MONTANA FUEL TAX REFUNDS

FHWA/MT-11-003/8205

Final Report

prepared for
THE STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

in cooperation with
THE U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

November 2011

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RESEARCH PROGRAMS

MDT

Montana Fuel Tax Refunds

Final Report

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16. Abstract

The primary source of funding for transportation infrastructure is the taxes that are imposed on motor fuels. One aspect of fuel tax collections is the process that requires consumers to apply for refunds of taxes paid on fuels used for tax-exempt purposes. Few studies on fuel tax evasion have focused on the refund process. The Montana Department of Transportation has expressed concern over the possibility of fraud, errors and inefficiencies in the current fuel tax refund process. This report summarizes a project that focused on estimating the current level of fraud and errors and examining the current laws and processes for motor fuel tax refunds in Montana. The project focused primarily on three refund types; agriculture, power take-off units (PTO) and refrigeration units (reefer). The project included a literature review, a survey of peer states in the region, development of a model to estimate what portion of the state's fuel consumption might reasonably be considered tax exempt, a review of over 500 refund claim forms, and recommendations for improving the tax refund process in Montana.

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ADOT	Arizona Department Of Transportation
AZ OAG	Arizona Office Of The Auditor General
DOT	Department of Transportation
EIA DOE	Energy Information Administration of the Department of Energy
EOE	Errors, Omissions and Evasions
ERS	USDA's Economic Research Service
EXFIRS	Excise Files Information Retrieval System
EXSTARS	Excise Summary Terminal Activity Reporting System
FHWA	Federal Highway Administration
FTCU	Fuel Tax Compliance Unit
IFTA	International Fuel Tax Agreement
IRS	Internal Revenue Service
LUST	Leaking Underground Storage Tank
MCA	Montana Code Annotated
MDT	Montana Department Of Transportation
MF	Montana Forms
MPG	Miles Per Gallon
MVD	Motor Vehicles Division
NASS	USDA's National Agricultural Statistics Service
NCHRP	National Cooperative Highway Research Program
OBRA	Omnibus Budget Reconciliation Act
OIG	USDOT's Office Of Inspector General
PTO	Power Take-off Units
REEFER	Refrigeration Units
RR	Railroads
SU	Special Fuel Users
TC	Tax Commission
TIGTA	Treasury Inspector General For Tax Administration
U.S.C.	United States Code
USDA	United State Department of Agriculture
USDOT	United State Department Of Transportation
VIN	Vehicle Identification Numbers
§	A symbol meaning "section" within the U.S.C.

1. INTRODUCTION

The primary source of funding for transportation infrastructure in every state is the taxes that are imposed on motor fuels. As with other kinds of taxes, tax fraud and tax evasion are a concern with fuel taxes. One aspect of the fuel tax collection system in Montana that may be susceptible to fraud is the process that requires consumers to apply for refunds of taxes paid on fuels used for tax-exempt purposes.

Montana allows refunds of the state fuel tax consumers pay when they purchase fuel to be used for several exempt purposes such as agriculture, running power take-off units (PTOs) and operating refrigeration units (reefers). Agricultural refunds relate to fuel used in farming and ranching operations. PTOs are devices that use the vehicle's engine as a power source for functions other than propelling the vehicle down the road. Two common examples are well-drilling rigs and concrete mixing trucks. The spinning drum of a concrete mixer and the drill on a well-drilling truck use fuel from the truck's main fuel tank. Since fuel taxes can be considered a type of user fee for driving on public roads, the fuel used to power these units is tax exempt. Reefers are refrigeration units that keep a truck's cargo area cold. Reefers often have a fuel tank that is separate from the vehicle's main fuel tank. In this case, the owner might have the option to purchase tax-free fuel, such as dyed diesel, to put in the tank powering the refrigeration unit.

Claimants who purchase fuel that has been taxed but use it for an allowed tax-exempt purpose can fill out a refund form and submit it with the required documentation to the Montana Department of Transportation (MDT) for a refund. Original invoices for fuel purchased are an example of the documentation that may be required.

MDT has expressed concern over the current fuel tax refund process in relation to both the appropriateness of the laws governing the process and the possibility of errors, omissions and evasions (EOE). EOE is a broad term encompassing all types of incorrect fuel tax payments, whether errors or outright fraud. Often the difference between an error and fraud is simply the individual's intent, which can be difficult to determine.

The agency is not as concerned with the laws and EOE in relation to other categories of fuel use and fuel tax refunds. These include fuel purchased elsewhere but taxed in Montana under the International Fuel Tax Agreement (IFTA), and a category broadly defined as special fuel users (SU). IFTA allows motor carriers who participate in interstate travel in the 48 states and 10 Canadian provinces to pay state or provincial fuel taxes to a single entity—their base jurisdiction—for fuel taxes due other jurisdictions. The amounts payable to other jurisdictions are based on miles driven and fuel purchased in the various states and provinces. The base jurisdiction then remits the fuel taxes to the appropriate jurisdictions. SU are those contractors who are required to obtain a special fuel users license to work on public projects.

Montana's current fuel tax refund process relies mostly on the submission of paper forms, which can make looking for EOE a difficult and time-consuming process. For example, when processing a refund one could check to make sure the claimant did not request refunds more than once for the same fuel purchase. This requires MDT staff to retrieve past refund claims from the archives and manually review those forms and receipts. Because claimants have three years to submit their claims, that review might involve a sizable amount of paper.

MDT entered into a contract with the Western Transportation Institute to examine the current refund process in Montana, estimate the current level of EOE and examine the current laws and

processes for refunds. The largest category of refunds paid to fuel consumers (by total number of claims and dollars paid) is for exempt uses related to agriculture. The next two largest refund categories are for fuels used in PTO units and reefers. Because these three uses account for 92 percent of refund claims processed for diesel fuel taxes, and 98 percent of the refund claims processed for gasoline taxes, the research focused primarily on these three refund types. This document reports on the results of this research and is organized as follows.

A literature review, detailed in chapter two, presents background on motor fuel taxes, discusses methods and consequences of motor fuel tax evasion, outlines initiatives taken by states and the federal government to counter fuel tax evasion, and discusses the fuel tax refund process that is in place in Montana at both the state and federal levels. Among other findings was that few studies focused on EOE in the fuel tax refund process. Summary statistics about Montana's refunds are also provided.

In chapter three, results of a survey are provided that compare how other states handle the refund process. This summary includes the amounts of refunds, types of refunds allowed and the most common types of errors encountered on refund forms.

Chapter four presents a comparative model that estimates how many gallons of fuel should be considered for refunds based on measures of fuel consumption for agricultural and refrigeration unit purposes, and how this may compare to surrounding states.

Chapter five provides a summary of the investigation by research staff into the current level of EOE in refund claims paid by the state of Montana. More than 500 refund forms from the past three years were examined in detail to identify EOE. Over 25 percent of refund forms were found to have some sort of error made by the claimant. MDT currently catches 85 percent of these errors, accounting for 97 percent of the fiscal impact.

Chapter six offers a list of recommendations for improving the refund process in Montana based on the problems found, along with a summary of the potential positive and negative outcomes of implementing the recommendations.

Chapter seven provides a brief recap of the report along with recommendations for further study.

2. BACKGROUND

This chapter provides a general history of fuel taxes across the nation, current tax rates, the magnitude of EOE in the collection of fuel taxes, methods of evasion, and methods to mitigate evasion. In compiling the background on fuel tax evasion it was found that few efforts aimed at mitigating EOE in state and federal fuel tax collection systems have focused on the refund process. The final sections of this chapter provide a summary of the refund process, including specific information about Montana's refund process and the magnitude of the fuel tax refunds Montana provides.

2.1. Historical Background

The invention of the automobile and its proliferation in the early 20th century was a force that truly shaped America. Though it's not likely that early automobile pioneers could have envisioned a complex interstate highway system or a massive national highway infrastructure, it did not take long for government to recognize both the need for transportation infrastructure and the potential revenue stream to pay for that infrastructure that automobiles could provide. Within the first three years of the last century, the city of New York and the state of Missouri both implemented systems that charged drivers a registration fee (Williams 2007).

The registration fees assessed in Missouri were designated to fund state highway construction. It was not until the Federal Aid Act of 1916 that the federal government began to provide assistance to states through a matching contribution for highway construction. Even with the federal government's matching funds, the growth of automobile use forced states to find more ways to earn revenue, mainly to supplement the building of roads and highways.

In 1919, Oregon's legislature became the first in the nation to implement a tax on motor fuels, taxing each gallon of motor fuel sold in the state at one cent per gallon. According to Williams (2007), New Mexico and Colorado also implemented taxes of one cent per gallon on motor fuels within six weeks of Oregon's action. By 1921, a total of 15 states, including Montana, had imposed fuel taxes, each at one cent per gallon. By 1929, each of the 48 continental states had instituted a fuel tax. New York was the last to do so, and the first to charge two cents per gallon of fuel. Hawaii and Alaska imposed fuel taxes before they were states, in 1932 and 1946, respectively (Williams 2007).

At the end of the 1920s, with the Great Depression looming, the federal government began looking for new revenue sources. Following the states' successful implementation of a fuel tax, the Revenue Act of 1932, which became law in June of that year, placed a temporary federal tax of one cent per gallon on gasoline. This tax was intended to collect nearly $125 million during the year it was to be in force (Jackson 2006). The federal tax on gasoline became a target for some opposition groups. The American Automobile Association, known today as AAA, voiced opposition to any federal gasoline tax. While the state fuel taxes typically went into building and maintaining roads, the federal tax was raised to make up for the deficit in the federal budget.

The 1932 federal tax on gasoline was intended to be temporary. After numerous extensions, however, the federal gasoline tax eventually became a permanent part of the price of a gallon of fuel. A major change occurred with the Highway Revenue Act of 1956, which created the Highway Trust Fund. The Highway Trust Fund ensured that federal gasoline taxes were used for transportation infrastructure. Up until this point they were used for, among other things, national

defense and making up federal budget deficits. Since the Highway Trust Fund was created, taxes on gasoline and diesel fuel have essentially been considered a user fee for public roads.

2.2. Current Fuel Tax Rates

Current federal tax rates are codified in the United States Code (U.S.C.) in Title 26, Subtitle D, Chapter 32, Subchapter A, Section (§) 4081. Diesel is currently taxed at 24.3 cents per gallon while gasoline and gasohol are currently taxed at 18.3 cents per gallon. In addition to the general fuel tax, the federal government imposes another tax that is specifically designated for the Leaking Underground Storage Tank (LUST) Trust Fund. The current tax rate for the LUST Trust Fund is 0.1 cent per gallon. Table 1 provides a breakdown of federal taxes imposed on motor fuels.

Table 1: Federal Fuel Tax Rate

Fuel	Federal Tax	LUST Fund Tax	Total Federal
Diesel	24.3	0.1	24.4
Gasohol	18.3	0.1	18.4
Gasoline	18.3	0.1	18.4

Units: Cents per gallon of fuel

Source: Data from 26 U.S.C. § 4081

At the federal level, the Internal Revenue Service (IRS) is tasked with collecting fuel taxes. Publication 510: Excise Taxes (IRS 2009a) contains information on federal fuel taxes. IRS Form 720: Quarterly Federal Excise Tax Return is to be filed quarterly by fuel producers along with a payment for motor fuels sold. These taxes are then disbursed to two funds, the Highway Trust Fund and the LUST Trust Fund. The Highway Trust Fund is composed of two accounts—the Mass Transit Account and the Highway Account. As shown in Table 2, 2.86 cents per gallon of each of the three fuel types is disbursed to the Mass Transit Account and 0.1 cent per gallon is disbursed to the LUST Trust Fund. The remaining federal fuel tax collected is deposited in the Highway Account of the Highway Trust Fund (FHWA 2005).

Table 2: Disbursement of Federal Fuel Taxes

		Highway Trust Fund		
Fuel	Total Federal	Highway Account	Mass Transit Account	LUST Fund
Diesel	24.4	21.44	2.86	0.1
Gasohol	18.4	15.44	2.86	0.1
Gasoline	18.4	15.44	2.86	0.1

Units: Cents per gallon of fuel

Source: Data from FHWA 2005

Fuel taxes can be collected at several points along the supply chain (Figure 1). A terminal is a facility registered with the IRS that stores and distributes fuel. Terminals are required to have a

device called a rack that is used to transfer fuel from the terminal to a truck or rail tank car operated by a distributor. Because all fuel is required to pass through a terminal rack, this is a convenient point to measure the fuel for federal tax collection purposes. Fuel passing through a single rack could ultimately be sold in several states, so collecting state taxes at the terminal rack is less efficient. Montana collects state fuel taxes from the distributor for any fuel the distributor sells in the state.

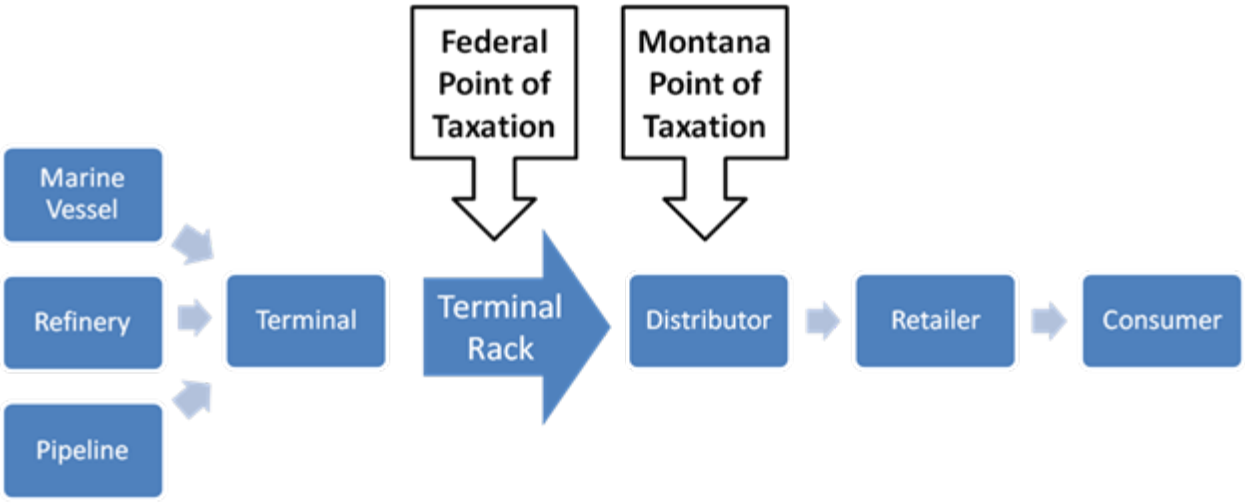

Figure 1: Point of Taxation in Fuel Supply Chain

Montana has collected a tax on motor fuels since 1921. The current tax rates are codified in the Montana Code Annotated (MCA). MCA 2009 15-70-204 and 15-70-321 contain the current tax rates for gasoline, gasohol, and diesel as summarized in Table 3. Current tax rates for Montana are 28.5 cents per gallon for diesel and 27.75 cents per gallon for gasohol and gasoline. These taxes include a 0.75 cent Petroleum Storage Tank Cleanup Fee. The fuel distributor, per MCA 2009 15-70-205 and 15-70-344, is granted a 1 percent allowance (reduction in payment) for collecting the Montana-imposed tax, though the allowance does not apply to the tank cleanup fee. The original intent of the 1 percent allowance was to account for shrinkage, spillage, and evaporation of fuel.

Table 3: Montana Fuel Tax Rates

Fuel	Montana Tax	Tank Cleanup	Total Montana	Tax & Fee Paid By Distributor*
Diesel	27.75	0.75	28.50	28.2225
Gasohol	27.00**	0.75	27.75	27.48
Gasoline	27.00	0.75	27.75	27.48

* - Includes 1% collection allowance on Montana Tax

** - From 2007 through July 01 2009 Gasohol was taxed at 22.95

Units: Cents per gallon of fuel

Source: Data from MCA 2009/2007 15-70-204, 15-70-321, 15-75-314

In the state of Montana, the tax on motor fuels is paid to the Montana Department of Transportation (MDT). Montana forms (MF) MF-32, MF-32A-Receipts, and MF-32A-Disbursements are filed monthly by distributors with tax remittances going to MDT. Disbursements of Montana fuel tax funds are specified in MCA 15-70-101.

At some gas stations in Montana, stickers on the gas pumps prominently display the fuel taxes that are included in the price of the gasoline. While the consumer may assume that money spent at the pump is directly transferred from the retailer to the government entity, the fuel tax is actually collected at a point higher up the distribution chain.

State and federal motor fuel taxes are primarily intended to be a user tax with the revenue largely used for construction and maintenance of public roads. There are a number of situations in which gasoline and diesel fuel are used for purposes other than driving on public roadways, and for which the tax is not imposed. Driving off-road or running equipment other than motor vehicles are the primary exempt uses. Because much of the non-motor-vehicle equipment runs on diesel, the federal government has implemented a dyed diesel fuel option to distinguish fuels used for exempt purposes. The U.S. Congress passed the Omnibus Budget Reconciliation Act (OBRA) of 1993 (U.S. Congress 1993), which contained amendments to the tax code that allowed diesel fuel to be purchased tax free for a nontaxable use if it was "indelibly dyed" in accordance with regulations to be set by the Secretary of Transportation. Under this system, a red dye is added at the terminal to diesel fuel that is not taxed. Fuel users can use this dyed fuel in equipment that is not used for travel on public roadways. The dye allows for enforcement action to inspect the fuel in motor vehicles in order to ensure that the proper tax has been paid.

The other primary way to allow consumers to avoid paying the fuel tax for off-road or other exempt uses is to require them to document such use and apply for a refund of the fuel tax that they have paid. This is discussed in more detail later in this chapter.

2.3. Background and Magnitude of EOE

While it can be generally assumed that most fuel taxes are paid, it's also safe to assume that some corporations and individuals will attempt to avoid paying required fuel taxes. Naturally, mistakes can occur that would be considered errors or omissions. Tax evasion, however, is done with the intent to defraud an entity of the fuel taxes owed. As it is hard to separate mistakes and evasion, three types of underpayments are grouped together under the broad category of "EOE," or errors, omissions and evasions. Most estimates of tax evasion provided in this document likely contain some elements of errors and omissions. Though a model may correctly predict the amount of fuel tax not paid, it is nearly impossible to break down an estimate into the amount due to errors, the amount due to omissions or the amount due to evasion.

2.3.1. Tax Evasion Estimates—Nationally

A 1992 study by the Federal Highway Administration (FHWA) estimated federal fuel tax evasion at $1.2 billion annually. In the same report, FHWA suggested that total state fuel tax evasion for all states was around $1.3 billion. These estimates were in 1992 dollars and derived from a literature review (Weimar et al. 2008). These numbers should be used with caution as they are extrapolations from sources that may not be representative. These sources include congressional testimony and changes in state taxes collected when the point of taxation was moved (See section 2.5.2, page 10).

Another literature review by FHWA suggested that between 3 and 7 percent of the gasoline sold in the country evaded the federal fuel tax, and between 15 and 25 percent of diesel sold evaded the federal fuel tax. The Council of State Governments and Council of Governors Policy Advisors went beyond a literature review and used econometric analysis and a survey of tax administrations to determine state tax evasion. Their estimates of state tax evasion in 1996 dollars were between $952 million and $1.5 billion annually (Weimar et al. 2008).

Other studies have estimated tax evasion specific to a state. The Washington State Legislative Transportation Committee conducted a literature review and estimated that state fuel tax evasion was between $15 million and $30 million each year (Weimar et al. 2008). A Wisconsin study examining agricultural usage found that Wisconsin's consumption of tax-exempt fuel was more than $4 million greater than expected, using modeling with multiple variables and comparisons to other Midwestern states (Eger et al. 2002). A 1996 study in Kentucky examined state fuel tax evasion in 1993. One report on the study in Kentucky estimated the evasion was $28 million, while another source suggested the evasion was between $26 million and $34 million (Denison et al. 1997; Weimer et al. 2008).

2.3.2. Tax Evasion Estimates—Montana

Using the FHWA estimates from 1992, Montana's evasion can be estimated as a proportion of the total state fuel tax evasion. Based on a 2009 calendar year estimate of fuel usage, Montana accounts for approximately 0.427 percent of all fuel used in the United States, or one out of every 234 gallons sold (FHWA 2010). Using this estimate, Montana's portion of the 1992 evasion would be about $5.555 million. As mentioned previously, the national estimates are based on extrapolating data from congressional testimony and other sources and should be used with caution.

A 2006 report prepared by Battelle for MDT estimated rates of state fuel tax evasion within Montana by constructing a model of expected taxable fuel usage within the state and comparing the results to the actual values reported by MDT. The estimates of EOE in 2004 in Montana involved over 10 million gallons of gasoline and over 43 million gallons of diesel fuel. Based on these numbers, the model predicted nearly $2.8 million of gasoline tax revenue and over $12 million of diesel tax revenue were lost in 2004. These estimates result in a calculated 2004 EOE rate of 2.1 percent for gasoline and 16.3 percent for diesel (Balducci et al. 2006). These rates are close to the national estimates determined by FHWA in the early 1990s, which may suggest that Montana's tax evasion is not abnormal in relation to other states. It should be noted that based on the reports described above, MDT has made several efforts to find the EOE mentioned in them. One example is enforcement efforts targeting dyed fuel use in vehicles on the highway. The general lack of EOE found during these efforts has led many MDT staff to believe these estimates are overstated.

2.3.3. The Impact of Fuel Tax Rates on Tax Evasion

Federal fuel tax rates for diesel and gasoline have remained the same since 1997. Prior to 1997, the tax rate for gasoline posted several increases from its initial rate of a penny per gallon. Between September 1990 and October 1993, federal fuel taxes on gasoline went from nine cents per gallon to over 18 cents per gallon, the largest jump since the tax was first imposed (Figure 2).

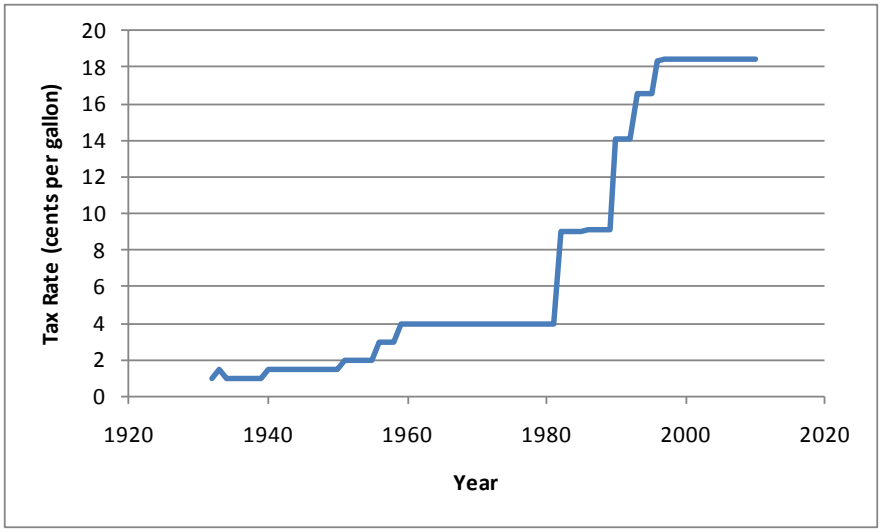

Figure 2: Federal Fuel Tax Rates for Gasoline (Adapted from Talley 2000 and Williams 2007)

Marion and Muehlegger (2008) sought to model how a change in federal fuel tax rates would influence the level of tax evasion. Their findings suggested that increasing federal diesel fuel tax rates does increase fuel tax evasion. Specifically, the study estimated that prior to the use of dyed-fuel, each one-cent increase in the federal diesel fuel tax increased tax evasion on 16,500 gallons per day. After the dyed-fuel system was implemented, they estimated that each one-cent increase in the federal diesel fuel tax would increase evasion on 15,400 gallons per day, or 5.6 million gallons annually, leading to over $1.4 million in revenue lost each year. Based on 2008 sales (FHWA 2009), the amount of evasion is less than one percent of the $387 million in additional revenue generated by a one-cent increase.

2.4. Methods of Evasion

Several reports discuss methods of tax evasion (Denison and Eger 2000; Eger et al. 2002; Weimar et al. 2008) but the most comprehensive is Weimar et al. (2008), which lists 14 methods by which fuel users avoid paying required taxes. The report provides a brief description of how each method of evasion is conducted and, if available, provides details of a legal case involving that method. The 14 methods reported on are:

- Use of dyed diesel on-road
- Abuse of International Fuel Tax Agreement (IFTA) returns
- Fake refund requests, credits or exemptions
- Improper transportation of fuel between states (“bootlegging”)
- Bogus claim of exporting fuel
- Illegally importing fuel from foreign refineries
- Evasion related to Native American reservations
- False labeling of fuel
- Mixing fuels (“cocktailing”)
- Evasion due to tampering of fuel dye equipment

- Evasion due to untaxed fuel not receiving its splash dye
- Tax-exempt diesel fuel dye is removed from the fuel
- Failure to pay the tax
- False corporations and false paperwork trails ("daisy chains")

While most of the 14 methods are self-explanatory, a few methods require some clarification. Abuse of the IFTA return process involves improper filing of paperwork for a motor carrier's vehicle that is registered with the IFTA division or agency. While the state fuel tax process is simplified by IFTA for the motor carrier, it creates opportunity for improper reporting of miles driven and fuel purchased

Bootlegging occurs when fuel is illegally shipped between states, generally from a lower tax state where it has been declared for sale, to a higher tax state where it is sold. A report by Balducci et al. (2006) specifically examined bootlegging into Montana from Wyoming, which has the second lowest tax rate in the United States. After modeling diesel consumption in the states surrounding Wyoming, the authors determined that between 6.5 and 7.5 million gallons of diesel were bootlegged from Wyoming into Montana in 2004. It should be noted that MDT has been unable to identify any bootlegging activities, which calls the model into question.

Another area where fuel tax evasion is thought to occur is on Native American reservations that may not be subject to federal and state taxes. According to Weimer et al. (2008), two problems with fuel sales have been seen on Native American reservations. First, the quantity of fuel sold may not be accurately reported, and thus the apportionment of Highway Trust Fund money to states with Native American reservations may not be appropriate. The second issue is that non-tribal motorists may purchase fuel on the reservation, and thus state taxes, which are to be assessed to non-tribal motorists, may not be remitted. Idaho, for example, estimates that state tax evasion related to Native American fuel sales is around $2.2 million annually (Weimar et al. 2008). In Montana, everyone regardless of tribal membership pays the tax on gasoline and clear diesel. Montana participates in a revenue sharing agreement with the tribal reservations. Thus these challenges do not exist in Montana.

Cocktailing involves the mixing or blending of non-taxable products with taxable fuels. The resulting product can be used in gasoline or diesel engines, though it may not be safe for the engine. By blending the products, the volume of fuel the retailer is able to sell and collect taxes on is increased, but the amount of taxes the retailer must remit is limited to the amount of taxable fuel originally purchased (Weimar et al. 2008). Denison and Eger (2000) also report on cocktailing and note that the blended product can be problematic to the consumer and to the environment. The non-taxable products blended with the fuel are sometimes waste products such as used oils that are not suitable for combustion in an engine.

Daisy chains are a high-risk evasion method that carries a possibility for high returns. Daisy chains involve a series of companies that collectively act as a distributor, transporting fuel from the refiner to the retailer. While the retailer may remit the appropriate taxes to the distributors, the distributors avoid paying the taxes they collect by filing falsified paperwork. Auditors may have difficulty uncovering the operation since the paper trail between the companies in the daisy chain is complex and difficult to unravel. Before the scheme is discovered, the daisy chain company typically goes out of business and the fuel taxes owed the government are left unpaid (Denison and Eger 2000). The effort required to carry out this means of fuel tax evasion is

enormous. However, the return on those efforts could be high depending on the length of time the scheme goes undiscovered.

Of the 14 methods of evasion that were identified, only one method pertained to the refund process (fake refund requests, credits or exemptions). Weimar et al. (2008) did not provide extensive details relating to this form of evasion. More details regarding the refund process are provided later in this chapter.

2.5. Mitigating Evasion

Although fuel tax evasion may have begun with the implementation of the first state fuel tax in Oregon, attention to the problem grew after tax rates went up substantially in the 1980s. During this decade, daisy chains with connections to organized crime were uncovered by the IRS and by state investigative agencies (Weimar et al. 2008). As shown in Figure 2, federal fuel tax rates for gasoline increased significantly in the 1980s and 1990s, thus the potential profits from evasion rose. Several methods for mitigating federal and state fuel tax evasion are discussed below.

2.5.1. Federal Investigations

One method to mitigate evasion is to increase investigation efforts and prosecution of wrongdoing. Though federal fuel taxes are collected by the IRS, the U.S. Department of Transportation's Office of Inspector General (USDOT OIG) has handled many recent cases involving federal fuel tax evasion that have resulted from federal investigations. Numerous successful cases were brought against individuals and corporations who avoided paying federal fuel tax through daisy chains, fraudulent documents and bootlegging (USDOT OIG 2001, 2002a, 2002b, 2004, 2006, 2008, 2009a and 2009b). Sentences ranged from probation to prison terms as long as 12 years. Fines resulting from individual cases, largely based on the amount of fuel tax evaded, were as large as $34 million. These cases provide examples of how federal investigations identified and recovered fuel tax that was evaded. In addition, the judgments resulting from these cases may act as a deterrent for those who may otherwise attempt to evade paying fuel taxes.

2.5.2. Moving the Federal Point of Taxation

The point at which taxes are collected in the fuel distribution process could affect fuel tax evasion rates. Crude oil is refined into fuel and is then made available at the terminal rack. A distributor purchases the fuel at the terminal rack and transports it to a retailer who then sells it to the consumer. Prior to 1993, federal diesel fuel taxes were collected from the distributors. Under a 1993 law, federal tax collections on diesel were moved up one level in the distribution chain to the terminal rack (Denison and Eger 2000). Federal fuel taxes for gasoline were collected at the terminal rack beginning in 1986 (Weimar et al. 2008).

Moving the point of taxation up the fuel distribution system at the federal level reduced the number of taxpayers and the amount of paperwork relating to motor fuel taxes. This simplified process benefited the IRS as it had to keep track of fewer transactions. It also meant fewer entities to engage in tax evasion.

2.5.3. Federal Dyed Diesel Program

A major change in the system of taxing motor fuels came in 1993 when Congress passed the OBRA Act, which instituted the dyed diesel program. One of the ways dye was added to fuel is called "splash dyeing," which simply means dumping dye into a tank of clear diesel fuel. Another method is the mechanical injection of the dye before it leaves the terminal rack. The American Jobs Creation Act of 2004 required dyed diesel fuel to be dyed mechanically (TIGTA 2009). This policy grew from the concern that splash dyeing made it too easy to avoid paying taxes because of the relative ease with which one could falsely report adding dye to a tank of diesel fuel.

As discussed previously, Marion and Muehlegger (2008) created a model to estimate federal fuel tax evasion for diesel fuels and found a reduction in evasion after the dyed diesel program was implemented. In the year following the implementation of the OBRA requirements, which coincided with an increase in the federal diesel fuel tax of 4.3 cents per gallon, federal fuel tax revenue increased by $1 billion. It is estimated that 60 to 70 percent of that amount was due to a decrease in tax evasion (Weimar et al. 2008). It is important to note that the decrease in tax evasion that was seen could have resulted from the implementation of the dyed diesel program, the movement of the point of taxation for diesel up the distribution system or other initiatives, all occurring around the same time.

2.5.4. Federal Fines, Penalties, and Punishments

Both the IRS and the USDOT OIG have held tough stances toward fuel tax fraud. Table 4 presents a sampling of some types of tax fraud and the federal penalties that could be enforced. Though not listed in the table, falsely filing for a fuel tax credit could lead to a $5,000 penalty (IRS 2009b).

Table 4: Actions and Federal Penalties

Type of Action	Conviction Type	Max Prison Term (yrs)	Maximum Fine Individual	Maximum Fine Corporation	Can Prison Term and Fine be Combined?
Attempt to evade or defeat tax	Felony	5	$250,000	$500,000	Yes - with prosecution costs
Willful failure to collect or pay over tax	Felony	5	$250,000	$500,000	Yes - with prosecution costs
Willful failure to file return, supply information, or pay tax	Misdemeanor	1	$100,000	$200,000	Yes - with prosecution costs
Fraud and false statements - declarations under penalty of perjury	Felony	3	$250,000	$500,000	Yes - with prosecution costs
Fraud and false statements - provides aid or assistance with	Felony	3	$250,000	$500,000	Yes - with prosecution costs
Attempts to interfere with administration of Internal Revenue Laws	Felony	3	$250,000	$500,000	Yes
Conspiracy to commit offense or to defraud the United States	Felony	5	$250,000	$500,000	Yes

Source: IRS 2009c

2.5.5. Other Federal Initiatives

Around the same time that federal initiatives such as the dyed fuel program and modification of the tax collection system were implemented, another initiative involving state and federal government entities working together was begun. The Joint Federal/State Motor Fuel Tax Compliance Project (Joint Project) began in 1990 and involved 12 states. By 1995, 49 states and the District of Columbia were participating in one of the project's nine regional task forces. Each of the task forces was a collaboration of state and federal agencies working together to combat fuel tax evasion. Some of the $600 million to $700 million mentioned above in the 1994 increase in revenue was attributed to successful initiatives of the Joint Project (Baluch 1996).

Another initiative to combat fuel tax evasion came from the IRS. The Excise Files Information Retrieval System (ExFIRS) was created in 1998 to help track excise taxes. A recent report by the Treasury Inspector General for Tax Administration (TIGTA) examined the effectiveness of ExFIRS and the Fuel Excise Tax Compliance Program. ExFIRS is a system that, besides tracking payments, is used by the IRS to report on federal motor fuel taxes and to submit payments to the Department of Transportation. ExFIRS is composed of six different subsystems, one of them the Excise Summary Terminal Activity Reporting Systems (ExSTARS). ExSTARS is used to track motor fuel movement from terminal to terminal and represents a collaborative effort of the IRS, FHWA, states, and the fuel industry (TIGTA 2009). The system provides better tracking of fuel movement and is in place to help identify fraud that may be occurring.

The IRS and FHWA have also developed the Joint IRS and FHWA Strategy to Address Fuel Tax Noncompliance. While ExFIRS and ExSTARS encompass some of the goals of the joint strategy, the Joint Operations Center for National Fuel Tax Compliance (Joint Operations Center) is currently under development. Much like the Joint Project, the Joint Operations Center will allow the IRS and FHWA to work together on combating fuel tax evasion and to collaborate with state governments. This program allows for more targeted audits as compared to the current system (TIGTA 2009).

2.5.6. Moving a State's Point of Taxation

Similar to the federal government's actions, some states have moved the point of taxation up the supply chain. Despite the move, not all states have seen improvements in revenue. Texas, for example, did not see a notable change in state fuel tax revenue when it moved the point of taxation to the terminal rack. Other states have seen an improvement in revenue. In 1996 Idaho moved the point of taxation to the first receiver of the fuel after the terminal rack and experienced a 19 percent increase in state fuel tax revenue. Also in 1996, Florida moved the point of taxation to the terminal rack, and experienced an increase in revenue. Under the previous system, Florida was left with $2 million to $3 million in bad debt at the end of each year from distributors not paying their state fuel taxes. Moving the point of taxation has mostly resolved the issue of bad debt related to fuel taxes (Weimar et al. 2008).

2.5.7. State Auditors

State tax departments as well as the federal government have implemented auditing strategies to catch state fuel tax evasion. Eger and Hackbart (2001) used three different models to examine the impacts of putting a tax auditor to work on state fuel tax assessments in Kentucky. The models indicated that an auditor would increase state fuel tax assessments, with estimates ranging from

$132,000 to $173,000 per year, or $1,232 per million truck-vehicle-miles traveled, if the auditor focused on IFTA returns.

Another article by Eger and Hackbart (2005) also estimated the impact of an additional auditor on assessments for any state. The estimated impact was an increase in assessments of $415,000. The difference in the estimates developed by the two studies is a result of a different sample size (43 states for the 2005 study and six states for the 2001 study) and a different functional form of the model. The functional forms were different because the research question on which the model was formulated was different for each study; yet both included a variable for the number of auditors in a state. Regardless of the magnitude of the impact, the studies show that states with more auditors have higher state fuel tax assessments. They noted other impacts, as well. For example, auditing may instill in taxpayers the idea that they are paying their fair share and this could lead to an increased willingness to pay fuel taxes.

2.5.8. A State Fuel Tax Unit

A program similar to the Joint Project developed between FHWA and the IRS was developed by the state of Kentucky. The Fuel Tax Compliance Unit (FTCU) was a program set up to target state fuel tax evasion by conducting audits and examining tax evasion. This was a joint effort between the Kentucky Transportation Cabinet and the Kentucky Department of Revenue. The program could conduct audits but could not impose penalties nor could it seek legal action. Instead, the program turned over cases to either the Kentucky Transportation Cabinet or the Department of Revenue. While the FTCU only focused on audits of IFTA returns in relation to state motor fuel taxes, the program also looked at heavy vehicle surtaxes, weight-distances taxes, vehicle registrations and dealer sales. In the first two years of the program, expenditures of the unit exceeded the extra tax assessments gained by the program. In the third fiscal year of operations the assessments gained were greater than program expenses. In fact, the net profit in the third fiscal year of $275,000 nearly made up for the $279,000 in total net losses of the first two fiscal years. However, in the fourth fiscal year the program was closed down (Sapp 2004).

2.5.9. State Tribal Agreements

Idaho estimated fuel tax revenue lost from taxable fuel sales on reservations to be around $2.2 million. Idaho did not have a clear agreement with the tribal governments on how to collect and distribute fuel tax revenue. Idaho is one of a few states now involved in litigation against tribal governments concerning fuel taxes (Weimar et al. 2008). A practice exercised in a number of states is to let fuel sold to tribes and tribal members be taxed and enter into agreements with the tribal governments on how the taxes collected will be distributed back to the tribal governments. Montana has such revenue-sharing agreements with six of seven tribes within the state. North Dakota also has an agreement in place with tribes to tax fuel (Balducci et al. 2006).

2.5.10. State Tracking and Information Sharing

States can tackle fuel tax EOE by sharing information among departments and with other states. Balducci et al. (2006) estimated that Idaho experienced less bootlegging than other states bordering Wyoming. They noted that Idaho checks distributor records for fuel sold to retailers against terminal records to assure that taxes have been remitted. Idaho's method may not work for all states, but tracking fuel sales from the terminal to the retailer is one way for states to combat fuel tax evasion.

2.5.11. State Fines, Penalties, and Punishments

Fines, penalties and punishments are all solid deterrents that states could and do use to fight fuel tax evasion. More specifically, states could publicize the outcomes of fuel tax evasion prosecutions to warn citizens of the consequences of engaging in such schemes. At the federal level, cases brought by the USDOT OIG and the IRS have targeted people suspected of fuel tax evasion and have resulted in guilty pleas, federal prison terms and fines assessed to the defendant.

Dennison and Eger (2000) examined criminal penalties for tax evasion in southern states. At the time, Arkansas had no criminal penalty for state fuel tax evasion. Alabama and Maryland classified state fuel tax evasion as a misdemeanor, while other states made it a felony. Texas, for example, classified state fuel tax evasion as a felony punishable by a fine of $10,000 or a prison term of up to 10 years, or both. While Dennison and Eger (2000) noted that there was much debate concerning the effectiveness of the penalties, Eger and Hackbart (2005) recommended that states consider making fuel tax evasion a felony.

Montana law currently states that state diesel fuel tax evasion is a misdemeanor punishable by a fine of up to $1,000 or by imprisonment in the county jail for up to six months, or both. A civil penalty of $100 could apply as well. Illegal use of dyed fuel could result in up to $1,000 in civil penalties for the first offense and up to $5,000 in civil penalties for the second offense. Penalties including a fine or short prison term can be assessed to the distributor for failure to file necessary documents (MCA 15-70-336, 15-70-372, 15-70-330, 15-70-366). State fuel tax evasion involving gasoline in Montana features similar penalties and possible prison terms (MCA 15-70-210, 15-70-232, 15-70-242).

In a related area, corporate responsibility and liability figure into the criminal provisions for fuel tax evasion. Dennison and Eger (2000) examined this and found that 14 of the 16 states they looked at had some form of criminal liability for directors of corporations. A report for Montana (Balducci et al. 2006) recommended specific legislation that could hold directors, managers and even lower-level employees liable for state fuel tax evasion. However, as noted in the report, Montana has a business judgment rule that allows for the protection of officers, managers and employees if their actions were committed in good faith.

2.6. The Fuel Tax Refund Process

As previously noted, the purpose of the fuel tax at both the federal and state levels is to support public highway maintenance and construction. The IRS currently allows fuel users to claim a credit or refund for the federal fuel tax paid if the fuel is used for select purposes. For gasoline, these exempt purposes are (IRS 2009a):

- On a farm for farming purposes (credit only)
- Off-highway business use
- Exportation
- In a boat engaged in commercial fishing
- In certain intercity and local buses
- In a school bus
- Exclusive use by a qualified blood collector organization
- In a highway vehicle owned by the United States that is not used on a highway

- Exclusive use by a nonprofit educational organization
- Exclusive use by a state, political subdivision of a state, or the District of Columbia
- In an aircraft or vehicle owned by an aircraft museum

For diesel fuel, exempt purposes are:

- On a farm for farming purposes
- Off-highway business use
- Exportation
- In a qualified local bus
- In a school bus
- Other than as a fuel in a propulsion engine of a diesel-powered highway vehicle (such as home heating oil)
- Exclusive use by a qualified blood collector organization
- In a highway vehicle owned by the United States that is not used on a highway
- Exclusive use by a nonprofit educational organization
- Exclusive use by a state, political subdivision of a state, or the District of Columbia
- In a vehicle owned by an aircraft museum
- As a fuel in a propulsion engine of a diesel-powered train

To claim a refund or credit, the IRS currently requires claimants to maintain records of the number of gallons of fuel purchased, the date of purchase, the supplier's name and address, amounts purchased from each supplier, the type of use and the number of gallons for each use. There are three forms that could be used to claim a refund or credit. If the claimable fuel taxes were less than $750 in the tax year, or if a refund claim had not been filed on fuel used in a previous quarter, or if the off-highway business use was less than 7,500 miles, then IRS Form 4136 must be used to claim a credit. IRS Form 4136 is filed once at the end of the claimant's tax year along with IRS Form 1040. IRS Forms 8849 and 8849 Schedule 1 can be used to claim a periodic tax refund if the claimable fuel taxes were more than $750 in the claimed quarter. IRS Form 8849 allows claimants to claim a refund for one quarter or a combination of quarters. It must be filed within the quarter following the end of the last quarter claimed, and IRS Form 8849 can only be filed once per quarter. Finally, if IRS Form 720 is used to report fuel taxes due the IRS, Schedule C of Form 720 can also be used to claim a refund at the same time (IRS 2009a, 2009d, 2009e, 2009f, 2009g).

Most states have a process for claiming refunds on state fuel tax for exempt uses. Weimer et al. (2008) notes that two conflicting goals exist in the refund process: having a form that provides sufficient information to prove a claim is legitimate versus one that is simple for the claimant to use.

States differ on what they allow for refunds. North Dakota only allows refunds for gasoline and requires diesel to be either taxed or dyed (untaxed). Florida is the opposite, allowing refunds for diesel but not for gasoline (Weimar et al. 2008). Chapter 3 provides details on the refund process in other states.

For the extensive literature available on fuel tax fraud, there is very little detail on issues relating to the refund process. One report describes an investigation into the refund process in Arizona. The Arizona Office of the Auditor General (AZ OAG) conducted a performance audit of the Arizona Department of Transportation's (ADOT's) Motor Vehicles Division (MVD) in

September 2004. This report showed seven of 16 audits performed on randomly selected refund forms found errors ranging from $8 to $5,800. Refund forms that were over $25,000 or were unusual in other ways were audited. Seven of the 18 claims in this category had errors totaling $700,000. Errors on the refund forms included filing claims after the time limit, submitting the same claim twice, inadequate documentation, and submitting claims for fuel taxes paid to the Navajo Nation. The report gave five recommendations for the MVD (AZ OAG 2004, 2007):

- Update procedures and implement written procedures for the refund process.
- Train all staff on procedures.
- Require two levels of refund request approval, supervisory review of all refund forms and turn questionable claims over to a special unit; independent audits should be conducted by ADOT's Office of Audit and Analysis.
- Strengthen requirements for taxpayer maintenance of supporting documents.
- Develop more comprehensive forms and instructions.

2.7. Montana's Refund Process

Montana also has a process in place to allow certain fuel users to claim a refund of the Montana fuel tax paid. Each of the following uses has its own refund form:

- Agricultural use
- Heating fuel
- Refrigeration fuel (trucks)
- Federal, state, local governments and school districts
- Off-road use
- Power take-off (PTO) units

Agricultural fuel users are allowed to claim refunds using either the agricultural or off-road refund forms. The off-road refund form requires the claimant to track fuel use for each piece of equipment and, if the equipment is a vehicle used partially for on-road travel, the proportion of mileage that the vehicle travels on-road. Thus only fuel taxes for off-road use are refunded. The agricultural refund form requires less documentation than that of the off-road refund form. The claimant documents only the fuel purchases and can submit them for a refund of a portion of the fuel taxes they pay based on the ratio of the claimant's gross earned farm income to their total gross earned income (Table 5). For example, claimants who receive more than 50 percent of their gross earned income from farming will receive a refund equal to 60 percent of the fuel taxes they have paid, excluding the tank cleanup fee. To prove this ratio, claimants must submit a copy of their federal or Montana income tax return at least every three years. The agricultural refund is for fuel used in agricultural operations and could include fuel used for operating motor vehicles on public roads. Claimants are not required to list how the fuel was used but they must list the bulk purchases and Keylock or Cardtrol purchases on the claim form (MDT 2010). Cardtrol and Keylock are devices intended to allow access to a fuel dealer's unattended pump or dispensing unit for the purposes of delivery of fuel to an authorized user. The user receives a monthly invoice of all Cardtrol/Keylock purchases. Bulk purchases are made from distributors by users who have large fuel storage tanks. Cardtrol, Keylock and bulk purchase invoices are marked as such and should include the additional required information that may not be on a typical receipt for fuel purchased from a retailer.

Table 5: Montana Agricultural Refund Standard Deduction

Gross Earned Income from Farming	Standard Deduction
< 30%	None
30% - 39%	40%
40% - 49%	50%
> 50%	60%

Claims for heating fuel, refrigeration fuel, or for fuel used by federal, state and local governments and school districts allow a full refund of the Montana fuel tax, excluding the tank cleanup fee. On each form the claimant is required to list the dealer, date of purchase, invoice number, and the gallons of clear diesel purchased (MDT 2006a, 2006b, 2008).

Full refunds, excluding the tank cleanup fee, are allowed for off-road use of gasoline, clear diesel and gasohol. This refund claim requires values for fuel purchases, total fuel dispersed from bulk tanks, and mileage traveled within and outside of Montana. For fuel purchases, the dealer's name, date of purchase, invoice number, Montana-taxed bulk gallons purchased, Montana-taxed gallons pumped into a vehicle, and the Montana-taxed gallons pumped into off-road equipment must be specified on the claim for each of the three fuel types. Invoices for bulk fuel purchases are submitted with the off-road refund form; other supporting documentation, including vehicle mileage logs and bulk tank dispersal records, is kept by the claimant for audit purposes (MDT 2006c).

The PTO unit refund form is similar to the off-road use claim form. Values are required for the gallons of fuel used for each vehicle along with the miles traveled within and outside of Montana. Vehicle mileage logs and bulk tank dispersal records are kept by the claimant for audit purposes. For this form, though, the claimants must submit information about each vehicle owned with a PTO unit, including the vehicle identification number. Unlike the off-road form, the refund allowed for the fuel used by PTO units is dependent on the type of unit installed and is based on a percentage of the total fuel used. For example, well-drilling rigs can claim an 80 percent refund while carpet cleaning vans can only claim a 10 percent refund (MDT 2007). The list of PTO percentages refunded, found in MDT's Form MF-27P, is shown in Table 6. The percent refund is based on the fuel tax paid and excludes the tank cleanup fee.

Table 6: PTO Percentage Allowances

Vehicle Type	Percentage
Water and Oil-well Drilling Rig	80
Concrete Mixing/Concrete Pumping Truck	30
Sanitation/Garbage Trucks/Septic Pumpers	30
Sewer Cleaning/Jet Vactor	30
Super Suckers	30
Fire Trucks	30
Mobile Cranes	30
Line Trucks with Digger/Aerial Lift	25
Refrigeration Trucks	25
Sweeper Trucks (must be motor vehicle)	25
Self Loaders/Boom Truck (logging truck)	20
Truck with Hydraulic Winch	20
Wrecker	20
Semi-Wrecker	20
Service Truck with Jack Hammer/Drill Crane	20
Oil and Water Well Service Truck	20
Bulk Feed Truck	20
Dump Trailer Trucks	20
Dump Trucks	20
Hot Asphalt Distribution Trucks	20
Leaf Truck	20
Pneumatic Tank Trucks	20
Salt Spreader on Dump Truck	20
Seeder Truck	20
Snow Plow	20
Spray Trucks	20
Tank Transport	20
Tank Trucks	20
Car Carrier with Hydraulic	10
Carpet Cleaning Van	10
All others with auxiliary engines under 15 hp	7.5

With the exception of refrigeration fuel refund claims, claimants must submit a MDT form with the original invoices and postmark the submission within 36 months of the fuel purchase. The refrigeration unit refund claims can be submitted with the original invoices or the form can be submitted electronically, but the claimant must keep the original invoices. If an original invoice has been lost, the claimant must submit a notarized affidavit signed by the claimant and the original retailer with all of the original invoice information. Per MCA 15-70-226 and MCA 15-70-365, MDT must process the submission within 120 working days of receiving the claim. If MDT determines that the refund claim is fraudulent, it may reject the refund and suspend claims from the claimant for one year.

For agricultural and off-road refund forms, sales invoices submitted must contain the following information:

- Seller's name and address
- Purchaser's name
- Complete date of delivery or purchase
- Type of fuel with diesel identified as clear or dyed
- Gallons purchased
- Price per gallon or total sale amount
- Vehicle unit number and/or
    - Identification of the equipment or bulk storage that the fuel is placed into if it is fueled by a source other than a Cardtrol/Keylock
- Sufficient proof that the motor fuel tax was included, such as a statement on the invoice affirming "All taxes included in the price," or a breakdown of the taxes assessed

2.8. Montana Refund Amounts

This section provides summary statistics from an analysis of fuel tax refund forms for a three-year period from 2007 through 2009. This analysis examines the monthly distribution of refunds over the average year. Refunds grouped into categories are presented showing the breakdown of refund claims processed and money paid. Finally, the frequency with which individuals submit claims is analyzed for each of the categories. These statistics do not include IFTA refunds.

Currently the refund process is done primarily on paper. MDT does, however, track refund payments electronically. The Accounts Payable System database was used to obtain estimates of fuel tax refunds. The database contains information on the claimant, where the paper refund is stored, the type of fuel, the date paid, the amount paid and the ratio of gross earned farm income to gross earned income. Two additional items specified in the database—refund option and an occupation code—were used to determine the type of refund. The refund option value was either "agricultural refunds" or a combination of several refund types (e.g., "off-road and PTO"), which allowed agricultural refunds to be identified. To categorize the other refund types, the occupation code was used. The occupation code data often listed the specific type of refund (e.g., reefer or PTO), or the category could be inferred (e.g., ready mix concrete was assumed to be PTO).

While the electronic database provided by MDT had data from 2006 through 2010, the research team chose to analyze only three years of data. Paper records, the limiting factor, are maintained for 36 months after the refund check is issued. Thus in seeking to correlate the physical records to the electronic files, the research team only examined refund requests approved from 2007 through 2009. The research team asked MDT to hold paper records from these years until they could be reviewed. Review of the paper records is discussed in chapter 5.

The Accounts Payable System database categorizes payments by fuel type. For example, a single refund form could contain requests for refunds on gasoline, diesel and gasohol. In this way, one refund form could show up as three different claims in the database. The data in the remainder of this chapter refers to the number of refund claims, which is larger than the number of refund forms. Based on the sample reviewed (detailed in chapter 5, Table 17), one agricultural refund form contains an average of 1.54 claims. PTO refund forms contain an average of 1.05 claims. Because refrigeration units only use diesel fuel, one reefer refund form is equivalent to one claim.

MDT processed and paid over 25,000 refund claims in the three-year period studied, amounting to $15 million in refunds or an average of $5 million per calendar year. The number of refund claims reported does not include those requests that were originally denied and/or returned to the filing party.

2.8.1. Temporal Analysis

An average of about 8,400 refund claims was paid each year during the three-year period. Gasoline refund claims processed by MDT outnumber both diesel and gasohol. In 2007, for example, only 72 refund claims were processed and paid for gasohol, while diesel accounted for over 3,100 requests and gasoline accounted for nearly 5,200 refund claims. The relative number of refund claims is not an exact estimator of the amount paid in refunds. For example, $2.3 million was paid for over 5,200 gasoline tax refund claims in 2008. In contrast, diesel refund claims numbered over 3,400 that year while the amount of refunds paid was nearly $2.7 million.

Table 7 shows the yearly totals of refund claims and dollars paid. An initial analysis of the annual totals showed there was a reduction in the dollar amount of diesel fuel refunds paid each year, which was due in large part to railroads shifting to the use of untaxed dyed diesel fuel and away from clear diesel, for which it would request refunds. Railroads (RR) are listed separately in Table 7, and not included in the remainder of the analysis.

Table 7: Yearly Distribution of Refunds (2007-2009)

Calendar Year	Fuel Type	Claims Processed	Refunds Paid ($)	Average Refund ($)
2007	Diesel RR	12	$1,630,450	$135,871
	Diesel Non-RR	3,229	$2,258,399	$699
	Gasohol	72	$21,005	$292
	Gasoline	5,194	$2,248,522	$433
	Total	**8,507**	**$6,158,376**	**$724**
2008	Diesel RR	3	$460,886	$153,629
	Diesel Non-RR	3,442	$2,239,921	$651
	Gasohol	95	$26,348	$277
	Gasoline	5,205	$2,297,946	$441
	Total	**8,745**	**$5,025,101**	**$575**
2009	Diesel RR	2	$1,655	$828
	Diesel Non-RR	3,295	$1,987,390	$603
	Gasohol	45	$10,966	$244
	Gasoline	4,753	$2,007,620	$422
	Total	**8,095**	**$4,007,631**	**$495**
Total		**25,347**	**$15,191,108**	**$599**

The values do not vary drastically from year to year. Note that these values are related to the year the refund was paid. The date the fuel was purchased and used could have been up to three years earlier.

On average, MDT processes over 6,700 refund claims by the end of May each year, accounting for nearly 80 percent of refund claims processed the entire calendar year. Nearly 70 percent of the entire refund payout is distributed in the five-month period of January through May. Figure 3 shows the average monthly distributions of refunds.

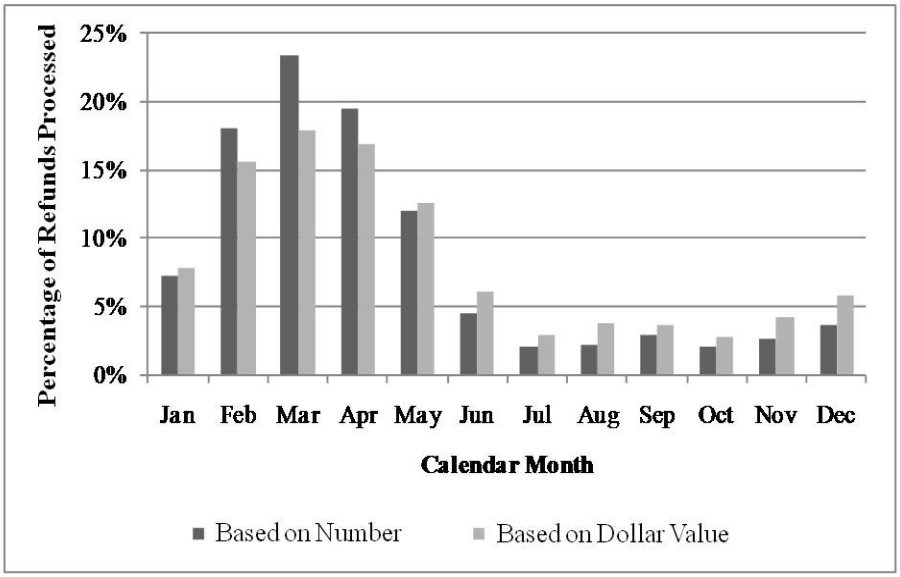

Figure 3: Monthly Distribution of Refunds Processed

The spike in refunds from January through May correlates to the months leading up to and immediately following the income tax deadline, typically April 15, which is when claimants are likely to compile documentation for their tax return. The remaining months could include refund claims that are submitted on a regular basis, every month or quarter for example, but also represents random submissions of refund claims by individuals or companies.

2.8.2. Analysis by Refund Type

This project, while addressing the topic of all fuel tax refunds, focuses on three broad categories of refund types: agricultural refunds, refunds for power take-off units (PTO), and refunds for vehicles with refrigeration units (reefers).

Agricultural refunds involve those fuels used in agriculture for which form MF27-A is used to apply for the refund. In the Accounts Payable System database, refund claims were considered to be agricultural if the record had a value recorded for the percent farm income or terms such as "miscellaneous agriculture" and "custom harvesters" were found in the occupation code field. Some of these claims were identified as agricultural even though a form other than MF27-A may have been used.

Refund claims submitted for fuel used for PTO units, as defined by form MF-27P, involves fuel used by an engine, primary or auxiliary, from a vehicle's fuel supply tank to perform an

operation using more than 7.5 percent of the engine's power. Climate control, such as heat or air conditioning, is not considered a PTO unit. In the database, PTO units were identified by occupational codes of "PTO" or terms describing types of PTOs such as well-drilling rigs or concrete mixing trucks.

The third focus area of this report is tax refunds for fuel used in powering reefers. Such claims are made by completing form MF-93. These claims were identified as "reefer" in the occupational code.

The remaining refund claims are combined in a category designated as "other." This category reflects refunds paid to governments (cities, counties, federal, school district and state) and to businesses (airlines, railroads, construction, excavation, golf courses and cemeteries, logging, mines, miscellaneous contractor, miscellaneous industry, refiners and smelters) for fuels used for non-transportation purposes, and for taxed fuels used for heating. Forms MF-27G, MF-27H, or MF-27O would be used for these refund claims.

Table 8 provides a breakdown of the refunds and fuel types for each of the categories. The remaining analyses conducted in this chapter have excluded gasohol. During the three-year period, only 212 refund claims for gasohol were processed and paid, totaling roughly $58,300. This low number of refunds was considered to be negligible in comparison to the diesel and gasoline refunds.

Table 8: Categorical Breakdown of Refunds

Use Category	Fuel Type	Claims Processed	Refunds Paid ($)	Average Refund ($)
Agriculture	Diesel	7,499	$2,540,761	$338.81
	Gasohol	211	$56,814	$269.26
	Gasoline	14,704	$6,286,359	$427.53
	Total	22,414	$8,883,934	$396.36
PTO*	Diesel	820	$1,221,923	$1,490.15
	Gasoline	84	$29,020	$345.47
	Total	**904**	**$1,250,943**	**$1,383.79**
Reefer*,**	Diesel	859	$661,828	$770.46
	Gasoline	1	$74	$74.45
	Total	**860**	**$661,902**	**$769.65**
Other	Diesel	805	$4,154,188	$5,160.48
	Gasohol	1	$1,506	$1,505.94
	Gasoline	363	$238,635	$657.40
	Total	**1,169**	**$4,394,329**	**$3,759.05**
Other Excluding Railroads	Diesel	788	$2,061,197	$2,615.73
	Gasohol	1	$1,506	$1,506.00
	Gasoline	363	$238,635	$657.40
	Total	**1,152**	**$2,301,338**	**$1,997.69**
Total		**25,347**	**$15,191,108**	**$599.33**
-Exc. Railroads		**25,330**	**$13,098,117**	**$517.10**

Notes * -No gasohol submissions
** -Gasoline submission is likely an error

The number of diesel fuel refund claims processed during the three calendar years of 2007 through 2009 was heavily weighted toward agriculture, with 75 percent of the refund claims made to agricultural users (Figure 4). The remaining three categories were split in the number of refund claims processed. However, agriculture only accounted for 39 percent of the refund money paid within the three-year period.

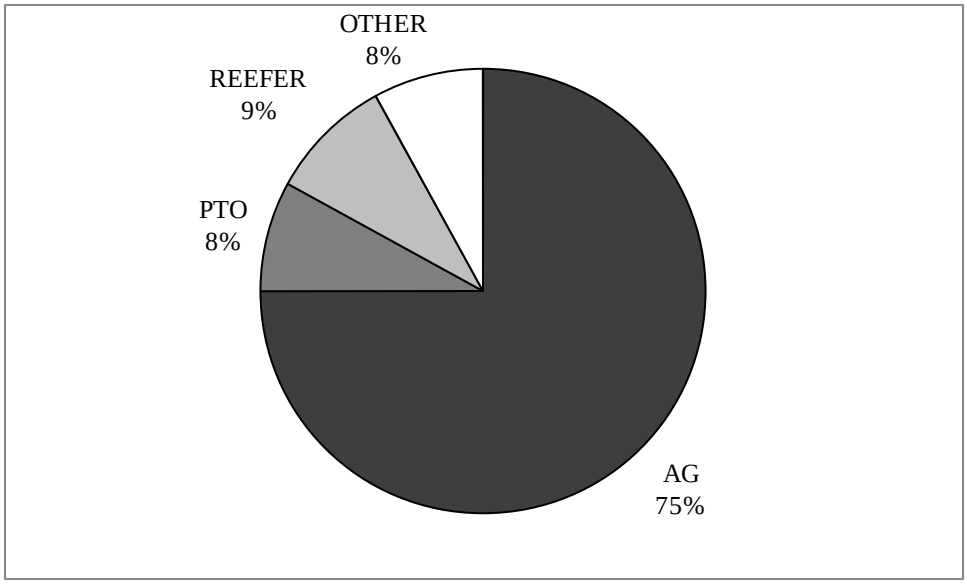

Figure 4: Proportion of Diesel Refund Claims by Number Processed

Figure 5 presents the proportion of diesel refunds by monetary distribution when railroads are excluded from the data. Agriculture is the largest single category. The "Other" category includes heating oil, school districts, government vehicles, and other off-road use.

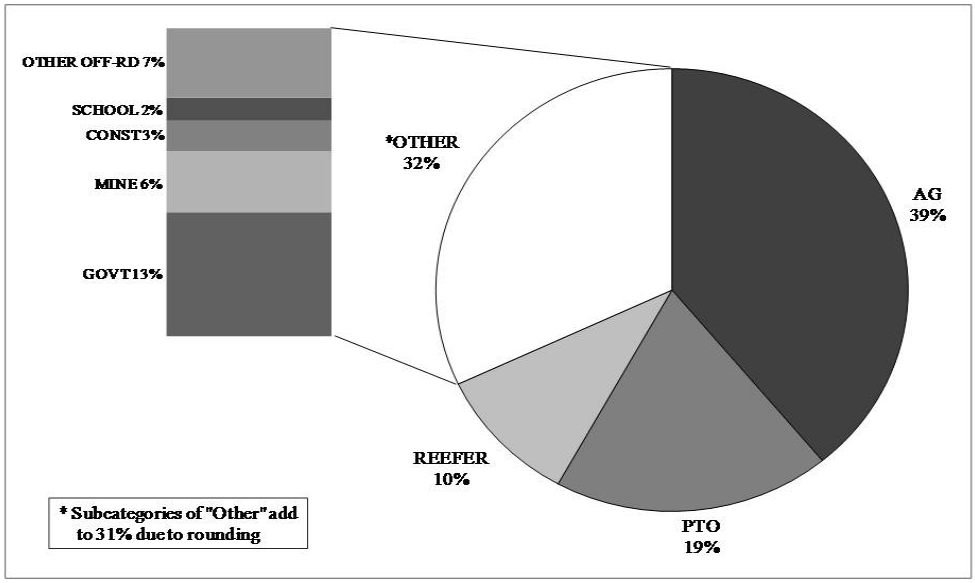

Figure 5: Proportion of Diesel Refunds (Excluding Railroads) by Monetary Distribution

Gasoline fuel refund claims were mainly for agricultural use from 2007 through 2009. In total, 97 percent of the gasoline refund claims were for agricultural uses. This value correlates to the refund money paid, in which gasoline agricultural refunds accounted for 96 percent of the money paid out. It's worth noting that refrigeration units are allowed tax refunds on diesel fuel only,

thus the single gasoline refund claim marked as a refrigeration unit most likely represents a data entry error. Figure 6 and Figure 7 display the proportion of gasoline refunds by category.

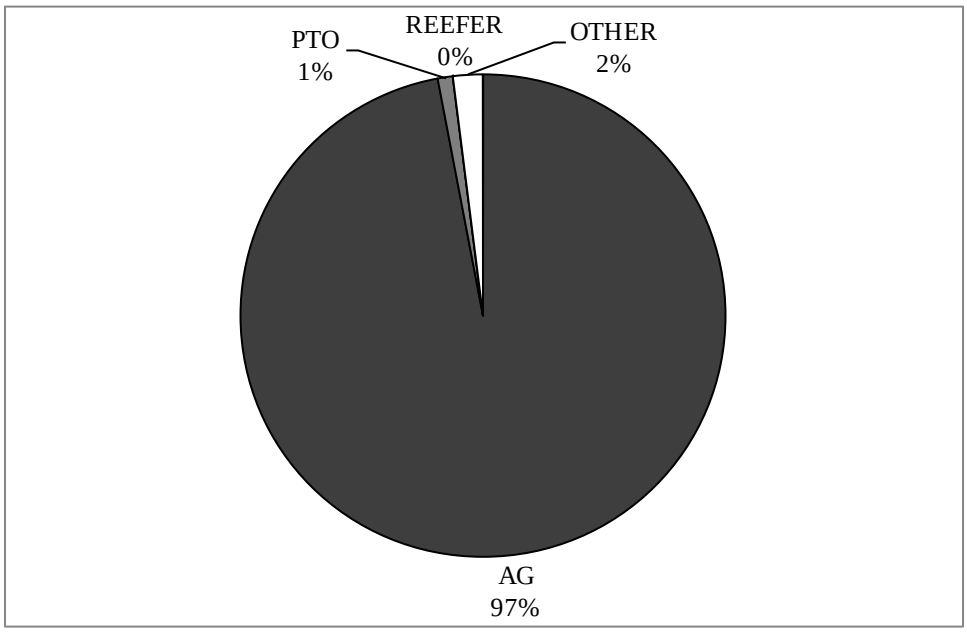

Figure 6: Proportion of Gasoline Refund Claims by Number Processed

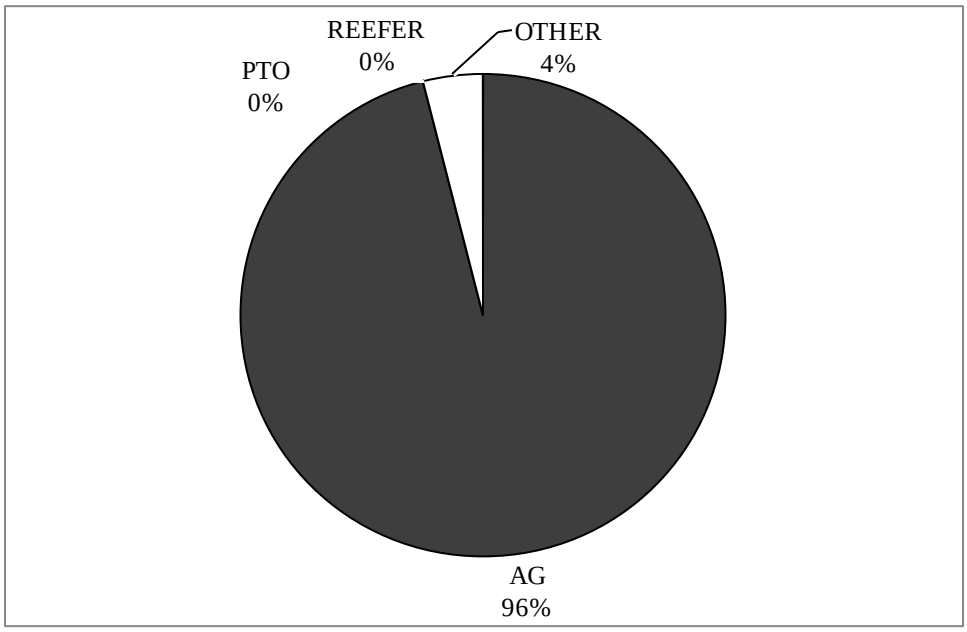

Figure 7: Proportion of Gasoline Refunds by Monetary Distribution

2.8.3. Claim Frequency

Claimants who file refund requests must supply invoices or an affidavit for a lost receipt and their request must be postmarked within 36 months of the fuel purchase date. For claimants submitting a refund request with an affidavit, a form must be completed by both the claimant and the fuel dealer, and a notary public's seal must be on the claimant's section. Because of the timeframe allowed, some claimants may elect to file only once per three-year period, while others may develop a regular annual or quarterly schedule. The following charts examine the frequency of claims by individuals within the three-year period studied.

Figure 8 displays the frequency of agricultural claims per claimant. For agricultural claims, over 1,500 claimants filed between six and nine refund claims during the three-year period. The refund claims as shown represent separate claims for diesel and gasoline, even though the claims may have been part of the same submission. Examining diesel and gasoline separately, most claimants submitted between one and three claims for diesel or for gasoline, suggesting that the six to nine total refund claims may actually represent three submissions by a user, with the gasoline and diesel separated into different claims, during the three-year period. Over 1,400 claimants submitted three refund claims during the three-year period. Over 1,900 claimants submitted refund claims once or twice within the three-year period. Few agricultural submissions were received from claimants more than 10 times during the three-year period; claimants in this category numbered only 18 out of 6,142 unique claimants.

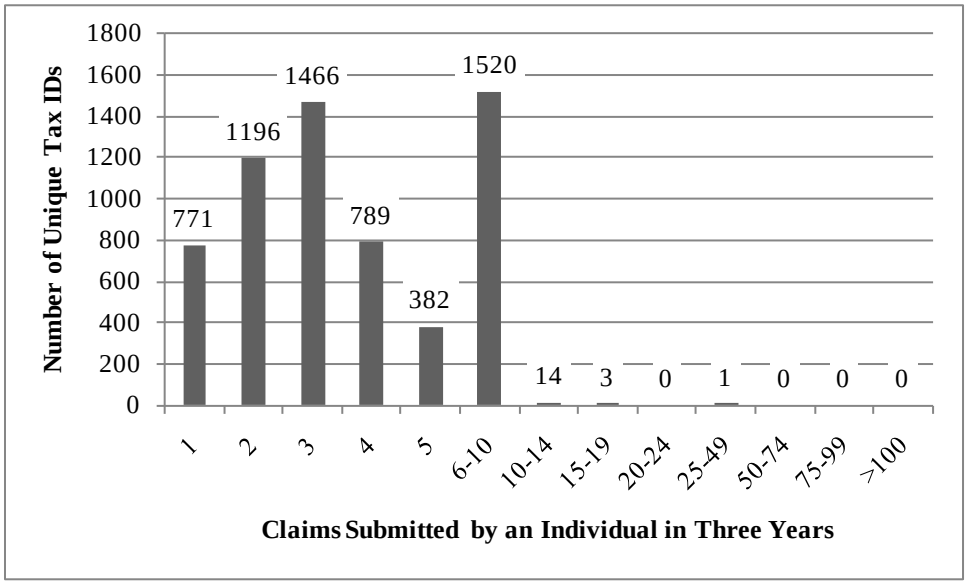

Figure 8: Frequency of Agricultural Claims in Three Years (2007-2009)

Figure 9 displays the frequency of PTO claims per claimant. For PTO refunds, most claimants submitted one refund claim in the three-year period. For diesel, though, a significant number of claimants submitted six to nine times within the three-year period. For gasoline PTO refunds, the most common frequency figure was once in the three-year period, though this sample was relatively small with only 11 claimants submitting a gasoline PTO claim once in a three-year period.

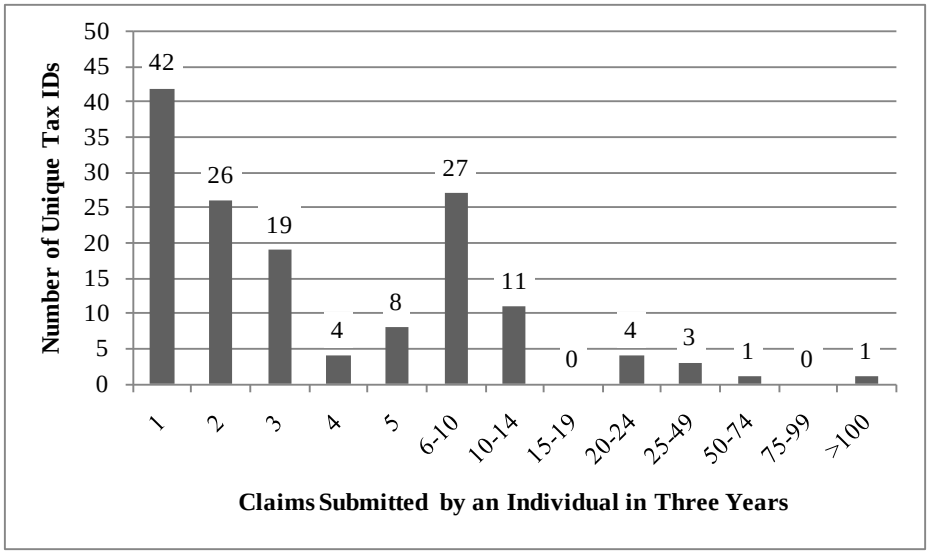

Figure 9: Frequency of all PTO Claims in Three Years (2007-2009)

Of special note for PTOs is the frequency of refund claim submissions by one tax identification number. This individual submitted over 100 refund claims for diesel PTOs in the three-year period. The same tax identification number was also on over 25 refund claims for gasoline PTOs in the three-year period. The high volume of refund claims may raise an eyebrow, but if the tax identification number belonged to a corporation with multiple branches or a large fleet the high number of submissions could be better explained.

Figure 10 displays the frequency of refrigeration unit claims. Refrigeration unit refund claims were most frequently submitted once during the three-year period. Forty-one claimants submitted refund requests six to nine times during the three-year period. A high number of claimants submitted twice and three times in the three-year period. No claimant submitted more than 14 refund requests for refrigeration units during the three-year period.

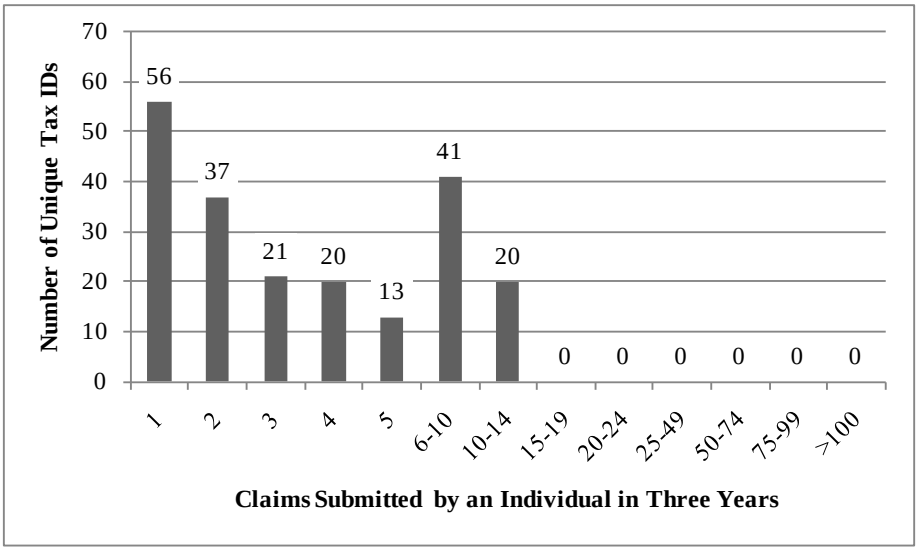

Figure 10: Frequency of all Reefer Claims in Three Years (2007-2009)

2.8.4. Refund Amount Summary

MDT processed and paid, on average, over 8,400 refund claims each year during the three year period analyzed. Totaling more than $5 million each year in refunds ($4 million when excluding railroads), MDT processed nearly 80 percent of refund claims received in a calendar year within the first five months, paying out nearly 70 percent of refund money in the same time period.

The refund claims processed by MDT are designated for diesel, gasohol or gasoline. For this study, three categories were of special interest: agriculture, PTO and reefer. Agriculture accounted for 75 percent of non-railroad diesel refund claims processed and 39 percent of non-railroad diesel refund money. For gasoline, agriculture accounted for over 95 percent of refund claims processed and refund money paid.

Refund claims submitted must be postmarked within 36 months of the original purchase date of the fuel. It appears common for claimants to only submit fuel tax refund requests up to three times within a three-year period. This is particularly true with agricultural claims. For diesel PTOs and diesel refrigeration units, six to nine claims were also a common frequency for submissions within the three-year period examined.

3. INTERVIEWS WITH OFFICIALS FROM OTHER STATES

This chapter examines the fuel tax refund policies and processes of the neighboring states of North Dakota, South Dakota, Idaho and Wyoming. Policies were also examined for Washington, Oregon, Nevada, Colorado and Utah as suggested by the project panel.

The purpose of this chapter is to evaluate current governing policies, the potential for errors, omissions and evasions (EOE), and any unique processes used within the states selected for the study.

Fuel tax governing policies were studied based on a literature review that included fuel tax refund forms and guidelines from each state (Colorado Department of Revenue 2010, Idaho State Tax Commission 2010, Nevada Department of Motor Vehicles 2006, Nevada Department of Motor Vehicles 2010, North Dakota Office of State Tax Commissioner 2010, Oregon Department of Transportation 2010, South Dakota Department of Revenue 2010, Utah State Tax Commission 2010, Washington State Department of Licensing 2010, Wyoming Department of Transportation 2010, and Wyoming State Legislature 2010). Fact sheets were created for each of the nine states in the study to summarize their fuel tax governing policies.

In addition to the fact sheets, a survey was conducted to address areas of the fuel tax refund process that were not addressed through the literature review. The survey consisted of 26 questions divided into four main sections: general fuel tax questions, the refund request process, EOE information, and public perceptions about the refund process.

Because fuel tax refunds are managed by different agencies in each state (i.e., state departments of transportation, state departments of revenue, or departments of motor vehicles), the appropriate individual to complete the survey was identified for each state. This individual was sent a survey and fact sheet pertaining to their state via email. The states were asked to verify the information contained in the fact sheets and provide the latest fuel tax governing policies. Follow-up questions were handled by email as well. North Dakota, South Dakota, Idaho, Wyoming, Washington, Oregon and Colorado representatives responded to the survey (Gostovich 2010, Lacey 2010, McCarty 2010, Menard 2010, Peck 2010, Schatz 2010, and Wiersma 2010). Nevada and Utah did not complete the survey nor did they verify the fact sheets. The information in this chapter pertaining to Nevada and Utah is from the fact sheets only.

This chapter is organized by the four main sections of the survey, followed by a summary of the law enforcement efforts to curb EOE and a section summarizing key findings and recommendations. For comparison, information about MDT refunds is also included.

3.1. General Fuel Tax Information

Researchers developed questions aimed at uncovering general facts about the fuel tax refund process in each state as well as details on individual practices within the refund process. The following section contains state-specific information on the types of fuel refunds allowed, necessary documentation to support refund claims, licensing requirements for fuel refund claimants, the minimum fuel volume eligible for tax refunds, and the percentage of the fuel tax that is refunded through the claims process. Information on record storage and the employee workload needed to process fuel tax returns is also included. Table 9 provides a summary of the fuel taxes charged by each of the states studied for this project.

Table 9: State Fuel Tax Rates

State	Fuel Tax Per Gallon	
	Gasoline	Clear Diesel
Montana	$0.27	$0.2775
North Dakota	$0.23	$0.23
South Dakota	$0.22	$0.22
Idaho	$0.25	$0.25
Wyoming	$0.14	$0.14
Nevada	$0.27-$0.32	$0.27
Washington	$0.375	$0.375
Colorado	$0.22	$0.205
Oregon	$0.24	$0.24
Utah	$0.245	$0.245

3.1.1. Fuel Tax Refund Eligibility

Montana fuel users are allowed a refund for off-road use of gasoline, gasohol and diesel. Applicants can claim a refund for fuel used for agriculture by using the agricultural refund form or the off-road refund form. The agricultural refund form uses a standard deduction that allows claimants whose gross earned farm income to gross earned income ratio is at least 50 percent to obtain a refund equal to 60 percent of the fuel taxes they have paid. The standard deduction is reduced for lower percentages of gross income earned from farming (see Table 5). Instead of using this standard deduction, agricultural users could elect to track actual off-road use and submit the off-road form specifying the total amount of fuel used in agricultural equipment, the total fuel used in vehicles and the proportion of vehicle miles traveled off-road. If the off-road form is used the claimant must keep supporting documentation for audit purposes (e.g., mileage logs, equipment fuel use logs and bulk tank logs) and calculations. PTO refunds are allowed using a percentage of fuel used by the vehicle according to the type of PTO unit installed. Reefer use can earn a refund if the fuel is placed in a separate supply tank. Reefer units fueled from the vehicle supply tank are considered a PTO and eligible for a refund of 25 percent of the taxes paid. The Montana Department of Transportation administers the fuel tax refund process. Refer to section 2.7 for further details.

In North Dakota, refunds are available for gasoline and gasohol used in unlicensed vehicles for agricultural and industrial uses. Fuel used in vehicles that are or can be licensed is ineligible for a refund. North Dakota returns only $0.16 of the $0.23 per gallon fuel tax on eligible agricultural refund requests, a refund of approximately 70 percent of the fuel tax paid. The $0.07 per gallon kept by the state is used for payments to an agricultural research fund ($0.04), agriculture products utilization commission ($0.02) and the ethanol production fund ($0.01). PTO refunds are not allowed. Special fuels (diesel, biodiesel, kerosene, CNG, waste oil, propane, soy oil and other blending components) are not eligible for refunds with the exception of clear fuel used in refrigeration units that have a separate supply tank. For reefers with a separate tank, the refund is reduced by $0.04 per gallon due to an excise tax placed on all special fuels that are exempt from the $0.23 tax. The fuel tax is administered by the North Dakota Office of the State Tax Commission.

The refund program in South Dakota is geared towards off-road fuel use in agriculture and commercial operations. Refunds are granted for gasoline, clear diesel, and 100 percent ethyl alcohol in licensed and unlicensed vehicles. Clear diesel used in off-road machinery or equipment is not eligible for refunds since dyed fuel could be used. The claimant must document, through mileage logs and fuel records, the exact proportion of off-road agricultural use for those vehicles that could be used for on-road travel. PTO refunds are not allowed by South Dakota. Reefer units with separate tanks are eligible for a refund. However, fuel used to power a refrigeration unit attached to the engine fuel supply tank of a motor vehicle is not eligible for a refund. The Motor Vehicle Division of the Department of Revenue handles the collection of fuel taxes.

Both clear diesel and gasoline are eligible for agricultural refunds in Idaho. There are several options for claiming refunds. Non-bulk purchases can be claimed, but only for the proportion of miles the vehicle is used off-road. The claimant is required to maintain mileage and fuel records for these vehicles. Equipment that is used entirely off-road does not require mileage records and all fuel can be claimed. Agriculture applicants can also apply for a refund on fuel placed in bulk fuel tanks. There are two options for bulk fuel. The applicant can either maintain records to justify the amount eligible for refund (e.g., on and off road mileage, fuel used by equipment), or use a standard allowance percentage of 25 percent of all taxed gasoline and 60 percent of taxed diesel. The 60 percent diesel provision is similar to Montana regulations, with one important difference. In Idaho, the allowance is only available if the claimant does not also have a bulk dyed diesel tank. Claimants with both a clear diesel and a dyed diesel bulk tank must track their exempt mileage and usage to qualify for a refund.

Idaho allows refunds for fuel used in PTO units. A standard allowance based either on a percentage of total fuel used or on the amount of activity can be applied to determine the refund amount. A refund for fuel used in a reefer is allowed if it has a separate supply tank. Reefer units are also allowed as PTOs if they are fueled from the vehicle's main fuel tank. The fuel tax is administered and collected by the Motor Fuels Division of the Tax Commission.

Clear diesel fuel and gasoline purchased and used off-road in Wyoming is eligible for a refund of the motor fuel tax. Taxes paid on gasoline or gasohol used for agricultural purposes and purchased in bulk are eligible for a 70 percent refund. An agricultural user may apply for a nearly full refund of the $0.13 fuel tax paid on bulk clear diesel purchased for off-road use. Bulk purchases are required to be a minimum of 35 gallons. Refunds are allowed for reefers if there is a separate tank. An auxiliary equipment refund is allowed, but PTO is not specified. Universities, community colleges and school districts may also request a refund of the fuel tax on both gasoline or gasohol and clear diesel. The Wyoming Department of Transportation handles all business associated with the fuel tax.

Nevada offers refunds on taxes paid on gasoline, gasohol, clear diesel, and kerosene used in activities that do not involve highway usage. While the state tax rate remains constant for gasoline ($0.23), clear diesel ($0.27), and kerosene ($0.27), there is an additional gasoline fuel tax that varies between $0.04 and $0.09 per gallon by county.

Nevada farmers and ranchers may claim a refund on 80 percent of their bulk purchases (for gasoline purchases over 50 gallons) without maintaining records. Diesel fuel used in agriculture can be submitted for off-road use with supporting documentation of the proportion of mileage that is off-road. Fuel used in reefer units with a separate tank is eligible for refund. Power take-

off units are eligible for refunds based on a set percentage of fuel used depending on the type of unit. Fuel taxes are administered and collected by the Nevada Department of Motor Vehicles.

Agricultural refunds in Washington are allowed for vehicles that cannot be licensed to drive on the highway. PTO refunds can be based either on a department-approved monitoring device or by taking a set percentage of fuel used. For example, concrete mixers qualify for a refund on 25 percent of the fuel used. Reefer units require a separate supply tank for a full refund; otherwise a 20 percent set allowance is used. The Prorate and Fuel Tax Division of the Department of Licensing handles the fuel tax system.

In Colorado, fuel tax refunds are allowed for gasoline, aviation fuel and special fuels when the fuel is used for approved commercial off-road purposes. Fuel used for operating stationary engines, PTOs, refrigeration units, motor boats or motor vehicles for commercial purposes, or trucks and farm machinery used off-road for agricultural purposes, is eligible for refunds. Claimants must apply for a permit, after which Colorado provides them with a preprinted form that includes a set percentage that will be refunded on the fuel tax paid. The percentage depends on the claimant's type of activity. The fuel tax refunds in Colorado are administered by the Colorado Taxpayer Services Division of the Department of Revenue.

Oregon provides tax refunds for gasoline, diesel, aviation gasoline, jet fuel and biodiesel. Gasoline is taxed at the distributor level while diesel is taxed at the retail level. Gasoline refunds are allowed for fuel used in non-vehicular equipment, fuel used in licensed vehicles driven on private property (with the proper documentation) and for removal of forest products over certain public roads (also with required documentation). Since clear diesel fuel is taxed at a different level than gasoline it can be purchased tax-free if placed into bulk tanks, non-vehicle equipment or containers. Diesel purchased in Oregon is taxable only when placed in the fuel tank of a licensed motor vehicle. A refund of diesel tax paid is allowed if fuel is used in a licensed vehicle driven on private property. For agriculture, off-road fuel use in licensed and non-licensed equipment is refundable. Refunds for running PTO units are allowed with three options. Garbage trucks and concrete mixers are provided a fixed percentage of 25 percent of total fuel used in the vehicle. For fuel and heating oil delivery trucks a refund for three fourths of a gallon per 1,000 gallons pumped is allowed. Any other PTO requires a department-approved fuel-use measuring device that operates only when the vehicle is stationary. Reefer units with separate tanks do not need a refund since non-taxed clear diesel can be purchased for such a tank. If the reefer unit uses fuel from the vehicle's main tank, a refund is not allowed. The Oregon Department of Transportation administers the motor fuel tax.

Utah provides refunds on gasoline, gasohol and special fuels if used for off-road or other tax-exempt purposes. Agricultural use refunds are handled in an interesting way. The state provides the claimant with a refund for the number of gallons for which they received a federal fuel tax refund as shown on their Form 1040 schedule F. The federal government allows a refund for agricultural off-road use of fuel. There is another state form for agricultural refunds for non-profit agriculture entities that may not file the IRS Form 1040 (nonprofits file Form 990). For fuel tax purposes, corporations are considered special users and they file the Utah State Commission's TC-922 series forms. Utah allows PTO refunds with specified refund rates for several types of units as well as allowing any PTO a refund if the appropriate documentation can be provided to justify a rate. Fuel dispensed into a secondary fuel tank to operate a reefer engine is eligible for a fuel tax refund. The Utah Tax Commission administers the fuel tax and refund process.

The following tables summarize the fuel tax and refund details described above. Agricultural refund allowances vary from state to state. Some states refund the whole amount of the fuel tax while others only refund a portion. The real difference between states is in the details of what is allowed. There are several types of restrictions for the states surveyed that are summarized in Table 10 and Table 11:

- Only fuel used in unlicensed vehicles or equipment is eligible for refund. Not only can the vehicle not be registered, but if it is a vehicle that could be registered, such as a pickup truck, it is not eligible for a refund. For fuel used in unlicensed vehicles or equipment to be eligible for a refund, equipment records must be kept on the hours of operation and fuel used for each piece of equipment.
- Off-road use is eligible for a refund. Equipment usage logs must be kept. If the equipment is a vehicle that can be driven on-road, mileage logs must be kept and only the portion of fuel used off-road is eligible for a refund. If a state is listed as eligible for off-road refunds of non-bulk purchases, they are also eligible for similar refunds for bulk tank purchases. The "Bulk Tank Off-Road Use" in the table indicates only bulk tank purchases are eligible.
- For some states, only fuel purchased for bulk tanks is eligible for a refund. Some states, Idaho for example, allow a proportion of the fuel eligible for refund to be used for any purpose even if some of the fuel is used for on-road purposes. Other states allow only refunds on bulk tank fuel that is used for off-road purposes. For these states, records must be kept of fuel used in each piece of equipment and mileage logs for those vehicles that could be used for on-road purposes.
- Although Montana occasionally denies refund claims where it is clear the fuel purpose was not agriculture (see the outside area errors in chapter 5), in general there are no requirements that the fuel be used entirely off-road.

Table 10: State Agricultural Refund Percentages Allowed for Gasoline

State	Unlicensed Vehicles	Off-Road Use	Bulk Tanks (off-road use)	Bulk Tanks (any use)	Any Use
Montana		100%			0-60%
North Dakota	70%				
South Dakota		100%			
Idaho		100%		25%	
Wyoming			70%		
Nevada				80%	
Washington	100%				
Colorado		100%			
Oregon		100%			
Utah		100%			

Note: a blank cell implies no refund of that type is allowed

Table 11: State Agricultural Refund Percentages Allowed for Diesel

State	Unlicensed Vehicles	Off-Road Use	Bulk Tanks (off-road use only)	Bulk Tanks (any use)	Any Road Use
Montana		100%			0-60%
North Dakota		No agricultural refunds allowed for diesel			
South Dakota		100%			
Idaho		100%		60%	
Wyoming			93%		
Nevada		100%			
Washington		100%			
Colorado		100%			
Oregon	not taxed	100%	not taxed	not taxed	
Utah		100%			

Note: a blank cell implies no refund of that type is allowed

Power take-off unit refunds also vary greatly from state to state. States that allow refunds for PTO use have different ways of calculating the amount of fuel used by the PTO unit. Some states are like Montana in that they allow a percentage of fuel used to be eligible for a refund. Oregon and Utah rely on some measure of the PTO usage or a metering device. Table 12 summarizes the percentage of PTO fuel refunds granted by each state.

Table 12: PTO Refunds Allowed

State	PTO Allowed	How Refunds are Applied
Montana	Yes	10 to 80%, refer to chapter 2 for details
North Dakota	No	-
South Dakota	No	-
Idaho	Yes	Unit Quantities 0.00015 gal per gal pumped for gas or fuel oil 0.18 gal per ton bulk cement pumped 0.75 gal per hour of reefer operation 0.0503 gal per ton timber handled 3.46 gal per hour operation handling timber 0.75 gal per hour carpet cleaning Percentage allowances 30 percent concrete mixing 25% garbage compaction
Wyoming	Yes	Not specified
Nevada	Yes	30% for concrete mixers, concrete pumpers, mobile cranes, drill rigs 20% for garbage trucks, auxiliary pump trucks, or sweeper trucks 10% for all other PTO uses
Washington	Yes	Determined by direct measuring device 25% for concrete mixers, mobile cranes or garbage trucks 20% for line trucks, refrigeration trucks, or sweeper trucks 15% for boom trucks, bulk feed trucks, or dump trucks 10% for carpet cleaning van or car carrier with hydraulic winch 7.5% for all other PTO uses
Colorado	Yes	-
Oregon	Yes	Determined by a department approved metering device designed to operate only when the vehicle is stationary 25% of gasoline for concrete mixer or garbage truck ¾ of a gallon of gasoline for each 1,000 gallons of fuel or heating oil pumped from a fuel or heating oil delivery truck.
Utah	Yes	¾ of a gallon per 1,000 gallons of liquid pumped ¾ of a gallon per 6,000 pounds of dry product loaded or off loaded. 20% cement truck or trash compaction

A majority of the states allow reefer fuel usage refunds as long as the unit has a separate tank. Oregon does not allow reefer refunds.

3.1.2. Minimum Fuel and Time Requirement

Some states require a minimum amount of fuel be purchased before a tax refund can be claimed (Table 13). For example, the minimum volume required in Idaho is 50 gallons of gasoline and any amount of regular diesel. Nevada requires 200 gallons of fuel purchased for a refund. This

can be from multiple purchases and the minimums refer to the total amount for the claim. Minimum dollar amounts are also in place. In Washington, refund claims require a minimum refund of $20 paid for any fuel used for a non-highway purpose. Other states have limits on how often a claimant can submit a refund request. Typically a claimant is allowed only one refund request per year, but can submit monthly or quarterly if they satisfy some minimum amount. Any diesel fuel user in Wyoming who is entitled to a minimum refund of $250 in any calendar month may apply for the refund at any time after the last day of the month. Refund requests of less than $250 per month are filed quarterly and refund requests of less than $10 are processed only once in each calendar year.

The limitations on frequency are different than the total timeframe for eligibility. States require that a refund request be submitted within a certain period of time after the fuel was purchased (Table 13). Montana has the most flexible timeframe, allowing refund requests for up to three years after the purchase.

Table 13: Minimum Fuel and Time Requirement

State	Timeframe For Eligible Requests	Minimum Fuel Volume (gallons)	Minimum Total Refund Amount ($)	Minimum Amount for Higher Frequency ($)
Montana	3 years			
North Dakota	1 year		$5/yr	$400/Month
South Dakota	15 months			
Idaho	1 year	50		
Wyoming	1 year		$10/yr	$250/Month
Nevada	1 year	200		
Washington	13 months		$20	
Colorado	1 year	20		
Oregon	15 months			
Utah	15 months			

3.1.3. Documents Required for Fuel Refunds

The documentation required for refunds varies across states. What also differs is whether a state requires claimants to obtain a license or a refund eligibility certificate before they can apply for refunds. The terminology varies—it might be called a license, permit or exemption certificate—but all accomplish the same basic task of pre-qualifying claimants to receive tax refunds.

Colorado, South Dakota and Nevada require each agricultural producer to become certified as a licensed refund claimant before refund claims may be submitted. Fuel taxpayers in Colorado must submit a refund permit application to the Department of Revenue before or at the time of the first refund claim. A fuel tax refund claim form is then mailed for each calendar quarter and is preprinted with claimant's name, account number, the quarterly filing period and the pre-approved refund allowance percentage. All claimants submitting refund requests in South Dakota must apply for a license that identifies them as refund claimants. Licensing requires a report on

total acreage in each agricultural operation. In Nevada, a farmer or rancher wishing to claim a refund must first secure a permit from the Department of Motor Vehicles.

A Wyoming agricultural user may choose to apply for an exemption certificate issued by the Department of Transportation, which allows a 70 percent exemption of taxes on bulk gasoline or gasohol purchases for agricultural use. The seller, a licensed supplier or distributor, must have a copy of the exemption certificate issued by the department on file before making a tax-exempt (or tax reduced) sale to the qualified user. The seller then requests a refund of tax on the monthly tax return. This prequalification is not a requirement in Wyoming; tax refunds for both gasoline and diesel may be applied for after the time of purchase without prior certification.

Montana, Oregon, North Dakota, Idaho, Utah, Washington and Wyoming do not require a preliminary license in order to submit refund requests.

The levels of documentation required for obtaining fuel refunds vary from state to state. For all states, a refund form is available online to submit directly via the state website or to print, manually complete, and fax or mail to the managing agency, although Colorado's form is a preliminary form that must be filled out to receive the final refund form. Nearly every state in this study requires the inclusion of original receipts or certified copies and fuel invoices with the refund claim. Those that do not require receipts be submitted with claims still require claimants to keep receipts on file for a specified time period. For example, Washington requires that all records must be kept for five years for documentation purposes. In the event of an audit, information maintained by the claimant may be requested by the state auditor.

Montanans submitting a refund claim with the agricultural refund form (as opposed to the off-road form) must submit a copy of their federal or Montana income tax return at least once every three years to prove their ratio of gross earned farm income to gross earned income. This ratio impacts the standard deduction allowed for agricultural use. Claimants using the agricultural refund form are not required to list how the fuel was used, but bulk purchases and Keylock or Cardtrol invoices must be included. For PTO refunds, claimants must submit information about each of the vehicles with a PTO unit, including the vehicle identification number. For reefers, the document requirements are the same as PTO units. If a claim is filed electronically, then there is no need to submit an invoice of a purchase. However, a claimant has to keep all records and the fuel tax bureau may ask for a fuel tax audit. If a claimant files for off-road refunds, then the original bulk delivery invoices are required. The off-road claimant must keep vehicle mileage log and dispersal records in case of an audit. See section 2.7 for more details.

In Nevada, agricultural users may claim a refund of 80 percent of taxes paid on bulk gasoline purchases without maintaining records. For diesel and non-bulk gasoline refunds in Nevada, documentation required includes the type of fuel purchased, original receipts, an equipment list, bulk fuel inventory list and the county where the fuel was purchased. Records used to substantiate refund claims need to be retained for four years from the date of the refund request.

Colorado does not require supporting documentation to be submitted with refund applications; however, taxpayers must keep all documentation for audit purposes.

In Utah, agricultural producers apply for fuel tax refunds on their income tax returns; no documentation is required beyond what claimants are required to keep for their federal tax return. Claimants filing for PTO fuel tax refunds in Utah must include a listing of total vehicle miles, total gallons of fuel used in eligible vehicles, and total miles traveled off-highway.

Machinery and equipment lists and original fuel receipts and invoices are required. Additionally, some sort of documentation is required for PTO fuel use such as pounds of dry product loaded and off loaded for each vehicle, gallons of liquid product pumped by PTOs, and/or daily records of the actual fuel consumed by PTOs. Records must be maintained for clear diesel used in reefer units or other machinery not registered for highway use. Documentation includes fuel purchase invoices that specify the equipment into which the fuel was placed.

On a Wyoming refund request, claimants must list the purpose of fuel usage and equipment utilized. In addition, receipts, invoices or bulk-purchase printouts from distributors must be included. Each refund applicant is required to provide receipts detailing the gallons purchased and fuel taxes paid. Claimants need to keep mileage logs for on-road and off-road use for audit purposes. For refunds involving reefer fuel, claimants must list the purpose of fuel usage and equipment in which the fuel is used, and include receipts specifying clear fuel use for reefer and vehicle number (license plate or assigned unit number).

Claimants in North Dakota must describe the purpose for which the fuel was used, equipment in which the fuel described in the request was used, and whether bulk fuel purchases were delivered to a Native American reservation. Individual Native Americans living on a reservation in which they are enrolled qualify for a refund of the state fuel tax. Refunds do not apply if the reservation has a motor fuel sharing agreement in place with the state.

The Oregon Department of Transportation requires claimants to document how fuel is acquired and stored, the gasoline-powered equipment that was used and the number of gallons consumed per machine, and the type of fuel used to propel licensed vehicles for farm and non-farm use. Additionally, farm claimants must describe the types of crops planted and number of acres owned and leased.

The state of Washington requires that refund requests include fuel invoices, an explanation of exempt uses and equipment lists that include non-exempt equipment. Records must be kept by the claimant for five years and include all fuel receipts, gallons of fuel used in each piece of equipment, other gains and losses of fuel, on-highway and off-highway mileage records for each licensed vehicle and a physical inventory of fuel.

In South Dakota, claimants must provide details on the miles vehicles are driven while consuming taxed fuel, the average miles per gallon of vehicles, and the total gallons of fuel consumed in vehicles driven off-road for agricultural and commercial purposes.

Although the exact documentation required can vary depending on the type of refund, Table 14 summarizes the typical documents required to be submitted with the refund form and the information claimants must keep in the event of audits. The table also indicates whether a license/permit/certificate is required.

Table 14: Documentation Required for Refund

State	Documents Required For Refund										Documents Required for Personal Records In Case of Audit				License/Permit/ Exemption Certificate Requirement
	Original Fuel Receipts	Type/Amount of Fuel Purchased	Total Mileage & MPG of Exempt Veh./Machinery	Bulk Fuel Inventory List	Agricultural/Commercial Purpose	Machinery/Equipment List	City or County of Purchase	How Fuel Is Acquired and Stored	Type of Crops Planted/Number of Acres	Native American Reservation Use	Original Fuel Receipts	Bulk Fuel Logs	Machinery/Equipment Lists	Gallons of Fuel Used in Vehicles	
Montana	X	X	X				X				X			X	No
North Dakota	X				X					X					No
South Dakota	X	X	X		X	X			X		X		X		Yes
Idaho					X										No
Wyoming	X				X	X									Optional for tax exempt gas at point of purchase
Nevada	X	X		X		X	X				X	X	X		Yes
Washington	X				X	X					X		X		No
Colorado		X													Yes
Oregon	X	X	X	X	X	X	X	X	X						None
Utah	X	X	X			X									None

3.2. Refund Claims Process and Record Storage

The refund form filing system is similar throughout the states chosen for the fuel tax study. Refund processes are predominantly paper-based, with some states utilizing electronic databases to store records. State representatives were asked to describe any recently implemented changes to the refund process that may have reduced departmental burden for processing refunds and if there were plans to update the existing refund process. The majority of the states indicated that they do not have plans to change their paper-based system to an electronic system.

Table 15 presents annual refund information including types of fuel eligible for refunds, amount paid in refunds, number of refund requests/claims received per year and the months the majority of refund requests are received. Typically the largest amounts of gasoline refunds are granted to agricultural operations and construction companies.

Table 15: Annual Refund Amounts and Requests 2009

State	Amount Paid in Refunds Annually		Refund Requests/Claims Received		Highest Refund Months
	Gasoline	Diesel	Gasoline	Diesel	
MT	Ag. $2,095,453 PTO $416,981	Ag. $846,920 PTO $407,308 Reefer $220,609	Ag. 4,901 [1] PTO 28 [1]	Ag. 2,500 PTO 273 Reefer 286	Feb., Mar., Apr.
ND	Ag. $845,101 Ind. $23,376	Reefer $6,099	Ag. 4,498 Ind. 41 Govt. 134 Tribal 117 Misc 68	Reefer 21 Govt. 33 Tribal 16 EMS 50 Misc 108	Jan., Feb., Jun.
SD	Ag./Ind. $874,863.21	Ag./Ind. $84,778.98	Ag./Ind. 4,369	Included in gasoline number	Jan., Feb., Mar.
ID	All $442,350	All $927,998	All 3,000	Included in gasoline number	Jan., Apr., Jul.
WY	Univ. $40,000 Ag. $370,000 [2]	Ag. $65,000; Reefer $100,000 Off-road $200,000 Rail $10,000 Govt. $40,000 Univ. $40,000	No response	No response	No response
WA[3]	Ag. $179,048 PTO $40,860 Marine $292,195 Misc. $1,234,480; Transportation $623,182 Tribal $18,754,240	Ag. $977,372 PTO $2,254,170 Reefer $754,944 Misc. $4,028,218 Transp. $1,006,917 Off-road $3,928,498 Tribal $1,746,575	Ag. 311 PTO 2 Marine 1,681 Misc. 337 Transportation 109 Tribal 258	Ag. 184 PTO 613 Reefer 351 Misc. 650 Transp. 84 Off-road: 893 Tribal: 112	Jan., Feb., Mar.
CO	unavailable	unavailable	unavailable	unavailable	Feb., May, Aug., Nov.
OR	All $434,120 Aircraft $2,675	no response	All: 565 Aircrafts: 32	no response	Feb., Mar., Apr.

[1] Some requests include both gasoline and diesel fuel on the same form and thus may appear in both columns.
[2] These are not refunds directly for agriculture, but to distributors that sold 70% tax-reduced fuel to licensed agricultural operations.
[3] Includes non-licensed claims only; additional fuel tax exemptions are processed for licensees on their tax returns.

The survey covered the refund workload of each state and how equipped the departments were in dealing with the volumes of refund requests. Questions were asked about the number of full-time employees involved in processing the fuel tax refunds and if there were other major resources needed to manage the refund process.

In Montana, approximately 1.25 full-time workers handle fuel tax refunds. One full-time employee focuses on processing refunds; another employee spends about 25 percent of her time on refunds, focusing on the reefer submittals. Her remainder job duties are not related to processing refunds. Based on the number of refund requests received during the peak refund season (January to May), one or more MDT employees may help the designated refund staff process requests. Paid refund claim paperwork is stored for three years. Rejected claims are returned to the claimant and not kept on file by MDT. If a claim contains errors that do not appear fraudulent, MDT may correct the statement and approve it as correct, or the department may require the claimant to file an amended statement. The corrected or amended claims are stored for three years with the other paid claims. Montana's electronic database—the Accounts Payable System—tracks refund payments and contains information on claimants, the type of refund, dates and amounts of refunds and other data related to the refund calculation.

Wyoming utilizes one full-time employee equivalency to process refund requests. Typically, two employees each spend half of their time processing refunds. Other employees help out when there is a larger than normal backlog of requests. Records are maintained for two years in the active files and then moved to storage for one year. The state currently has seven years of records available. Paper files of individual claims are used to track rejections.

In South Dakota, one full-time employee is involved in processing the fuel tax refund requests. Past refund requests are stored for a four-year period. Paper files of rejected claims are stored for one year.

Three full-time employees handle the fuel tax refunds in Colorado. Past refund requests are stored on microfilm and there is no record of requests that are rejected. Refund rejections are handled by mail and no material is returned to rejected claimants since documentation is not required.

North Dakota employs one full-time employee who spends approximately 30 percent of their work time processing refunds. Assistance is provided by an auditor or compliance officer for the claims that contain issues. The paper claim is filed and kept on-site for three years. Receipts and invoices are returned when requested, and all denied claims are returned.

In Oregon, two employees are currently assigned to process and desk audit refund claims. The claims are kept in paper form and stored on-site for three years. Records are then archived for an additional four-year period.

Five employees handle the Idaho fuel tax refunds along with their other duties. Records of refund requests are imaged and maintained electronically for three years. Rejections are not tracked. The main reasons refund requests are denied are because the equipment or use listed on the form does not qualify for a refund or the tax was not paid at the time of purchase. Common errors seen in refund requests include missing schedules and improperly completed forms.

Washington employs nine full-time staff members—six for processing claims, two for verification, and one for imaging and archiving. The Treasurer's Office mails the warrants for

refunds directly to the customer. Records are maintained through web-based imaging for a six-year period.

3.3. Auditing Procedures

Information was also gathered on how the validity of refund claims are checked and if audits are performed.

MDT staff review each refund request to ensure completeness and accuracy. They check to ensure the refund includes required supporting documentation, that the invoice values were entered correctly, that the fuel was purchased within the last three years and that the values on the form were correctly calculated. In addition, the department's internal auditor conducts desk audits of refund requests. In this case any other documentation for the applicant is compiled (e.g., IFTA or SU forms) and all information is checked for compliance and whether the information is supported.

South Dakota does not perform audits for reasons of political sensitivity, but claimants are contacted if their refund requests appear unreasonable.

In North Dakota, three years of refund applications were audited, but the practice was discontinued due to insignificant returns. In the past, one joint audit was performed between North Dakota and Minnesota.

Audits are performed as frequently as every three years in Idaho by external audit staff. The number of errors detected by audits is not directly tracked but audit staff tracks the number of audits completed and the revenue recovered. Changes have been made in the refund process to expedite processing but dollar savings have not been tracked as of yet.

The Wyoming DOT program conducts monthly desk audits of all returns. The Department of Audit conducts field audits. The validity of refund claims is checked by examining the fuel type, date and Wyoming tax listing. An audit is not performed after refunds are issued but a lead employee or supervisor reviews the refund form before issuance.

In Oregon, an auditor reviews each application and compares it to a standardized set of estimates on how much fuel is used for agricultural purposes, which provides a guideline to detect fraud and over-estimation of fuel use. A desk review is conducted for each claim after it has been entered into the system and before refunds are approved.

Washington Department of Licensing Prorate and Fuel Tax staff performs audits through a random selection process to flag unusual requests. Combination license audits are also conducted with IFTA and unlicensed refund claims.

To perform an audit or to curb EOE, coordination in exchanging tax information among different states and departments plays an important role. Some degree of coordination exists between states to share tax information. However, none of the information sharing was specific to the refund process.

3.4. Errors, Omissions and Evasion (EOE) Information

The states were asked if any errors, omissions or evasion take place during the fuel tax refund process. If yes, respondents were asked to describe the various elements of EOE they have witnessed. The majority of EOE occurs through a failure to provide the proper documentation,

overstatement of fuel gallons purchased/used, refund requests submitted after the deadline and mathematical errors.

The types of errors found in Montana refund claims include math errors, missing original invoices, use of an incorrect standard deduction value for agriculture, not listing all of the included invoices on the form, placing the fuel amount in the incorrect fuel type column, discrepancies in fuel quantity between the form and supporting invoices, receipts that were missing details, claiming refunds for untaxed dyed fuel, including the same receipt twice in two different submissions, requesting refunds for fuel that was purchased outside of Montana, submitting receipts with dates beyond the allowable claim period, overstated mileage, incorrectly calculating fuel economy for PTO units, including an individual purchase that exceeded the fuel capacity of the reefer tank, and listing the same fuel purchase twice. Refer to chapter 5 for further detail on the types of EOE found in Montana.

If MDT finds that a claim has errors that do not appear fraudulent, MDT may correct the form and approve it as corrected, or the department may require the claimant to file an amended claim (MCA 15-70-225 for gasoline and MCA 15-70-364 for special fuels). If the department identifies any fraudulent information on any statement in the claim or affidavit, the department shall reject the claim in full and may suspend a claimant's right to a refund for a period not to exceed one year (MCA 15-70-226 for gasoline and MCA 15-70-365 for diesel).

In Wyoming, refund requests are denied mainly due to an invalid date or incomplete documentation. A request is also denied if the number of gallons claimed by an agricultural user does not correspond to the number reported to the IRS. The majority of errors stem from miscalculations, such as the total cost of fuel submitted rather than the requested number of gallons. Other errors include duplicate receipts, fuel type errors and out-of-state receipts. A user is contacted via telephone if corrections can be made to the refund request. An actual rejection of the request is sent in writing. All material is sent back to the claimant, unless receipt copies have been submitted. Copies are shredded. Department officials believe that the state’s hands-on review process and desk audits minimize EOE.

Oregon rejects approximately twenty claims annually, usually due to claimants failing to provide the proper documentation. Mathematical errors are also common. Claimants are informed of any refund rejections or necessary adjustments by mail, and refund materials are only returned if requested. Evasion is suspected because the potential exists for claimants to fabricate consumption records to support more refundable use than actually occurs. Oregon currently requests more supporting documentation than was required in past years. Refund claims have decreased in the past two to three years as more documentation has been required. For example, the state now requires claimants to submit original fuel receipts, a description of the type and amount of fuel purchased, the total mileage and miles per gallon of all exempt vehicles and machinery, a machinery/equipment list, a description of how the fuel is acquired and stored and a listing of the types of crops planted and total number of acres owned and leased.

The main reasons refund requests are denied in North Dakota are that claims are submitted after the June 30 deadline, claims include non-qualifying equipment or claims do not include the required documentation. The most common errors found in refund requests are incomplete required information and documentation not provided. Evasion is suspected by claimants using tax-exempt gasoline in on-road vehicles. The North Dakota Motor Fuel Tax Section changed its forms several years ago to require claimants to list the equipment using the fuel in an effort to

reduce EOE. This effort has been moderately effective as claims in recent years are not listing as many unqualified vehicles, but fraud is still suspected.

South Dakota refund requests are usually denied due to receipts being submitted past the 15 month cut-off date. A common error is the lack of signature on refund applications.

In Idaho, it is estimated that 80 percent of refund claims require review or error correction. No significant amount of evasion is suspected to take place, and the refund claim review process is highly effective at reducing EOE in the refund process. Once EOE is discovered, the correction is mailed to the claimant and the request is referred to the audit staff. A coordination agreement is in place with the Idaho Department of Transportation regarding information sharing in relation to the fuel tax refunds.

The majority of refund claims rejected by the state of Washington are due to incomplete forms or not being able to make contact with the claimant in a timely manner to discuss discrepancies. Common errors include calculation errors, incomplete supporting documents, claims submitted past the statute of limitations or claims submitted when no taxes were paid. All material is returned for claims that are completely rejected. If there is a partial rejection, only the denied portion is returned with a letter of explanation. Refundable gallons are reduced if EOE is discovered. Steps taken to reduce EOE in the refund process include asking for more information from claimants, requiring additional supporting documents or contacting the distributor for verification of the information received. Evasion methods suspected by the state include idle time, incorrect rates used per PTO type and claiming IFTA.

3.5. Public Perception of the Refund Process and Public Outreach

States were asked to describe the level of public input they receive about the refund process. Information was also gathered on whether state departments issue public service announcements or conduct educational campaigns about the fuel tax refund process and evasion reporting.

Montana has a unique public outreach program that includes the IFTA and SU training program, radio announcements, newspaper advertisements, notifications by mail, posters, and visits with distributors and booths at county fairs. MDT developed a training program to educate IFTA and SU licensees on requirements, licensing, non-compliance with decal and cab cards, reporting information and record keeping. The training and outreach programs are regularly evaluated and feedback is positive. Radio, newspaper and print ads are used to educate and inform the public about the fuel tax and notify consumers of any rule changes. Since 2005, MDT has prepared posters that are displayed at rest areas, U.S. Customs offices, weigh stations and Town Pump gas stations. Examples of outreach materials are included in Appendix A. From 2000 through 2008, the MDT Fuel Tax Management and Analysis Bureau agents visited Montana's fuel distributors every two years to promote electronic filing of their monthly distributor tax returns. The main purposes of the visits were education, training and general public relations. As a result, 99 percent of Montana distributors currently file tax returns and pay taxes electronically. Prior to 2004, MDT had a program called the Transportation Awareness Program. MDT officials visited county fairs around the state and other public events to promote fuel tax awareness. MDT is in the process of conducting a customer satisfaction survey with refund applicants, special fuel users, IFTA permit holders and licensed distributors. This survey is expected to be completed by July 1, 2011.

The Wyoming DOT does not receive many calls or emails questioning the refund process. The forms provide enough detail as to what must be submitted with the refund request. Generally, the public sees the WYDOT staff as helpful, although it has been noted that agricultural users who can purchase tax-exempt gasoline find the time spent on clear diesel tax refund requests to be excessive. This same population has taken issue with the requirement of providing IRS documentation for comparison purposes because the gallons claimed on refund requests and IRS documents must be identical. A few claimants contact the office each quarter to directly request forms as they do not have Internet access. WYDOT's outreach program offers on-site visits to licensed taxpayers. Tax examiners also educate taxpayers via telephone and fax. Future outreach plans include an annual seminar for taxpayers covering basic, advanced and specialized training as well as a section on legal issues. The seminar will be held in a training setting as well as via Internet streaming, video conferencing and teleconferencing. While currently in the planning stages, the anticipated date of the first seminar will be in 2011.

Most calls the Oregon DOT receives pertain to concerns over the amount and type of records to be maintained. Claimants also have questions about fuel types that qualify for refunds. Common feedback includes refund claimants stating they would like to not have to maintain consumption records to support refundable use. A large number of claimants live in areas where Internet service is unreliable or do not utilize computers, making online filing unfeasible. Forms are sent to claimants who do not have online access. To date, no substantial public outreach programs have been conducted by Oregon on fuel tax evasion.

North Dakota receives feedback from claimants expressing the view that refund claims should be accepted without documentation. The majority of questions are regarding why there is a deadline for refund submittal and why fuel used in trucks or pickups is not allowed for agricultural refunds. When major changes in the tax code take place, North Dakota provides seminars to fuel suppliers and distributors. Newsletters are also utilized to provide information on changes in tax laws.

In Idaho, no issues have been reported with accessing the online refund forms. The state is very active in outreach and public relation campaigns on the fuel tax. A distributor advisory group has been established that makes presentations to the petroleum industry and provides updates on changes in tax codes and reporting procedures. A significant amount of time is dedicated to training certified public accountants who focus on income taxes and fuel tax refunds. Moreover, the Idaho Tax Commission has a "Keep Me Updated" online alert to notify claimants about any fuel tax policy changes. Fuel tax notifications can be obtained by (1) a RSS feed (2) email delivered by Google Feedburner, (3) text on the webpage, (4) video on the webpage, (5) audio through a computer or a cell phone. Also, the Tax Commission has "Classes and Events" for tax education purposes that can be found at: http://tax.idaho.gov/i-1041.cfm?idd=f.

Public awareness programs in South Dakota on motor fuel tax are limited. Occasional seminars are conducted to provide information on the sales and use taxes, and the fuel tax manual is available online on the state's Motor Vehicle Division website.

In Utah, ongoing training does not exist for fuel tax issues. Notices are sent to taxpayers only when significant changes to the tax code take place.

Washington has received feedback from claimants requesting online filing and forms. The most common question is how claimants can obtain a fuel tax refund. Washington has not done much public education about fuel tax beyond information on their website.

3.6. Law Enforcement Efforts to Curb EOE

States were asked about law enforcement efforts, including challenges faced in combating EOE. The degree to which law enforcement is involved in the process varies by state.

Several states have some sort of fuel tax abuse reporting hotline. MDT has a toll free number, 1-888-FUEL-LAW (1-888-383-5529), to report suspected fuel tax abuse. Nevada Department of Motor Vehicles has an online tax evasion reporting system called "Potential Fuel Tax Evasion Report." It is available on http://www.dmvnv.com/surveys/fuel_report.asp. This reporting system requires date and time of observation, location, name of fuel dealer/seller, name of company/buyer/user, vehicle description, vehicle USDOT number and vehicle license plate number and state to report a tax evasion. Utah State Tax Commission and the Internal Revenue Service (IRS) have a fraud, waste and abuse hotline at 801-297-6719.

Several states reported law enforcement efforts focusing on dyed fuel. State police in Idaho, for example, investigate motorists illegally using dyed fuel on Idaho roads. However off-road dyed fuel inspections are not carried out. Instead, the IRS inspection program is utilized to catch evaders. If a person is caught by the IRS and fails to report to the Idaho DOT, the offender must prove that the past seven years of dyed fuel purchases were used for tax-exempt purposes.

To curb EOE in Montana, Motor Carrier Services Officers of Montana enforce Montana's dyed diesel law by randomly taking fuel samples from diesel-powered vehicles. First offense of fuel use violation carries a penalty of $1,000 plus the tax on the fuel in the tank. A second offense results in a penalty of $5,000 plus the tax. These violations also carry federal penalties.

3.7. Key Findings

The exact method of how agricultural refunds are allowed (e.g., bulk purchases only, unlicensed vehicles only, standard deduction of all fuel) varies widely among the states. PTO allowances also vary widely. Some states require a fuel use monitoring device that can track how much fuel is being used by the PTO unit. All states interviewed except Oregon allow a refund for fuel used in reefer units.

Some states require a minimum fuel volume purchase or minimum amount of monetary refund before fuel tax refunds can be claimed. For example, Nevada requires 200 gallons of fuel purchased for a refund claim. Montana does not impose a minimum.

The time limit of when refund requests must be received after the fuel is purchased is between 12 and 15 months for all states surveyed. This is in contrast to the 36-month timeframe employed by Montana.

States that require a license in order to apply for refund claims are South Dakota, Nevada, and Colorado. Claimants in Wyoming can apply for an exemption certificate for point-of-sale fuel purchases or submit refund claims after the fuel has been purchased.

The majority of states require the following documents to be submitted for fuel tax refund claims: original fuel receipts, description of agricultural/commercial purpose and machinery/equipment lists. Oregon recently increased the amount of required supporting documentation. Refund claims decreased as a result.

Washington received 5,585 total refund requests in 2009, the highest among the interviewed states that were able to provide such data. Washington also paid the highest amount in refunds.

In 2009, Montana paid nearly 8,000 claims, but as noted previously some refund forms that included more than one fuel type were counted more than once.

All states in the study posted their refund forms online. However, Montana is the only state among those studied that provides a form that could be filled out and submitted via the Internet. Montana does allow an electronic version of the reefer refund form to be filled out and emailed to the state. The claimant must keep supporting documentation for audit purposes. Some form of electronic record management is used by all states to store refund requests and records.

The majority of EOE occurs through a failure to provide the proper documentation, overstatement of fuel gallons purchased/used, refund requests submitted after the deadline and mathematical errors. Idaho estimates that 80 percent of refund claims require review or error correction.

The most cited public feedback from refund claimants is requests for decreased documentation requirements. Several states also reported receiving requests for forms by mail, as some claimants do not have Internet access.

The states of Montana, Idaho, Wyoming, North Dakota and South Dakota take part in some degree of public outreach through informational mailings, seminars, presentations or training.

4. COMPARATIVE MODEL

One method to estimate the cumulative effect of EOE is to develop a model to predict the expected statewide refund amounts. The model is based on data from several states that includes the amount of refunds and one or more measures of activity (e.g., vehicle-miles traveled, acres of farmland). If the number of gallons of fuel that a state actually refunds is higher than the expected use predicted by the model, this may indicate the presence of EOE. The difference between expected and actual refunds could be used as an estimate of EOE, but caution should be used in light of the limitations of the model developed in this study. Using the difference as an estimate of EOE, the following assumptions should be considered:

- Each state has different laws and processes. This approach assumes a difference predicted by the model is not in any way due to a difference in the laws but solely due to EOE.
- Another assumption is that other differences across states, besides laws, that impact fuel use are all included in the model.
- The data is assumed to be collected in a consistent manner in each state.
- The final assumption is that the difference measured is not due to random variability in the data.

Data was collected and modeled for agricultural refunds and reefer units. PTO refund data was not available for enough states to build a model. This chapter provides a summary of the best model found for each refund type and the resulting potential for EOE. Statistical details of the models are available in Appendix B.

4.1. Agriculture

Data on refund values for agricultural use from several states (MT, ID, ND, SD and NV) was collected through the FHWA-551M fuel use reporting forms. These reporting forms contained agricultural refund amounts for gasoline and diesel. Many states do not refund fuel taxes paid on diesel, so only gasoline was used. This data was collected for the years 2006 to 2009. Agricultural data was acquired from the U.S. Department of Agriculture (USDA) agricultural census completed in 2007. Data was analyzed to determine how agricultural fuel in each state, as reported through the refund process, compared to the amount of agricultural activity. This can shed light on whether Montana is refunding more or less than neighboring states when normalizing the refund data for the amount of agricultural activity.

Data from the USDA census included acres of cropland, acres of irrigated cropland, total head of cattle, average farm size, total farmland and several other variables indicating the intensity of agricultural activity in the state. Total farmland includes cropland and land used for grazing. Using all five states and data available, a statistically viable model could not be developed. The amount of refunds reported by Idaho seemed to be erroneous. A viable model was developed using total acres of farmland for all states except Idaho. Figure 11 shows the four-year average of refunds for each state compared to acres of farmland. The expected refund amounts predicted by the model are also shown in Figure 11 represented by the solid line. Montana's reported value of gasoline agricultural refunds is 4 percent higher than the estimated expected amount of refunds based on the model.

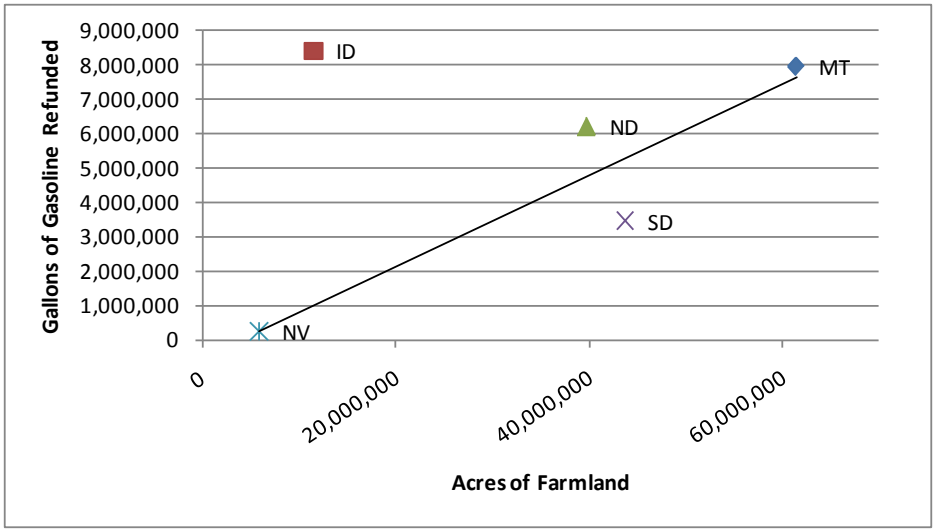

Figure 11: Agricultural Fuel Eligible for Refunds vs. Acres of Farmland

4.2. Reefer

Refrigeration unit refund data was not available on the FHWA-551 forms. State interviews provided the dollar amount of reefer refunds (see chapter 3) for three states (ND, WY, WA). Unlike the agriculture model, there was only one year of refund data for each state. The activity variable used was ton-miles of freight based on the national commodity flow survey. Figure 12 shows the data used for the model, with the line representing the model developed. Based on the model, Montana is refunding reefer claims 145 percent higher than expected compared with neighboring states.

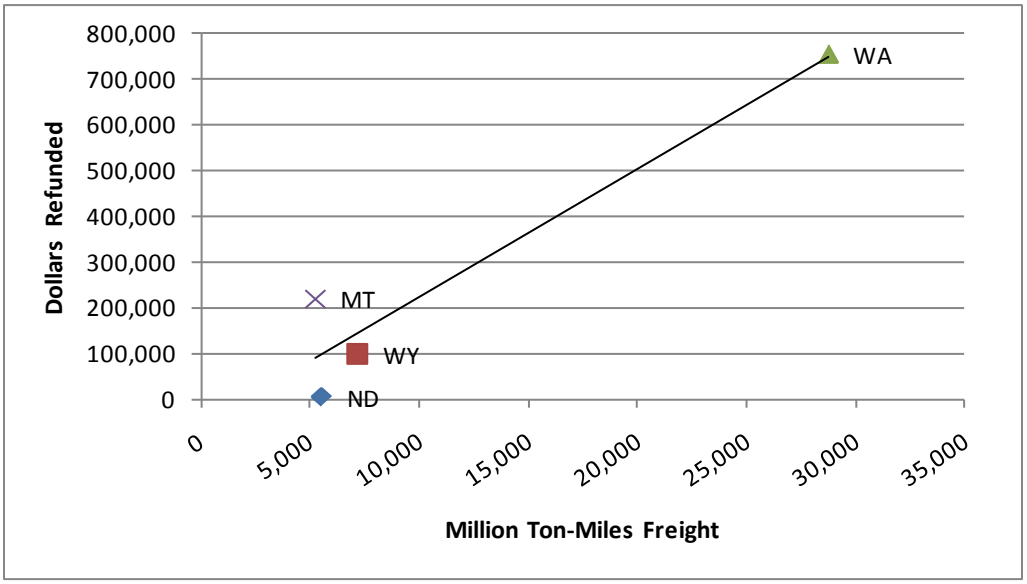

Figure 12: Reefer Refunds vs. Ton-Miles of Freight

5. EOE FOUND IN REFUND FORM SAMPLE

The research team examined over 500 refund forms that were submitted over a three-year period from 2007 to 2009 in an attempt to identify EOE. The details of these refund forms were entered into a research database to allow for cross checking in identifying potential EOE. The research database was created and used by the research team and is different from the Accounts Payable System database maintained by MDT. This chapter discusses the errors found and attempts to extrapolate the potential impact of these errors to all refund forms.

5.1. Methodology

The Accounts Payable System database was used to generate a random sample of refund forms to be examined. It is important to understand how the terms "claim" and "form" are used in this report. The claims listed in the Accounts Payable System database are separated by fuel type (gasoline, diesel, and gasohol). A claimant can file a single refund form claiming refunds for one or more fuel types. Thus, one refund form can show up as one, two or three claims in the Accounts Payable System database depending on the number of fuel types on the refund form.

In order to run cross checks, it was decided to base the sampling unit on the individual or entity filing the claims so that all claims from that individual could be collectively investigated. For each tax identification number, all claims belonging to that number during the three-year period, for the respective category, were selected for review.

From the Accounts Payable System database, agricultural claims comprised over 22,000 claims, and PTO and reefers accounted for less than 1,000 claims apiece. Stratified random sampling was used to ensure that at least 40 unique tax identification numbers were reviewed from both PTO and reefer claims. To reach the target sample size of 500 total refund claims, 85 unique claimants were analyzed in the agriculture category.

Claims were sorted into the categories of agricultural, PTO, and reefer using the occupational code in the Accounts Payable System database. This code was not intended to be used for this purpose, and thus some claims were misclassified in the analysis. As a result some claims were deleted and others added after the random sample was selected

With the difference between claims and forms in mind, the data presented throughout this chapter will reflect errors located on the forms. Because a single error could affect multiple claims, error proportions were based on forms rather than claims. Nonetheless, the proportions are likely representative of the entire population of refund forms or claims.

The sample size by number of individuals, the number of claims and number of refund forms are summarized in Table 16. The EOE discussed in this chapter is in terms of refund forms.

Table 16: Refund Sample Summary

Refund Type	Individuals	Claims	Refunds
Agriculture	85	327	213
Power Take-Off	40	152	145
Refrigerator	40	197	197
Total	165	675	555

EOE within a refund form was found by research staff in four ways. The first way was by compiling errors identified by the MDT refund staff and corrected on the form. The refund staff completes an initial review on each refund form. Based on that review, the staff will accept the refund form as is, make corrections and process the refund, or reject the refund. The second way was by an audit. A sample of refund forms are selected for audit and reviewed in more detail by MDT audit staff. The audit documentation was not reviewed by research staff, only the summary information provided with the refund form. The third way EOE was found on a refund form was by checks made by research staff. The research database automatically checked for math errors once researchers entered information from the refund form. Research staff also looked for specific errors based on the knowledge gathered from the literature review and state interviews. The final or fourth way EOE was found was by performing cross checks after all refund forms were entered. Cross checking included identifying suspicious receipts that had identical values and individual purchases for reefers that were over 50 gallons.

5.2. Error Overview

The sample was stratified by the three refund types investigated: agricultural, power take-off units (PTO), and refrigeration units (Reefer). For each type, more than 25 percent of the forms had some sort of error (Table 17). Nearly 85 percent of these errors had already been detected and corrected by MDT. By type, 87 percent of agricultural refund errors, 98 percent of PTO refund errors and 73 percent of reefer refund errors had already been detected by MDT. Based on this sample, bounds were extrapolated on the error rates expected for the entire population of refund forms at a 95 percent confidence interval. These error rates are reported at the bottom of Table 17. For example, it can be stated with 95 percent confidence that the error rate on all agricultural refunds is between 19.6 and 31.1 percent.

Table 17: Summary of Errors Found

	Agricultural	PTO	Reefer
Claims Examined	327	152	197
Forms Examined	213	145	197
Forms with Errors	53	46	59
Forms with Multiple Errors	8	1	12
Forms with Errors Found by MDT	46	45	43
Percent of Sampled Forms with Errors	24.9%	31.7%	29.9%
95% Confidence Interval of Errors	19.6%–31.1%	24.7%–39.7%	24.0%–36.7%

5.3. Errors in Agricultural Refund Forms

For agriculture, 12 types of errors were identified including math errors, missing original invoices, using the incorrect standard deduction, additional purchases that were not listed on the form, placing the fuel amount in the incorrect fuel type column, discrepancies between fuel quantities reported on the claim form and on the original invoice, receipts that were missing details, claiming tax refunds for untaxed dyed fuel, including the same receipt twice in two different submittals, submitting fuel that was purchased outside of Montana, submitting receipts

with dates beyond the allowable claim period and including receipts for purchases that were ineligible for refund. Each of these is described below.

Math: On some forms, the claimant introduced a math error. The math error could be attributed to addition, subtraction, multiplication, division, or rounding of the value on the form. For the agriculture form, the two most common math errors were an incorrect summation at the bottom of the fuel quantity listing and an incorrect multiplication on the Schedule A worksheet.

Original Invoices: Agricultural claims require that the original receipts be submitted to MDT with the refund form. If an original invoice has been lost, the claimant must submit a notarized affidavit signed by the claimant and the original retailer with all of the original invoice information. If the claimant did not include the original receipts or attached a photocopy of the original receipts, then an error was declared by the research team. Some claims were missing a single invoice; for example one claim for a $165.95 refund was reduced by MDT to $153.46 because of one missing receipt. Another claim had three missing receipts, which resulted in the claim being reduced from $217.34 to $165.12.

Standard Deduction: Up to 60 percent of fuel taxes paid by agricultural operations is refunded. This percentage is termed the standard deduction on the agricultural refund form. The percent refunded is based on the ratio of the claimant's gross earned farm income to the total gross earned income. For a few claims, claimants had used the incorrect standard deduction when calculating their final refund. In one example, the claimant used a 60 percent standard deduction to calculate a refund of $235.91, but he or she should have used 40 percent because the claimant's ratio of gross earned farm income to total gross earned income was only 36 percent. In this case, the standard deduction was corrected by MDT, reducing the refund to $157.27. One of the five cases identified went the other way, where the claimant used a standard deduction that was too low.

Additional Purchases: An additional purchases error occurs when a claimant attaches receipts that would support an additional refund but does not claim these fuel purchases. In other words, the preparer or claimant forgets to list the fuel purchase on the fuel listing worksheet, but included all the documentation.

In one instance the claimant submitted a return for 640 gallons of diesel fuel resulting in a refund of $106.56. The receipts attached to this return included an additional 310 gallons of diesel fuel that were not listed on the refund form. For this example MDT did not catch the error, which would have resulted in an additional $51.62 refund.

Incorrect Column: This category of error focuses on the fuel listing worksheet. For this error, the claimant would enter the fuel purchase quantity into the incorrect column. An example of this occurred when a claimant entered a diesel purchase in the gasoline column. MDT discovered this error and increased the claimant's refund by $1.30 to $422.28.

Incorrect Quantity: Another error involves the claimant entering the incorrect quantity of fuel listed on the receipt. This type of error could be construed as fraud if the purchase were inflated by a large amount. The examples found were small errors affecting refund amounts by less than five dollars. For one example, a diesel listing of 132.8 gallons was actually 131.8 gallons on the receipt.

Receipt Details: The receipt details error refers to a receipt given to the claimant that lacks sufficient detail for the refund to be processed. There are eight required items to be listed on the

sales invoice (name and address of seller; name of purchaser; date of delivery or purchase; fuel type; quantity of fuel purchased; either the price per gallon or total sale amount; vehicle unit number or identification of the bulk tank or equipment unless fueled by Keylock/Cardtrol; and evidence indicating that tax has been paid on the purchase). One instance of a receipt details error discovered by the research team involved a submission with 11 invoices missing the name of the purchaser. MDT corrected this and other types of errors on this form. Because of the multiple errors, the impact of the receipt details error could not be separated.

Dyed Diesel: Dyed diesel is not taxed so purchases are not eligible for a refund. Thus, MDT should deny a dyed diesel receipt and the refund reduced accordingly. In one instance, MDT did catch the error of 197 gallons of dyed diesel included in a refund form. However, this refund form had a total diesel request of over 10,600 clear gallons and 87 receipts for both gasoline and diesel. Thus, this scenario could be an unintentional error rather than intentional fraud.

Repeat Receipts: The research team found one claim that included a receipt that was already used in a previous claim by the same person. The individual submitted a claim on 6/15/07 with only one receipt for 232.6 gallons of gasoline resulting in a claim of $37.68. The same person submitted another claim with two receipts on 12/31/07. One of these two receipts was a repeat of the 232.6 gallon receipt already submitted. The repeated receipt was actually a carbon copy of the original, but was hand stamped “original.”

Outside Montana: The Montana fuel tax refunds should apply only to those purchases made within Montana. However, EOE results when claimants purchase fuel outside of Montana, pay the other state’s tax, and then claim the fuel on their Montana fuel refund form. One example of this had Cardtrol statements showing some individual purchases in other states: 13.1 gallons of gasoline were purchased in Walla Walla, Washington, 6.8 gallons in Yakima, Washington, 7.0 gallons in Pullman, Washington, and 5.8 gallons in Sandpoint, Idaho. Some of the individual purchases listed did not show a city or state but retailer code. MDT staff helped check these and found additional purchases outside of Montana.

Beyond Claim Period: One of the requirements of the current refund process is that fuel purchase dates be within 36 months of when the refund claim is filed (as indicated by the postmark date of the refund request). Thus, MDT should deny a receipt included with a refund form that is more than three years old. In one instance, a refund form was postmarked on December 19, 2008. However, receipts for 404 gallons and 213 gallons of diesel were from November 30 and December 15, 2005, respectively. Had MDT denied these receipts, the claimant’s refund would have been decreased by $102.73.

Ineligible Receipt: One refund form in the sample was audited by MDT and 207.06 gallons of diesel were found to be ineligible for a refund. The fuel was purchased from a gas station using a method other than Keylock or Cardtrol. For agricultural refunds the fuel must be purchased either in bulk or by Keylock/Cardtrol. Regular gas station purchases are not eligible unless the fuel is placed in a bulk container and a bulk invoice is provided.

The numbers for each error type found are shown in Table 18. Some forms had several types of errors, which made it difficult to separate out the impacts of individual error types for these forms. Forms with multiple errors are listed in their own category. Note that all forms with receipt detail errors had multiple errors and are included in the multiple category.

The average amount of the error is also calculated. A positive value indicates that the erroneous refund value is higher than the accurate value. If a positive error is corrected the refund amount is reduced resulting in a lower amount given by MDT. A negative average error means that when/if the error is corrected the claimant would receive a higher refund. Because the sample of refund forms reviewed was a random sample, the percentage of errors for all refunds can be estimated. Note that errors found by MDT audit likely have a higher percentage since only a small portion of the forms in the sample were audited.

As noted previously, MDT found and had already corrected 87 percent of the errors this research detected. The errors MDT already found account for 97 percent of the fiscal impact. The potential financial impact of correcting the errors found by MDT is extrapolated to all refunds and estimated to be $74,695 per year. The amount of errors not found by MDT is estimated to be $2,630.

Table 18: Agricultural Refund Errors Summary

	Total Errors in Sample		Found by MDT			Not Found by MDT		
Error Type	No.	%	No.	Avg. Error	Fiscal Impact	No.	Avg. Error	Fiscal Impact
Multiple	8	3.8%	7	$330.08	$52,791.48	1	$0.67	$15.31
Additional purchases	1	0.5%	0	-	$0.00	1	-$51.62	-$1,179.42
Beyond claim period	1	0.5%	0	-	$0.00	1	$102.73	$2,347.19
Dyed diesel	2	0.9%	2	$289.56	$13,231.80	0	$0.00	$0.00
Incorrect column	5	2.3%	4	-$4.61	-$420.86	1	$0.05	$1.14
Incorrect quantity	4	1.9%	3	$2.47	$169.30	1	$0.09	$2.06
Math	21	9.9%	21	$2.99	$1,432.58	0	$0.00	$0.00
Ineligible Receipt	1	0.5%	1	$34.48	$787.80	0	$0.00	$0.00
Original Invoices	3	1.4%	3	$40.80	$2,796.61	0	$0.00	$0.00
Outside Montana	2	0.9%	1	$2.83	$64.66	1	$25.49	$582.40
Repeat Receipts	1	0.5%	0	-	$0.00	1	$37.68	$860.92
Standard deduction	4	1.9%	4	$42.03	$3,841.22	0	$0.00	$0.00
Total	53	24.9%	46		$74,694.60	7		$2,629.59

5.4. Errors in Power Take-Off Unit Refund Forms

Power take-off unit (PTO) claims had math, missing original invoice, overstated mileage and fuel economy errors. Only an audit by MDT or a very high or low number would make it possible to identify a form with overstated mileage or fuel economy errors. Each error type is described further below.

Math: For the PTO form, it is possible for the claimant to make an error when entering the requested refund amount for diesel and gasoline, but it is more likely that the claimant will make an error on Schedule C. Schedule C requires the claimant to list vehicle identification numbers (VIN), vehicle types, mileage and fuel usage. Then the claimant uses this information to calculate the miles driven on-road in Montana and the fuel used on-road in Montana. With this

the claimant then calculates the amount of fuel eligible for a refund based on the PTO fuel rate. With at least four calculations per unit or vehicle, it is plausible for the claimant to make an error on Schedule C.

Most cases of math errors seen on PTO forms resulted in small changes to the refund amount, often 50 cents or less. However, some forms had larger math errors. In one case, a claimant entered the off-road mileage on the form, but did not subtract the off-road mileage (which is claimed separately). This led to a $67.38 decrease in the refund from $192.03 to $124.65. With another form, the claimant had a calculation error on each line of Schedule C, resulting in an increase in the refund (a negative error) of $148.10 from $7,715.89 to $7,863.99. One form had a positive error of $10,324.84. This was an outlier as the next highest math error was $280.27.

Original Invoices: This error is the same as described when applied to agricultural refund forms. However, claimants filing PTO refund requests may also file IFTA and off-road refund requests, thus the original receipts may not be attached to the PTO request. The one error found of this type was one missing receipt on a form that also had math errors, which when combined resulted in a decreased refund from $1,830.58 to $1,829.80.

Overstate Mileage: For this error class, only an audit by MDT or a very high number would suggest that the claimant overstated the mileage on a PTO refund form or did not maintain proper records. The one instance of this error was discovered after an MDT audit. For this refund form, the company had claimed 8,070 miles driven within Montana, but documentation provided during the audit suggested that only 1,265 miles (approximately) were driven in Montana. This resulted in a decrease of the refund to $13.90 from $88.80.

Fuel Economy: The claimant is required to list the total miles and total gallons used for each vehicle. The fuel economy, or average miles per gallon (MPG), for each vehicle is calculated from these reported values. One error that was discovered by MDT was the use of a fleet-wide average MPG rather than a unit specific MPG. This error prompted MDT to obtain more accurate records from the company. For this error, though, the refund actually increased after the new MPG values were applied.

The numbers of errors found for each type described above are shown in Table 19 along with the fiscal impact of the errors as estimated by extrapolating the sample to a yearly total number of returns.

Table 19: PTO Error Summary

	Total Errors in Sample		Found by MDT			Not Found by MDT		
Error Type	**No.**	**%**	**No.**	**Avg. Error**	**Fiscal Impact**	**No.**	**Avg. Error**	**Fiscal Impact**
Multiple	1	0.7%	1	$0.78	$1.55	0	$0.00	$0.00
Fuel Economy	1	0.7%	1	-$52.49	-$104.06	0	$0.00	$0.00
Math	40	27.6%	39	$271.20	$20,968.42	1	-$183.80	-$364.38
*Overstate Mileage	4	2.8%	4	$64.89	$514.55	0	$0.00	$0.00
Total	46	31.7%	45		$21,380.45	1		-$364.38

* Can only be found from audit

5.5. Errors in Refrigeration Unit Refund Forms

Refrigeration unit (reefer) refund forms contained errors similar to those described above for agricultural and PTO claims, including math, dyed diesel, original invoices, receipt details, overstated mileage, additional purchases and incorrect quantity. Additional types of errors specific to reefers were exceeding fuel capacity and repeat entries.

Exceeded Fuel Capacity: This type of error is unique to reefer purchases, as the maximum holding capacity for reefer tanks is typically 50 gallons. Thus, purchases over 50 gallons, even though they were marked reefer, may have been pumped into the truck's main tank or used for another purpose. There are occasionally reefer tanks that are larger than 50 gallons, but they are rare enough that a purchase over 50 gallons could be flagged so staff can require the claimant show documentation of a larger tank. In the sample, a single purchase of 109 gallons was found through an MDT audit. MDT requested a listing of the equipment for which the company was claiming reefer refunds. The firm supplied the list of units and their maximum fuel capacity was 50 gallons. This led to MDT denying any fuel purchases over 50 gallons and resulted in a $30.26 deduction in the refund amount.

Repeated Entries: This form of error was only found once on reefer forms and involved the claimant entering a fuel purchase twice in a fuel listing. This error was found on a claim involving 156 fuel purchases. One of the purchases was listed at the bottom of one page and was also found at the top of the page immediately following.

Dyed Diesel: This category of error is similar to the error found in agricultural forms. For this error, claimants included dyed diesel receipts with the refund form. In one example, a claimant's request for $331.83 was reduced to $239.98, saving MDT $92.85.

Original Invoices: Also similar to the error found in agricultural forms, this error involves missing invoices or the claimant attaching photocopies of invoices. In one case where photocopies were submitted in place of originals, a claim was reduced from $212.13 to $190.98, saving MDT $21.15.

Receipt Details: One of the requirements for reefer claims is for the receipt to include a designation that the fuel was used for a reefer purchase. Most receipts examined either included a column for reefer with a "Y" mark for yes or included the word reefer next to the fuel. Thus, if the designation of fuel use was missing, this was considered a receipt detail error. The other types of receipt detail errors were similar to those described under the agriculture forms section. In one claim, the claimant included an invoice without a name or a reefer designation, resulting in a reduction of the requested $249.20 to $240.32. Another claim had receipts included that did not indicate that tax was paid on the fuel.

Additional Purchases: Some claimants included purchases of reefer fuel that were not listed on the refund form. In one case, an audit by MDT found that records from the claimant provided sufficient information to support refunding two additional purchases.

Incorrect Quantity: Some claims included an incorrect quantity in the list of fuel purchases for which the claimant was claiming a refund. The one claim in the first sample with this error listed the dollar amount of the purchase instead of the quantity of fuel.

Low Purchase Price: One issue that is specific to reefer refund forms is a low purchase price paid for fuel. Specifically, electronic returns may list fuel purchases without providing original

receipts and this is acceptable to MDT. However, some purchases are approximately 50 cents per gallon lower than other comparable purchases. As state and federal taxes total nearly 50 cents per gallon of diesel fuel, it is possible that these low-price purchases are of dyed fuel. The sample of refund forms examined only yielded a single refund form where MDT audited the form and found the fuel to be dyed. Other refund forms found by the research team with low purchase prices were flagged and counted separately.

Math: In the case of reefers claims, only a single math error was found. The sum of the total gallons for all the fuel purchased was 10 gallons less than the actual sum of the values listed. MDT missed this error that, if corrected, would have increased the claimant's refund by $2.78.

Outside Montana: As with agricultural refunds, reefer purchases outside Montana should not be claimed for refund. An error was located in the sample where MDT missed a receipt stamped Sheridan, WY, which the claimant included with the refund form.

About one-third of the forms had gallons rounded to the nearest number when the receipt had decimal portions of a gallon. Agricultural and PTO forms with gallons rounded were often corrected by refund processing staff and included in the math errors. This rounding was not corrected on reefer forms investigated by research staff.

The magnitude of different error types is shown in Table 20. Several error types were found on forms that had multiple errors, which made it difficult to separate out the financial impact by individual error type. These error types included repeated entries, purchases outside Montana and incorrect quantity. As mentioned above, the rounding errors were not included in the fiscal impact analysis as they represented 41 percent of forms investigated.

Table 20: Reefer Error Summary

	Total Errors in Sample		Found by MDT			Not Found by MDT		
Error Type	No.	%	No.	Avg. Error	Fiscal Impact	No.	Avg. Error	Fiscal Impact
Multiple	12	6.1%	9	$282.04	$3,693.74	3	$6.81	$29.74
Additional purchases	1	0.5%	1	-$19.49	-$28.36	0	-	-
Dyed diesel	12	6.1%	10	$31.12	$452.79	2	$12.56	$36.55
*Low Purchase price	1	0.5%	1	$3.43	$4.99	0	-	-
Math	1	0.5%	0	-	-	1	-$2.78	-$4.05
Original invoices	14	7.1%	14	$10.96	$223.22	0	-	-
Receipt details	8	4.1%	7	$6.17	$62.80	1	$4.72	$6.87
*Exc. fuel capacity	1	0.5%	1	$30.26	$44.03	0	-	-
flag low purch. price	4	2.0%	0	-	-	4	$20.00	$116.40
flag exc. fuel capacity	5	2.5%	0	-	-	5	$141.82	$1,031.87
Total	59	29.9%	43		$4,453.21	16		$1,217.39

* Can only be found from audit

5.6. Error Summary

Errors were found in one of four ways: (1) they were previously caught and corrected by MDT refund processing staff, (2) they were found through an MDT audit, (3) research staff found them during their initial review, or (4) they were found through automated checks utilizing the research database. Research staff members were looking for specific types of errors such as claims for dyed fuel purchases. Entering the sample into a research database helped with finding a few other errors such as math errors or cross-referencing to find matching receipts submitted twice. However, there are likely some errors that the research team did not catch. Although this provides a good estimate of EOE, it could be higher, particularly if there are types of errors that were not targeted by research staff. Also the reader should keep in mind that the fiscal impact estimate is based on extrapolating a sample of refund forms reviewed to all refunds that MDT pays.

The results in this chapter show that EOE exists in MDT's fuel tax refund process, but is much smaller than the millions of dollars of EOE discussed in the literature (see section 2.3). Existing MDT refund processing and auditing activities are catching most of the EOE that was found by this study. The success of current MDT efforts is also indicated by its internal tracking of the value of errors caught (presented in Table 21).

Table 21: Magnitude of Errors Found by MDT

Year	Net Error Value
2007	$69,571
2008	$57,694
2009	$58,285
Average	$61,850

6. LEGISLATIVE AND OTHER RECOMMENDATIONS

This chapter provides suggested changes MDT could make to the fuel tax refund process that would potentially reduce EOE, reduce the application effort for claimants, reduce MDT's administrative effort, and/or improve equity of the tax burden. These recommendations, summarized in Table 22, are described in more detail below. This material is prefaced by an overview and analysis of fuel use in agricultural operations in the state, as many of the recommendations are based on how fuel is used (and refunds are claimed) in these operations. Each recommendation is then presented with a summary of its issues and impacts. Specific changes to the MCA are suggested, when appropriate, for each recommendation. Suggested additions to the existing MCA text are shown with an underline and suggested deletions are shown with strikethrough. Estimates are provided when possible and appropriate on changes in the number and/or amount of refunds that will result from implementing each recommendation. The chapter concludes with a summary of those recommendations deemed the highest priority.

Table 22: Summary of Recommendations

No.	Recommendation	Options	Potential Impacts
1	Only allow bulk fuel purchases to be claimed when using the agricultural refund form with the standard deduction.*	a. No Keylock/Cardtrol (K/C) b. K/C for only 10 mile radius c. K/C for only off-road vehicles	Reduce refund of K/C on-road use More bulk storage tanks
2	Do not allow diesel fuel purchases to be claimed when using the agricultural refund form with the standard deduction.*	a. Apply to everyone b. Only dyed diesel bulk tank owners	Reduce refunds for on-road use Reduced MDT processing effort
3	Eliminate the agricultural refund form with the standard deduction.*	No options	Reduce refunds for on-road use Increased claimant burden Increased equity
4	For agriculture, only allow a refund of fuel taxes for fuel used in unregistered vehicles.	a. Gasoline b. Diesel c. Gasoline and diesel	Reduced MDT processing
5	Limit the total gallons of fuel per year that can be claimed when using the agricultural refund form with the standard deduction.*	No options	Reduce refunds for on-road use Increase refund frequency
6	Replace existing documentation needed for agricultural refund claims with copies of IRS income tax forms used to claim a federal fuel tax credit.*	No options	Reduced claimant burden Reduce MDT processing Reduce refunds for on-road use
7	Eliminate or reduce the fuel tax refunds allowed for reefer units.	a. No refund b. 75% refund	Reduce MDT processing Reduce EOE Increase operator inconvenience
8	Track and study PTO use.	No options	Determined by further study
9	Limit fuel tax refund timeframe to one year from date of fuel purchase.	No options	Increase refund frequency Reduce EOE Different from IFTA/SU
10	Modify the refund forms.	a. Rounding instructions b. Auto-calculating c. Last revised date d. Farm size	Reduce EOE Reduce MDT processing Reduce claimaint burder
11	Develop an electronic database for tracking the fuel tax refund requests	No options	Development cost Increase MDT processing Reduce EOE Increased policy analysis capability
12	Increase the number of fuel tax refund audits.	No options	Reduce EOE Increase MDT audit staff burden
13	Continue public outreach and training	No options	Improved claimant's understanding

* Agricultural refunds would still be available through use of the off-road refund form.

6.1. Typical Agricultural Fuel Use

Some of the recommendations and their potential impacts are based on estimates of the types and amounts of fuel used in agricultural operations. This section provides information and discussion on typical fuel usage for agricultural operations.

Farmers and ranchers use fuel in the production of valuable crops and livestock. Production decisions vary with market and natural conditions; the amount of fuel used in the agricultural sector varies as a result. The type of operation also matters—some crops are more fuel-intensive than others. Fuel use is concentrated around planting and harvest times. Fuel use for planting in the late fall and spring is noticeably higher along with mid-summer harvest of winter-planted crops and later fall harvest of spring-planted crops. On-farm storage is used for many grain crops. Fuel is used to bring these crops to market throughout the fall and winter, typically over public roads.

Agricultural fuel is mostly used in trucks, tractors and combines off of the public roads and therefore eligible for tax-exemption. Gasoline is still used as a fuel on farms and is not available in a tax-free form. In contrast, dyed diesel fuel is less expensive than taxed diesel for an agricultural user for use off-road. As discussed in chapter 2, substantial penalties are imposed when dyed fuel is used for taxable purposes.

The nature of fuel use in agriculture varies to some extent with farm size, which further affects the nature of fuel tax refunds requested by this sector. There is considerable variation in the size of farms in Montana. Table 23 shows farm size data for the most recent years of the agricultural census.

Table 23: Number of Farms by Size in Montana

	Acreage of Farms					Total
	< 50	**50-179**	**180-499**	**500-999**	**> 1,000**	**Farms**
2002	6,489	4,497	3,964	2,770	10,150	27,870
2007	7,379	4,971	4,464	2,919	9,791	29,524

Source: USDA 2009

The table reflects some important realities. The number of farms is increasing. Of the total number of farms, small farms make up a substantial and growing portion. These are often called “hobby farms” and owners rarely derive significant income from agricultural operations. In contrast, a large portion of farms are larger than 1,000 acres. The large size means that operators rely heavily on mechanization, and therefore fuel. Also notice that there are 29,524 farms in Montana but, as mentioned in chapter 2, only 6,142 unique claimants submitted agricultural refund requests from 2007 to 2009. This leads to an estimate that fuel refund requests are received from 28 percent of farms in Montana. Many farms and ranches may not submit a refund form because they do not expect their fuel use to be eligible for a refund of the tax, or the documentation and submittal effort outweighs the benefit of receiving the refund. Another reason for not submitting a refund form is that a farm or ranch uses primarily dyed fuel.

Table 24 shows the typical proportion of fuel use by type. Other fuel types include liquid propane and other alternative fuels. Discounting the use of other fuels, which are not used widely

in Montana, it is estimated that 75 percent of agricultural activities depend on diesel fuel and 25 percent on gasoline.

Table 24: Estimated Farm Fuel Expenditure Percentages by Fuel Type, United States

	2007	2008	2009	Average
Diesel	60.7	61.6	58.2	60.2
Gasoline	20.7	18.8	19.6	19.7
Other	18.6	19.6	22.2	20.1

Source: USDA NASS 2009, and USDA NASS 2010

From the refund form sample it was found that an individual claimant, on average, submits documentation of fuel taxes paid on 757 gallons of clear diesel and 2,140 gallons of gasoline per year. As indicated in Table 25, claimants do not report the amount of dyed fuel used, although this could be the majority of the fuel used on a farm.

Table 25: Annual Fuel Use per Refund Claimant

Fuel Type	Gallons
Gasoline	2,140
Clear Diesel	757
Dyed Diesel	?

Fuel use and acreage have been estimated for the most prominent crops in Montana. Based on the information in Table 26, average fuel use is 1.04 gallons of gasoline per acre and 3.50 gallons of diesel per acre for off-road farming activities for the indicated crops. These are in harvested acres, which account for about half the acres of cropland according to the 2007 Ag Census.

Table 26: Estimated Fuel Use by Type in Montana for Wheat, Barley, and Sugar Beets

Year	Acres Farmed	Estimated Gasoline Used (gal)	Estimated Diesel Used (gal)
2006	6,003,550	6,350,690	21,264,605
2007	5,974,750	6,296,050	21,103,225
2008	6,436,200	6,648,360	22,404,120
2009	6,243,500	6,488,300	21,829,100

Source: USDA 2009 and USDA ERS 2010

The average farm size in Montana is 2,079 acres (USDA 2009). Using the fuel use rates per acre derived above, legitimate off-road fuel use for an average farm would be 2,160 gallons of gasoline and 7,270 gallons of diesel per year. This figure for gasoline agrees well with the average refund request of 2,140 gallons reported in Table 25. Relative to 7,270 total gallons of diesel used, the average refund implies that approximately 10 percent of this is clear diesel (i.e., the 757 gallons of clear diesel submitted for refunds each year as reported in Table 25), and the remaining 90 percent is the amount of dyed diesel that is used.

Some diesel-powered vehicles are not eligible for dyed diesel fuel use. For example, grain hauled to elevators from on-farm storage typically uses public roads. However, the same vehicles are likely used to haul grain to on-farm storage, which may not require use of a public road. Mixing the fuels is not practical. In the case of diesel-powered haul trucks, farmers are eligible for refund claims on off-road miles driven, since dyed fuel is not a viable option. All gasoline-powered vehicles must use taxed fuel since gasoline does not have a dyed option. Gasoline-powered haul trucks are typically older and smaller parts of the fleet.

Larger and more modern tractors are exclusively diesel-powered. Gasoline-powered tractors are disproportionately smaller and older. Such tractors are more attractive for smaller agricultural operations. The upshot of these fuel options is that agricultural use is already skewed towards diesel use and largely appropriate for dyed diesel. This is reflected in Table 27. The information in Table 27 was created by the authors with input from Montana Agricultural Extension staff.

Table 27: Common Farm Equipment in Montana by Fuel Type

Equipment	Diesel	Gasoline	Exempt-Use
Tractor			
Tillage	Y	N	Y
Loader	Y	Few	Y
Utility	Some	Y	Y
Combine/ Windrower	Y	Very few	Y
Pickup	Y	Y	Some
4-wheeler	N	Y	Some
Haul Truck	Y	Few	Some
Stationary Power	Y	Y	Y
Spray Rigs	Y	Y	Y
Other	Y	Y	Y

To further understand diesel fuel use, the amounts of gasoline and diesel fuel purchased annually by individual agricultural operations, as determined from an analysis of the refund forms, were compared. These calculated purchases are shown in Figures 13 and 14 for gasoline and diesel fuel, respectively. Notice that for gasoline (Figure 13) there is a spread distribution of the amount of fuel used that is comparable to the distribution of farm sizes presented previously in Table 23.

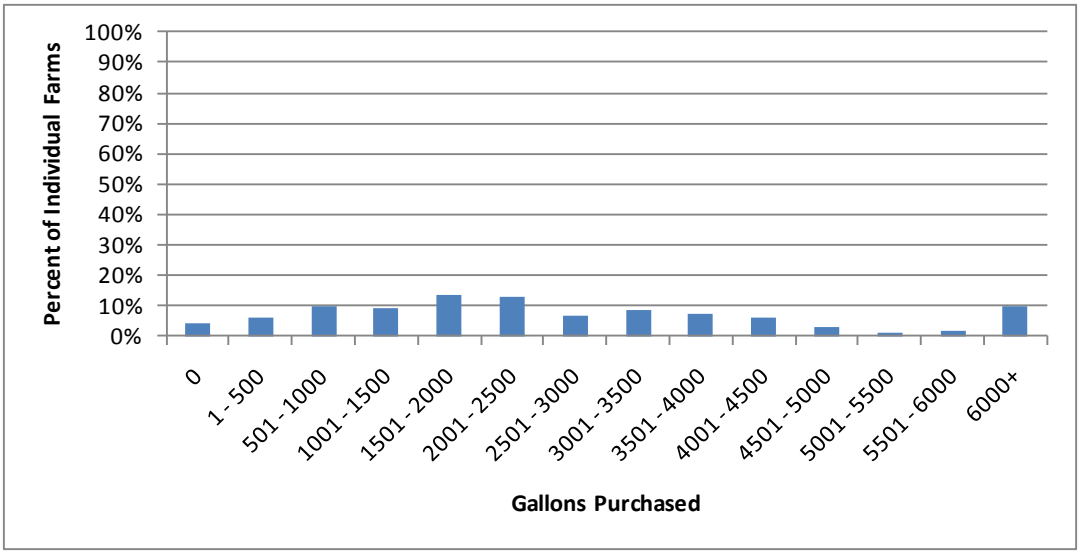

Figure 13: Proportion of Farms by the Amount of Gasoline Purchased per Year

One would expect diesel use to have a similar distributional shape but with higher values because farms use an average of three times as much diesel as gasoline. The actual distribution of diesel is unexpected (Figure 14). Sixty-nine percent of agricultural operations report using less than a thousand gallons per year of clear diesel, which may be associated with household on-road travel or hauling produce on public roads. A typical rural household uses 1,469 gallons of fuel per year (EIA DOE 2005). This is a strong indication that many farmers are using dyed diesel where they can (e.g., tractors, stationary equipment), and requesting a refund for clear diesel used in vehicles that run partially or wholly on public roads.

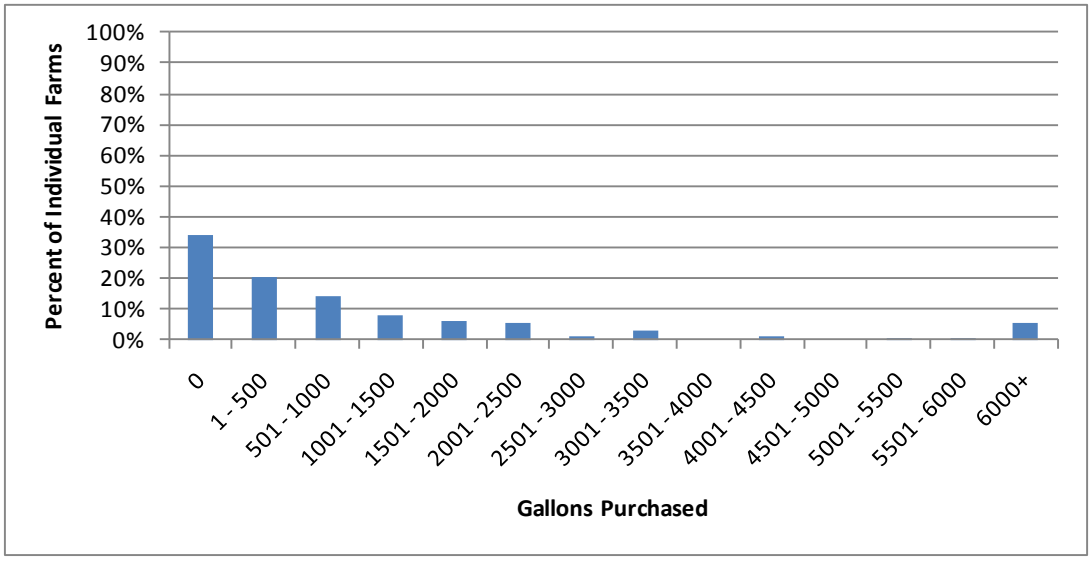

Figure 14: Proportion of Farms by the Amount of Taxed Diesel Purchased per Year

6.2. Recommendation 1: Allow Only Bulk Purchases for Agricultural Use

In light of the agricultural fuel use patterns described in section 6.1, the MCA could be changed to allow only fuel delivered in bulk to be eligible for agricultural refunds. Note that refund policies in other states (chapter 3) reveal that Wyoming only allows bulk purchases for agriculture use, while in Nevada this is true for gasoline but not diesel. This recommendation impacts the eligibility of all non-bulk purchases currently refunded for agricultural use, which represent 52 percent of gasoline and 57 percent of diesel agricultural purchases by number of transactions. The total gallons of non-bulk purchases only accounts for 15 and 27 percent of the total gallons refunded for gasoline and diesel, respectively, as shown in Table 28. The options for implementing this recommendation would make some or all of the non-bulk purchases ineligible for refund. The potential annual fiscal impact in terms of reduced refunds paid by MDT is $314,000 for gasoline and $229,000 for diesel.

Table 28: Potential Impacts of Making Only Bulk Purchases Eligible for Refunds

	Gallons Not Eligible		Purchases Not Eligible	
	Gasoline	**Diesel**	**Gasoline**	**Diesel**
Proportion of Current Claims	15%	27%	52%	57%
Potential Fiscal Impact	$314,000	$229,000		

In regard to allowed purchases the current state statute reads, “an applicant whose use qualifies as agricultural use may apply for a refund of the applicable tax on the gallons of gasoline as indicated by bulk delivery invoices or by evidence of Keylock or Cardtrol purchases as an estimate of off-roadway use” (MCA 15-70-223). The same statement is also made for special fuels (i.e., diesel) in MCA 15-70-362. The non-bulk purchases shown in Table 28 are Keylock or Cardtrol purchases, which are defined as “a unique device intended to allow access to a special fuel dealer's unattended pump or dispensing unit for the purpose of delivery of special fuel to an authorized user of the unique device” (MCA 15-70-301). This definition is for special fuels, which includes diesel. A definition does not exist in the MCA for gasoline.

Essentially all pumps are now unattended pumps. The challenge is that with a Keylock or Cardtrol account an individual can purchase fuel at numerous gas stations around the country for any use. Keylock and Cardtrol, initially intended to be utilized as a farmer would use a bulk tank, are being used for gas station purchases. The primary reason for this recommendation is to limit the agricultural refund with the standard deduction to only bulk fuel purchases, thus reducing the claims for fuel purchased through the Keylock and Cardtrol systems that are used for personal travel. Three options are suggested below to address this issue.

The first option would be to limit agricultural refunds to only bulk purchases and eliminate the ability to use Cardtrol or Keylock. The proposed change to the MCA is shown below with additions underlined and deletions interlined.

> MCA 15-70-223
>
> An applicant whose use qualifies as agricultural use may apply for a refund of the applicable tax on the gallons of gasoline as indicated by bulk delivery invoices ~~or by evidence of keylock or cardtrol purchases~~ as an estimate of off-roadway use.

MCA 15-70-362

An applicant whose use qualifies as agricultural use may apply for a refund of the applicable tax on the gallons of special fuel as indicated by bulk delivery invoices ~~or by evidence of keylock or cardtrol purchases~~ as an estimate of off-roadway use.

Implementing the first option may encourage more farmers and ranchers to install bulk fuel tanks, which could result in secondary environmental and economic impacts. Keylock and Cardtrol were initially intended to replace an individual's need for a bulk tank. Instead of eliminating Keylock and Cardtrol completely it could be restricted in order to more fully limit its use to the intended purpose. As discussed in chapter 5, one Cardtrol purchase was made in the state of Washington and submitted for an agricultural refund in Montana. Eligibility for refund could be limited to some distance from the location of the claimant's agricultural operations.

MCA 15-70-223

An applicant whose use qualifies as agricultural use may apply for a refund of the applicable tax on the gallons of gasoline as indicated by bulk delivery invoices or by evidence of keylock or cardtrol purchases, made within a 10-mile radius from the farm or ranch, as an estimate of off-roadway use.

MCA 15-70-362

An applicant whose use qualifies as agricultural use may apply for a refund of the applicable tax on the gallons of special fuel as indicated by bulk delivery invoices or by evidence of keylock or cardtrol purchases, made within a 10-mile radius from the farm or ranch, as an estimate of off-roadway use.

Another way to restrict Keylock and Cardtrol purchases would be to explicitly exclude for agricultural refund purposes fuel purchased for vehicles that are not used in off-road agricultural operations. In this way fuel purchased for a personal vehicle that is used entirely on public roads could not be included on the agricultural refund form with the standard deduction.

MCA 15-70-201

(5) "Cardtrol" or "keylock" means a unique device intended to allow access to a gasoline dealer's unattended pump or dispensing unit for the purpose of delivery of gasoline to an authorized user of the unique device for use in equipment that is partially or wholly used in off-road commercial activity.

[remaining definitions to be renumbered accordingly]

MCA 15-70-301

(6) "Cardtrol" or "keylock" means a unique device intended to allow access to a special fuel dealer's unattended pump or dispensing unit for the purpose of delivery of special fuel to an authorized user of the unique device for use in equipment that is partially or wholly used in off-road commercial activity.

Even if none of the options under this recommendation are implemented, a definition for Cardtrol and Keylock should be added for gasoline since it does not currently exist in the statutes.

6.3. Recommendation 2: Eliminate Agricultural Standard Deduction for Clear Diesel

The agricultural refund form with the standard deduction could be eliminated for special fuels, including diesel. Diesel tax refunds for agricultural operations could still be obtained through the off-road refund form, which, due to its associated documentation requirements, would mean more record keeping for the claimant.

For clear diesel to be eligible for a refund, Montana currently allows either a standard deduction for all fuel taxes paid on fuel used in agriculture (on and off-road) using the agricultural refund form, or a calculated refund based on documented off-road use using the off-road refund form. The standard deduction applied to all fuel purchased is a percentage ranging from 40 to 60 percent, which is intended to account for the proportion of the fuel used for on-road purposes. The off-road option is more accurate, but requires more recordkeeping and accounting to determine which fuel is used off-road.

Of the nine states investigated only Idaho allows a standard deduction for refunding the diesel fuel tax for agricultural use. However, Idaho does not allow the use of this standard deduction if the applicant has a bulk storage tank for dyed diesel.

Relative to the specific situation in Montana, from the Accounts Payable System database, 47 percent of individuals who request agricultural refunds claim them for gasoline but not for diesel. This indicates that these individuals use only dyed diesel for their agricultural operations. The use of dyed diesel is further indicated by the values previously shown in Table 25 where clear diesel use is one-third of the gasoline use for the average agricultural claimant. Data in Table 24 and Table 26 indicate that total diesel use is three times the gasoline use. These values indicate that farmers are using dyed fuel for a majority of their diesel needs. The remaining clear diesel use submitted for refund could be mostly on-road use. One could assume that most agricultural operations already use dyed diesel where they can in order to realize the increased tax benefit it offers (i.e., paying no state fuel tax) compared to receiving only a partial refund of taxes paid on clear diesel.

This recommendation would eliminate fuel tax refunds MDT is currently making that could be from fuel used for on-road travel. If this recommendation were implemented, claimants currently using clear diesel in agricultural operations would switch to dyed fuel, request a refund with the off-road form, or not claim a refund. Currently, MDT refunds about $847,000 in fuel taxes paid on clear diesel used in agriculture per year that is claimed using the agricultural form with the standard deduction. It is difficult to predict how much of this fuel use would switch to dyed fuel or still be refunded through the off-road refund form. Some agricultural claimants currently have a large incentive to keep their produce hauling operations in house as the fuel used could be submitted for a 60 percent refund of the state fuel tax. This recommendation could have broader economic impacts due to the removal of this incentive.

If this recommendation is implemented the estimated reduction in the total number of refund forms would be minimal. The number of gasoline forms would remain the same as gasoline remains refundable under this recommendation. The reduction would be limited to the 1 to 2

percent of forms that are for diesel fuel only. Given that MDT is currently catching an estimated $74,695 in EOE in agricultural refunds, this saved staff time could be reallocated to target other improvements to the refund process.

There are two proposed options for this recommendation. First, the agricultural refund form with the standard deduction for clear diesel could be eliminated by repealing all of MCA 15-70-362. A less severe option would be to prohibit the use of the agricultural refund form with the standard deduction by claimants who have bulk storage for dyed diesel (similar to Idaho's policy). The suggested changes to the MCA are shown for this second option.

> MCA 15-70-362
>
> Estimate allowed for agricultural use—seller's signed statement acceptable on keylock or cardtrol purchases. (1) An applicant whose use qualifies as agricultural use and does not have a bulk storage tank for dyed diesel may apply for a refund of the applicable tax on the gallons of special fuel as indicated by bulk delivery invoices or by evidence of keylock or cardtrol purchases as an estimate of off-roadway use.

6.4. Recommendation 3: Eliminate Agricultural Standard Deduction for All Fuels

The agricultural refund form with the standard deduction could be eliminated for diesel and gasoline fuel. Taxes paid on gasoline and diesel used in agricultural operations would only be eligible for refunds through the off-road refund form. This would result in a more accurate estimate of off-road fuel eligible for refund through the use of mileage logs for vehicles used partially on-road and fuel-use logs for all equipment. This would require the repeal of MCA 15-70-223 and MCA 15-70-362. Agricultural refunds for gasoline amount to $2,095,000 annually. The impact of this change is difficult to quantify, since claimants could still request refunds through the off-road refund form. It would increase the documentation burden of claimants, but would likely lead to a more just refund amount.

6.5. Recommendation 4: For Agriculture Allow Only Unregistered Vehicle Fuel Use

Refunds for fuel taxes could be limited for fuel used in agricultural operations to only off-road equipment. For vehicles such as trucks that can be used in agricultural operations but are registered for on-road use, the fuel would not be eligible for a refund. This limitation could be applied to gasoline, diesel, or both. A definition similar to the one used by North Dakota in its implementation of this concept could be added to MCA 15-70-201 (for gasoline) and MCA 15-70-301 (for diesel) for licensed motor vehicles.

> MCA 15-70-201 and MCA 15-70-301
>
> Licensed motor vehicle means any motor vehicle licensed for operation upon public roads or highway, but does not include a vehicle with a permanently mounted manure spreader or stack moving unit.

In addition to the definition, this recommendation would require the repeal of the codes allowing for the agricultural standard deduction, MCA 15-70-223 and MCA 15-70-362. Additionally the codes for off-road use would need to be modified for agricultural use:

MCA 15-70-222

(5) Any person who operates a licensed motor vehicle on and off the public roads for commercial purposes, other than agriculture, may claim a refund of the state license tax on the gasoline used to operate the vehicle on roads or property in private ownership…

(7) The state license tax on gasoline used in licensed motor vehicles for agricultural operations is not eligible for a refund.

MCA 15-70-361

(4) Any person who operates a licensed motor vehicle on and off the public roads for commercial purposes, other than agriculture, may claim refund of the state license tax on the special fuel used to operate the vehicle on roads or property in private ownership if the person has maintained the following records:

(7) The state license tax on special fuels used in licensed motor vehicles for agricultural operations is not eligible for a refund.

Consistent with the idea that fuel tax refunds are supposed to be for taxed fuel used for off road purposes, this change would completely eliminate paying such refunds for on-road operation of licensed vehicles engage in agricultural operations. However, as implemented by North Dakota and presented here, this change also precludes payment of such refunds when/if these vehicles are used off-road. The impact of this change on the amount MDT refunds is difficult to quantify without knowledge of the agricultural use of registered vehicles. Because of the potential shift to dyed diesel and the elimination of refunds for fuel used in on-road vehicles (claimed either through mileage logs of the off-road form or the standard deduction of the agricultural form) the size and number of refund requests would likely be reduced. A benefit of this recommendation would be a reduction in the paperwork burden for the claimant and the processing burden for MDT. This recommendation restricts refunds for agricultural operations more than other commercial sectors. In the interest of fairness, this recommendation could be expanded to eliminate refunds for licensed vehicles across all commercial sectors.

6.6. Recommendation 5: Cap the Standard Deduction for Agriculture

Aside from reducing the standard deduction to zero (see Recommendations 2-4), a limit could be placed on the amount of fuel that would be allowed for a standard deduction refund. Implementing a limit or cap on the total gallons allowed would reduce the refunds for those applicants who include large amounts of fuel used for on-road purposes. The standard deduction for agricultural refunds in Montana can be as much as 60 percent. This percentage is reduced if the ratio of gross earned farm income to gross earned income for the individual is below 50 percent. The assumption behind this is that for typical agricultural operations 60 percent of the fuel used is for off-road purposes and 40 percent is used on public roadways.

As discussed previously, the average yearly off-road fuel use per acre is 1.04 gallons of gasoline and 3.50 gallons of diesel. Extrapolating from the refund claim data, one might assume that typically 10 percent of the diesel fuel used (0.35 gallons per acre) would be clear while the rest would be dyed.

Claimants using the agricultural refund form with the standard deduction could be required to submit the acres farmed with their refund application, then limit the total fuel submitted for refund to 1.04 gallons of gasoline per acre and 0.35 gallons of diesel per acre. Acres could include leased land. If the claimant could document that they do not have access to dyed fuel, they could use the higher rate of 3.50 gallons of diesel per acre.

Since these fuel consumption rates are based on annual usage, claimants would be required to track fuel purchases for each calendar year. The following are suggested changes to MCA to implement this policy:

> MCA 15-70-223
>
> (6) If the standard deductions under subsection (3) are used, the total gallons of gasoline an applicant can request for a refund of the fuel license tax, before applying the proportions in subsection (3), are limited to 1.1 times the number of acres used for the agricultural operation for any calendar year.
>
> ~~(6)~~ (7) An applicant…
>
> MCA 15-70-362
>
> (5) If the standard deductions under subsection (2) are used, the total gallons of special fuel an applicant can request for a refund of the fuel license tax, before applying the proportions in subsection (2), are limited to the following amounts for any calendar year:
>
> (a) for special fuel use 0.35 gallons times the number of acres used for the agricultural operation if the applicant has access to dyed diesel;
>
> (b) for special fuel use 3.5 gallons times the number of acres used for the agricultural operation if documentation can be provided that the applicant does not have reasonable access to dyed diesel for use in the agricultural operation.
>
> ~~(5)~~ (6) An applicant…

Note that the average use values may differ based on the types of crops/livestock and the size of the farm. Smaller farms are typically less efficient and use more fuel per acre for off-road activities, but they also use less total fuel so the personal travel and other on-road fuel use will be a higher proportion of their total fuel use. The ability for the claimant to still utilize the off-road refund form allows those who use higher rates to get their fair refund. This recommendation would reduce the amount of on-road fuel use that was refunded as part of the standard deduction. Without knowing farm sizes of current applicants, it is difficult to calculate the potential financial impact.

6.7. Recommendation 6: Augment the Agricultural Refund Form Documentation with IRS Forms

If an individual or corporation has legitimate off-road fuel use in farming operations they can obtain a tax credit on their income tax return for the federal fuel taxes paid on gasoline or diesel. For diesel, a refund can be obtained instead of a tax credit. Claimants could seek a refund by submitting copies of the federal forms to MDT as documentation for the agricultural refund

form. Because the federal refund only allows off-road use, the standard deduction would be changed to 100 percent. The federal forms the individual uses to report gallons used for off-road farming operations are:

- for gasoline IRS Form 4136 Line 1b column c, and
- for diesel either
    - Form 4136 line 3b column c,
    - Form 8849 Schedule 1 line 3b column c, or
    - Form 720 Schedule C line 3d in the gallons column.

In each of these cases fuel used for personal use or on public roads is not eligible. Documentation to justify the claim must be maintained by the individual for three years. There is some flexibility on the documentation but it must indicate gallons purchased, dates purchased, names and addresses of suppliers and gallons used.

One of the downsides of eliminating the agricultural refund form with the standard deduction (Recommendation 3) is that the claimant would have additional documentation and calculation burden in submitting the off-road claim. For this recommendation the claimant would not have an additional burden if he or she is requesting a refund or credit for the federal tax on their federal income tax return.

The claimant would be required to submit a simple MDT agricultural refund form, a copy of the IRS form that shows the gallons used (from the previous list), and fuel purchase invoices. Requiring the individual to submit invoices would accomplish two things. First, it would allow MDT to run some of the same checks for errors that it currently does. Additionally, there may be purchases that are eligible for refund of federal tax but not Montana state tax, such as fuel purchased in another state.

This approach allows MDT to take advantage of the documentation requirements and enforcement efforts of the IRS to help ensure claims are fair and correct. It would not add a significant paperwork burden on claimants who claim the federal fuel tax credit or refund. Those who do not file income taxes would have to submit the off-road refund form. The following are suggested changes to MCA to implement this policy:

> MCA 15-70-201.
>
> (1) "Agricultural use" means use of gasoline by a person who earns income while engaging in the business of farming or ranching and who files farm income reports for tax purposes as required by the United States internal revenue service.
>
> MCA 15-70-223.
>
> (1) An applicant whose use qualifies as agricultural use may apply for a refund of the applicable tax on the gallons of gasoline as indicated by documentation required by the United States internal revenue service to obtain a refund or credit of federal fuel tax paid for gasoline used on a farm for farming purposes and bulk delivery invoices or by evidence of keylock or cardtrol purchases. ~~as an estimate of off-roadway use. To ensure that the applicant's use qualifies as agricultural use, the department of transportation may request from the department of revenue information on the ratio of the applicant's gross earned farm income to total gross~~

~~earned income, excluding unearned income, provided that the department of transportation gives notice to the applicant.~~

(2) For purposes of application for a refund under subsection (1), the department shall accept, as evidence of keylock or cardtrol purchases, a statement of the sale of gasoline with applicable tax that identifies the purchaser and that is signed by a licensed distributor.

(3) An applicant may apply for a refund of the applicable tax on gallons of gasoline as evidenced by the gallons of gasoline reported on IRS Form 4136 Line 1b column c and bulk delivery invoices or by evidence of keylock or cardtrol purchases. ~~according to the applicant's ratio of gross earned farm income to total gross earned income, excluding unearned income, as follows:~~

~~(a) if the ratio is 50% or more, the applicant may apply for a refund of 60% of the gasoline tax;~~

~~(b) if the ratio is between 40% and 49%, the applicant may apply for a refund of 50% of the gasoline tax;~~

~~(c) if the ratio is between 30% and 39%, the applicant may apply for a refund of 40% of the gasoline tax;~~

~~(d) if the ratio is less than 30%, the applicant is not eligible for a refund of the gasoline tax under this section.~~

~~(4) If the applicant's ratio in any of the 3 previous years on record is higher than the present year, the highest ratio must be used to calculate the eligible refund.~~

(4) All other documentation for justification of off-road farm use required by the United States internal revenue service shall be maintained by the applicant.

(5) If an invoice or evidence is either lost or destroyed, the purchaser may support the purchaser's claim for refund by submitting an affidavit relating the circumstances of the loss or destruction and by producing other evidence that may be required by the department of transportation.

(6) An applicant whose use does not qualify as agricultural use may not estimate and shall maintain records as required by 15-70-222.

MCA 15-70-301.

(1) "Agricultural use" means use of special fuel by a person who earns income while engaging in the business of farming or ranching and who files farm or income reports for tax purposes as required by the United States internal revenue service.

MCA 15-70-362.

(1) An applicant whose use qualifies as agricultural use may apply for a refund of the applicable tax on the gallons of special fuel as indicated by documentation required by the United States internal revenue service to obtain a refund or credit of federal fuel tax paid for special fuel used on a farm for farming purposes and bulk delivery invoices or by evidence of keylock or cardtrol purchases as an estimate of off-roadway use.

(2) An applicant may apply for a refund of the applicable tax on gallons of special fuel as evidenced by bulk delivery invoices or by evidence of keylock or cardtrol purchases and the gallons of special fuel reported on one of the following IRS Forms:

(a) Form 4136 line 3b column c,

(b) Form 8849 Schedule 1 line 3b column c, or

(c) Form 720 Schedule C line 3d in the gallons column. ~~according to the applicant's ratio of gross earned farm income to total gross earned income, excluding unearned income, as follows:~~

~~(a) if the ratio is 50% or more, the applicant may apply for a refund of 60% of the special fuel tax;~~

~~(b) if the ratio is between 40% and 49%, the applicant may apply for a refund of 50% of the special fuel tax;~~

~~(c) if the ratio is between 30% and 39%, the applicant may apply for a refund of 40% of the special fuel tax;~~

~~(d) if the ratio is less than 30%, the applicant is not eligible for a refund of the special fuel tax under this section.~~

~~(3) If the applicant's ratio in any of the 3 previous years on record is higher than the present year, the highest ratio must be used to calculate the eligible refund.~~

(3) All other documentation for justification of off-road farm use required by the United States internal revenue service shall be maintained by the applicant.

(4) If any invoice or evidence is either lost or destroyed, the purchaser may support the purchaser's claim for refund by submitting an affidavit relating the circumstances of the loss or destruction and by producing other evidence that may be required by the department of transportation.

(5) An applicant whose use does not qualify as agricultural use may not estimate and shall maintain records as required by 15-70-361.

6.8. Recommendation 7: Reduce or Eliminate Reefer Refunds

Reefer refunds could be eliminated. Currently, full refunds for taxes paid on fuel used in reefers are allowed by MDT for units that have a separate tank that is not connected to the vehicle engine. If the reefer unit is connected to the engine supply tank, it is considered a PTO and only

25 percent of the fuel tax is eligible for refund. Under this recommendation, operators of vehicles with reefer units would either use dyed diesel in a separate tank or pay tax on the clear diesel used. Note that Oregon does not allow reefer refunds even if there is a separate tank.

Impacts of acting on this recommendation include a reduction in MDT processing effort for reefer refunds, elimination of fraud associated with reefer refunds, and increased inconvenience for reefer operators as they can no longer receive a tax refund on clear diesel fuel used in their reefer tanks.

> MCA 15-70-356
>
> (1) A person who purchases and uses any special fuel on which the Montana special fuel license tax has been paid for operating stationary special fuel engines used off the public highways and streets or for any commercial use other than operating vehicles upon any of the public highways or streets of this state is allowed a refund of the amount of tax paid directly or indirectly on the special fuel used if the person has records, as provided in 15-70-323, to prove nontaxable use. <u>License tax on special fuel used to power refrigeration units with separate tanks is not allowed for refund.</u>

MDT refunded an average of $221,000 per year for reefer fuel use from 2007 to 2009. If those individuals who currently submit refund forms are able to use dyed fuel, fuel taxes collected by MDT would be reduced by the amount not refunded since dyed fuel is not taxed. It would eliminate the fraud in the reefer refund process which is estimated to be at least $5,670 per year. Note that the current MDT review and audit processes are catching $4,453 of this error. The primary benefit would be the reduction in administrative effort required by MDT to process reefer refunds.

A potential negative effect is that at low temperatures diesel fuel can turn into a non-flowing gel. Diesel fuel with certain additives can overcome this challenge; however, dyed fuel may not be available at certain gas stations in a low temperature additive form.

An alternative option for this recommendation would be to provide a disincentive for reefer users to use clear diesel and apply for the refund. Claimants could be allowed only a proportion of the taxes paid on clear diesel used in reefer tanks. Considering that the total reefer refunds are approximately $221,000 and it currently takes 0.25 full-time equivalent MDT staff persons to process these refunds, one could justify lowering the refund for use of clear diesel in a reefer unit to 75 percent of the taxes paid. This would mean a reduction of approximately $55,000 in refunds paid by MDT to offset the costs of the 0.25 full-time equivalent staff person dedicated to processing reefer refunds.

6.9. Recommendation 8: Further Study of PTO

In Montana PTO refunds amount to an average of $417,000 per year. Table 29 shows the dollars refunded for different PTO types based on the sample of refunds investigated (see chapter 5 for detail on the sample). Caution should be used when considering the values in Table 29 because of the small sample of 40 refund claimants from which these values were derived. For example, 87 percent of the refund dollars for the pneumatic tank trucks were to a single claimant. The Accounts Payable System database provides a more complete sample, but only specifically identifies “well drillers” and “ready mix concrete” for PTO refunds; the rest of the refund

requests have a general PTO designation in the occupation code. The percentages of refund dollars paid from the Accounts Payable System database are shown in parentheses for these two categories.

The percentage of the paid fuel taxes that is refunded in Montana depends on the type of vehicle and ranges from 7.5 percent to 80 percent (Table 29). The percentages used by other states range from 7.5 to 30 percent depending on the type of unit (Table 12) and are similar to Montana with the exception of well drilling rigs (Montana returns 80 percent). Nevada is the only state with a percentage specific to well drilling rigs, which is 30 percent. Montana could consider lowering the well drilling rig allowance to 30 percent. Even with this high percentage refunded for well drilling rigs, the amount of dollars refunded based on documentation available is calculated at less than $10,000 per year. Thus the financial impact of such a change would be small. Additionally, reducing an existing rate based on what one other state uses may not be adequate justification.

In light of the sparse information available on the characteristics of PTO refunds, it is recommended that they be further studied. First, the proportion of dollars refunded by PTO type should be tracked by one of two options. For PTO refunds the occupation code in the Accounts Payable System database could be better utilized by specifying the vehicle type from the 31 types listed in Table 29. Alternatively, a larger sample of PTO refunds could be reviewed to compile a more accurate picture than that provided in Table 29. If the proportions of individual types are small the financial impact may not warrant further study. For example, if concrete mixing trucks accounted for 10 percent of the PTO refunds (as the current data indicate), and further study could justify reducing the percent allowed from 30 to 20, this would have a financial impact of $13,900 less in refunds annually. This financial impact may not be worth the further study and effort needed to change Montana statutes. If, however, a single PTO type had a large share of the dollars refunded, a second study could be undertaken to investigate the actual fuel used by the PTO units on these vehicles.

Table 29: Percent Allowed and Refunded Dollars by PTO Vehicle Type

Vehicle Type	Percentage Allowed	Percent of Dollars Refunded
Water and Oil-well Drilling Rig	80	1.5% (2.4%)
Concrete Mixing/Concrete Pumping Truck	30	10.6% (7.9%)
Sanitation/Garbage Trucks/Septic Pumpers	30	2.0%
Sewer Cleaning/Jet Vactor	30	0%
Super Suckers	30	0%
Fire Trucks	30	0%
Mobile Cranes	30	0%
Line Trucks with Digger/Aerial Lift	25	0%
Refrigeration Trucks	25	0%
Sweeper Trucks (must be motor vehicle)	25	0%
Self Loaders/Boom Truck (logging truck)	20	1.5%
Truck with Hydraulic Winch	20	0%
Wrecker	20	0.5%
Semi-Wrecker	20	0.1%
Service Truck with Jack Hammer/Drill Crane	20	0%
Oil and Water Well Service Truck	20	0.1%
Bulk Feed Truck	20	0%
Dump Trailer Trucks	20	0%
Dump Trucks	20	7.6%
Hot Asphalt Distribution Trucks	20	0%
Leaf Truck	20	0.1%
Pneumatic Tank Trucks	20	42.2%
Salt Spreader on Dump Truck	20	0.1%
Seeder Truck	20	0.1%
Snow Plow	20	0.1%
Spray Trucks	20	0%
Tank Transport	20	16.8%
Tank Trucks	20	16.6%
Car Carrier with Hydraulic	10	0%
Carpet Cleaning Van	10	0%
All others with auxiliary engines under 15 hp	7.5	0%

6.10. Recommendation 9: Only Allow One Year from Fuel Purchase to Submit Refund

Montana could reduce the period of time applicants are allowed to apply for a refund from three years after the purchase down to 12 to 15 months, as is done in other states. This would reduce the potential for repeat claim errors. This could make processing and error checking of refunds easier as they would only contain one year's worth of fuel purchases. This could increase the number of refund applications processed each year as those applicants who previously submitted one claim every three years would submit them yearly. The total number of fuel purchases

reviewed would not increase. Although the number of claims might increase, each claim would be, on average, smaller.

Based on the Accounts Payable System database, applicants submit refund requests according to the frequencies shown in Table 30. This would have no impact on claimants already submitting forms at least once per year (59 percent of agriculture claimants, 52 percent of PTO claimants and 55 percent of reefer claimants). If those who submit forms less than once per year begin submitting annually, the increase in forms received by MDT would be 21 to 27 percent depending on the form type.

Table 30: Frequency of Refund Form Submissions by Type of Refund

Frequency	Agriculture	PTO	Reefer
Once every 3 years	22%	32%	27%
Twice every 3 years	20%	16%	18%
Yearly	54%	17%	10%
More than once per year	5%	35%	45%
Potential increase in forms	21%	27%	24%

Note that the current 36-month time period was instituted by the Montana legislature in 1999 (changed from a 14-month time period), in part to be more consistent with other fuel tax requirements. IFTA carriers and SU licensees must file a quarterly fuel tax return, but they have 36 months to request a refund of their credits from MDT. Making the change back to 14 months would result in different requirements on unlicensed claimants and IFTA/SU licensees.

6.11. Recommendation 10: Modification of Forms

Current claim forms could be modified to improve clarity, which has the potential to reduce EOE. Some specific recommendations are detailed below.

The significant number of rounding errors, particularly on PTO forms, could be remedied by providing more instructions on the accuracy that is expected. For example, instructions could read “all gallons should be rounded to the nearest one-tenth of a gallon.”

Auto-calculating forms could be developed in which values entered would be summed and otherwise calculated automatically. This may result in a reduction in the number of math errors. However, many applicants may still obtain hard copies of the refund form and manually write in the values they calculate. This is particularly an issue for applicants who do not have Internet access. MDT indicated that it is currently working on forms with automatic calculations.

Research staff came across refund requests that used previous versions of the various forms. As forms are modified to reflect changing tax rates and changing rules, it is important to ensure claimants are using updated forms. Form instructions could include a statement such as “if the last revised date of the form (found in the page footer) is older than three years please visit www.mdt.mt.gov or call 406-444-7278 to ensure you are using the most recent form.”

On the PTO form the average miles per gallon (column 3) is to be found by dividing column 1 (total miles traveled for vehicle) by column 2 (total gallons used in vehicle). This is stated in the instructions, but the column header does not have the math instructions included as they are in

other headers on this form. A line should be added to the column 3 header that reads "(1) / (2)" as shown in Figure 15. This should eliminate the fuel economy error discussed in chapter 5.

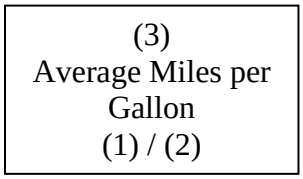

Figure 15: Suggested Column 3 Header for PTO Claim Form

As discussed in Recommendation 5, the size of an agricultural operation impacts the total amount of fuel used. Even if Recommendation 5 is not implemented, the current agricultural refund form should include a reporting of farm size in acres. This would allow for future evaluation of the fuel use by farm type. Additionally the farm size could be used to identify potentially erroneous claims. A claim would be given a red flag if the total fuel usage, for either gasoline or diesel, is greater than 1.5 times the number of acres times the number of years the claim covers.

The fiscal impact of this recommendation is difficult to estimate. The current fiscal impact of math errors on all forms is estimated to be about $22,000. MDT currently catches almost all of these errors. The main benefit of this recommendation is reducing the potential for error, thus reducing MDT staff burden. Another benefit is increased convenience for the applicant.

6.12. Recommendation 11: Electronic Database

An electronic database could be used to track more details of current and past refunds. This would allow for more detailed analysis of refund data, automated error checking and cross-checking for errors between applications. Currently the MDT refund process is primarily paper based. When the refund is paid, a record is established in the Accounts Payable System database with some summary information (e.g., applicant name, applicant address, fuel type, refund type, date paid, amount paid, and a number to locate the paper document). All other information is limited to the paper version. Paper records are maintained for three years. The main downside is the increased staff time required for entering this data.

The research database created for this project was used to analyze certain characteristics of fuel purchases and other details not available in the current Accounts Payable System database (refer to Figure 14 for an example). This is beneficial for estimating and tracking impacts of policy decisions.

Several cross checks were made to identify EOE within the sample refund forms entered into the research database. An example was the identification of individual purchases that had the same date, retailer and amount. Several identical receipts were found that were coincidences such as one company that had a fleet of trucks with PTO units such that there were several fuel purchases each day. However, this led to the identification of one repeat claim described previously in chapter 5. Cross checking will identify specific EOE and red flags to direct further investigation. The cross checking done for this research came up with a few suspicious claims. Only one turned out to have a clear error. If cross checking was implemented it would require

additional staff time to verify that an error exists. Cross checks could include:

- Fuel sales included in refunds by retailers as a percent of their fuel sales
- Fuel sales included in refunds by county as a percent of county fuel sales

The costs of implementing such a database would need to be considered in advance. To this end, the amount of time required to enter the detailed data into the research database for each form was tracked and reported below.

Figure 16 displays the average number of claims processed per hour for each day a researcher was entering data. The typical rate was about five claims per hour. The lower rates on the first few days suggest a learning curve. Subsequently, the days on which fewer claims were reviewed per hour (days 7 and 12 through 14) were primarily or completely spent processing reefer claims, which required more time than agricultural or PTO claims.

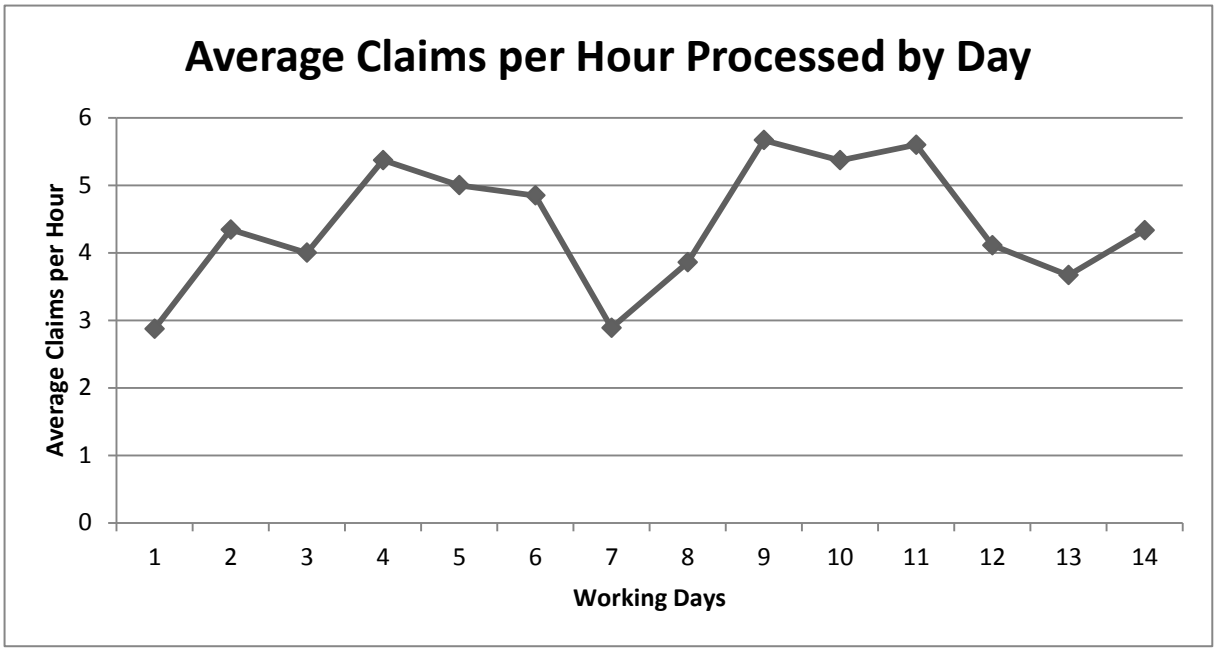

Figure 16: Data Entry Time for Electronic Research Database

Assuming an average data entry time of five claims per hour for agricultural and PTO refunds, and three claims per hour for reefer claims, data entry for such a database could require 1,700 hours per year, or approximately 0.8 full-time equivalents. This effort could be minimized or even eliminated if claimants were allowed to electronically submit claims and keep the original receipts for audits only. Without the ability to check original receipts with the values on the claim, audit efforts should be increased.

The relational structure and suggested improvements to the research database developed for this project are provided in Appendix C. The functionality and design of such a database should be determined by MDT to ensure it meets departmental needs. The information in the appendix is only intended to provide a possible starting point should a database be developed.

6.13. Recommendation 12: Increase Audit Numbers

The number of desk audits could be increased and/or current audits could be refocused. A target should be set for some number of desk audits to be conducted each year of individuals submitting refund forms. Currently MDT audits approximately 3 percent of IFTA individuals annually. MDT audits at least six special fuel users. An audit of an individual includes any refund claims they may have submitted. Individuals filing PTO and reefer claims are typically IFTA and/or SU. Agricultural refund claimants are rarely in one of these audited categories. There is no set number for auditing refund claimants other than those already selected from the IFTA or SU audits. Individuals submitting only agricultural refund forms are audited based on recommendations from the refund staff. Currently a few agricultural refunds per year are recommended for audit based on the discovery of errors, missing documentation or suspicious circumstances. Setting a fixed target for the number of refund form audits per year would encourage some random selection of refund forms beyond those with clear red flags.

The number of audits should be determined based on staff availability. A small number (e.g., one or two per year) could possibly be absorbed into current workloads. A large number would require additional staff and/or reducing the number of IFTA and SU audits. A pilot effort could determine the potential consequences of such a shift.

6.14. Recommendation 13: Training/Public Outreach

If any of the previous recommendations are implemented, the change should be incorporated into MDT's public outreach effort. MDT is currently making significant efforts in the area of training and public outreach to fuel tax refund applicants (See chapter 3.5). Public outreach and training could include announcements, on-site visits or other activities.

6.15. Recommendation Summary

Collectively considering the expected changes in a) the application burden placed on the claimant, b) the administrative burden placed on MDT, c) the amounts to be refunded and d) the basic equity of the refund structure within and between fuel user groups, the authors believe the following recommendations particularly merit MDT's consideration:

- Eliminate the option to use the agricultural refund form for diesel, which currently applies the standard deduction (Recommendation 2). As discussed in section 6.3, the data indicates that a large portion of the clear diesel reported on agricultural refund forms could be for fuel used for on-road purposes. Implementing Recommendation 2 would make this fuel ineligible for refund, which would be more consistent with the underlying rational for the refund program. Claimants could still receive a refund for clear diesel used for off-road purposes by using the off-road refund form.
- Augment the current agricultural refund form with a simpler agricultural refund form supplemented by IRS income tax forms (Recommendation 6).
- Create automatic calculating forms and improve form instructions (Recommendation 10). The level of effort required to accomplish this would be minimal and it would reduce the burden on both the claimant (in submitting a claim) and MDT (in reviewing and correcting claims).

7. CONCLUSIONS

Gasoline and clear diesel are taxed in Montana primarily to provide funds to build and maintain the transportation system. Refund of the tax paid is allowed for certain uses other than to power a motor vehicle on a public roadway. Montana refunded, on average, in excess of $4 million annually from 2007 to 2009 (not including refunds for IFTA applicants or railroads). The three largest types of refunds in Montana are those allowed for agricultural use, power take-off units and refrigeration units. These three refund types account for 68 percent of all refunded tax dollars for diesel fuel and 96 percent for gasoline. Managing fuel tax refunds requires MDT to process over 8,000 claims each year (a single form may contain up to three claims, one for each of three fuel types).

Fuel tax refund practices in nine surrounding states were reviewed using information available in the literature and a direct survey sent to state DOT personnel (with seven of the nine states responding). It was found that the way in which agricultural refunds are allowed varied across the states. The most common method was to allow refunds for off-road use of either diesel or gasoline. This refund application process typically requires documentation of exactly what fuel is used on and off-road (e.g., fuel invoices; non-motor vehicle equipment records of hours of operation, and fuel placed in the equipment; motor vehicle equipment records of miles on-road, miles off-road, fuel placed in equipment, odometer readings, etc.). Some states are more restrictive by only allowing refunds for fuel used in unlicensed vehicles or bulk tank purchases with the same off-road documentation requirements. Montana is the only state to allow a fixed refund percentage for all fuel used for agriculture (although Idaho and Nevada allow this for bulk fuel purchases only).

States that require a license to apply for agricultural fuel refunds are South Dakota, Nevada and Colorado. Claimants in Wyoming can apply for an exemption certificate for discounts on point-of-sale fuel purchases or submit refund claims after the fuel has been purchased.

Most states allow refunds for fuel used to run power take-off units, but the method for calculating the fuel used varied widely. The three main methods were a fixed percentage of all fuel used in the vehicles, a rate of fuel per quantity of activity (e.g., 0.05 gallons per ton of timber handled), or a metering device to directly monitor PTO use. The metering device would record fuel use when the vehicle parking brake is on and the PTO unit is running.

Most states allow refrigeration unit refunds but require that the fuel supply source be a separate tank from the fuel tank supplying the motor vehicle engine. Oregon does not allow refunds on refrigeration units because it expects that dyed fuel will be used to power those units.

Montana is the only state in the survey to allow refund forms to be submitted for fuel purchased up to three years earlier. All other states placed a time limit of one year to 15 months for claims to be filed. Some states require a minimum amount of fuel purchased or dollars refunded for a refund form to be submitted. Nevada had the strictest requirement with a 200-gallon minimum.

North Dakota and South Dakota received the most refund requests of the interviewed states that were able to provide such data. North Dakota and South Dakota received 4,560 (Agriculture: 4,498 Industrial: 41, and Refrigerator: 21) and 4,369 (Agriculture/Commercial: 4,369) refund requests in 2009, respectively. North and South Dakota also paid the highest amount of gasoline refunds. Idaho paid the highest amount of diesel refunds in 2009.

The majority of EOE reported by other states occurs through a failure to provide proper documentation, overstatement of fuel gallons purchased/used, refund requests submitted after the deadline and mathematical errors. Idaho estimates that 80 percent of refund claims require review or error correction.

The most cited public feedback from refund claimants is requests for decreased documentation requirements. Several states also reported receiving requests for forms in the mail, as some claimants do not have Internet access. The states of Montana, Idaho, Wyoming, North Dakota and South Dakota take part in some form of public outreach through informational mailings, seminars, presentations and training.

A comparative model was developed for the amount of agricultural and reefer refunds provided by several states as compared to some measure of use (i.e., acres of farmland, or ton-miles of freight). A state that is higher or lower than the predicted model could have (1) a different amount of EOE, (2) stricter or more lenient fuel tax rules, (3) state-specific attributes not in the model that could impact fuel usage, and/or (4) random fluctuation. For Montana the actual refunds exceeded the model projections by 4 percent for gasoline used in agriculture and 145 percent for diesel used in reefer units.

Over 500 refund forms (from the more than 20,000 collected in a three-year period) were examined by research staff. Researchers looked for specific types of errors based on the literature review and interviews with the states. Detailed data for each refund form was entered into a research database to allow automated checking for certain types of errors such as math errors and repeated receipts. Over 25 percent of refund forms had some sort of error when initially submitted. MDT had caught and corrected 85 percent of the errors found by research staff. The estimated annual financial impact in terms of reduced dollars in refund form errors paid out was $100,500, of which MDT staff caught about 97 percent.

The final outcome of this project is the 13 recommendations provided in chapter 6. The recommendations have the potential to impact EOE, the application effort for the claimant, the administrative effort for MDT, the dollars refunded by MDT and/or the equity of the tax burden across affected fuel users. Wherever possible, estimated impacts for these recommendations are provided. The authors felt Recommendations 2, 6 and 10 in the following list had the most merit:

1. Only allow bulk purchases for agriculture
2. Eliminate the agricultural refund form with the standard deduction for clear diesel
3. Eliminate the agricultural refund form with the standard deduction for all fuels
4. Only allow unregistered fuel use for agricultural refunds
5. Cap the standard deduction for agricultural refunds
6. Augment the agricultural refund form documentation with IRS federal fuel tax refund forms
7. Eliminate or reduce reefer refunds
8. Conduct further studies of PTO fuel use and refunds
9. Only allow claimants to submit refunds within one year of the fuel purchase date
10. Modify forms
11. Develop an electronic database
12. Increase audit numbers
13. Perform public outreach and training for any of the recommendations implemented

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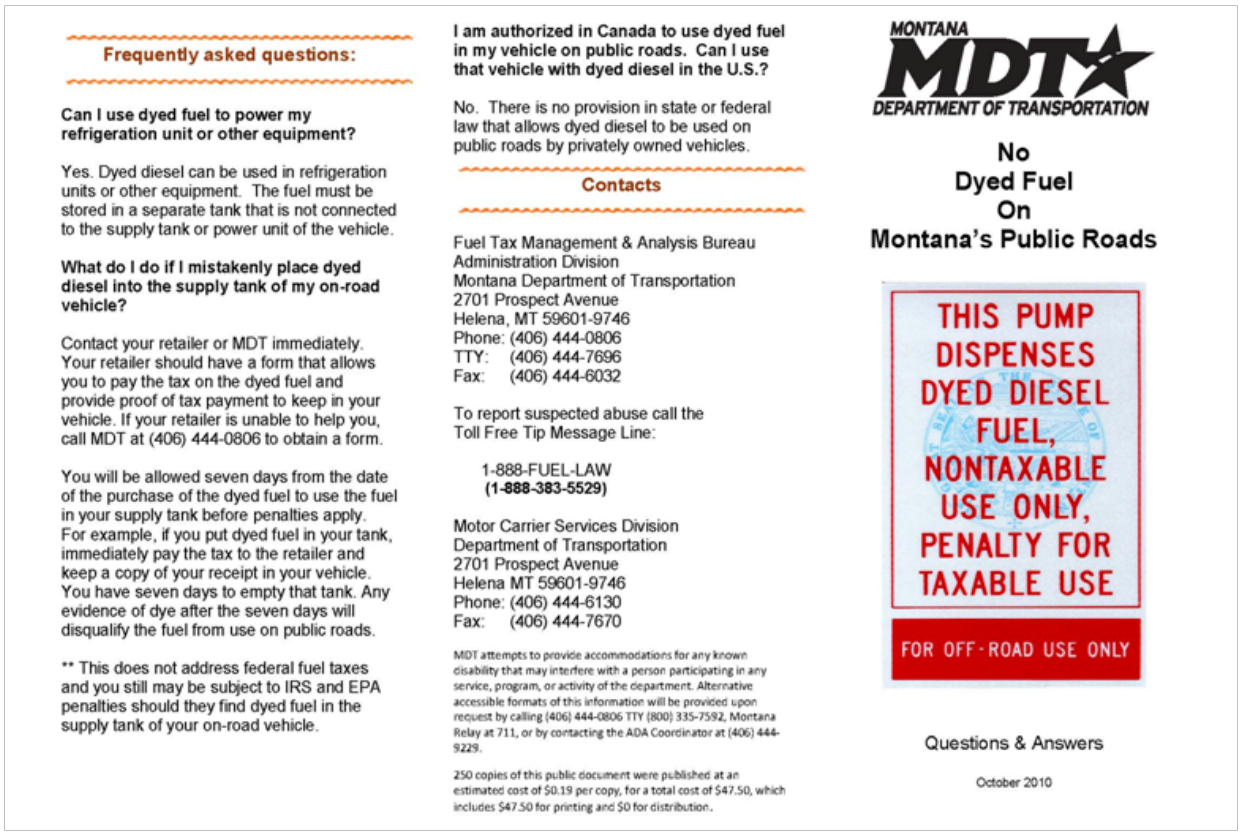
9. APPENDIX A: MDT FUEL TAX OUTREACH MATERIALS



Frequently asked questions:

Can I use dyed fuel to power my refrigeration unit or other equipment?

Yes. Dyed diesel can be used in refrigeration units or other equipment. The fuel must be stored in a separate tank that is not connected to the supply tank or power unit of the vehicle.

What do I do if I mistakenly place dyed diesel into the supply tank of my on-road vehicle?

Contact your retailer or MDT immediately. Your retailer should have a form that allows you to pay the tax on the dyed fuel and provide proof of tax payment to keep in your vehicle. If your retailer is unable to help you, call MDT at (406) 444-0806 to obtain a form.

You will be allowed seven days from the date of the purchase of the dyed fuel to use the fuel in your supply tank before penalties apply. For example, if you put dyed fuel in your tank, immediately pay the tax to the retailer and keep a copy of your receipt in your vehicle. You have seven days to empty that tank. Any evidence of dye after the seven days will disqualify the fuel from use on public roads.

** This does not address federal fuel taxes and you still may be subject to IRS and EPA penalties should they find dyed fuel in the supply tank of your on-road vehicle.

I am authorized in Canada to use dyed fuel in my vehicle on public roads. Can I use that vehicle with dyed diesel in the U.S.?

No. There is no provision in state or federal law that allows dyed diesel to be used on public roads by privately owned vehicles.

Contacts

Fuel Tax Management & Analysis Bureau
Administration Division
Montana Department of Transportation
2701 Prospect Avenue
Helena, MT 59601-9746
Phone: (406) 444-0806
TTY: (406) 444-7696
Fax: (406) 444-6032

To report suspected abuse call the Toll Free Tip Message Line:

1-888-FUEL-LAW
(1-888-383-5529)

Motor Carrier Services Division
Department of Transportation
2701 Prospect Avenue
Helena MT 59601-9746
Phone: (406) 444-6130
Fax: (406) 444-7670

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity of the department. Alternative accessible formats of this information will be provided upon request by calling (406) 444-0806 TTY (800) 335-7592, Montana Relay at 711, or by contacting the ADA Coordinator at (406) 444-9229.

250 copies of this public document were published at an estimated cost of $0.19 per copy, for a total cost of $47.50, which includes $47.50 for printing and $0 for distribution.

MONTANA MDT DEPARTMENT OF TRANSPORTATION

No Dyed Fuel On Montana's Public Roads

THIS PUMP DISPENSES DYED DIESEL FUEL, NONTAXABLE USE ONLY, PENALTY FOR TAXABLE USE

FOR OFF-ROAD USE ONLY

Questions & Answers

October 2010

What is dyed diesel fuel and what is it used for?

- Dyed diesel fuel is regular diesel fuel that has a red dye added to it. This is done to identify it as non-taxed fuel.
- Proper use of dyed diesel is home heating, off-road equipment, and in government-owned vehicles. Examples of other uses include a generator used for a home construction project or a farm vehicle that does not normally travel on public roads.

What is fuel tax evasion?

Fuel tax evasion is the act of intentionally choosing to not pay fuel taxes.

The knowingly misuse of dyed diesel is tax evasion that takes money away from the resources needed to build and maintain Montana's transportation system.

What are the penalties for improper use of dyed diesel fuel?

Montana's fine: First offense imposes a penalty of $1,000 plus the tax on the fuel in the tank. A second offense imposes a penalty of $5,000 plus tax.

Federal fine: First offense imposes a penalty of the greater of $1,000 or $10 per gallon plus tax on the fuel in the tank.

MDT Motor Carrier Services Officers enforce Montana's dyed diesel law by randomly taking fuel samples from diesel-powered vehicles. This includes privately owned vehicles when probable cause has been established.

Information on violators may be shared with other agencies such as the federal Environmental Protection Agency (EPA) and the Internal Revenue Service (IRS).

Who is responsible?

The operator of the vehicle is responsible for consuming the proper fuel while traveling on Montana's public roads.

Any noticeable presence of dye in the diesel fuel disqualifies the product from use in a vehicle operated on a public road. MDT warns consumers that mixing clear fuel with dyed fuel will make all the fuel unsuitable for use in a vehicle operated on a public road.

What are some precautionary measures and things to watch for?

Know your Supplier: Deal only with reputable companies. Report any suspicious activity to the contacts on the back of this pamphlet.

Observe Pump Labels: The State of Montana and the federal government require pumps dispensing dyed diesel fuel to be labeled with the sign on the front of this brochure. The Department of Transportation provides the label, free of charge, to anyone with a pump dispensing dyed fuel.

The fine for failure to properly mark a dyed fuel pump is $100 per pump, per offense.

Visually Inspect the Fuel: Consider observing a sample of the fuel in a clear approved container if you have any doubts.

Look for Evidence of Tampering: Visible presence of dye, altered labels, or unreadable receipts should be cause for suspicion.

Keep Receipts: Make sure receipts identify the fuel product and indicate where and when it was purchased. It is your right to request a statement from the seller that the fuel you are purchasing does not contain evidence of dye.


Gasoline
Diesel
4.60 9/10
Dyed Diesel
5.000
IT'S JUST NOT WORTH IT
DYED DIESEL IS FOR OFF-ROAD USE ONLY. SMALL SAVINGS AT THE PUMP COULD COST YOU $5,000 IN FINES.
You may not know using untaxed dyed diesel on public roads is against the law. Do the right thing. Help fund road construction and maintenance.
REPORT FUEL TAX EVADERS BY CALLING 1-888-FUEL-LAW.
MDT

10. APPENDIX B: STATISTICAL MODELS

Chapter 4 provides a summary of the models developed to estimate EOE. Statistical results of the final models developed are provided here.

The final model for agricultural fuel use is summarized in Table 31. The model is a general least squares linear model with random effects of the panel data. That is, there are factors within a state that are not accounted for in the model. These state factors are on average equal to zero, but normally distributed. Four years of fuel refund data (2006-2009) was used, with acres of farmland from the 2007 census. Time-series adjustments were not utilized in the model because only one year of farmland data was used. This is acceptable considering the short timeframe (four years).

Table 31: Model Results for Agriculture Gasoline

Random-effects GLS regression	Number of observations = 16
Group variable: State	Number of groups = 4
Random effects State_i ~ Gaussian	Observations per group = 4
corr(State_i, X) = 0 (assumed)	Wald chi2(1) = 10.29
Σu = 1429669.8	Prob > chi2 = 0.0013
Σe= 1695944	R-squared between states = 0.8373
ρ = 0.41542282	R-squared overall = 0.6677

Dependant Variable: Ag gasoline gallons refunded

Variable	Coefficient	Std. Error	t-Statistic	Probability
Farmland	0.1328	0.4137	3.21	0.001
Constant	-522,817	1,765,543	-0.30	0.767

The model is significant with the Wald Chi-squared statistic and the t-statistic for the slope. The t-statistic for the constant is less than desired, meaning that the model could pass through the origin, which does not invalidate the farmland variable as significant.

Unlike the agriculture model, there was only one year of reefer refund data available for each state, so a simple ordinary least squares linear model was used. The model developed is shown in Table 32. Similar to the agriculture model, the statistics of this model are good with the exception of the constant term t-statistic.

Table 32: Model Results for Reefer

OLS Regression

Source	Sum of Sq.	D.F.
Model	3.0875e+11	1
Residual	2.7388e+10	2
Total	3.3615e+11	3

Number of observations = 4
F-Statistic = 22.55
Prob > F = 0.0416
R-squared = 0.9185
Adj. R-squared = 0.8778

Dependant Variable: Reefer gallons refunded

Variable	Coefficient	Std. Error	t-Statistic	Probability
Million ton-mi.	28.093	5.916	4.75	0.042
Constant	-57,264	90,476	-0.63	-0.63

11. APPENDIX C: DATABASE STRUCTURE

To support this research project, a database was developed by the researchers and sample data was entered into the database. This database was used for the EOE analysis discussed in chapter five and is not the MDT Accounts Payable System database discussed throughout the report. This section will outline the design of the database and the entry program used to input the sample data. To ease the implementation of the mock database Microsoft Access was used, however the design could be implemented using other database products such as Oracle.

A small data entry program was created for adding information to the database. The data entry program included some basic consistency checks to catch entry errors. This entry program was designed for the entry of data from existing forms for analysis purposes. Therefore, while it notifies the user of some errors or inconsistencies, it allows the entry of incorrect data for those paper refund forms that contained errors. The database does not do some of the automatic calculations that could be done as part of a production data entry system. This demonstrates a sample of the checks that can be made but does not include every possible check as that is outside of the scope of this project. Attempts were made to prevent any information that could be used to identify individuals associated with fuel reports to be stored. This included obscuring the tax identification number stored in the database and not entering the complete home address.

The remainder of this appendix provides an overview of the database and data entry program created, including a relational database structure.

The data entry program was written to allow easy entry of sample data into the database. The data entry program initially presents the user with the option to enter an Agricultural Refund, a PTO refund, or a Refrigerator fuel refund (Figure 17).

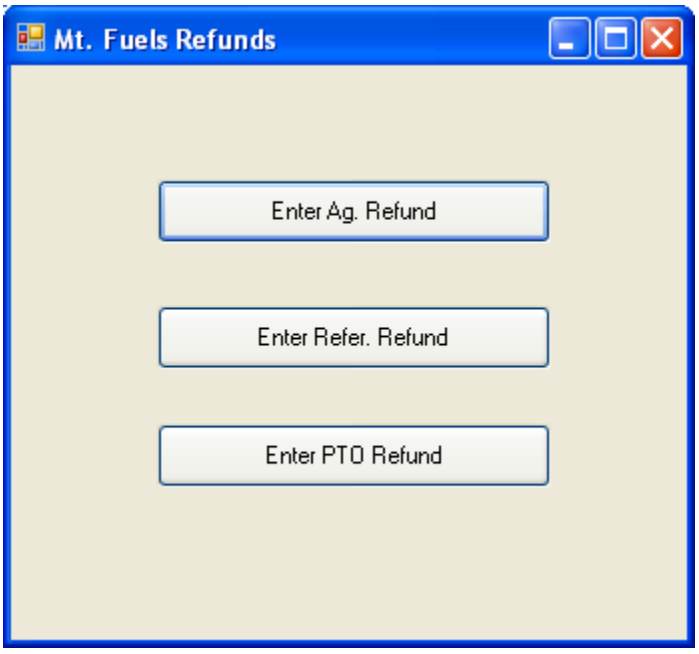


Figure 17: Initial Data Entry Screen

Selecting any of the options above will display the entry screen for the particular type of refund. The first step is to enter the Social Security or Tax Id number of the entrant. The system will then try to find the applicant's general information in the database. If the information is found the form is populated with the applicant's name, zip code, and occupation. For the sake of privacy the full address and phone number was not included, but likely would be for a production system. If the refund being entered is a new applicant the identification information would be manually entered by the user. The entry screens are shown in Figures 18-20 for the three different refunds.

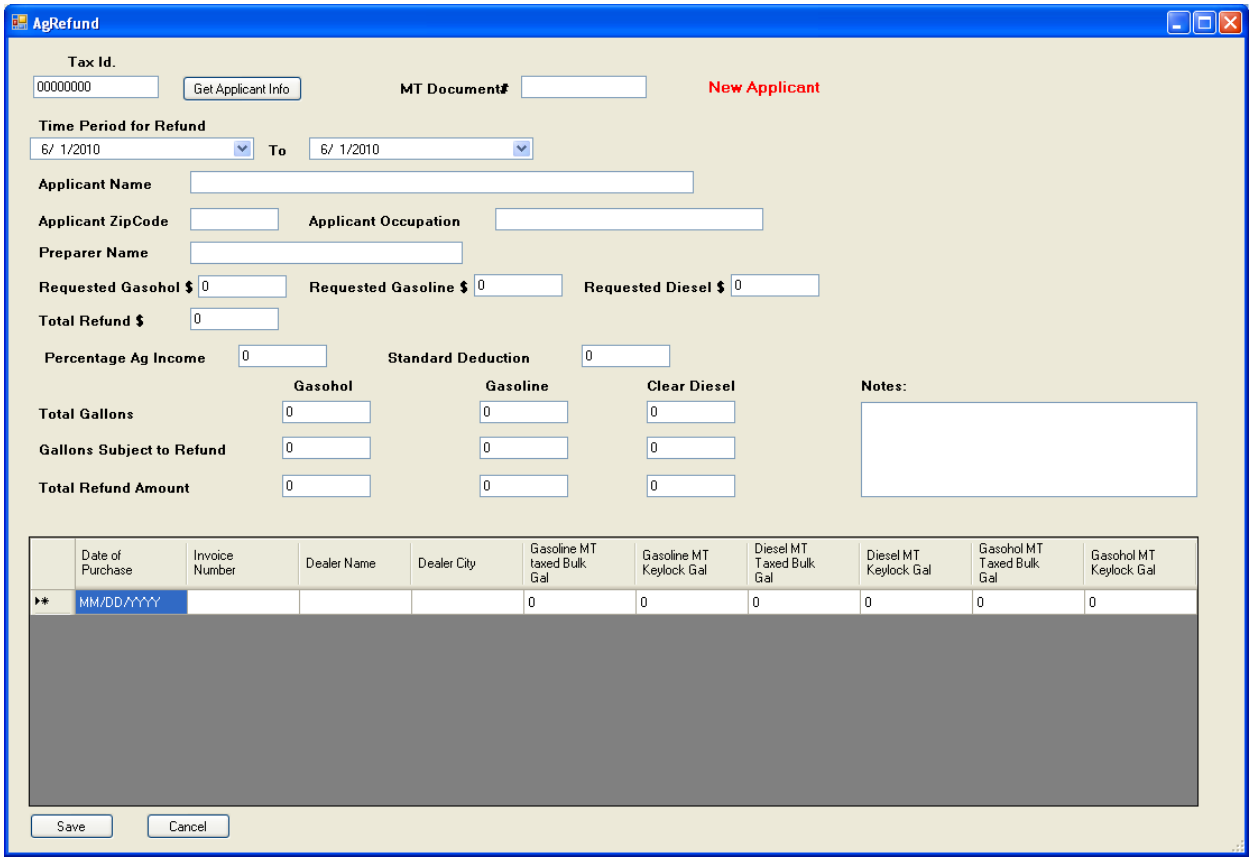


Figure 18: Agriculture Refund Entry Screen

Clicking the "save" button caused some automatic checks to be made for agricultural refunds. A check was made verifying that the Total Refund dollar amount equals the sum of the Requested Gasohol, Gasoline and Clear Diesel dollar amounts. A check was made verifying that the total listed Gasoline, Diesel and Gasohol purchase amounts equaled the total amounts entered.

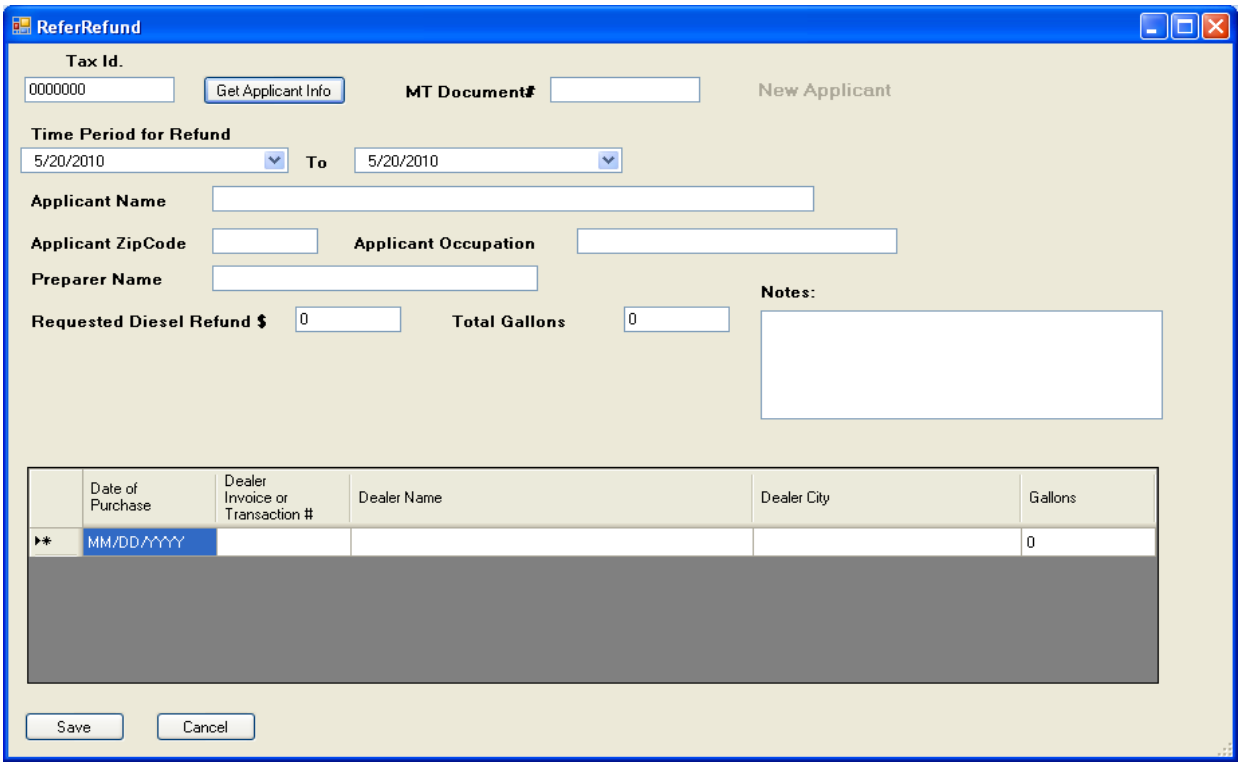


Figure 19: Refrigeration Fuel Refund Entry Screen

For the refrigeration unit refund, an automatic check was made to verify that the total listed Diesel gallons purchased equaled the Total Gallons entered.

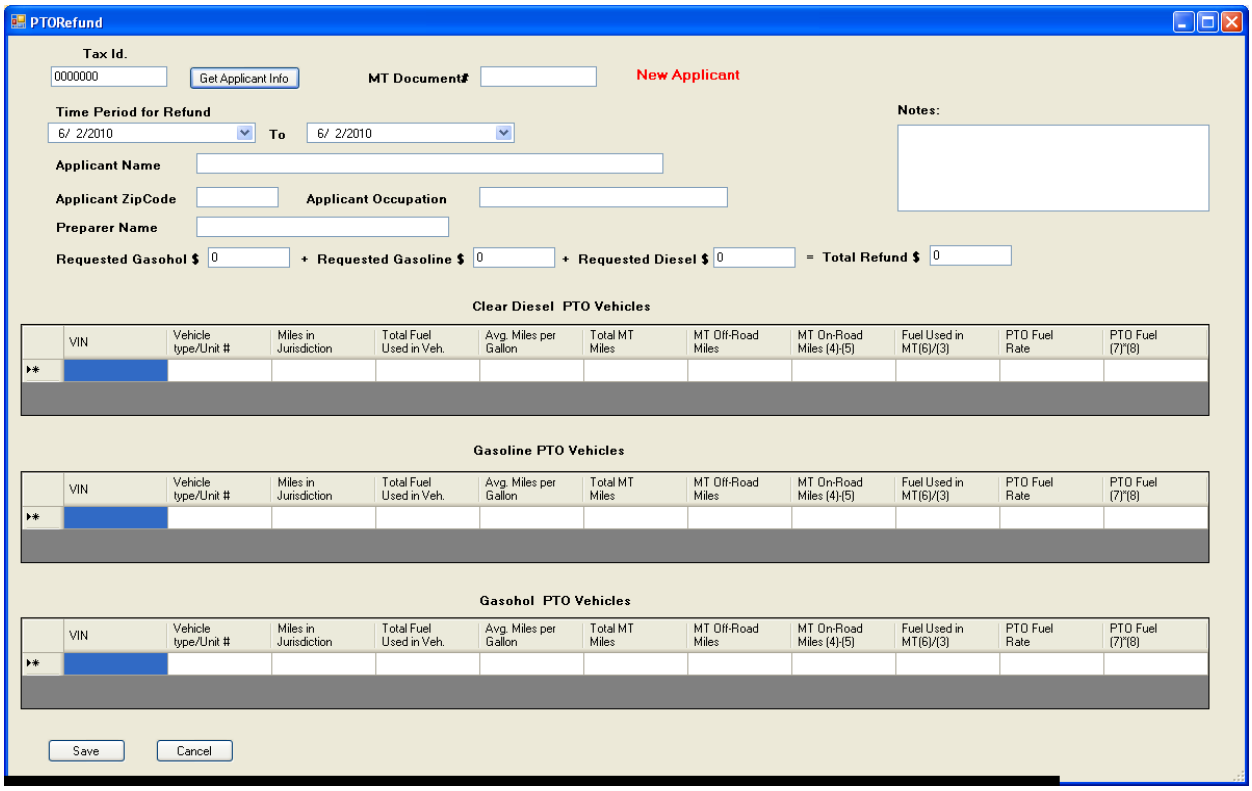


Figure 20: PTO Fuel Refund Entry Screen

For PTO refunds a check was made to verify that the Total Refund dollar amount was equal to the sum of the Requested Gasohol, Requested Gasoline and Requested Diesel dollar amounts.

The "Notes" field on all three entry screens was used during this study for comments to be entered by research staff about errors, red flags or anything else noteworthy. This field would not be necessary in a production system. Calculated fields are entered as they appear on the original form; in a production or online entry system they could be calculated automatically.

The database designed for this project had a simple relational design (Figure 21). This design could easily expand as needed to support a production environment. The database relates all refund requests back to an applicant. For each type of refund request—PTO, Refrigeration or Agricultural—the fuel purchases are related back to the individual application. Having the fuel listings in separate tables preserves the relational integrity of the database. The "Notes" and columns in the Agricultural Refund, PTO Fuel Refund and Reefer Fuel Refund tables were used for this study to keep track of irregularities on the original forms and would not need to be included in a production system.

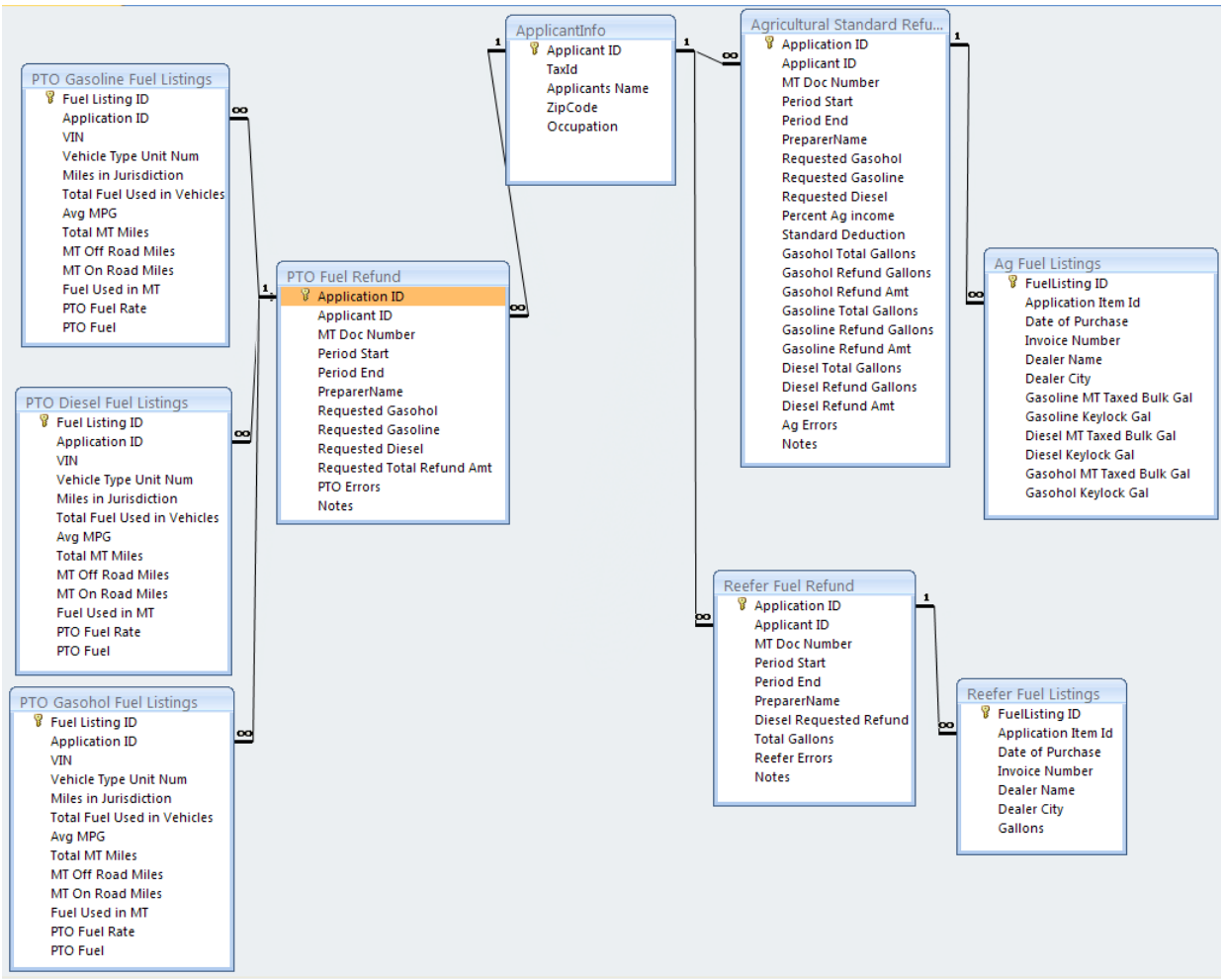


Figure 21: Mock Database Relational Structure

Tables 33-41 provide data storage information for the variables in each database table.

Table 33: ApplicantInfo Variables

Name	Type	Size
Applicant ID	Long Integer	4
TaxId	Long Integer	4
Applicants Name	Text	255
ZipCode	Text	255
Occupation	Text	255

Table 34: Agriculture Refund Variables

Name	Type	Size
Application ID	Long Integer	4
Applicant ID	Long Integer	4
MT Doc Number	Text	255
Period Start	Date/Time	8
Period End	Date/Time	8
PreparerName	Text	255
Requested Gasohol	Double	8
Requested Gasoline	Double	8
Requested Diesel	Double	8
Percent Ag income	Double	8
Standard Deduction	Double	8
Gasohol Total Gallons	Double	8
Gasohol Refund Gallons	Double	8
Gasohol Refund Amt	Double	8
Gasoline Total Gallons	Double	8
Gasoline Refund Gallons	Double	8
Gasoline Refund Amt	Double	8
Diesel Total Gallons	Double	8
Diesel Refund Gallons	Double	8
Diesel Refund Amt	Double	8
Ag Errors	Text	255
Notes	Text	255

Table 35: Ag Fuel Listing Variables

Name	Type	Size
FuelListing ID	Long Integer	4
Application Item Id	Long Integer	4
Date of Purchase	Text	255
Invoice Number	Text	255
Dealer Name	Text	255
Dealer City	Text	255
Gasoline MT Taxed Bulk Gal	Double	8
Gasoline Keylock Gal	Double	8
Diesel MT Taxed Bulk Gal	Double	8
Diesel Keylock Gal	Double	8
Gasohol MT Taxed Bulk Gal	Double	8
Gasohol Keylock Gal	Double	8

Table 36: PTO Fuel Refund Variables

Name	Type	Size
Application ID	Long Integer	4
Applicant ID	Long Integer	4
MT Doc Number	Text	255
Period Start	Date/Time	8
Period End	Date/Time	8
PreparerName	Text	255
Requested Gasohol	Double	8
Requested Gasoline	Double	8
Requested Diesel	Double	8
Requested Total Refund Amt	Double	8
PTO Errors	Text	255
Notes	Text	255

Table 37: PTO Diesel Fuel Listings Variables

Name	Type	Size
Fuel Listing ID	Long Integer	4
Application ID	Long Integer	4
VIN	Text	255
Vehicle Type Unit Num	Text	255
Miles in Jurisdiction	Double	8
Total Fuel Used in Vehicles	Double	8
Avg MPG	Double	8
Total MT Miles	Double	8
MT Off-Road Miles	Double	8
MT On-Road Miles	Double	8
Fuel Used in MT	Double	8
PTO Fuel Rate	Double	8
PTO Fuel	Double	8

Table 38: PTO Gasohol Fuel Listings Variables

Name	Type	Size
Fuel Listing ID	Long Integer	4
Application ID	Long Integer	4
VIN	Text	255
Vehicle Type Unit Num	Text	255
Miles in Jurisdiction	Double	8
Total Fuel Used in Vehicles	Double	8
Avg MPG	Double	8
Total MT Miles	Double	8
MT Off-Road Miles	Double	8
MT On-Road Miles	Double	8
Fuel Used in MT	Double	8
PTO Fuel Rate	Double	8
PTO Fuel	Double	8

Table 39: PTO Gasoline Fuel Listings Variables

Name	Type	Size
Fuel Listing ID	Long Integer	4
Application ID	Long Integer	4
VIN	Text	255
Vehicle Type Unit Num	Text	255
Miles in Jurisdiction	Double	8
Total Fuel Used in Vehicles	Double	8
Avg MPG	Double	8
Total MT Miles	Double	8
MT Off-Road Miles	Double	8
MT On-Road Miles	Double	8
Fuel Used in MT	Double	8
PTO Fuel Rate	Double	8
PTO Fuel	Double	8

Table 40: Reefer Fuel Refund Variables

Name	Type	Size
Application ID	Long Integer	4
Applicant ID	Long Integer	4
MT Doc Number	Text	255
Period Start	Date/Time	8
Period End	Date/Time	8
PreparerName	Text	255
Diesel Requested Refund	Double	8
Total Gallons	Double	8
Reefer Errors	Text	255
Notes	Text	255

Table 41: Reefer Fuel Listings Variables

Name	Type	Size
FuelListing ID	Long Integer	4
Application Item Id	Long Integer	4
Date of Purchase	Date/Time	8
Invoice Number	Text	255
Dealer Name	Text	255
Dealer City	Text	255
Gallons	Double	8