

Program Evaluation

Railroad Safety in Montana

Montana Public Service Commission



ENERGY AND TELECOMMUNICATIONS INTERIM COMMITTEE

January 15, 2016
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Introduction

The Energy and Telecommunications Interim Committee’s statutory duties allow for an in-depth overview of programs, including laws, rules, budget, and on-the-ground implementation of programs, administered by the Montana Public Service Commission (PSC). The committee has an opportunity to focus more specifically on a particular subject that the PSC administers, pursuant to 5-5-230, MCA. That law provides the ETIC with “administrative rule review, draft legislation review, program evaluation, and monitoring functions for the department of public service regulation and the public service commission.”

The ETIC allocated 0.02 FTE to a programmatic review of railroad safety and the role of the PSC in railroad safety. At the January 15 ETIC meeting, the committee will hear from the PSC concerning the agency’s role in railroad safety and will learn more about a legislative audit completed on the subject in October 2015. The review in this report also covers changes made by the 2015 Legislature with the adoption of House Bill No. 61 (Chapter 104, Laws 2015), which significantly updated railroad laws in Montana to clarify state and federal authority over railroads.

The Legislative Audit Division’s performance audit, discussed later in this report, addresses railroad safety programs managed by the Montana PSC, the Department of Military Affairs, and the Department of Transportation. Because the ETIC’s statutory duties are limited to its oversight of the PSC, this report is focused solely on the PSC and its partnership with the Federal Railroad Safety Administration (FRA) and on the PSC’s statutory responsibilities related to railroad safety. Those responsibilities are centered on railroad inspections and enforcing safety measures that are governed by federal law.

Railroad Safety Program

Background

Railroad safety legislation in Montana and throughout the United States dates back hundreds of years. By the early 1900’s the railroad was a major factor in Montana’s growing economy. Track was being built at a frantic pace and as rail lines went down, people demanded that something be done to address railroad safety – largely to protect rail workers. Railroad labor unions were active and advocated for better regulation and enforcement of safety legislation. “In 1911 railroads employed nearly 23,000 Montanans. By about 1920 Montana had one of the highest proportions of railroad workers of any state. These railroad employees joined labor unions, and the unions negotiated with the railroads for higher pay and safer working conditions.”¹ Many of Montana’s laws related to the safety of railroads focused on the safety of railroad employees, with limited focus on general, public safety matters. As those laws evolved, they increasingly emphasized Montana’s role in setting railroad rates and tariffs.

Specific laws related to railroad safety as it pertains to the general public in some cases took a backseat to more detailed laws addressing railroad employee safety and comfort. For example, until recent changes by the Legislature, Montana’s railroad laws established specific requirements concerning cabooses. Cabooses were required to include “electric lighting of at least 40 foot-candles” for direct illumination of the cooosie desk, reading areas, and lavatory facilities.² Matters related to inspection and safety, however, have been on the books in Montana for the past 100

¹ <http://svcult.mt.gov/education/textbook/chapter9/Chapter9.pdf>

² 69-14-232, MCA. This section was repealed with the enactment of HB 61 in 2015.

years. For example, in 1909 Montana enacted laws related to the examination and inspection of brakes and brake equipment.³

The 10th Legislative Assembly of Montana in 1907 passed the “Railroad Commission Law of the State of Montana”. It created a Board of Railroad Commissioners charged with overseeing railroads in Montana. The Board of Railroad Commissioners consisted of three members elected statewide. The board had the authority to establish regulations regarding railroads within Montana, including safety matters for employees and the general public. The law also required rail companies to report and investigate railroad accidents. On October 1st, 1907, the Commission created the position of Track and Safety Appliance Inspector within the department and appointed S. M. Ross, an experienced railroad man, as inspector, at an annual salary of \$1,500. It was the job of Mr. Ross to report violations of any state or federal law pertaining to railroads.⁴

In 1913 the Board of Railroad Commissioners was made ex officio the newly created Montana PSC. In 1971 the Montana Board of Railroad Commissioners was abolished and its work was taken over directly by the PSC.

Many of Montana’s railroad laws have changed very little since enactment in the early 1900s. Up until the 2015 Legislative session, the Montana PSC’s overall authority over railroads was included in 69-14-111, MCA, and simply stated, “The commission shall have the general supervision of all railroads subject to the provisions of this chapter.” Most of the laws related to safety focused on the authority of a state agency, like the PSC, to enforce laws “intended to safeguard railroad employees.” The 2015 Legislature, with passage of House Bill No. 61, amended 69-14-111, MCA, to read:

- “(1) The commission shall supervise railroads subject to the provisions of this chapter.
- (2) The commission may:
 - (a) adopt or enforce regulations and orders related to railroad safety or security in accordance with 49 U.S.C. 20106;
 - (b) bring civil action in a district court for violations of federal railroad safety regulations in accordance with 49 U.S.C. 20113; and
 - (c) participate in investigative and surveillance activities in accordance with 49 U.S.C. 20105.”

HB 61 was requested by the PSC and eliminated multiple sections of outdated code to update Title 69, chapter 14, MCA. The federal Interstate Commerce Commission Termination Act of 1995 gave the federal Surface Transportation Board exclusive jurisdiction over transportation by rail carriers and railroad rates, classifications, rules, practices, routes, services, and facilities. Court decisions have also consistently found that state and local authorities have a limited role in managing and governing rail transportation. The Federal Railroad Safety Act of 1970 established Federal Railroad Administration (FRA) authority concerning rail safety. The PSC testified during the 2015 Legislative session that the cleanup in HB 61 granted the PSC the “authority to take advantage of explicit carve-outs for state safety regulation within federal laws” and to retain provisions that are not preempted by federal law.⁵

Federal Role

State and federal railroad roles regarding railroad inspections and enforcement are established in Title 49 CFR 212, Subpart B. Under the federal Railroad Safety Act of 1970 (P.L. 94-458), once the FRA, one of 10 agencies under the

³ Chapter 136, Laws of 1909.

⁴ “First Annual Report of the Board of Railroad Commissioners of the State of Montana,” 1907-1908, Commissioners B.T. Stanton, Nathan Godfrey, E.A. Morley, and H.K. Howry, secretary, State Publishing Company, Helena, August 31, 1908.

⁵ Testimony of Public Service Commissioner Travis Kavulla on HB 61, House Federal Relations, Energy, and Telecommunications Committee, January 9, 2015.

federal Department of Transportation, issues a railroad safety rule or order covering a subject, states may adopt and enforce their own railroad safety laws only when laws are required to address a local safety hazard, are not incompatible with the federal safety requirements, and do not unreasonably burden interstate commerce. The federal Railroad Safety Act authorized states to develop partnerships through a State Rail Safety Participation Program with the FRA to enforce federal railroad safety requirements.

FRA's Office of Railroad Safety regulates railroad safety throughout the country. They employ 400 federal safety inspectors who operate out of 8 regional offices. Montana is part of Region 8, which has headquarters in Vancouver, Wash.⁶

The State Rail Safety Participation Program allows states to employ safety inspectors in the rail safety disciplines noted below. Before participating in the national program, a state must enter into a multiyear agreement with the FRA to exercise state-level authority. The agreement then establishes certain investigative and surveillance authority regarding federal railroad safety laws. Montana's PSC has had an active agreement with the FRA since 1999.

Federal inspections focus primarily on five major aspects of the railroad. Each regional office includes administrators, inspectors, specialists, grade crossing safety managers, and safety inspectors for those five safety disciplines including:

- Hazardous Materials
- Motive Power and Equipment (MP&E)
- Operating Practices
- Signal and Train Control
- Track

Under Montana's agreement with the FRA, the state PSC monitors the safety practices of railroads operating in Montana by conducting inspections of operating practices and MP&E. The PSC, however, currently does not have a track inspector. The FRA provides certification requirements for inspectors, and Montana's two state inspectors are certified by the FRA. The FRA also employs inspectors in Montana.

Responding to a growing number of rail accidents between 2002 and 2008, Congress also passed the Rail Safety Improvement Act of 2008. It was the first authorization of FRA's safety programs since 1994. The FRA was directed to promulgate new safety regulations to address "hours of service requirements for railroad workers, positive train control implementation, standards for track inspections, certification of locomotive conductors, and safety at highway-rail grade crossings."⁷

Federal Inspections

In Montana, the FRA has nine employees with inspection duties and authority. There are currently six FRA inspectors in Montana (five in Billings and one in Glendive), two specialists in Billings, and one chief inspector in Billings. Western Montana is covered by the five inspectors based in Spokane, Wash., and eastern Montana is covered by an additional track inspector based in western North Dakota. Region 8 of the FRA will add a new operating practices inspector position in Great Falls early in 2016, according to the FRA. Montana's FRA inspectors also do some work in neighboring states.

The civil penalty per rail safety violation can range from a minimum of \$650 through an ordinary maximum of \$25,000, with an aggravated maximum of \$105,000. Each day that a violation continues is a separate offense. Most

⁶ <https://www.fra.dot.gov/Page/P0010>

⁷ <https://www.fra.dot.gov/Page/P0395>

civil penalties are assessed in the range of \$2,500 to \$5,000. Congress sets criteria that the FRA must consider in compromising rail safety penalty assessments. When unable to collect a penalty, FRA asks the Attorney General to bring suit in U.S. District Court to collect penalties.⁸

FRA also primarily enforces the federal Hazardous Materials Transportation Act and its implementing regulations with regard to shipments by rail. Most violations of hazmat regulations are assessed in a range from \$1,000 to \$10,000. The ordinary maximum civil penalty is \$75,000, and the aggravated maximum civil penalty (in the case of a violation that results in death, serious illness, severe injury, or substantial property damage) is \$175,000.

Montana Role

Montana and other states work with the FRA to enforce federal regulations, and the FRA supports those activities, for example, by providing training. Thirty states are part of the State Rail Safety Participation Program, including Montana.

Under the program, states can conduct inspections and investigations to ensure that railroads meet federal railroad safety requirements. The FRA shares its investigatory and surveillance authority, at least to some degree, with a participating state. The federal government has the overall authority to set railroad safety standards, but states are able to have a role in enforcing those standards. In Montana, the PSC employs two railroad safety inspectors.

A state inspector also can recommend enforcement action to the FRA in Washington. If the FRA fails to act on the inspector's recommendation within 60 days from the date of the violation, the state can take enforcement action.

Montana Inspections

The FRA does not reduce its federal inspection efforts in states that employ state rail safety inspectors. In Montana, for example, the state has a net gain of two rail safety inspectors, because the state elects to employ state inspectors.

The Montana PSC has three full-time equivalent positions that spend time on railroad regulation. Two safety inspectors spend about 80% of their time addressing railroad matters and a third employee provides management oversight of the inspectors, with about 15% of the employee's time spent on rail safety.

In Montana, inspectors inspect only motive power and equipment (MP&E). A certified MP&E inspector is based out of Laurel and inspects rail activity from Interstate 15 east to the border with North Dakota. A car inspector, which is a subcategory of MP&E inspectors, is based in Missoula and covers all rail activity west of Interstate 15 to the border with Idaho. The MP&E inspector based in Laurel is qualified to inspect locomotives, but the Missoula inspector is not qualified. The Missoula inspector is charged with focusing on standards for freight cars, safety window glazing, safety appliances, and power brakes.

The state inspectors are federally mandated to conduct a minimum of 50 annual inspections to qualify for FRA-funded training the following year. Montana's two inspectors typically exceed the minimum requirement, according to the PSC.⁹ The FRA doesn't credit Montana for inspections where state and federal inspectors collaborate. FRA 2014 records, for example, show 175 reports submitted by the PSC's MP&E inspector; and PSC records contain 245 reports. PSC and FRA inspectors jointly conducted 70 inspections, with the FRA inspector submitting the report.

⁸ <https://www.law.cornell.edu/cfr/text/49/part-209/appendix-A>

⁹ The PSC's MP&E inspector position did not complete 50 inspections in 2011 and 2012 because the previous inspector retired in May 2011 and the new inspector, hired in September 2011, required training before being certified to conduct inspections in May 2012.

Inspections conducted since 2010 are included in **Table 1** provided below. In the table, “report” is a written result of inspection activity that may involve assessing compliance with multiple federal regulations. “Defect” is the discovery of an item determined by an inspector not to comply with federal regulations. “Units” are the number of specific items examined during an inspection. For example, one inspection of power brake systems may include an examination of 50 individual brake units. “Observation” is the number of times inspections performed in an activity area. For example, 100 inspections of power brake systems and 100 inspections related to freight car standards is 200 total observations. “Inspection days” are the number of days observations are made.

TABLE 1

MP&E Inspector	2010	2011	2012	2013	2014
Reports	100	40	43	126	175
Defects	462	152	41	458	1,023
Units	21,683	10,568	1,338	16,750	26,610
Observations	555	214	149	584	734
Inspection Days	90	34	42	100	118
Car Inspector	2010	2011	2012	2013	2014
Reports	55	52	72	90	103
Defects	452	428	532	521	579
Units	17,631	16,631	21,165	23,031	27,897
Observations	179	160	216	270	309
Inspection Days	55	52	72	90	103
All Inspections	2010	2011	2012	2013	2014
Reports	155	92	115	216	278
Defects	914	580	573	979	1,602
Units	39,314	27,199	22,503	39,781	54,507
Observations	734	374	365	854	1,043
Inspections Days	145	86	114	190	221

Source: PSC

During the period 2010 through 2014, the PSC inspectors did not report any violations. A violation is a determination that a railroad company willfully violated federal regulations. In 2014, however, PSC inspectors reported about 1,600 defects. Violations indicate serious compliance issues and involve mandatory fines pursuant to federal regulations. Defects also can be punitive. If an inspector determines a defect, for example, a railroad company can be mandated to remove rail cars from the train until the defect is corrected. This delay can strand payloads and

have revenue implications for the company. “The PSC’s inspectors generally consider violation reports to be a last resort for achieving compliance with federal regulations.”¹⁰

Transportation of Crude Oil

As crude oil production in the U.S., specifically in North Dakota’s Bakken region, increased in the last 5 years, the amount of crude oil transported by rail in recent years has grown exponentially. In addition, oil train derailments and explosions have occurred in the United States and Canada, putting the issue of railroad safety in that national spotlight. The Association of American Railroads notes that in 2009 about 2.6% of petroleum products were transported by rail. By 2015, 11% of those products were carried on Class I railroads. The growth has been accompanied by requests for better rail safety standards, specifically for the transportation of crude oil. Concerns about railroad safety and hauling crude oil came to the forefront after a July 2013 catastrophic accident in Lac-Mégantic in Quebec that left 47 people dead and demolished a downtown.¹¹

While the FRA has primary jurisdiction over railroad safety, the federal Department of Transportation’s Pipeline and Hazardous Materials Safety Administration (PHMSA) and the U.S. Department of Homeland Security’s Transportation Security Administration also issue safety standards that apply to railroads. The National Transportation Safety Board also is an independent federal agency that makes recommendations to prevent future railroad accidents.

In May 2014, the U.S. Department of Transportation issued an emergency order requiring railroad operators to notify local emergency responders whenever oil shipments travel through their states. The emergency orders required all railroads operating trains containing more than 1 million gallons or approximately 35 tank cars of oil being transported from the Bakken region—in North Dakota, Montana, Saskatchewan, and Manitoba—to notify State Emergency Response Commissions about the operation of these trains through their states. Montana’s State Emergency Response Commission, established pursuant to 10-3-1204, MCA, is attached to Montana’s Disaster and Emergency Services.

Since June 2014, the reports have been received by the commission and made available to the public. The notifications and the emergency response plans for each railroad, including Montana Rail Link, Burlington Northern/Santa Fe, and Union Pacific, are available on the Department of Military Affairs website.¹²

In May 2015, the Department of Transportation also issued a final rule developed by the FRA and PHMSA that establishes new standards for the transportation of flammable liquids by rail. The standards address enhanced tank car standards, new braking standards, new testing and sampling requirements to determine product stability, and new operational protocols, such as routing requirements, speed restrictions, and informing local agencies.¹³

Coordinated Safety Efforts

States active in rail safety regulation have formed the Association of State Rail Safety Program Managers, a FRA-supported state organization. A principal motivation for forming the association was to attain greater uniformity among states in the conduct of rail regulatory activities and to enable states to speak with a collective voice on rail safety topics. An audit conducted by the Legislative Audit Division found that the PSC does not participate in the association and raised concerns about the lack of participation. Since the audit’s release, the PSC has increased its

¹⁰ Information provided by the Montana Public Service Commission Regulatory Division Staff, November 30, 2015.

¹¹ <http://www.thestar.com/news/canada/quebecexplosion.html>

¹² <http://montanadma.org/crude-oil-shipment-information>

¹³ “Transporting Crude Oil By Rail: State and Federal Action,” Daniel Shea, Kristy Hartman, and Sijia Qiu, National Conference of State Legislatures, October 30, 2015.

participation in the organization, and the PSC’s transportation manager attended the organization’s annual meeting in Washington, D.C.

The audit also found that a handbook used by the association encourages states to set goals and priorities for railroad safety through the establishment of a state-specific rail safety risk assessment. The audit said that the PSC has not conducted a rail safety assessment and does not have an active rail safety plan. The PSC responded that formally conducting a rail safety risk assessment and establishing goals and objectives along with developing a rail safety plan would require substantial PSC time and resources. The PSC said it would explore options for development of a plan, but it would be a policy decision by the full commission.

The Montana DES, which is not the subject of this program review, also is required to work with state agencies to plan for and respond to emergencies – like railroad accidents. The 2015 audit also determined that Montana’s PSC does not have an active relationship with the state DES to address “safety, derailment response planning, railroad priorities, railroad response plans and capabilities; and risk identification and mitigation.” The PSC said it will reach out to Montana’s DES and other entities to begin the conversation about better coordination.

Fiscal Overview

The PSC funds its railroad safety program, and all other regulatory functions, based on a total budget appropriation set by the Legislature. The PSC budget, submitted to the Legislature, includes FTE requirements, and those FTEs account for the current railroad inspectors. Once the Legislature establishes the budget, the Department of Revenue establishes the fees that railroad companies and other regulated utilities are assessed to meet the budget.

The railroad safety program receives no general fund money, and the PSC does not separately receive money from fees to cover the costs of railroad safety inspectors. **Table 2** includes the PSC’s annual budget appropriations for the period of 2010 through 2014. The PSC uses the lump-sum appropriations to fund all regulatory activities, including the costs of administering a railroad safety program. There is not a direct relationship between the fees charged to railroad companies and the PSC’s expenses for administering a rail safety program.

TABLE 2

Year	Percentage multiplier	Total fees DOR assess on railroad companies	PSC budget appropriation	Railroad fees as a % of PSC appropriation
2010	0.4200%	\$142,376	\$3,640,294	3.9%
2011	0.2000%	\$192,678	\$3,695,220	5.2%
2012	0.2300%	\$103,625	\$3,698,391	2.8%
2013	0.4200%	\$150,811	\$3,696,522	4.1%
2014	0.2000%	\$228,274	\$3,834,643	6%
Average	0.2940%	\$163,553	\$3,713,014	4.4%

Source: PSC

The Montana Department of Revenue determines the gross operating revenue generated by regulated activities within Montana and determines a fee (a percentage multiplier) designed to collect the PSC’s budget appropriation in accordance with 69-1-224, MCA. To make the determination, the PSC provides the Department of Revenue with the prior year actual expenses and its projected budget for the next fiscal year. The Department of Revenue then

determines the amount of the fee or the tax rate. The Department of Revenue levies the fee on the railroad company, for example, and deposits the revenue in a state special revenue account to cover the PSC's total budget appropriation. Because the PSC does not regulate railroad rates, the PSC does not authorize railroad companies to recover the fees through rates – railroads determine how and whether to recover the fees.

The average annual fee levied by the Department of Revenue on all railroad companies for the period of 2010 through 2014 was \$163,553. Seven railroad companies currently are assessed a fee. In Fiscal Year 2014, the PSC received \$228,274 from railroad fees.

Audits

The Legislative Audit Division recommended a number of changes to the PSC's railroad safety program in a recent performance audit. Some of those recommendations are discussed above. The LAD report concludes:

- Two state rail safety inspectors currently covering the entire state is not sufficient.
 - The PSC responded that this recommendation is beyond the control of the PSC because the Legislature sets PSC's staffing levels by funding FTEs. The PSC notes that it would welcome the addition of three rail safety inspectors "if the Legislature were to approve such a measure."
- If the PSC is unwilling or unable to prioritize its railroad safety activities, legislative consideration of where these functions are assigned within state government and how they are funded may be necessary.
 - The audit found that of the 30 state rail safety programs in place in 2014, 14 aligned with state departments of transportation and 16 were part of regulatory agencies similar to the PSC.

The audit recommended:

- The PSC should actively administer rail safety in Montana to include:
 - Active involvement in the Association of State Rail Safety Managers to ensure Montana has a voice at the national level.
 - Conduct a state rail safety risk assessment; establish rail safety goals and objectives; and develop a state rail safety plan for Montana that is reviewed annually with the FRA.
 - Actively engage with Montana DES, and the other state and federal agencies, in emergency planning to ensure the rail safety program is proactively addressing risk in the state.
- Increase railroad safety inspection capability across the state through increased inspection coverage and frequency.

The complete audit report is available at: <http://leg.mt.gov/content/Publications/Audit/Report/14P-13.pdf>.

On Nov. 3, the PSC opened an investigatory docket (N2015.11.84), and it will host a roundtable discussion on Jan. 20 about rail safety. The PSC indicated at this time it has not addressed the audit recommendations that railroad safety functions be transferred. The investigatory docket will review the matter. The docket also will be used "to inform future PSC decisions regarding the railroad safety program including, but not limited to, whether to approach the 2017 Legislature for additional funding." The PSC is seeking comments on the following proposals:

- Conduct a rail safety risk assessment and establish rail safety goals and objectives;
- Develop a rail safety plan that is reviewed annually with the FRA;
- Engage with other agencies and engage in emergency planning to ensure the program is proactive; and
- Conduct rulemaking on safety concerns of blocked railroad crossings in accordance with 69-14-111, MCA.