



DRIVING REPORT BUSINESS RULES

December 2020

Hawaii Road Usage Charge Demonstration

with



Reference	Title	Rule Definition
BR_Part1_1	Electric Vehicle	“Electric” vehicle segment includes any street-legal passenger vehicle with an electric motor that charges its battery from a power source external to the vehicle. This includes Plug-in electrics (PEV) and plug-in hybrids (PHEV).
BR_Part1_2	Any vehicle included in the “Fleet” segment is NOT included in the “Electric” segment or “Non-Electric” segment	Any vehicle included in the “Fleet” segment is NOT included in the “Electric” segment. For the purposes of assigning vehicles to segments, the fleet segment, as defined here in these business rules, takes highest priority. If a vehicle is not in a fleet, but meets the definition for electric vehicle, it is included in the “Electric” segment. All remaining vehicles--vehicles which do not meet the definition for “Fleet” or “Electric” vehicle segments are considered to be in the “Non-Electric” segment.
BR_Part1_3	“Non-electric” vehicle segment includes all vehicles that do not meet the criteria for “Electric”. This segment includes gasoline/electric hybrid vehicles that charge their batteries via regenerative braking.	The “Non-electric” vehicle segment includes all vehicles that do not meet the criteria for “Electric” or “Fleet”. This segment includes gasoline/electric hybrid vehicles that charge their batteries via regenerative braking.
BR_Part1_4	Fleet segment definition	<p>A “Fleet” is a group of vehicles that meets one or more of the following criteria:</p> <ol style="list-style-type: none"> Pre-identified fleets that provide HiRUC a list of their vehicles. Pre-identified fleets will be recorded on a spreadsheet, with each member vehicle listed, and provided to the HiRUC system. Vehicles registered to same name AND address--at least 10 unique vehicles/VINs at with same Name and Address (the count of vehicles includes vehicles with active and inactive status, but no other statuses). <ul style="list-style-type: none"> Small Fleets: 10 - 250 vehicles Medium fleets: 251 - 2,500 vehicles Large fleets: 2,501 - 5,000 Upper threshold: 5,000 vehicles Pre-identified by Inspection station ID--certain fleets have unique/proprietary inspection stations. Pre-identified inspection station information will include the name and address of the fleet. Any vehicle inspected at that station will be included in such a fleet.

Reference	Title	Rule Definition
BR_Part1_5	Definition of "prior address"	Prior Address is initially populated from the first DMV file. At least 2 address changes will be required before the data in this field changes. All Prior Addresses with time stamps should be retained in the data warehouse
BR_Part1_6	Definition of "current address"	Current Address is initially populated from the first DMV file and will match "Prior Address". On each DMV file load, the address in the DMV file should be compared to "Current Address". If the DMV file address is different, "Current Address" should be updated to the DMV file address and "Prior Address" updated to the previous "Current Address".
BR_Part1_7	Definition of "prior owner"	Prior Owner is initially populated from the first DMV file. At least 2 owner name changes will be required before the data in this field updates. All Prior Owners with time stamps should be retained in the data warehouse
BR_Part1_8	Definition of "current owner"	Current Owner is initially populated from the first DMV file and will match "Prior Owner". On each DMV file load, the owner name in the DMV file should be compared to "Current owner". If the DMV file owner name is different, "Current Owner" should be updated to the DMV file owner name and "Prior Owner" updated to the previous "Current Owner"
BR_Part1_9	Prior Odometer (s)	Prior Odometer is the odometer reading reported from the last passed safety inspection. This value will be loaded from the most recent passed odometer reading (from the PMVI database) during May 2019 through three to four months after launch). And will be accompanied by a prior odometer time stamp.
BR_Part1_10	Current Odometer	Current Odometer is the odometer reading from PMVI from the most recent passed inspection
BR_Part1_11a	Vehicle Assignment of County for Rate	The county assigned to each vehicle for the purposes of determining the RUC rate will be the vehicle's county of registration.
BR_Part1_11b	Fleet County	Fleets are identified as entities that have the same address and similar names in the vehicle registry. The fleet county is determined by the fleet registration county address.

Reference	Title	Rule Definition
BR_Part1_12	VIN is the primary identifier of vehicles, not license plate	VIN is the primary vehicle identifier. License plates (LP) can be changed by an owner (for example, a personalized plate may be purchased) at any time, so LP is not a reliable vehicle identifier
BR_Part1_13	One driving report per vehicle	A given vehicle (as identified by its VIN) shall not receive more than one invoice during the course of the Part 1 pilot.
BR_Part1_14	Vehicle Type	Vehicle Type is the general type/category descriptor for the vehicle. Vehicle Type shall be determined from the VIN, not the "type" data in the PMVI or DMV datasets
BR_Part1_16	Vehicle Eligibility to receive invoices -- vehicle type	Vehicle shall be considered eligible to receive an invoice (manual pilot) if: <ul style="list-style-type: none"> • an EPA-estimated city/highway MPG can be determined from its VIN, and/or it is an electric vehicle • The vehicle is not a LNG/CNG/LPG flex-fuel, dual-fuel, or bi-fuel vehicle • The vehicles is not a member of an excluded vehicle type.
BR_Part1_17	Vehicle Eligibility to receive invoices -- MPG and fuel type	Vehicles registered in the Part 2 Pilot Are ineligible to receive Part 1 invoices.
BR_Part1_18	Vehicle Eligibility to receive invoices--enrollment in Part 2 Pilot	Vehicles are only eligible to receive an invoice if they have a DMV vehicle status code = "A" at the time of sending the invoice
BR_Part1_19	Vehicle Eligibility to receive invoices-- vehicle status in DMV	Milestone will provide a list of ineligible mailing addresses. These could include car dealerships, state agencies, etc. Any vehicle registered to such an address shall be considered ineligible to receive a Part 1 invoice. All addresses not included on the ineligible list are considered eligible.
BR_Part1_20	Vehicle Eligibility to receive invoices--Mailing address	Milestone will provide a list of ineligible mailing addresses. These could include car dealerships, state agencies, etc. Any vehicle registered to such an address shall be considered ineligible to receive a Part 1 invoice. All addresses not included on the ineligible list are considered eligible.

Reference	Title	Rule Definition
BR_Part1_21	Vehicle eligibility to receive invoice--vehicle with same owner moves within same county	If mailing address for a VIN changes between initial data load (or any subsequent data load) and month of most recent inspection but OWNER NAME is identical AND county does not change, the vehicle is eligible to receive an invoice.
BR_Part1_22	Vehicle eligibility to receive invoice--vehicle ownership change	If mailing address for a VIN from DMV changes between initial data load (or any subsequent data load) and month of most recent inspection AND owner name is not identical, the vehicle is ineligible to receive an invoice.
BR_Part1_23	Vehicle eligibility to receive invoice--vehicle moves between counties	If mailing address from DMV for a VIN changes between initial data load (or any subsequent data load) and month of most recent inspection, OWNER NAME is identical BUT county does change, or if county from National Change of Address (NCOA) address is different from county of DMV address, the vehicle is ineligible to receive an invoice
BR_Part1_24	Vehicle eligibility to receive invoice--State of vehicle mailing address	If a mailing address is outside Hawaii, the vehicle is ineligible to receive an invoice
BR_Part1_25	Vehicle eligibility to receive invoice--Out of state permits.	Vehicles currently operating under an out-of-state permit are ineligible to receive an invoice. However, vehicles whose first odometer reading was taken while it had an out-of-state permit, and whose second odometer reading is recorded while they are registered in Hawaii, are eligible to receive an invoice.
BR_Part1_25b	Vehicle eligibility to receive invoices--status of safety inspection.	Vehicles shall only receive a Driving Report if Current Odometer is accompanied by a "Pass" on PMVI.
BR_Part1_26, •MD.IVS.2	Types of fleet	[Added to SRS as a requirement: "The data warehouse shall maintain a record of vehicles identified as part of a "fleet", including which vehicles are associated with a given fleet, and the fleet's name, address, and type"]. Types of fleets include: private company; city government; county government; state government; other. D'Artagnan will provide information on the type of fleet.
BR_Part1_27a	Vehicle Eligibility to receive Driving Report--minimum time between odometer readings.	At least 8 months must pass between prior odometer reading and current odometer reading for a vehicle to be eligible to receive an Driving Report.

Reference	Title	Rule Definition
BR_Part1_27b	Vehicle Eligibility to receive Driving Report--maximum time between odometer readings.	Vehicles that have odometer readings 30 or more months apart shall not be eligible for Driving Reports.
BR_Part1_30	Determination of vehicle eligibility to receive invoice	Vehicle invoicing eligibility shall be determined once monthly, following the DIT and PMVI data load
BR_Part1_31	Batching of Driving Report Generation	Driving Reports for each months' eligible vehicles shall be produced in 1 batch. In month 1, we may ask the printer to only print portions of the batch each week until we are sure that there are no changes necessary.
BR_Part1_32	Minimum inspections for Fleet Driving Report	Only fleets with more than 4 vehicles that have been inspected in a quarter are eligible for a Driving Report
BR_Part1_34	Fleet Driving Report Frequency	Driving Reports for fleets shall be generated either: - yearly [calendar year] for small/mid fleets (10-250 vehicles). Yearly Driving Reports include all vehicles in the fleet for the preceding 12 months, or - monthly [calendar month] for large fleets (>250 - 5000). Monthly Driving Reports include all vehicles inspected during the most recent month only. Fleets that have more than 5,000 vehicles do not receive a Driving Report.
BR_Part1_36	Fleet Driving Report Printing	The fleet driving reports shall be generated at the end of the calendar year for all fleets. Yearly or monthly Driving Report are generated in PDF format at the end of the calendar year and sent to the printer.
BR_Part1_37	One Driving Report per fleet	Once a fleet entity has received a Driving Report (monthly or yearly), it will not automatically receive any more for the rest of the Part 1 pilot.
BR_Part1_38	Final Annual Driving Report	Fleets between 10 to 250 vehicles will receive only one yearly Driving Report, and fleets between 251 and 5000 vehicles receive only monthly Driving Report during the pilot
BR_Part1_39	Name of statements sent to participants in Part 1 Pilot.	Part 1 "invoices" or statements shall be called "Driving Reports"

Reference	Title	Rule Definition
BR_Part1_40	Inclusion of County name and Rate on Driving Reports	If a county has opted to participate in the Part 1 pilot, the county's name and rate shall appear on Driving Reports for vehicles registered in that county in the appropriate location on the driving report template, and the county rate shall be charged for those vehicles in addition to the state rate. If a county has not opted to participate in the Part 1 pilot, its name shall not appear on the Driving Reports for vehicles registered in that county, and only the state rate shall be charged for those vehicles.
BR_Part1_43	Return mail	A record of the returned mail will be kept, tracked by Driving Report ID. DCL will log returns and provide data (e.g. CSV file) for import into the master database.
BR_Part1_44	Definition of Driving Report period	Driving Report "period" refers to the time between the last two odometer readings for non-fleet driving reports
BR_Part1_45	Driving Report period for fleets	Driving report period for fleets that have between 10 and 250 vehicles is calendar year 2020. Driving report period for fleets that have between 251 and 5000 vehicles is calendar month 2020. Fleets than have more than 5,000 vehicles do not receive a driving report.
BR_Part1_46	Maximum number of Driving Reports for a given owner-address	Any owner-address combination shall receive only up to 1 driving report. Multiple reports may be sent to a given address if the vehicles have different owners.
BR_Part1_47	Maximum miles on a driving report	A non-fleet driving statement with greater than 100,000 miles should be flagged for immediate review and not sent.
BR_Part1_48	Maximum RUC on a driving report	A non-fleet driving statement with a RUC greater than \$200,000 should be flagged for immediate review and not sent.
BR_Part1_49	Vehicle eligibility to receive a Driving Report--odometer reported in km	When an odometer is collected in kilometers in the PMVI data, vehicle is not eligible to receive a driving report

Reference	Title	Rule Definition
BR_Part1_51	Rounding and Computation Rules for Driving Reports	<p>1) Rounding rules: round to nearest unit If the digit in the first decimal place is 5 or more then add 1. If the digit in the first decimal place is less than 5, then leave the unit number as it is.</p> <p>2) Computation "You may want to explore the math yourself" Work with unrounded numbers until the Total gas tax, i.e. Total gas tax = $10,523/22 \times 0.39 = 186.544091$, which is rounded up to \$187. Similarly for Total RUC, we round 199.937 to \$200. Then we compute the difference between the rounded numbers: $\\$200 - \\$187 \Rightarrow \\$13$ more</p> <p>3) Your vehicle section (monthly average) Dividing the rounded Total Gas Tax (\$187) and Total RUC(\$200) numbers by the number of months (12), so - average monthly gas tax is $\\$187/12 = \\15.58, i.e. about \$16 - average monthly RUC is $\\$200/12 = \\16.67, i.e. about \$17</p>
BR_Part1_52	Vehicle inspection county	If registration address county doesn't match vehicle inspection county, the vehicle is not eligible to receive a Driving Report
BR_Part1_53	Vehicle current mailing address county	If current mailing address county (per NCOA address) doesn't match vehicle registration county, a DR cannot be created
BR_Part1_54	Vehicle ownership at earliest PMVI Record if PMVI record predates DIT record	If a PMVI inspection record for a given VIN predates the earliest available DIT record for that VIN, the ownership at the time of that PMVI inspection record will be assigned per that earliest DIT record.
BR_Part1_55	Vehicle ownership at earliest PMVI Record if DIT record predates PMVI record	Vehicle ownership at the time of a PMVI inspection record will be assigned per the info in the DIT record that equals or immediately precedes the inspection date.
BR_Part1_56	Driving Reports only issued to Current Vehicle owners	A DR will only be issued to the current owner of the vehicle, even if enough data exists to generate a DR for a prior owner.
BR_Part1_57	Registration status of "I"	A registration status of "I" does not indicate a change a change in vehicle ownership or registration address