOR LAW?

No. All electric vehicles are subject to the annual registration fee under current Iowa Code 321.109 and the additional registration fee under current Iowa Code 321.116.

Prior to 2014, Iowa law authorized a \$25.00 annual registration fee for electric motor vehicles. This fee was reduced to \$15.00 for the sixth and succeeding registration years. The law was repealed. Because the prior law was repealed, it is as though the law never existed. Therefore, no electric vehicles will receive a reduced, annual registration fee based on the prior, repealed law.

We will be updating programming in ARTS to reflect that no electric vehicles should receive a different annual registration fee under this prior law.