

# Navigating EROAD's Electronic IFTA and IRP Solutions

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## Audit Guide



# Introduction

The purpose of this document is to provide auditors with a helpful and quick overview of EROAD's IFTA Electronic Tax and IRP Electronic Registration Management solutions.

Licensees choose EROAD because they want to comply with all regulations and to have a trusted technology service provider that offers commercial and regulatory services on one platform.

EROAD has established an enviable position as a trusted party of our licensee clients and the government agencies we work with across North America. To achieve this EROAD built an entirely new kind of technology platform to support the commercial transport sector – designed from the ground up to meet the highest performance, financial and evidential standards.

Our team are experts in their field, highly qualified, and experienced in the technology and security, the transport industry and the public sector.

**We ensure we fully understand the regulations we offer solutions for and keep up to date with any changes, including requirements to each jurisdiction.** During the development process we consider all aspects of how the data will be used by the licensees, this includes ensuring that a licensee has everything needed in case of an audit.

EROAD's system generates, provides, and maintains adequate, auditable records, and includes the necessary internal controls and meets recordkeeping and retention requirements for IFTA and IRP.



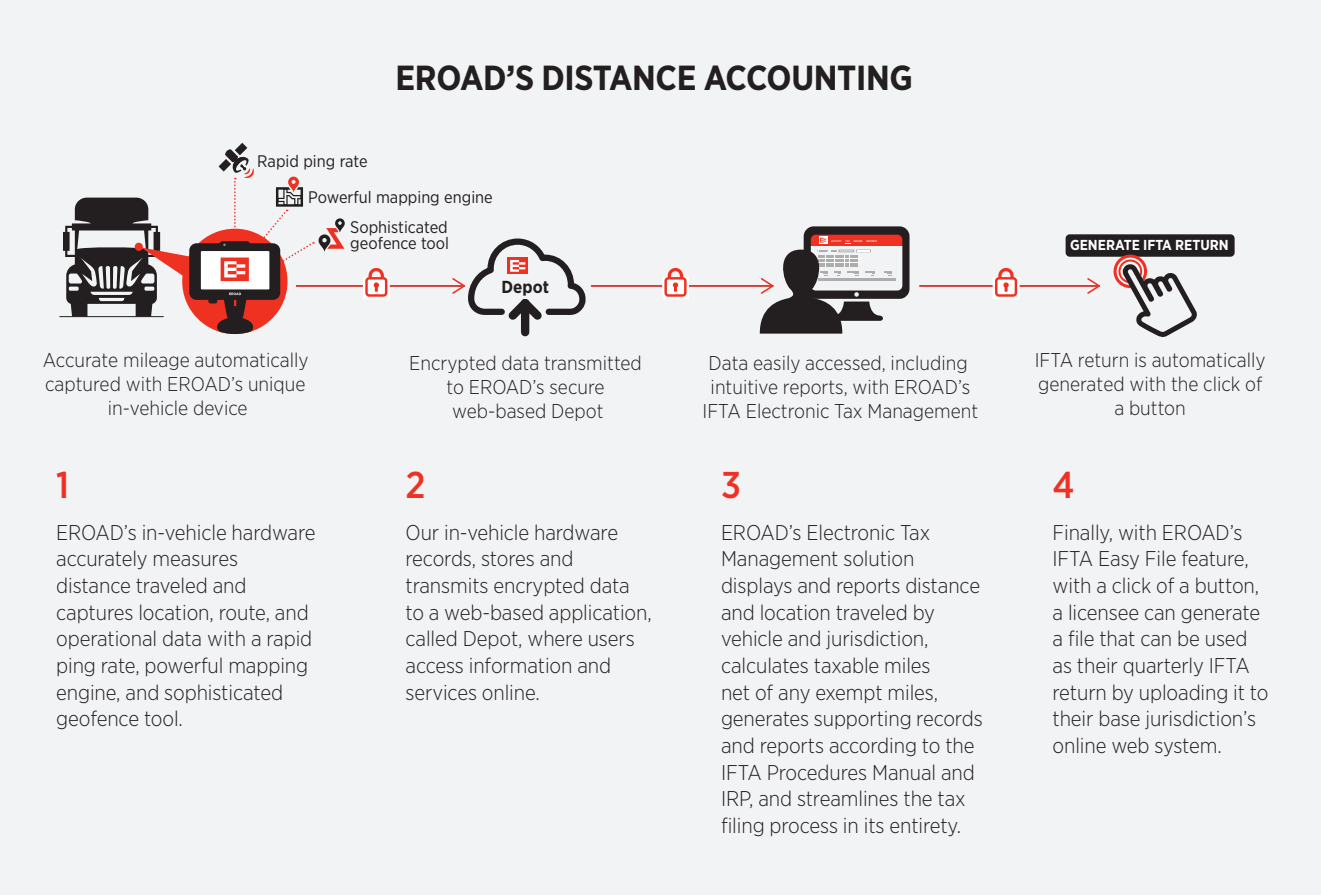
# EROAD's IFTA and IRP Electronic Management Key Points of Difference

- 1 Trusted in-vehicle hardware that is ELD compliant
- 2 Superior accuracy
- 3 Government-approved mileage records, including an independent unqualified opinion by the Oregon Secretary of State Audit Division
- 4 Exceeds record retention requirements for IFTA and IRP
- 5 Meets electronic IFTA and IRP recordkeeping requirements
- 6 Automatically calculates IFTA exempt miles according to individual jurisdictional requirements
- 7 Provides quarterly filing with EROAD IFTA Easy File
- 8 Designed to be easily read by external audit software
- 9 Industry-leading 99.98% service uptime. Less than 6 minutes of downtime each month.
- 10 Actively engaged in regulatory and trucking community

EROAD meets or exceeds internationally accepted control objectives and practices for privacy, security, and information systems, FIPS (Federal Information Processing Standard) 140-2 Level 3, Common Criteria EAL2+ ALC\_FLR.1 and United States Government Accountability Office Audit and Security Guidelines.

# Know Before You Go

This section contains an overview of EROAD's solution to help you make the most of your time in the field.



## IN-VEHICLE HARDWARE

The EROAD in-vehicle hardware is extremely accurate and typically achieves within  $\pm 0.5\%$  of true distance and is unaffected by tire wear and inflation, vehicle loads, temperature or humidity. During travel, internal and external sensors continually monitor and improve distance calibration.

The EROAD hardware contains a GPS receiver that receives and processes GPS signals continuously (sampled **once per second**). EROAD's rapid ping rate and proprietary mapping engine translate into accurate and reliable distance and location recordkeeping.

EROAD in-vehicle hardware can detect external tampering or modification of sensor inputs or data. The hardware is designed to operate in both poor GPS and cellular conditions, and its long-life internal battery ensures the unit can continue to estimate distance if power loss is experienced.

## WEB-BASED APPLICATION

The mileage and fuel information recorded are available in the EROAD web application, Depot. The encrypted data is transmitted via the cellular data network.

Depot is hosted on the Amazon cloud infrastructure, offering unparalleled performance, redundancy and security against unauthorized access (both physical and logical). All supporting records and data are retained and stored for at least five years before archiving. **No manual edits of mileage data recorded through the in-vehicle hardware are permitted.**

The EROAD solution has received an independent unqualified opinion by the Oregon Secretary of State (SoS) Audit Division. **The state government audit concluded that the EROAD technology platform was accurate and reliable, and found that the EROAD data, reports and records were more accurate than the paper-based records compiled and filed by the carrier.**

The Oregon SoS Audit Division also verified Depot and its associated services provide a secure and stable information system for transmitting, processing and storing tax information available to the licensee.

**Furthermore, EROAD meets the required security and financial standards to conduct electronic commerce, and has been approved by the Oregon Department of Transportation (ODOT) to electronically calculate, collect, and remit weight-mile taxes from licensees on behalf of the Oregon state government.**



# EROAD Internal Controls

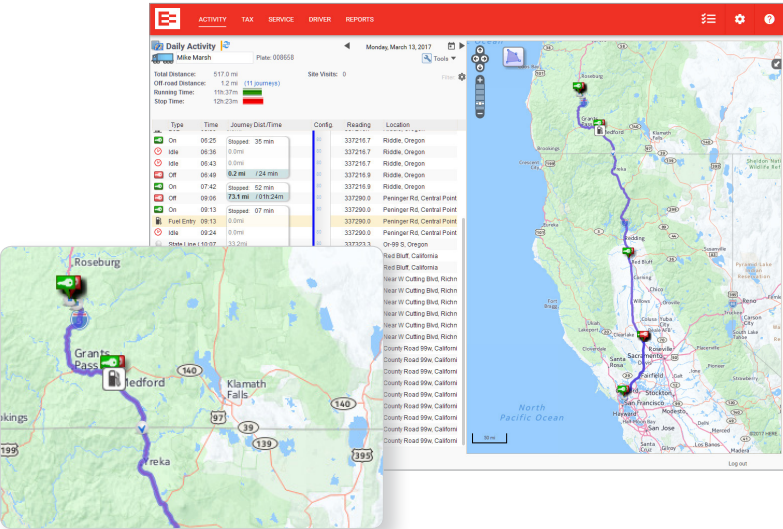
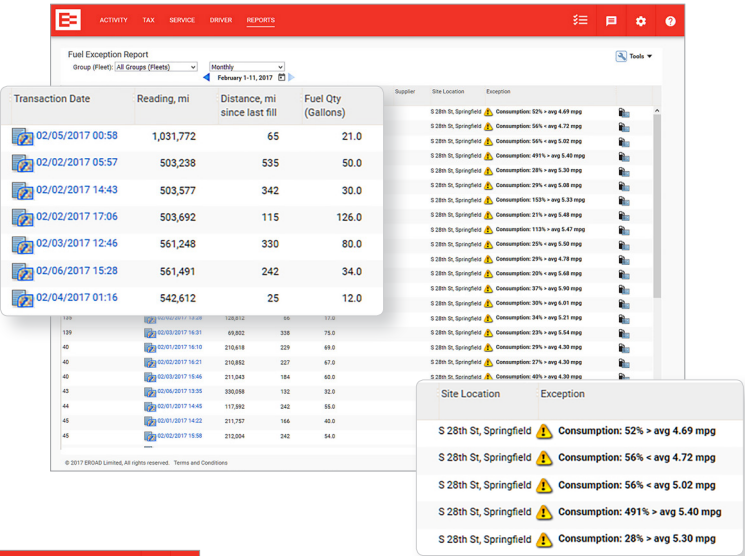
EROAD has a comprehensive set of internal and external controls in place that ensure the accuracy and integrity of the data provided.

## FUEL EXCEPTION REPORT

The Fuel Exception Report identifies location, consumption, and fuel type exceptions across the licensee's fleet for the selected reporting period.

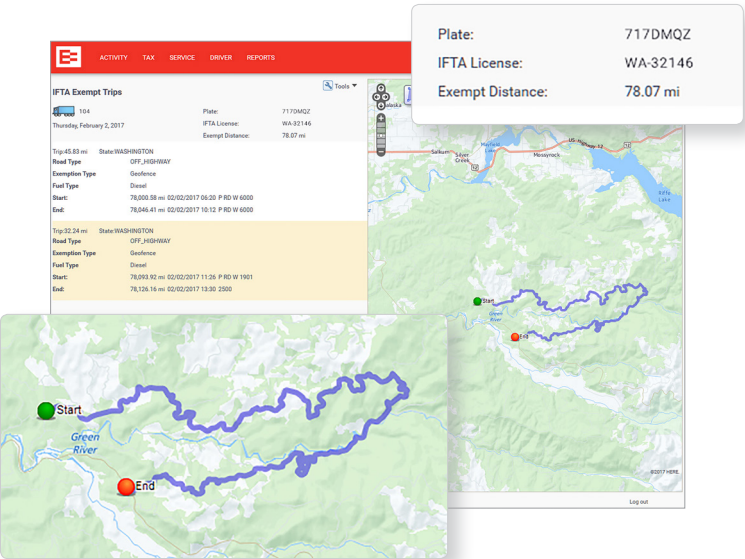
### Types of Exceptions

- 1. **Consumption** = MPG is greater/less than 20% across last 10 fuel fills
- 2. **Location** = Fuel fill location does not match location of vehicle
- 3. **Fuel Type** = Different fuel type than vehicle's fuel type



## DAILY TRIP DETAILS

A map visual of each day's trip is available in the Daily Activity Report, providing confidence, integrity, and validation of the distance reported and any fuel fills recorded.



## AUTOMATIC EXEMPT MILES

An added map layer, a continuous ping rate, and verification with jurisdictions, EROAD undergoes vigorous validation to ensure the automatic exempt miles are correct. EROAD automatically determines and nets any IFTA exempt miles when calculating and preparing the quarterly IFTA return data. Any off highway geofences manually created by a licensee can be easily identified to distinguish between mapped exempt miles and off highway travel generated from manually created geofences.

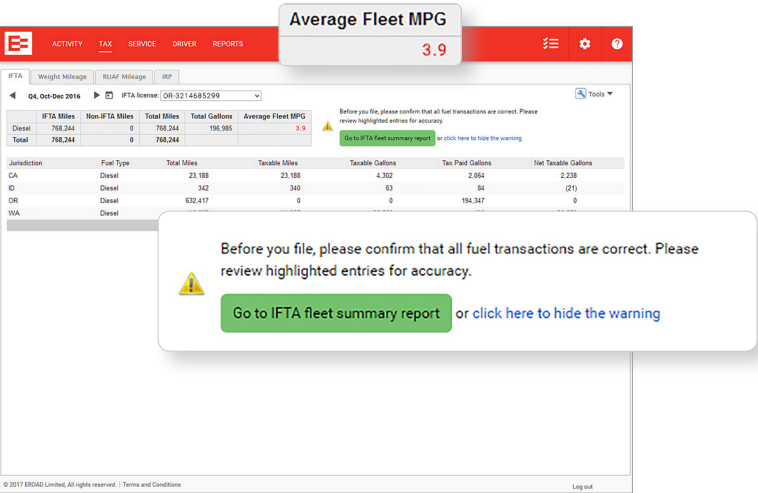
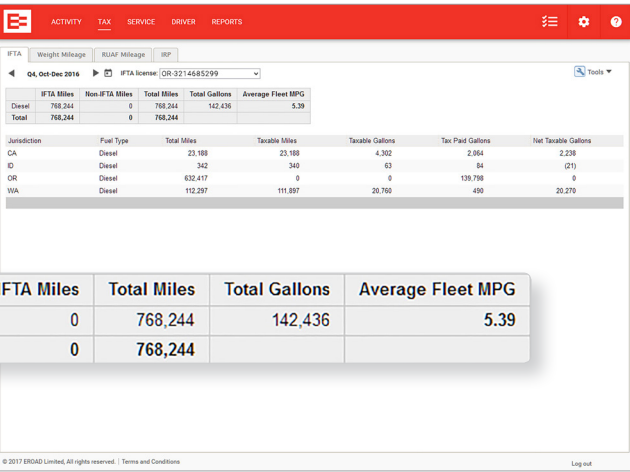
## MONITORING

EROAD monitors mileage information continuously to ensure the highest level of accuracy is maintained across daily trips, monthly trip records, summaries, and return data. This prevents any gap miles from occurring and highlights any firmware exceptions that require immediate attention.

## AUTOMATIC MPG CALCULATION

A licensee's quarterly fleet MPG is automatically calculated for each IFTA fuel type and quarter based on the electronic trip and fuel information available.

	IFTA Miles	Non-IFTA Miles	Total Miles	Total Gallons	Average Fleet MPG
Diesel	768,244	0	768,244	142,436	5.39
Total	768,244	0	768,244		



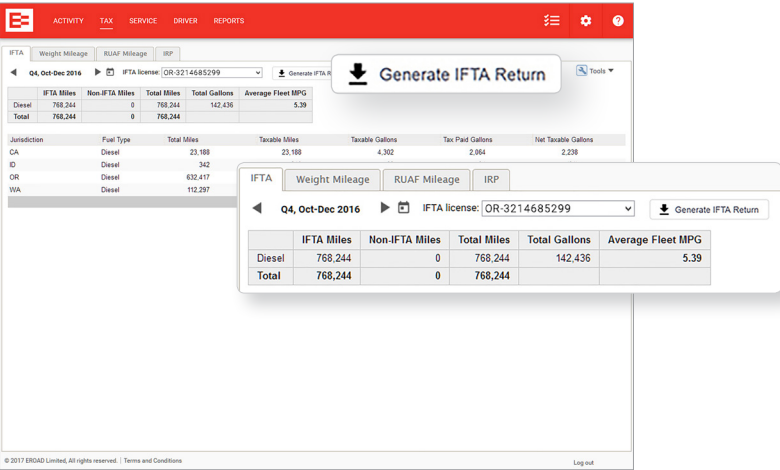
## SUSPECT MPG ALERT

When a fuel type's average fleet MPG is considered "suspect" or out of range, a message is displayed on the IFTA Return for up to one month after the close of the quarter to draw the licensee's attention to a possible issue, such as missing fuel receipts.

## IFTA RETURN AND IFTA EASY FILE

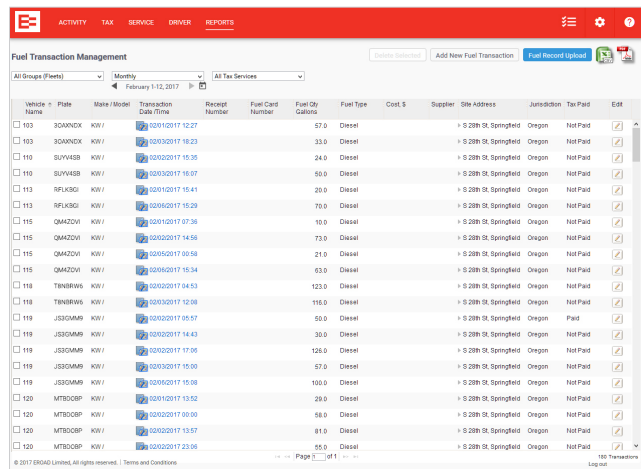
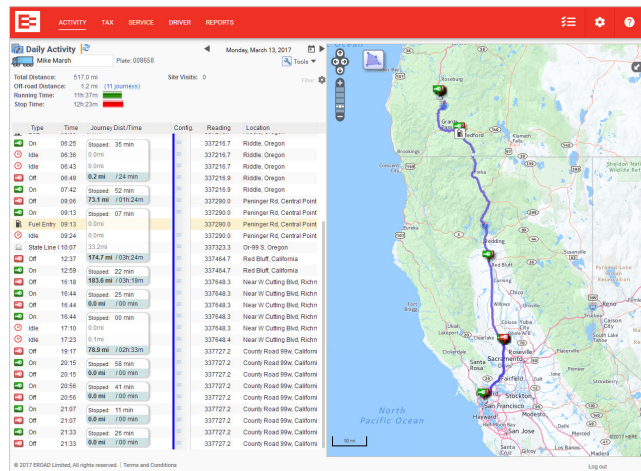
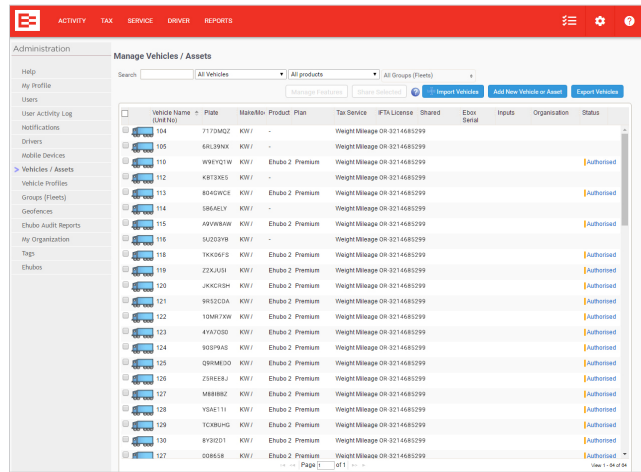
This EROAD feature removes the need for carriers to recalculate or perform arithmetic equations to determine quarterly tax obligations.

Carriers utilizing EROAD's IFTA Easy File eliminate the need to translate return data onto paper or manually enter it into an online system, preventing both transposition and math errors.



## Review of Records

EROAD provides supporting records and reports that comprise the licensee's tax returns and registration requirements.



## EQUIPMENT LIST

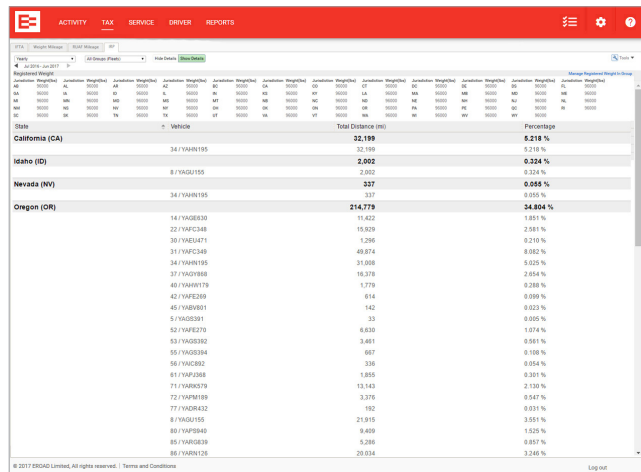
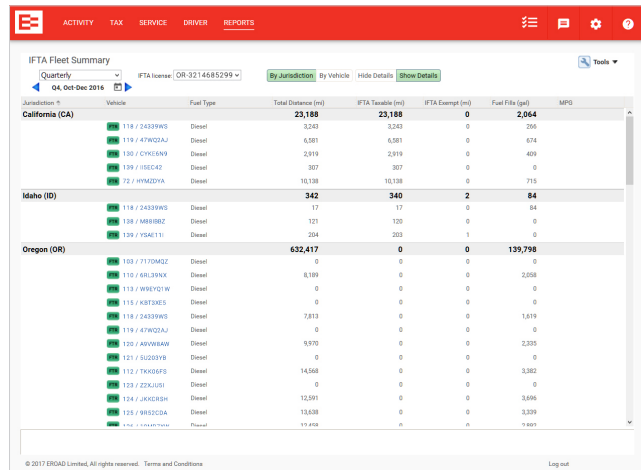
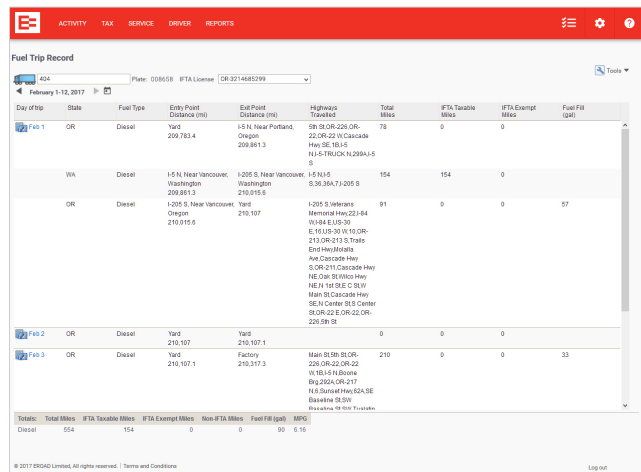
A licensee can easily generate and export a CSV file of their vehicles by fleet or tax service (e.g. IFTA/IRP). This includes but is not limited to information such as the vehicle identification number (VIN), unit number, license plate, weight, IFTA license and decal numbers, number of seats/axles, purchase price, and vehicle type.

## DAILY ACTIVITY

The Daily Activity Report displays a visual depiction of and provides details for each of the daily trips recorded through the in-vehicle hardware. In addition to the distance reading and location information, significant events such as the ignition on/off and running/stop times are available.

## FUEL TRANSACTIONS

There are three ways to capture fuel transactions; driver entry on in-vehicle hardware, uploading fuel data in bulk or receiving it directly from the fuel card provider. Fuel transactions are automatically combined with the mileage trip information to support the filing of accurate and auditable IFTA returns. The system allows a licensee to capture enough detail to meet the Fuel Records requirement portion for tax-paid credit and other fuel receipts, such as bulk fuel withdrawals that were deposited into IFTA vehicles. Additionally, when a fuel transaction is entered through the in-vehicle device, the location information is automatically recorded, solidifying the integrity of the fuel fill.



## MILEAGE RECORDS

IFTA Fuel Trip Records and IRP Vehicle Trip Records provide an electronic version of traditional, paper-based trip sheets. The trip records use the mileage information captured from the in-vehicle device to populate all the required elements for recordkeeping purposes.

For IFTA, the fuel information is automatically reconciled with the mileage information by vehicle and day of trip. A sub-set of the mileage and fuel information is visible on screen and intended to be used by the licensee; a CSV file can be generated that contains all the additional elements you may want to see, such as the GPS coordinates.

## IFTA FLEET SUMMARY

The IFTA Fleet Summary Report provides all of the needed summaries by jurisdiction and vehicle (monthly, quarterly, and yearly) for audit purposes. It displays items such as the total miles, IFTA taxable miles, IFTA exempt miles, total gallons, and fuel type by IFTA license, vehicle, and jurisdiction.

## IRP APPLICATION

EROAD's IRP Application automatically displays the mileage information for IRP apportioned vehicles by fleet and correctly calculates the IRP apportionment percentage by jurisdiction and vehicle. Registered weights can be managed for each reporting period and fleet. It also provides all of the needed summaries for IRP by jurisdiction and vehicle (monthly, quarterly, and yearly) for audit purposes.

From start to finish, you should easily be able to trace a licensee's records all the way from a daily trip to the required monthly, quarterly, and yearly summaries, as well as the filings and registration information all on a single platform that is consistent from carrier to carrier

*Note: For a review of the raw event data received from the in-vehicle device, an offline process is available to licensees, if needed.*



**EROAD**

## EROAD Advantage

EROAD Inc. is a leading transportation technology and services company, headquartered in Portland, Oregon. EROAD's in-vehicle technology and global electronic platform provides commercial vehicle operators with automated solutions to meet regulatory and compliance obligations, and provides a range of commercial services.

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