Evaluation of Montana's New Entrant Safety Assurance Program

Phase I

by

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EXECUTIVE SUMMARY

The State of Montana is participating in a pilot program with the Federal Motor Carrier Safety Administration in which New Entrant interstate motor carriers are provided third-party training before their initial required safety audits (previously, such training was provided by state personnel). The project detailed in this report outlines an approach to independently evaluate the effectiveness of this pilot program in meeting four safety-related objectives.

The objectives of the New Entrant training program and corresponding performance metrics and data sources developed in this report are as follows:

Objective 1: improve actual safety (reduce accident rates and out-of-service rates). Data is available from MCMIS.

Objective 2: improve New Entrant performance on initial safety audits. Since each new carrier must undergo a safety audit after 18 months of operation, data to evaluate carriers' performance will be readily available from MT MCSAP.

Objective 3: improve MT MCSAP's efficiency in managing New Entrants. Reasonable metrics include the average time and total cost required to manage each New Entrant. If the new program improves efficiency, MT MCSAP can potentially use the newly freed resources to perform more valuable safety-related tasks. The relevant data will be obtained by interviewing the MCSAP administrator.

Objective 4: provide quality safety compliance training to New Entrants. This objective seeks to ensure that the particular services provided by the third-party contractor best help meet the previous objectives. If significant improvements are found in New Entrant safety and compliance performance (Objectives 1 and 2 above) then the objective has possibly been met. In addition, New Entrants will be surveyed after receiving (or declining) training. Note that MT MCSAP personnel have undergone mock training provided by the third-party contractor and have pronounced it acceptable in that it was similar to the previous training program.

Initially, this evaluation project was scoped to include a second phase of data collection and analysis. However, this phase has been reserved for a follow-on project, since sufficient data for the analyses was available during the first year of the pilot program.

Examination of previous research related to New Entrants revealed several potential pitfalls to avoid in evaluations of this kind. For example, natural random variation in the data can mask actual trends in the data or suggest trends where none exist.

Relative to other New Entrant programs around the country, Michigan has a program somewhat similar to Montana's pilot program, except that the New Entrant training is provided by a non-profit organization rather than by a for-profit contractor. Evaluation information for the Michigan program was not immediately available.

1. INTRODUCTION

The State of Montana is participating in a pilot program with the Federal Motor Carrier Safety Administration (FMCSA) in which New Entrant interstate motor carriers are provided free third-party training before their initial required safety audits. The training is intended to directly improve the New Entrants' compliance with safety regulations and indirectly improve actual safety. This report details a project designed to provide an independent evaluation of Montana's New Entrant Safety Assurance Program (NESAP) and to suggest ways to improve the program.

Background

The FMCSA (http://www.fmcsa.dot.gov/registration-licensing/registration/new-entrant.htm) defines a New Entrant as a motor carrier (private or for-hire) that has recently started operating in interstate commerce. A carrier leaves New Entrant status after completing at least 18 months of service and passing a required initial safety audit. However, the carrier must not have failed any compliance reviews in the meantime or have any outstanding civil penalties.

To assist New Entrants in passing the initial safety audit (and indirectly improve actual on-the-road safety), the FMCSA requires States to offer New Entrants training on paperwork requirements associated with initial safety audits. In response to this requirement, Montana is trying an innovative approach in which this training is provided by a third-party contractor, Sage Technical Services (www.sageschools.com).

Montana recognizes that this new program must be independently evaluated to determine its effectiveness. The federal government shares this sentiment. In Report GAO-06-103 (2005), the federal Government Accountability Office noted that all FMCSA's New Entrant programs must be evaluated for effectiveness. Correspondingly, Montana's Request for Proposal used to solicit the third-party trainer (RFP05-1134R-draft) includes the following statement:

> Over the course of the five-year NESAP program, an independent evaluator will assess the effectiveness of the training program in helping participating new carriers and regulators [as measured by]: (a) improved compliance with safety laws and regulations, (b) lower long term accident rates, (c) lower long term out-of-service rates, (d) fewer failures of the required Safety Audit, and (e) reduced oversight time requirement.

The Western Transportation Institute (WTI) at Montana State University is the independent evaluator for Montana's NESAP.

Objectives

The primary objective of the effort detailed in this report is to outline a methodology to be followed in independently evaluating Montana New Entrant Safety Assurance Program. The evaluation will tell whether the NESAP objectives (as described in the previous passage) were met over the course of the five-year program and also suggest potential improvements as appropriate.

Scope

As originally scoped, this project comprised two phases: (1) describe the New Entrant training process, (2) collect and analyze data to determine whether the NESAP objectives were met and make data-based suggestions for improvements in the program. The project was subsequently re-scoped due to the length of time required before sufficient data would become available to execute Phase 2 (detailed data collection and analysis). Phase 2 tasks will be accomplished in a follow-on project.

This report covers the following tasks from the original Phase 1:

Task	Description
1.1	Summarize the previous and new training programs
1.2	Review New Entrant programs in other states
1.3	Review literature related to New Entrants
1.4	Review literature related to assessment
1.5	Develop program policy for carrier confidentiality
1.6	Develop program objectives, performance measures, and measurement instruments

2. PROGRAM DESCRIPTION

This section summarizes Montana's previous and new approaches to New Entrant safety compliance training. Oversight of New Entrant safety compliance is the responsibility of Montana's Motor Carrier Assistance Program (MCSAP). Previously, MT MCSAP personnel, administratively housed within the Montana Highway Patrol (MHP), provided on-site training to New Entrants about safety paperwork requirements. Currently, a third party has been contracted to provide similar training. This third-party contractor is responsible to MT MCSAP, which is now administratively under the Motor Carrier Services (MCS) Administration of the Montana Department of Transportation (MDT). Under both the previous and new approaches, the training is optional and is free to the New Entrant.

Descriptions are provided below of the previous and new approaches to New Entrant training to help in answering the following questions:

- Does the new training have "face validity" (i.e., does common-sense indicate that the training could improve safety compliance)?
- Does the new training require fewer MT MCSAP resources than the old program?

The new approach cannot be considered a success if the training is unrelated to safety compliance, or if it excessively burdens MT MCSAP.

Previous Training Approach

The following description of the previous training approach is based on a 9/23/05 personal interview with Rich Peterson, an inspector with MT MCSAP (which was then part of the Montana Highway Patrol). Mr. Peterson was one of seven (7) inspectors in 2005.

The previous training process began when a carrier applied for a U.S Department of Transportation (US DOT) number indicating planned interstate operations. Upon receiving notification of the new carrier from US DOT, Mr. Peterson would call the carrier, schedule a training visit, and send a letter confirming the date and telling the carrier what files and data would be required (1 hour). On the day of the visit, Mr. Peterson would drive from Helena (or whichever Montana city he was in at the time) to the carrier. During the onsite visit, Mr. Peterson would specifically cover the following documents (4-5 hours):

- Driver Qualification Form
- Accident/Incident Register
- Part 382 – Controlled Substance Records (monthly, quarterly)
- Equipment File
- Part 396.17 – Periodic Inspections (annual) – power units, trailers
- Part 396 – Miscellaneous Forms

Upon conclusion of the visit, Mr. Peterson would drive back to Helena and fill out additional paperwork (1 hour). The total time required of Mr. Peterson was 6+ hours per new carrier, *not including driving time to and from the carrier location.*

For New Entrants, time spent under the previous process included time to fill out safety compliance paperwork, and time spent during the 4+ hour on-site visit by Mr. Peterson.

New Training Approach

The new process is similar to the previous process, except that a third-party contractor (Sage Technical Services) arranges and provides free on-site training to New Entrants using a curriculum they developed and had approved by the MT MCSAP office. Since September 2005, when a carrier applies for a DOT number, the carrier's contact information is relayed to Sage. Sage contacts each New Entrant and offers to provide on-site training relevant to the initial safety audit. The time spent by New Entrants is expected to be approximately the same under the new program as for the previous program. Several MT MCSAP personnel have undergone mock training conducted by Sage and pronounced it acceptable insofar as it was similar to previous training.

The New Entrants have incentive to participate in the third-party training. Previously, state inspectors worked closely with New Entrants to ensure they met requirements (such as paperwork) to pass initial safety audits. The new initial safety audit process will be stricter. Under the new process, carriers who fail a New Entrant safety audit will immediately progress to a more serious Compliance Review. The third-party training will be attractive to New Entrants to the extent it helps them pass initial safety audits. Note also that New Entrants' training experience with Sage is confidential – anything that Sage learns about the carrier will not be shared with State of Federal officials unless the carrier grants permission (see Appendix A – Carrier Confidentiality).

Relative to MT MCSAP's involvement with the new program, their personnel no longer spend 4+ hours providing training to New Entrants; they do spend time administering the third-party contact and must still fill out some paperwork related to New Entrants. Further note that, for the initial year at least, the cost for the initial Sage educational visit is paid by an FMCSA grant rather than MT MCSAP funds or a New Entrant fee.

3. EVALUATION METHODOLOGY

This section provides a formal evaluation methodology for determining the effectiveness of Montana's New Entrant training program. Formal objectives and measures ensure that MDT and FMCSA can tell whether the new program results in actual improvements. As previously mentioned, the federal Government Accountability Office has also noted the importance of rigorously evaluating FMCSA's various New Entrant programs.

Background

The following list of potential performance measures is adapted from a list provided by Kris Phillips (FMCSA administrator in Montana at the time this program was initiated) at the beginning of this project:

- Number of roadside violations by the carriers before and after initial safety audits
- Number of accidents involving the carriers
- Impression of carrier ability to implement
- Comparison of violations found by Sage and those on the initial safety audit
- Number of carrier requests for additional information
- Amount of government time required to conduct initial safety audits
- Fraction of carriers who choose not to participate.

As previously mentioned, Montana's Request For Proposal used to solicit third-party contractors further stated:

> Over the course of the five-year NESAP program, an independent evaluator will assess the effectiveness of the training program in helping participating new carriers and regulators [as measured by]: (a) improved compliance with safety laws and regulations, (b) lower long term accident rates, (c) lower long term out-of-service rates, (d) fewer failures of the required Safety Audit, and (e) reduced oversight time requirement.

The objectives and performance measures referred in the remainder of section are drawn from the above sources. In particular, the performance measures described below (a) reflect the safety performance of New Entrants and the effectiveness of the New Entrant Safety Assurance Program, (b) are quantitative in nature, and (c) are (to a large extent) readily determined.

Methodology, Objectives, and Performance Measures

For the purposes of this evaluation, the objectives of Montana's NESAP are being summarized as follows:

1. Improve the measurable (short-term and long-term) safety of carriers that were New Entrants during the study period.
2. Improve New Entrant performance on initial safety audits.
3. Reduce MT MCSAP's level of effort required to manage New Entrants.
4. Ensure that the third-party contractor (Sage) is providing quality training.

For the "direct safety objectives" (1 and 2), the basic evaluation approach is to compare the safety performance of four sets of carriers: (1) carriers that received training under the previous program,

(2) carriers that declined training under the previous program, (3) carriers that received training under the new program, and (4) carriers that declined training under the new program. Note that it might not be possible to divide carriers into these four groups for each performance measure. Once the data is collected, appropriate methods will be used to make statistically valid conclusions that account for confounding factors. The specific statistical methods used will depend on the nature and quantity of data available.

For the "administrative objectives" (3 and 4), the basic evaluation approach will be to compare total resource requirements and training content quality under the previous and new programs, respectively.

Tying together the "direct safety objectives" and the "administrative objectives," the conditions for evaluating the new program as a success are (1) a substantial fraction of New Entrants must accept the new training program, (2) these New Entrants must outperform those carriers that declined to receive training and those carriers that were New Entrants under the previous program, and (3) the new program must not take an inordinate amount of resources compared to its safety impact.

Objective 1 – Improve the Measurable Safety (Short-Term and Long-Term) of Carriers That Were New Entrants During the Study Period

This objective relates directly to actual on-the-road safety of New Entrants and their continuing safety after passing the initial safety audit. Carrier safety can and will be measured using the following:

1. Mean crash rate, in reportable crashes per million vehicles traveled (VMT)
2. Number of roadside violations
3. Out-of-service rates

Data to calculate these metrics will be obtained from MCMIS (Motor Carrier Management Information System). Comparisons based on these metrics cannot be made until a substantial number of recent New Entrants have accumulated safety records.

Objective 2 – Improve New Entrant Performance on Initial Safety Audits

This objective is directly related to safety compliance. Since each new carrier must undergo a safety audit after 18 months of operation, data to evaluate carriers' performance will be readily available from MCSAP.

Objective 3 – Reduce MT MCSAP's Level of Effort Required to Manage New Entrants

Objective 3 is related to MCSAP efficiency. After improving the efficiency of managing New Entrants, MCSAP can potentially use the newly freed resources to perform more valuable tasks.

The performance metrics for this objective depend on the perspective of the evaluation. From the perspective of MCSAP personnel usage, a reasonable metric is the average time required to manage each New Entrant (from the carrier's starting interstate operations to passing the initial safety audit) under the previous and new programs. From a total resource perspective, a reasonable metric is the total cost (i.e., MCSAP's direct cost and the cost to hire the third-party contractor) of putting a New Entrant through the entire process. In both cases, the inherent assumption is that MCSAP can effectively reallocate any time and resources saved under the new program. This assumption is likely true, but it should be confirmed, at least qualitatively, by surveying the MCSAP administrator.

MCSAP personnel usage and cost will be determined by interviewing the MCSAP administrator and relevant personnel.

Objective 4 – Ensure that the Third-Party Contractor (Sage) is Providing Quality Training

Objective 4 seeks to ensure that the particular services provided by Sage best help meet the previous objectives. If significant improvements are found in New Entrant safety and compliance performance (Objectives 1 and 2 above) then the objective has possibly been met.

The following metrics indicate whether New Entrants *perceive* value in the third-party training: (1) fraction of New Entrants participating in the training, (2) participating carriers' evaluations of the training, and (3) non-participating carriers' explanations for declining training. For metric (1), the evaluation will recognize that the participation fraction depends partly on the marketing of the training program, both by the third-party contactor and by MCSAP. For metrics (2) and (3), the evaluation will recognize that a carrier might not initially recognize the value of training only to change opinion after passing or failing the initial safety audit. In the extreme case, the carrier might have received "good value" from the time spent on training, but fail to recognize this even after passing (or failing) the initial safety audit.

A more straightforward metric for measuring quality of training is to correlate the performance of New Entrants on the initial safety audit against New Entrant participation (or non-participation) in the optional training. Care must be exercised when analyzing this data to avoid confusing correlation with causation. There is no easy way, for example, to determine if a particular New Entrant that refused the training and failed the initial safety audit would have passed the audit if they had accepted the training.

Data for the above metrics will be obtained from examining MCSAP records, interviewing MCSAP personnel, and surveying New Entrants (both carriers that accepted training and carriers that declined training).

As mentioned previously, MCSAP personnel have undergone mock training provided by the third-party contractor and have pronounced it acceptable in that it was similar to the previous training provided by MCSAP. Thus, relative to "face validity," the new training would be expected to be equally as effective as the old training. Of course, the actual effectiveness can only be determined by analyzing relevant data, as described earlier in this section.

Other Potential Metrics

Some previous research on New Entrant safety (Volpe, 2000) used carrier SafeStat scores as general metrics. The particular research is detailed in the Literature Review section. While future iterations of the current project might consider using SafeSat score, there are several cautions from the FMCSA:

The FMCSA website (http://ai.fmcsa.dot.gov/SafeStat/disclaimer.asp, accessed 9/28/06) warns:

> Because of State data variations, FMCSA cautions those who seek to use the SafeStat data analysis system in ways not intended by FMCSA. Please be aware that use of SafeStat for purposes other than identifying and prioritizing carriers for FMCSA and state safety improvement and enforcement programs may produce unintended results and not be suitable for certain uses.

The FMCSA website (http://ai.fmcsa.dot.gov/SafeStat/Removal_SafeStat_Explain.asp, accessed 9/28/06) states:

> FMCSA has temporarily restricted **public access** to the A&I Online SafeStat Module's Accident SEA and Overall SafeStat Score because these scores rely on State-provided crash reports, which are sometimes not of the highest data quality based on timeliness, completeness and accuracy. The Accident SEA and the overall SafeStat score will return to the system when the agency is confident that the information provided is more reliable.

4. LITERATURE REVIEW

To provide some perspective on the methodology proposed in the previous section, a review was conducted of investigations of a similar nature. In general, previous researchers have investigated whether readily available data indicate that New Entrants (and other less-experienced carriers) are consistently less safe than more experienced carriers. Their analyses and approaches are indicative indicate of what might be seen in the current evaluation project and suggest possibly useful methodologies.

Relative to previous New Entrant research, in 2005 the GAO still voiced the following criticisms (Report GAO-06-103):

> Although the FMCSA's New Entrant program has existed for over 2 years, FMCSA has no plans to evaluate its New Entrant program until 2008.

and

> FMCSA has no information whether information on its safety requirements, provided…during New Entrant safety audits…effectively communicate information to New Entrants.

The main research questions and conclusions from the reports reviewed below, stated in Question and Answer format, are:

Q. Do MCMIS and SafeStat data show that New Entrants have worse safety records and compliance practices than experienced carriers?
A. In general: **yes**, but there are some important caveats.

Q. Do safety performance and safety compliance improve *consistently* with carrier experience (i.e., do "learning curves" exist)?
A. The answer varies depending on which data set is analyzed and how the data set is divided into categories.

Q. Are SafeStat scores useful data points for analyzing carrier safety?
A. Not necessarily. The Oak Ridge report (2004) states that actual crash rates are a better measure of carrier safety than are carrier SafeStat scores.

The remainder of this section reviews scholarly and government reports that have considered New Entrant safety.

In March 2000, the Volpe Transportation Center issued a report that nicely summarizes previous Volpe-sponsored New Entrant research:

- Corsi-Fanara (1988)
- Volpe (1995)
- Volpe (1998)
- Volpe – "Analysis…using SafeStat" (2000)

These reports are summarized in tables in the remainder of this section.

Corsi and Fanara (1988) - The following table is based on the summary presented in Volpe (2000).

Hypothesis 1	• There exists a "safety performance (i.e., crash rate) learning curve".
Data	• Authorized for-hire carriers were put into three categories based on their dates of initial ICC certification • Mean crash rate (Reportable crashes per million vehicle miles traveled)
Conclusion	• A safety performance learning curve exists
Hypothesis 2	• There exists a "safety regulation compliance learning curve".
Data	• ICC-regulated (authorized for-hire) carriers were put into three categories based on date of initial ICC certification • Percentage of carriers with system to effectively control hours of service • Percentage of carriers complying with vehicle inspection procedures • Percentage of carriers with a driver training program
Conclusion:	• A safety regulation compliance learning curve exists

Volpe (1995) - The following table is based on the summary presented in Volpe (2000). Volpe (1995) extends the Corsi and Fanara (1988) study to consider all carriers, not just authorized for-hire carriers.

Hypothesis 1	• There exists a "safety performance (i.e., crash rate) learning curve".
Data	• Carriers were put into three categories based on their dates of initial certification • Mean crash rate (Reportable crashes per million vehicle miles traveled)
Conclusion	• There is no safety performance learning curve.
Hypothesis 2	• There exists a "safety regulation compliance learning curve".
Data	• Carriers were put into three categories based on date of initial certification • Percentage of carriers with system to effectively control hours of service • Percentage of carriers complying with vehicle inspection procedures • Percentage of carriers with a driver training program
Conclusion	• There is no safety regulation compliance learning curve.
Data Pitfalls	• The Volpe "Background…" report identifies the following as possible explanations for the different conclusion of the 1988 and 1995 studies (both of which involved Corsi): o MCS-150 date might not match actual start date of interstate operations (this might mistakenly categorize some experienced carriers as New Entrants) o "Crash rates were calculated using preventable/recordable crashes instead of recordable crashes, which would have been comparable to the Corsi-Fanara Study use of reportable crashes o The USDOT definition of a "crash" changed in the middle of the data collection period o The above data pitfalls mean that this study's results cannot be directly compared to the Corsi-Fanara (1988) study's results.

Volpe (April 1998): *New Entrant Safety Research: Final Report.* This report was designed to update the Corsi and Fanara (1988) study.

Hypothesis 1

- The date a carrier's MCS-150 data was input into MCMIS might not provide an accurate guide to the carrier's date of starting operations.
- The above pitfall might vary according to carrier industry segment

Data

- MCMIS entry date
- Sample survey of apparent New Entrants (May 1996 – August 1996)

Conclusions

- Carriers are confused as to what data to put onto forms
- Private carriers are more likely to delay registering for a DOT number
- Authors did **not** explain how this affected their research findings
- Authors suggested changes to MCS-150 form (implemented?)

Hypothesis 2

- There exists a "safety performance (i.e., crash rate) learning curve"

Data

- Compliance Review Crash Rates (recordable crashes per million vehicle miles traveled, April 1993 – June 1997)
- State-reported NGA Crash Rates (calendar year 1996 data from MCMIS, only carriers with at least one power unit and at least one compliance review or safety review since 4/1/1993.)

Conclusion

- "the analyses do not indicate the presence of a safety learning curve. The declines in crash rates from the least experienced to the most experienced carriers exhibited patterns of variability, rather than the steady progressions that are characteristic of learning curves."

Hypothesis 3

- There exists a "safety regulation compliance learning curve"

Data

- "violations of acute and critical regulations from compliance reviews" from October 1994 to June 1997
- For Driver and Safety Management SEAs (Safety Evaluation Areas):
  - "average number of violations of acute regulations per thousand interstate drivers"
  - "average number of patterns of violations of critical regulations per thousand interstate drivers"

Conclusion

- "substantial age-related pattern of compliance…[and] the rates declined in steady progression across age groups, showing clear evidence of a safety regulation compliance learning curve."

Volpe (March 2000): *Analysis of New Entrant Motor Carrier Safety Performance and Compliance Using SafeStat*

Hypothesis

- New Entrants perform worse than experienced carriers with respect to three SafeStat SEAs (Safety Evaluation Areas) and the SMRI (Safety Management Review Indicator).

Data

- Two carrier categories: New Entrants, experienced carriers
- SafeStat SEAs (Safety Evaluation Areas): Accident, Driver, Vehicle
- SMRI (Safety Management Review Indicator)

Conclusions

- Accident SEA: New Entrants had significantly higher crash rates
- Driver SEA: New entrants had significantly worse driver safety compliance and performance
- Vehicle SEA: New Entrants had "somewhat worse" vehicle safety compliance and performance
- SMRI: New Entrants had significantly worse compliance

Data Pitfalls

- Assumes that the SEAs and SMRI are "correct" in how they combine compliance and performance data
- Dividing carriers into only two categories means this study's conclusions are potentially less "powerful" than those of previous studies.

A report by the Center for Transportation Analysis (2004), part of the Oak Ridge National Laboratory, describes the limitations of SafeStat, which was developed by Volpe for the FMCSA. The report notes that the objective of SafeStat is

> "to measure the relative safety fitness of commercial motor vehicles and guide the deployment of resources to focus on carriers posing the greatest safety risk. SafeStat combines information on crashes, roadside inspections, traffic violations and compliance reviews from the previous 30 months to produce an overall SafeStat score for carriers with sufficient safety data."

The main conclusions are as follows:

1. Late and missing data negatively affect SafeStat.
2. The relative importance SafeStat places on its various inputs (crashes, roadside inspections, etc.) can be improved. In particular, the previous number of crashes is by far the most important indicator of future safety.
3. "Most carriers are identified at-risk by SafeStat due to random variations in the source data rather than a significant change in carrier risk."

5. PRACTICES IN OTHER STATES & PROVINCES

Based on a survey of state FMCSA administrators, apparently no other state currently has a New Entrant training program identical to Montana's new program. Michigan and Florida have programs that are somewhat similar to Montana's. Canada has an innovative program in which safety audits (rather than New Entrant training) are outsourced.

(Note: Initial information for this section was collected by David A. Galt (West Yellowstone Group) acting as a subcontractor for the Western Transportation Institute (WTI) for this project.)

Method of Data Collection

WTI first discussed Montana's new program with Steve Campbell, executive director of the Commercial Vehicle Safety Alliance. (CVSA (www.cvsa.org) is "an association of state, provincial, and federal officials responsible for the administration and enforcement of motor carrier safety laws… [whose] mission is to promote commercial motor vehicle safety and security." Mr. Campbell was intrigued by the idea of using private sector personnel to provide state/federal-sponsored training and was fairly certain that no other states are using a program like Montana's. Mr. Campbell did state that there is concern within the CVSA Executive Committee regarding devolving responsibility for truck safety from law enforcement to private-sector firms.

WTI drafted a letter that queried recipients whether their state had a New Entrant training program similar to Montana's pilot program (see Appendix B), and, if so, to reply with contact information for the appropriate administrator (e.g., the state MCSAP director). The Montana FMCSA Administrator emailed the letter to FMCSA administrators in every other state. Responses were received from five states: Michigan, Florida, Minnesota, North Carolina, and Oregon. Of these states, Michigan's program is the most similar to Montana's; that is, a program in which a non-state entity provides training specifically for New Entrants. The other states that responded either provide a state-run seminar to New Entrants or send them a training program on a DVD. WTI separately identified a program in Alberta, Canada that uses a third-party contractor, but for audits rather than training.

Data

Michigan

Michigan has partnered with the not-for-profit Center for Truck Safety (CTS) to provide training to New Entrants, as well as other motor carriers. The New Entrant training is free to the carrier and is available either at the carrier site or in a CTS classroom. CTS is funded through grants from the State of Michigan using funds generated from truck registration fees. Like the Montana program, CTS New Entrant training provides information to help carriers pass the initial safety audit.

Florida

Florida has a New Entrant program that is for intrastate carriers only; Florida believes that the safety of interstate carriers is already adequately addressed by the safety audit program. Florida requires new intrastate carriers to attend a 4-hour safety training seminar within 180 days after receiving a DOT number, or else be subject to a Compliance Review. These seminars are held at various Florida Department of Transportation sites around the state and are intended to familiarize

new intrastate carriers with relevant regulations. Florida MCSAP personnel stated that they do not have enough staff to provide on-site visits to each individual new intrastate carrier.

Minnesota

Minnesota apparently requires all New Entrants to attend a 6-hour classroom course titled "Introduction to Minnesota Trucking Regulations/ Initial Motor Carrier Contact (IMCC)."

North Carolina

The North Carolina State Highway Patrol has begun producing a two set DVD that will be used to educate New Entrants prior to the safety audit. The intent is to prepare them for a FMCSR safety audit. The disks include

- an overview of the national program
- an explanation of the safety audit while an actual audit is going on
- a description of what to expect when stopped at weight station or along the roadside
- an overview of the Level One inspection

The DVD set is filmed such that it can be used by any MCSAP agency. North Carolina allows other states to use the DVD set for educating New Entrants.

Oregon

Oregon sends a training DVD to New Entrants.

Alberta, Canada

In 2004, the Canadian Council of Motor Transport Ministers (CCMTA) established a third party audit (TPA) program in which private sector businesses are certified to perform motor carrier safety audits for the provinces. The program is based on one in place in Alberta since 2000 in which third-party auditors earn certification via a web-based program managed by Lethbridge Community College. The Alberta Infrastructure & Transportation department refers a carrier to the TPA program when the carrier comes to their attention by a complaint, adverse safety history, or when no information on the carrier exists. Audits take anywhere from one to four days to complete and cost approximately $1,000 (CDN). The Alberta government pays these expenses. While third-party auditors conduct inspections and review safety regulations, enforcement activities are still handled by the government.

6. CONCLUSIONS & RECOMMENDATIONS

The State of Montana is participating in a pilot program with the Federal Motor Carrier Safety Administration in which New Entrant interstate motor carriers are provided third-party training before their initial required safety audits (previously, such training was provided by state personnel). The project detailed in this report outlines an approach to independently evaluate the effectiveness of this pilot program in meeting four safety-related objectives.

The objectives and corresponding performance metrics and data sources developed in this report are as follows:

Objective 1: improve actual safety (reduce accident rates and out-of-service rates). Data is available from MCMIS.

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Objective 4: provide good safety compliance training to New Entrants. This objective seeks to ensure that the particular services provided by the third-party contractor best help meet the previous objectives. If significant improvements are found in New Entrant safety and compliance performance (Objectives 1 and 2 above) then the objective has possibly been met. In addition, New Entrants will be surveyed after receiving (or declining) training. Note that MT MCSAP personnel have undergone mock training provided by the third-party contractor and have pronounced it acceptable in that it was similar to the previous training program.

Initially, this evaluation project was scoped to include s second phase of data collection and analysis. However, this phase has been reserved for a follow-on project, since sufficient data was not available during the first year of the pilot program.

Examination of previous research related to New Entrants revealed several potential pitfalls to avoid in follow-on projects to this evaluation project. For example, natural random variation in the data can mask actual trends in the data or suggest trends where none exist.

Michigan has a program somewhat similar to Montana's pilot program, except that the New Entrant training is provided by a non-profit organization rather than by a for-profit contractor. Evaluation information for the Michigan program was not immediately available.

The primary recommendation of this report is that MT MCSAP should fund/implement a follow-on project to collect data and perform analysis for each of the four objectives as listed above. This follow-on project corresponds to Phase 2 of the original project proposal. The follow-on project should take special care to ensure that its conclusions are statistically valid, rather than qualitative, as in other New Entrant research.

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APPENDIX A - CARRIER CONFIDENTIALITY

A formal Non-Disclosure Agreement assures New Entrants that participating in the third-party training will not adversely affect them with respect to State and Federal regulators nor result in release of their confidential data to competitors. The Non-Disclosure Agreement is necessary to ensure carrier participation in the new program.

In summary, Sage Technical Services will not share carrier information with anyone else, except with WTI for program evaluation purposes (see attachments).

Within WTI, all carrier information will be treated as confidential information and will not be shared with others except in such summary format as needed for reports. Care will be taken to ensure that individual carriers will not be identifiable based on any WTI report.

Letter from Dave Galt to Sage Technical Services

September 30, 2005

Ms. Carmella Campanian
Sage Technical Services
3044 Hesper Rd.
Billings, MT 59102

Dear Carmella:

I have attached a copy of a non-disclosure agreement that you should consider including in your packet when performing the New Entrant safety sessions. In the contract I have with the Western Transportation Institute, one task requires that I work with you, FMCSA and the motor carrier industry to develop a confidentiality statement. As you are aware, Kris Phillips, State Director for the FMCSA, issued the confidentiality statement.

In completing my task I chose to work with Brian Smith of Trucker's Express as a representative of the motor carrier industry. Brian is a member of the Montana Motor Carrier Association and also the Transportation Lawyers Assn. (TLA). He is the current national President of the TLA. He was fine with the statement from Kris, but felt that the carrier needed a non-disclosure statement from SAGE. Brian felt a carrier should have some statement advising them that the information would not be given to law enforcement, but more importantly, the information would not be shared with another carrier.

The attached NDA has been reviewed by Brian, Kris and Michael Cole. I submit it for your consideration and use if you so chose.

Regards:

David A. Galt

Cc: Kris Phillips (email)
Michael Smith (email)

NON-DISCLOSURE AGREEMENT

Sage Technical Services (Sage) has entered into a contract with the Federal Motor Carrier Safety Administration (FMCSA) to provide educational sessions regarding motor carrier safety regulations, free of charge, to all motor carriers that are New Entrants to the trucking industry in Montana. We believe that it is important to the safe operation of a commercial motor vehicle to be knowledgeable of Federal regulations. Proper training as new carriers enter the business will enhance compliance with industry regulations. The key to a successful training session will be openness by the motor carrier with the Sage trainers. Sage understands that this information is sensitive and we make the following statements:

Sage will treat all information and materials learned in educational sessions as confidential.
Sage will not release any information learned in educational sessions to any Federal, State or local government agency without written permission of the motor carrier.
Sage will not release or share any information learned in educational sessions with any other motor carrier.
Sage will not release or share any information learned in educational sessions with any person, public or private, except for the Western Transportation Institute for the purposes of the project evaluation only.

_____

CEO Sage Corp.

APPENDIX B – LETTER TO FMCSA STATE ADMINISTRATORS

Greetings:

In August of 2005, the Montana Highway Patrol, in conjunction with the Federal Motor Carrier Safety Administration, issued a request for proposals (RFP) for a private sector firm to educate new entrants into the trucking industry. Montana commercial vehicle enforcement personnel were intrigued by the idea of the private sector conducting training with new entrants in an effort to increase compliance with safety regulations. Sage Technical Services was selected to do the training.

The Montana State University's Western Transportation Institute (WTI) was hired to evaluate the private sector new entrant training program. WTI will determine if overall highway safety was improved and will document any increase costs or savings resulting from the project. One of our tasks is to determine if any other jurisdiction in the US or Canada has a similar program.

WTI is interested in learning about efforts where:

- The private sector performs educational training of new entrants under contract with a state or federal agency.
- If State enforcement personnel have implemented a routine program effort to perform new entrant educational sessions prior to a formal safety audit being conducted.
- Variations of the first two scenarios.

If you have such efforts being undertaken in your state, could you send us the person's name and contact information that is responsible for the program so that WTI can conduct a brief interview. If we do not receive a response we will assume that no such programs are in place for that jurisdiction.

Information should be sent to:

Dave Galt
West Yellowstone Group LLC.
406.431.7605
76763@bresnan.net email