Introduction

Motor fuel excise tax revenue represents the primary funding source used to support Montana’s transportation system. Motor fuel taxes, however, can be jeopardized by the presence of motor fuel excise tax evasion. Historic changes in legislation and increased enforcement efforts have increased revenues, yet fuel tax evasion is still considered to be a significant and persistent problem.

This study is designed to determine the origin and magnitude of fuel tax evasion, thus enabling MDT to productively address the problem and allocate enforcement and auditing resources more efficiently.

What we did

To address the goals of the study, the research team performed the following key tasks: a) examined literature and legal cases in order to identify and examine techniques historically used to evade motor fuel taxes; b) conducted interviews with tax administrators in seven western states and three Canadian provinces; c) interviewed industry representatives, d) mapped the region’s motor fuel distribution system; e) examined Montana tax code and compared it with relevant codes in neighboring jurisdictions; f) collected data from neighboring states and provincial tax administrators and audit, enforcement, and collections data provided by MDT; and g) modeled motor fuel consumption in Montana and estimated total levels of evasion, omissions, and errors (EOE). EOE is the measure used in this study because the research team made no attempt to determine the intent of the taxpayer. Therefore, any omissions or errors that reduce tax payments to Montana would be included in the EOE calculations.

The incentive to evade is significant in Montana. For example, the profit associated with evasion of Montana’s diesel tax on an 8,000 gallon tanker is $2,220 per load. Through the examination of literature and legal cases, the research team identified and examined numerous techniques that could be used to evade Montana motor fuel taxes. These techniques were combined into six broad categories:

- Border Schemes,
- Dyed Fuel Schemes,
- Alternative Fuels Schemes,
- International Fuel Tax Agreement (IFTA) Fraud,
- Refund and Credit Fraud, and
- Failure to File Schemes.

The research team interviewed tax administrators of seven western states (Idaho, Montana, North Dakota, South Dakota, Utah, Washington, and Wyoming) and three Canadian provinces (Alberta, British Columbia, and Saskatchewan) in order to define differences in motor fuel administration and enforcement programs. This analysis, in turn, was used to create a profile for each jurisdiction describing the primary characteristics of each motor fuel tax program (e.g., structure, tax rates, point of taxation, exemptions), compare each jurisdiction in relation to major categories that characterize motor fuel tax programs, and define and examine opportunities for fuel tax evasion and compliance issues in Montana.
In order to learn from the industry perspective on fuel tax compliance and evasion, the research team obtained a list of companies from MDT that are currently involved in fuel distribution within the State of Montana. This list included the names of various companies involved in each stage of the fuel distribution process, including the bulk and non-bulk transfer system (terminals, refineries, importers, exporters, and retailers). The interviews covered topics such as: a) the process for tax compliance and the types of reporting procedures; b) shortcomings of data reported and costs for reporting; c) fuel tax evasion and improving compliance; d) electronic funds reporting; e) compliance issues with Native American reservations; and f) improving compliance through public outreach within the State of Montana. Nine companies dealing in motor fuel were contacted.

Montana is bordered by four U.S. states and three Canadian provinces. The opportunities for motor fuel evasion within a state are impacted by a number of factors, including: regional geography, fuel production and distribution, relevant tax codes, administrative procedures, and enforcement efforts internal to a jurisdiction and of those in surrounding jurisdictions. Therefore, the research team generated geographic information system (GIS) maps to graphically represent regional characteristics in terms of the fuel distribution system and geographic features. For example, Figure 1 depicts refinery and terminal capacities in Montana and the bordering region.

This exercise yielded a number of significant insights into the region’s motor fuel distribution system, including: Wyoming’s extremely high per-capita diesel consumption rates, the location of a Wyoming terminal near the Montana border, Montana’s strong reliance on motor fuel imports, and Alberta’s high levels of crude oil production.

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Figure 1. Montana Region Refineries and Terminals.

The research team summarized current motor fuel excise tax code in Montana, identified recent and proposed legislation in Montana aimed at addressing motor fuel tax codes, and identified gaps in the tax code that can be exploited by fuel tax evaders. This analysis enabled the research team to provide recommendations for closing these gaps.

Because detailed data is required to implement the modeling methodology and estimate the current rates of motor fuel tax EOE in Montana, the research team identified and examined an extensive set of data that could be used to assist Montana in measuring motor fuel tax evasion. The data set used to model evasion included state-level economic, transportation, tax, and highway system data collected for 10 states. The research team also examined motor fuel tax collections and audit data provided by MDT. The principal data sets examined in support of this study included: a) dyed fuel inspections data, b) refund audit data, c) distributor desk and field audit data, d) motor fuel tax collections data, e) refunds data, and f) IFTA audit data.

Using the aforementioned data, the research team designed a model to estimate total gasoline and diesel consumption within the State of Montana and compared the estimated amounts to reported gallons in order to estimate total levels of EOE. Gasoline and diesel consumption was regressed against real diesel prices, the ratio of Interstate lane miles to total lane miles, real personal state income, and population. The model was developed using eight baseline states’ data where evasion was thought to be low based on a number of factors that are considered indicators of the presence or absence of evasion, including: relative enforcement levels, evasion levels monitored within the state, proximity to international borders, and proximity to low tax states. The eight states’ data that established the baseline analysis were: Delaware, Idaho, Minnesota, Missouri, Nevada, Texas, Virginia, and Vermont.

The research team also used data provided by MDT to attempt to allocate total EOE among the various evasion techniques (e.g., cross-border evasion, on-road use of dyed fuel).

What we found

Based on the output of the model described in the previous section, estimated diesel and gasoline consumption in the State of Montana was compared to reported gallons in 2002, 2003, and 2004. To
disaggregate the total amounts of evasion to specific evasion techniques (e.g., illegal use of dyed fuel), several estimation methods were used.

Table 1 presents the results of the EOE analysis. It is estimated that EOE of diesel taxes totals roughly 16.3 percent of total tax liability, an amount equal to 43.4 million gallons. This level of EOE represented a loss in revenue to Montana of approximately $12.1 million in 2004. Fraud perpetrated by distributors using cross-border evasion techniques and various forms of motor carrier EOE as detected through IFTA audits represent the most significant evasion techniques, collectively accounting for $4.9 million in lost diesel tax revenue in 2004.

The data collected for this study suggest that gasoline tax EOE is not as significant, totaling roughly 2.1% of total tax liability: an amount equal to $2.8 million or 10.3 million gallons in 2004.

Table 1. Gasoline and Diesel Tax EOE in Montana.

<table>
<thead>
<tr>
<th>Evasion Method</th>
<th>Gasoline (thousand gallons)</th>
<th>Diesel (thousand gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>False Refunds or Credit Schemes</td>
<td>2,700</td>
<td>--</td>
</tr>
<tr>
<td>Loads Not Reported to MDT and Import</td>
<td>1,274</td>
<td>6,995</td>
</tr>
<tr>
<td>Export Schemes (thousand gallons)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evasion using Dyed Fuel (thousand gallons)</td>
<td></td>
<td>2,279</td>
</tr>
<tr>
<td>Motor Carrier Errors, Omissions and Evasion (thousand gallons)</td>
<td>--</td>
<td>10,511</td>
</tr>
<tr>
<td>Other Schemes (thousand gallons)</td>
<td>6,367</td>
<td>23,650</td>
</tr>
<tr>
<td>Total EOE (thousand gallons)</td>
<td>10,341</td>
<td>43,435</td>
</tr>
<tr>
<td>Total Gallons Taxed (thousand gallons)</td>
<td>497,719</td>
<td>235,636</td>
</tr>
<tr>
<td>Annual Lost Revenue ($ millions)</td>
<td>$2,792</td>
<td>$12,053</td>
</tr>
<tr>
<td>EOE Rate</td>
<td>2.1%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

What the researchers recommend

Numerous recommendations have been designed to enhance motor fuel tax collections, including those related to: a) auditing and enforcement programs, b) administrative programs, c) reviews and studies, and d) changes to tax code.

Audit and Inspection Programs. Field audits and inspection programs are recognized by many studies, and were noted by many respondents, as being one of the most fundamental components of any program for reducing evasion. The following are recommendations relating to Montana's auditing and enforcement programs:
- Perform more distributor audits and modify auditing procedures to compare terminal reports, distributor reports, bills of lading, tax reports, driver log books, import/export schedules, financial records, bulk plant inventory records, and sales receipts in order to track fuel from the terminal to its ultimate destination.
- Expand field operations, including: distributor field audits, border interdictions, vehicle and tanker field inspections, retailer audits, and covert operations, including the posting of personnel near operations where illegal activities (e.g., illegal use of dyed fuel in personal vehicles) are suspected to occur.
- Perform random and targeted audits of retail stations.
- Require attendants at weigh stations and Ports of Entry to pull bills of lading from tanker trucks in order to compare with tax records.

Administrative Practices. Based on the research team's review and Montana's administrative practices, recommendations regarding administrative procedures are as follows:
- Attempt to achieve total fuel accountability by instituting reporting requirements for all entities dealing in motor fuel (e.g., terminals, suppliers, common or contract carriers, distributors, retailers, and bulk dealers) and using these reports to cross-reference information regarding the transactions and movement of motor fuel gallons in order to account for all the motor fuel.
- Obtain and share data (e.g., import/export schedules, lists of convicted tax evaders) on a more consistent basis with neighboring states and provinces.
- Establish an internet website for individuals to report incidents of evasion.
- Maintain a distributor/importer education program, with emphasis on training when changes are made to administrative and enforcement practices or tax codes.
- Combine the four units that work together to collect, analyze, audit, and enforce motor fuel taxes, centralize these activities under one bureau, and dedicate this bureau exclusively to motor fuel tax enforcement.
- Perform extensive background checks/investigation of licensee applicants.

Tax Code. Though the current sections related to fuel taxation in the Montana codes do protect the road fund tax base, the code could be further strengthened to reduce opportunities and incentives for fuel tax evasion as follows:
- Extend the statute of limitation for motor fuel tax fraud from three to five years.
- Hold corporate officers jointly and severally liable for the filing of reports or returns and the payment of tax, penalty, and interest due (i.e., pierce the corporate veil).
- Expand penalties and fines for non-compliance.
- Mandate electronic reporting by taxpayers.
- Institute code sections that would authorize the inspection and examination of motor fuel and paper work of any persons engaged in storing, selling, transporting, or distributing of motor vehicle fuel or other petroleum product or related products within Montana, and such other investigations as it considers necessary in carrying out the provisions of the statutes regarding motor fuel.

Reviews and Studies. The research team recommended further review and study as follows:
- Perform an analysis to determine the correct power take-off rate schedule.
- Further examine the economic and policy implications of moving the point of taxation to the terminal rack.

Project Summary Report 8180
For More Details . . .

The research is documented in Report FHWA/MT-06-007/8180, Determining the Current Rates of Motor Fuel Tax Evasion for the State of Montana.

**MDT Project Manager:**
Craig Abernathy, cabernathy@mt.gov, 406-444-6269

**Battelle Project Manager:**
Patrick Balducci, patrick.balducci@pnl.gov, 503-679-7316

To obtain copies of this report, contact Craig Abernathy, MDT Research Programs, 2701 Prospect Avenue, PO Box 201001, Helena MT 59620-1001, cabernathy@mt.gov, 406-444-6269.

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**MDT Implementation Status**

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The divisions involved with motor fuel tax reporting, auditing, evasion and enforcement will use this report’s recommendations to increase the efficiency and effectiveness of the existing motor fuel program. The recommendations of performing more distributor audits and maintaining the distributor education program is being implemented with MDT management’s support. Also, other recommendations that don’t require legislation, such as reviewing PTO rate schedules and increasing third party reporting of fuel are being implemented. Recommendations requiring legislation, such as the statute of limitations, piercing the corporate veil, expanding penalties and fines for non-compliance will be presented to MDT management for the 2009 legislative consideration.

For more information contact Bob Turner at, boturner@mt.gov, 406-444-7672.

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