

Fall 2013



## Report of the Auditor General of Canada

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### CHAPTER 7

#### Oversight of Rail Safety—Transport Canada



Office of the Auditor General of Canada

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OAG

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*Ce document est également publié en français.*

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Cat. No. FA1-2013/2-7E-PDF

ISBN 978-1-100-22913-3

ISSN 1701-5413

## **CHAPTER 7**

### **Oversight of Rail Safety—Transport Canada**

## Performance audit reports

This report presents the results of a performance audit conducted by the Office of the Auditor General of Canada under the authority of the *Auditor General Act*.

A performance audit is an independent, objective, and systematic assessment of how well government is managing its activities, responsibilities, and resources. Audit topics are selected based on their significance. While the Office may comment on policy implementation in a performance audit, it does not comment on the merits of a policy.

Performance audits are planned, performed, and reported in accordance with professional auditing standards and Office policies. They are conducted by qualified auditors who

- establish audit objectives and criteria for the assessment of performance,
- gather the evidence necessary to assess performance against the criteria,
- report both positive and negative findings,
- conclude against the established audit objectives, and
- make recommendations for improvement when there are significant differences between criteria and assessed performance.

Performance audits contribute to a public service that is ethical and effective and a government that is accountable to Parliament and Canadians.

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# Oversight of Rail Safety— Transport Canada

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## Main Points

### What we examined

In 2012, Canada's railway network included the 31 federal railways authorized to operate across provincial or international borders. These included three national railways—Canadian Pacific Railway Limited, Canadian National Railway Company, and Via Rail Canada Inc.—and 28 smaller federal railways. Non-federal railways operating on tracks owned by federal railways must comply with safety requirements set out in agreements they enter into with track owners.

Transport Canada is responsible for the regulatory framework required for the safe operation of federal railways in Canada. The Department is also responsible for overseeing whether federal railways have complied with the regulatory framework, and for taking enforcement action when necessary. In 2011–12, Transport Canada spent approximately \$33 million and employed 173 staff in its Rail Safety Directorate, including 101 inspectors responsible for conducting inspections and audits to oversee rail safety in Canada.

In 2001, Transport Canada moved the Canadian rail industry toward a regulatory safety framework that includes an approach requiring federal railways to develop and implement safety management systems (SMSs) to enhance the safety culture, manage safety risks, and demonstrate compliance with rules and engineering standards in day-to-day operations. This was done to promote rail safety in Canada, with the objective of improving rail safety performance.

A number of high-profile rail accidents between 2005 and 2007 prompted the Minister of Transport to launch a review of the *Rail Safety Act* in 2007. This review confirmed the importance of safety management systems for federal railways and provided recommendations to the rail industry to ensure that effective safety management systems were in place, and to Transport Canada to improve the regulatory framework and its oversight of those systems. Transport Canada agreed with the recommendations and worked with the industry to address them. In 2009, the government approved

\$71 million to fund improvements to rail safety, including the regulatory framework and Transport Canada's oversight of federal railways' safety management systems.

In this audit, we examined whether the Department has adequately overseen the management of rail safety risks by federal railways. We focused on Transport Canada's regulatory framework, oversight activities, human resources, and quality assurance program. We did not examine the safety of federal and other railways' operations. We also did not examine the overall safety of Canada's rail industry.

Audit work for this chapter was completed on 28 June 2013. More details on the conduct of the audit are in **About the Audit** at the end of this chapter.

### Why it's important

Each year, federal railways carry more than 50 percent of goods, such as lumber and coal, moving across the country by land, as well as more than four million travellers. Safety risks are inherent to all modes of transportation, and rail transportation is no exception. Federal railways have the primary responsibility for managing these risks and ensuring the safety of rail operations, while Transport Canada plays a key role in advancing the safety of rail transportation in Canada, specifically by maintaining the regulatory framework and overseeing federal railways. It is important that the Department oversee the safety management systems implemented by federal railways to ensure that safety risks are actively managed. The traditional inspection-based oversight approach is not enough to ensure that federal railways have effective and adequate safety management systems in place to manage safety risks day to day. It is critical that Transport Canada maintain a robust and effective regulatory framework for rail safety, especially since the volume of rail freight traffic is expected to increase. To focus its resources on those areas where risks are the greatest, Transport Canada must ensure that its oversight activities are well planned.

### What we found

- Transport Canada has implemented a regulatory framework for rail transportation that includes a safety management system approach to identify, analyze, and respond to rail safety risks, and it has made progress in working with federal railways to implement safety management systems. It has also made significant progress in addressing many recommendations from the *Railway Safety Act* review. However, the Department recognizes that much remains to be done before the result of this work is integrated into the regulatory framework. Despite discussions with the industry and progress over the past 20 years, a number of long-standing and important safety issues remain, including trespassing, grade crossings,



concerns about the environment, the collection of data on safety performance from federal railways, and the implementation and oversight of safety management systems.

- Transport Canada has conducted many inspections and some audits to identify non-compliance with rail safety regulations, rules, and engineering standards. However, the Department does not systematically collect and use important and relevant railway safety performance and risk data to ensure that its oversight activities are targeting the higher-risk railways and the most significant safety risks.
- Despite the fact that federal railways were required 12 years ago to implement safety management systems for managing their safety risks and complying with safety requirements, Transport Canada has yet to establish an audit approach that provides a minimum level of assurance that federal railways have done so. While it has done a few audits of those systems, most of the audits it did were too narrowly focused and provided assurance on only a few aspects of SMSs. At the rate at which the Department is conducting focused audits, it will take many years to audit all the key components of SMS regulations, including key safety systems of each of the 31 federal railways.
- The guidance and tools provided to inspectors for assessing federal railways' safety management systems are missing many key elements. For example, they contain few requirements to help inspectors plan, conduct, and conclude on audits and inspections, and for following up on findings. This makes it difficult for Transport Canada to ensure that its inspections and audits are effective in determining whether railways are taking corrective actions where necessary. Lastly, Transport Canada does not have a quality assurance plan to continuously improve its oversight of rail safety.
- Transport Canada has defined the skills its inspectors need to conduct inspections and SMS audits. However, the Department has not assessed whether its current workforce has the required skills. Furthermore, many inspectors and their managers have not received timely training on the skills needed to do audits of SMSs. This is important if the Department is to implement an effective and sustainable SMS oversight approach.

**The Department has responded.** Transport Canada agrees with all of the recommendations. Its detailed responses follow the recommendations throughout the chapter.



## Introduction

### Facts about the rail industry in Canada

- The rail industry employs more than 32,000 people.
- Every year, railways in Canada carry about 70 percent of the country's freight moved on land (such as lumber and coal), and over 73 million passengers.

Source: Railway Association of Canada, 2012

**Federal railways**—The railway companies authorized to operate across provincial or international borders by the **Canadian Transportation Agency**.

**Canadian Transportation Agency**—An agency independent from Transport Canada. The Agency also resolves a range of commercial and consumer transportation-related disputes, including accessibility issues for persons with disabilities.

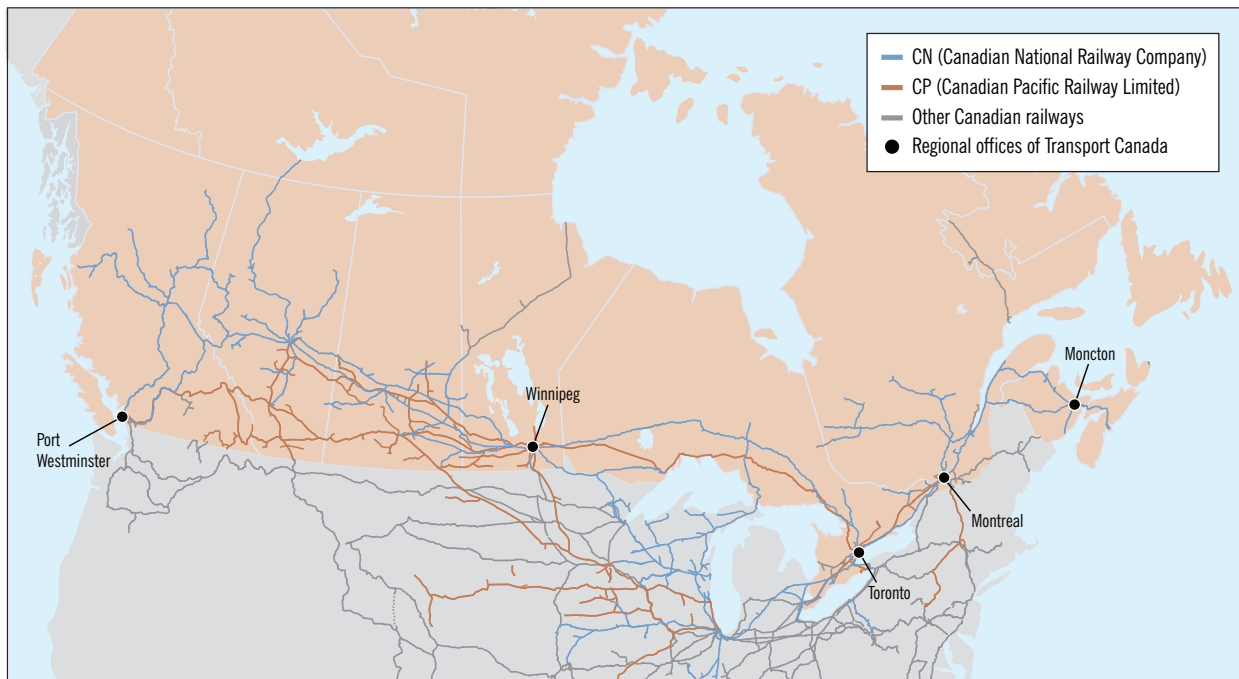
Source: The Canadian Transportation Agency

### Railways in Canada

**7.1** Canada has a large and well-developed railway network, with about 44,000 kilometres of tracks across the country (Exhibit 7.1). Railways played a key role in the shaping of the nation, and they remain an important economic driver as a primary mode of freight transportation. Canada's rail network is the third largest in the world, and it carries the fourth-largest volume of freight.

**7.2** In Canada's railway network, there are 31 **federal railways**. They include three national railways—Canadian Pacific Railway Limited and the Canadian National Railway Company, both of which are publicly traded companies, and VIA Rail Canada Inc., a federal Crown corporation—and 28 smaller federal railways. Non-federal railways operating on tracks owned by federal railways entered into agreements with the track owners specifying which safety requirements they must comply with. This audit focused on the oversight of federal railways only.

**Exhibit 7.1** Canada's vast railway network



Source: Railway Association of Canada, 2012

**7.3** Safe railway operations allow for a continuous flow of rail traffic and mitigate the risks of accidents causing injuries, deaths, and environmental damage. In 2012, the number of reported accidents by federal railways totalled 1,015 (1,022 in 2011) (Exhibit 7.2). About 60 percent of related fatalities and 30 percent of serious injuries involved trespassers going onto railway property (about 76 fatalities or serious injuries each year between 2002 and 2012).

**Exhibit 7.2** Number of reported accidents by federal railways in the transportation of freight and passengers between 2002 and 2012

Accidents*	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Freight	1,266	1,300	1,337	1,395	1,301	1,242	1,108	978	1,014	955	967
Passengers	66	53	78	83	71	82	79	68	62	68	49
<b>Total accidents**</b>	<b>1,332</b>	<b>1,352</b>	<b>1,413</b>	<b>1,476</b>	<b>1,371</b>	<b>1,320</b>	<b>1,179</b>	<b>1,043</b>	<b>1,074</b>	<b>1,022</b>	<b>1,015</b>

\* Includes some accidents reported by non-federal railways operating on tracks owned by federal railways.

\*\* Totals do not necessarily add up because some accidents involved both freight and passenger trains and were not counted twice.

Source: Transportation Safety Board, 2013

**7.4** In 1988, Parliament passed the first *Railway Safety Act*, governing all components of federal railways. The Act recognizes that federal railway companies have primary responsibility for ensuring the safety of their operations and authorizes them to develop operating rules and engineering standards to protect the public, rail personnel, rail properties, and the environment from potential harm caused by railway operations (Exhibit 7.3 shows the components of railway operations). Other statutes concerned with federal railway operations include

- the *Canadian Transportation Accident Investigation and Safety Board Act*,
- the *Canadian Transportation Act*, and
- the *Transportation of Dangerous Goods Act*.

**7.5** The federal railways have developed many operating rules and engineering standards, including safety requirements for equipment, grade crossings, rail operations, personnel, and infrastructure. Following approval of the Minister of Transport, these rules and standards are legally recognized as equivalent to regulations and form part of the overall **regulatory framework**.

**7.6** In the mid-1990s, the government determined that the oversight approach to railway safety was increasingly difficult to sustain because of the expected increase in traffic volume and projected shortages of technical personnel in the rail industry. In addition, advancement in

The **regulatory framework** applicable to the federal railways includes

- the *Railway Safety Act*,
- rules and engineering standards,
- regulations (such as the *Railway Safety Management System Regulations*),
- guidelines (such as the *Guideline for Bridge Safety Management*), and
- education and awareness activities.

**Exhibit 7.3 The key components of federal railways**

<b>Equipment</b>	The federal railways <ul style="list-style-type: none"> <li>• transport more than 50% of freight moved on land in Canada (3.6 million carloads of freight originating from Canada annually), and</li> <li>• operate 2,900 locomotives.</li> </ul>
<b>Engineering</b>	The federal railways maintain <ul style="list-style-type: none"> <li>• 17,800 public crossings,</li> <li>• 39,000 kilometres of tracks, and</li> <li>• more than 4,600 bridges.</li> </ul>
<b>Personnel (Operations)</b>	The federal railways employ 10,000 railway engineers, conductors, and traffic controllers, and other personnel such as maintenance and service staff.

Source: Railway Association of Canada, 2012

safety research demonstrated that organizations could comply with prescriptive regulations but still be unsafe. More specifically, compliance did not necessarily mean effectively managing safety risks. It thus became clear that, by itself, the traditional approach to regulatory oversight was not sustainable and was insufficient when it came to improving the safety performance. As a result, in 1999, the government added to the Act a provision for safety management system (SMS) regulations, and the *Railway Safety Management System Regulations* came into force in 2001. The *Rail Safety Act* requires federal railways to integrate safety management into their day-to-day operations (Exhibit 7.4). In addition to improving safety performance, SMS was expected to reduce costs by preventing accidents.

**Transport Canada's oversight role**

**7.7** Under the *Railway Safety Act*, the Minister of Transport is responsible for the oversight of rail safety. Transport Canada plays that role through

- the oversight of the compliance with the regulatory framework, including safety management systems implemented by federal railway companies;
- the approval of rules and engineering standards developed by the federal railways to enhance rail safety in Canada;
- the development and administration of additional policies, regulations, standards, guidelines, and guidance; and
- the conduct of education and awareness activities to promote rail safety for Canadians, travellers by rail, and Canada's rail industry.

**Exhibit 7.4 The federal railways have adopted the safety management system concept**

The safety management system (SMS) concept originated in the early 1980s in the chemical industry. It emphasized the need to look at an overall process or system, including the combination of human, organizational, technical, and environmental factors, rather than individual safety problems. The goal was for organizations to move from a reactive to a proactive approach by identifying hazards, analyzing associated risks, and taking appropriate measures before accidents and damage could occur. Over the years, the concept has spread to other industries, including transportation.

Instead of replacing the existing regulatory framework, the safety management system was intended to complement it by creating a more comprehensive way of managing safety. Federal railways in Canada have been required to have

- a safety policy with annual safety targets and associated safety initiatives;
- safety authorities, responsibilities, and accountabilities;
- employees' and their representatives' involvement in the development and implementation of the railway company's SMS;
- systems and procedures to demonstrate compliance with applicable regulations, rules, standards, and orders;
- risk management processes;
- risk control strategies;
- accident and incident reporting, investigation, analysis, and corrective action;
- skills, training, and supervision, including management controls to ensure that the safety management system is working well;
- systems that generate safety performance data and analysis;
- safety audit and evaluation;
- corrective action, approval, and monitoring; and
- documentation.

Source: Railway Safety Management Systems Guide, Transport Canada, 2010

**7.8** Transport Canada oversees rail safety in Canada through its Rail Safety Program. It includes a regulatory framework and activities to oversee safety of all components of federal railways (Exhibit 7.3). The Department exercises its oversight of the safety management systems of federal railways, including their compliance with the regulatory framework, primarily by inspectors through the conduct of audits and inspections, and through enforcement actions such as imposing speed limits when necessary. With the introduction of the Railway Safety Management System Regulations in 2001, Transport Canada's oversight role was to focus on assessing the effectiveness of a federal railway's SMS as well as its compliance with the regulatory framework (Exhibit 7.5).

**7.9** An effective SMS depends on both the federal railways and the regulator (Transport Canada): the federal railways are supposed to manage rail safety risks and improve safety performance on a continuing basis, while the regulator is supposed to oversee whether safety

management systems are free of deficiencies that might compromise rail safety. In 2010, in cooperation with the industry, Transport Canada published the *Railway Safety Management Systems Guide* to assist federal railways in developing, implementing, and enhancing their SMSs to meet the requirements of the *Railway Safety Act*.

**7.10** Transport Canada’s oversight focuses on the 31 federal railways—the 3 national railways and the 28 smaller federal railways.

**7.11** Transport Canada carries out its responsibilities for rail safety through the Rail Safety Directorate, which has its headquarters in Ottawa and branches in five regions. Headquarters is responsible for developing and implementing policies and regulations, as well as the overall administration of the *Railway Safety Act*. Along with the Operations Management Branch at headquarters, the regions deliver oversight activities, including carrying out audits and inspections. In the 2011–12 fiscal year, about 173 Transport Canada employees worked in the Directorate, including 101 inspectors responsible for conducting inspections and audits. In that period, Transport Canada spent approximately \$33 million on rail safety oversight.

**Exhibit 7.5** Transport Canada’s oversight approach changed with the introduction of safety management systems

Traditional approach	Safety Management System approach
Transport Canada performs inspections of federal railways’ compliance with regulations, rules, and engineering standards.	Transport Canada performs audits to assess whether federal railways have implemented effective safety management systems to manage their safety risks in day-to-day operations. This approach also includes inspections of federal railways’ compliance with regulations, rules, and engineering standards.

### Current challenges to Transport Canada’s oversight

**7.12 Expanded responsibility for oversight.** On 1 May 2013, amendments to the *Railway Safety Act* came into force to include non-federal railways operating on tracks owned by federal railways. These non-federal railways, such as local railway companies and metropolitan rail transportation companies currently under provincial oversight, now have to obtain a railway operating certificate from Transport Canada to operate rail equipment on tracks owned by federal railways. These amendments further expanded Transport Canada’s oversight role, making it responsible for the 70 federal and

non-federal railways. The Department will also have to oversee many components of the 39 newly added non-federal railways in addition to the 31 federal railways it already oversees.

**7.13 Changes in the rail industry.** The three national federal railways have recently improved their infrastructure and freight and passenger movements to raise service levels. For example, they have introduced new technologies (such as wheel impact load detectors on tracks) to identify problems with their equipment and prevent breakdowns. The three national railways have said that they plan to continue with investments to improve on-time performance, while at the same time improving their rate of return. With continued use of new technology, additional infrastructure, and traffic growth, it is important that Transport Canada oversees whether federal railways maintain effective safety management systems to identify new risks and implement strategies for improving rail safety in Canada.

#### **Focus of the audit**

**7.14** The federal railways have the primary responsibility for ensuring the safety of their operations. Transport Canada is responsible for advancing the safety of rail transportation in Canada, including overseeing the safety of the federal railways. The focus of our audit was to determine whether Transport Canada has adequately overseen the management of safety risks by federal railways. Safety risks are inherent in rail transportation. Transport Canada will never have enough resources to ensure that every federal railway company complies with all aspects of the safety regulatory framework at all times. Therefore it must use risk management techniques to choose what to oversee, when, and how often. It must also rely on properly trained staff to apply the appropriate methodology and tools, along with their knowledge and experience, to identify what to inspect or audit and to assess whether federal railways are managing their safety risks and are complying with the regulatory framework. For this purpose, we examined four aspects of Transport Canada's oversight program:

- First, we looked at whether Transport Canada has a regulatory framework that is responsive to significant safety issues and emerging high safety risks in a timely manner.
- Second, we looked at Transport Canada's planning of oversight activities of federal railways and whether it conducted these activities according to plans and has adequate methods in place for that purpose.



- Third, we looked at whether Transport Canada has assessed that it has the right number of qualified staff it needs to deliver the Department's Rail Safety Program.
- Finally, we looked at whether Transport Canada has an adequate quality assurance program.

**7.15** Our audit focused on Transport Canada's oversight role and was not designed to conclude on whether individual federal railways or the rail industry in Canada are safe. Nor did we examine the inspectors' judgments, the Department's compliance with other legislation applying to federal railways, including the *Canadian Transportation Accident Investigation and Safety Board Act* and the *Canadian Transportation Act*, or the Department's compliance with the *Transportation of Dangerous Goods Act*. We did not examine the oversight of non-federal railway operations done by the Department on behalf of provinces. Finally, our report is not an investigation into the tragic accident at Lac-Mégantic, Quebec, or any other rail accidents.

**7.16** More details about the audit objectives, scope, approach, and criteria are in **About the Audit** at the end of this chapter.

## Observations and Recommendations

### Regulatory framework

#### **Transport Canada has kept abreast of important safety issues and has taken some actions to address them**

**7.17** We examined whether Transport Canada has implemented a regulatory framework that is responsive to significant safety issues and emerging high risks. It is important that the Department identify and analyze safety issues so that significant issues will be resolved in a timely manner. Safety issues are usually resolved when the Department has made the necessary changes to the regulatory framework to mitigate the risks to an acceptable level.

**7.18** The Department implemented a regulatory framework that includes the *Railway Safety Act*, safety rules, engineering standards, regulations (such as the Railway Safety Management System Regulations), guidelines (such as the Guideline for Bridge Safety Management), and education and awareness activities.

**7.19** In addition, in 2007, the Minister of Transport established an independent panel of experts to review the *Railway Safety Act* and address concerns raised by high-profile railway accidents

between 2005 and 2007. Some of these accidents resulted in serious injuries and fatalities, as well as significant environmental damage.

**7.20** The *Railway Safety Act* Review Advisory Panel widely consulted in all provinces with the public, the rail industry, provincial and municipal governments, unions, and other interest groups such as environmental groups, emergency responders, and experts within the Rail Safety Directorate at Transport Canada. The Department was aware of most of the concerns raised by stakeholders because it works closely with the industry to keep abreast of new developments and important safety issues.

The final report of the *Railway Safety Act* Review Advisory Panel is posted on the Transport Canada website at [http://www.tc.gc.ca/eng/tcss/RSA\\_review](http://www.tc.gc.ca/eng/tcss/RSA_review)

The Report of the Standing Committee on Transport, Infrastructure, and Communities on Rail Safety in Canada is posted on the Parliament of Canada website at <http://www.parl.gc.ca/HousePublications>

**7.21** The Panel's November 2007 final report, *Stronger Ties: A Shared Commitment to Railway Safety*, contained 56 recommendations for resolving important issues. The report recommended improvements to rail safety, including measures to strengthen the rail safety regulatory framework, the implementation of safety management systems (SMSs) by the federal railways, and the Department's oversight of these systems. In May 2008, the House of Commons Standing Committee on Transport, Infrastructure and Communities reviewed and supported the Panel's recommendations. The Committee also provided 14 additional recommendations in its review of rail safety in Canada. Transport Canada agreed with both the Panel's and the Standing Committee's recommendations, and the Department worked with the industry to analyze the recommendations, identify solutions, and take action to implement them. In 2009, the government approved \$71 million in funding for Transport Canada, including \$43 million to improve the regulatory framework and the Department's oversight of the federal railways' safety management systems, and \$28 million to fund grade crossing improvements that would promote rail safety.

**7.22** We examined what the Department had done to implement the Panel's recommendations. We found that the Department has a process to identify and analyze safety issues, and to propose solutions. Between 2008 and 2009, Transport Canada and the industry created six working groups composed of officials from the Department, industry, unions, stakeholders, and other interested parties. The working groups analyzed the recommendations concerning

- the rule-making process;
- information collection, analysis, and dissemination;
- technology;
- the environment;

- safety management systems; and
- issues regarding proximity of railway infrastructure and operations issues.

**The Department implemented many rail safety recommendations, but more work is needed**

**7.23** The Department has made significant progress in implementing many of the Review Panel’s recommendations (Exhibit 7.6). Transport Canada took responsibility for implementing 45 of these recommendations. We found that the Department’s progress in implementing these recommendations included the following:

- The Department issued a guideline on submitting rules under the *Railway Safety Act* to improve consultation for the rule-making process and the quality of proposed rules.
- It created an Advisory Council on Rail Safety for ongoing discussion of rail safety issues with the industry and stakeholders.
- It increased its staff capacity to carry out additional education and awareness activities in regions, and to develop new regulations.
- After the Department consulted widely with the industry, Parliament amended the *Railway Safety Act*, which came into effect in May 2013, to give Transport Canada regulatory powers. These powers include issuing railway operating certificates for non-federal railways running on tracks owned by federal railways, requiring federal railways to file an environmental management plan, and levying monetary penalties as an additional compliance tool.

**Exhibit 7.6** Transport Canada’s status on the Review Panel’s recommendations

Status of recommendations	Number of recommendations
Assessed as completed by Transport Canada	32
Assessed as not yet completed by Transport Canada	13
Not pursued by Transport Canada (seven were outside of its mandate and one was assessed by the Department as not adding much safety value)	8
Led by the industry	3
<b>Total</b>	<b>56</b>

Source: Transport Canada

**7.24** Although Transport Canada assessed 32 recommendations as completely implemented, it recognizes that work remains to be done on some of these as well as on 13 other recommendations before the necessary changes can be integrated into the regulatory framework for federal railways to comply with it, and for the Department to conduct its oversight. For example, work is still ongoing on

- improving the oversight of the federal railways' safety management systems (for instance, auditing the federal railways' fatigue management plans);
- collecting data from federal railways measuring their safety performance;
- developing regulations to establish the conditions for a railway to obtain an operating certificate;
- identifying the actions to be taken to oversee each railway's management of environmental protection;
- developing meaningful measures of risk and safety performance to provide benchmarks for federal railways; and
- developing the necessary analytical skills for overseeing the federal railways' safety management systems.

**7.25** We also examined what the Department has done to implement the 14 additional recommendations of the Standing Committee on Transport, Infrastructure and Communities. We found 3 recommendations that Transport Canada did not implement because the Committee was dissolved in 2009 before the Department was able to report. As for the 11 remaining recommendations, we found that the Department has made significant progress on four of them. For example, the *Railway Safety Act* was amended in 2013 to include some changes such as protection for railway employee whistle-blowers, and a requirement for federal railways to include employees and their collective bargaining agents in the development of adequate and effective safety management systems. The Department recognizes that more work is required on 2 of them as well as on the remaining 7 recommendations. In our view, the Committee's recommendations on SMSs were important and still need to be addressed. For example, the Committee was concerned about the slow implementation of safety management systems by the industry and Transport Canada's oversight of federal railways' SMSs. (For our assessment of Transport Canada's oversight, including of safety management systems, see paragraphs 7.33 to 7.65.)

**7.26 Recommendation.** Transport Canada should complete the implementation of the recommendations raised in the *Railway Safety Act* review and relevant recommendations of the rail safety review conducted by the House of Commons Standing Committee on Transport, Infrastructure and Communities. It should integrate the changes into the regulatory framework for federal railways to comply with and for the Department to oversee.

**The Department's response.** Agreed. With industry and other important stakeholders, Transport Canada will continue to act on recommendations of the *Railway Safety Act* review and the study of the Standing Committee on Transport, Infrastructure and Communities. For some recommendations, this will involve the integration of recommended changes into the Department's regulatory framework.

#### **The Department responded to the recommendations of the Transportation Safety Board**

**7.27** The Transportation Safety Board of Canada is an agency independent of Transport Canada, reporting to Parliament through the Leader of the Government in the House of Commons. Its main purpose is to advance transportation safety by conducting investigations of accidents in rail and other modes of transportation. The Board's mandate is to answer three questions: what happened, why did it happen, and what can be done to reduce the risk of it happening again? In addition to identifying safety deficiencies evidenced by accidents, the Board makes recommendations to eliminate or reduce these deficiencies. It also reports publicly on its investigations and related findings. The Transportation Safety Board does not assign fault or determine liability, and its findings are not binding on the parties involved. However, federal ministers are required to provide formal responses to Board recommendations, describing action taken or planned.

**7.28** The Board made several recommendations on rail safety over the years after conducting detailed investigations of accidents. In its annual report to Parliament for the 2012–13 fiscal year, the Board assessed as fully satisfactory 90 percent of Transport Canada's responses to address its recommendations as at 31 March 2013. The Board also indicated that the actions planned or taken by Transport Canada on the other 10 percent of its recommendations (13 recommendations) have not been sufficiently advanced to reduce, substantially reduce, or eliminate the risks to transportation safety. However, the Board assessed the actions planned or taken by Transport Canada on these 13 recommendations as being satisfactory in intent or

The Transportation Safety Board of Canada's *Annual Report to Parliament 2012–2013* is available on the Board's website under Corporate publications > Annual reports (<http://www.bst-tsb.gc.ca/eng/publications/index.asp>).

satisfactory in part. These recommendations relate to important rail safety issues such as grade crossings and trespassing, which appear on the Board's Watchlist of safety issues. The Board reassesses the issues on the Watchlist annually or when otherwise warranted.

**Despite the Department's progress, important and long-standing rail safety issues remain unresolved**

**7.29** We reviewed Transport Canada's progress in resolving important rail safety issues. We selected and examined six important rail safety issues raised by stakeholders in the past 5 to 20 years. The six issues were

- trespassing,
- grade crossings,
- bridge safety management,
- environmental protection,
- collection of safety performance data from federal railways, and
- implementation and oversight of federal railways' safety management systems.

**7.30** We found that both the Department and the industry worked together and took action to mitigate safety risks. We also found that progress was made on these issues, including trespassing (see exhibits 7.7 and 7.8).

**7.31** Despite the Department's discussions with the industry and progress made over the past 20 years to mitigate risks, some important safety issues remain unresolved (Exhibit 7.8). We recognize that many complex, large-scale issues require consultations, analysis, and a number of actions, some of which are outside of the Department's control. In our view, however, it is taking too long to resolve significant safety issues. Although the Department has developed various work plans and monitored progress on an ad hoc basis, it does not have a formal process to set clear timelines for overseeing significant safety issues from the time they are identified until they are resolved. We found that the work plans are vague in terms of timelines for monitoring progress on important safety issues.

**7.32 Recommendation.** Transport Canada should accelerate the resolution of important and long-standing safety issues. The Department should establish a formal process with clear timelines to monitor significant safety issues, from the time they are identified until they are mitigated to an acceptable level.

**The Department's response.** Agreed. Transport Canada will continue to work with industry and other important stakeholders to mitigate important safety issues: for example, it will continue its efforts to increase public awareness of the dangers of trespassing. It will use its national database as a tool to monitor timelines and progress.

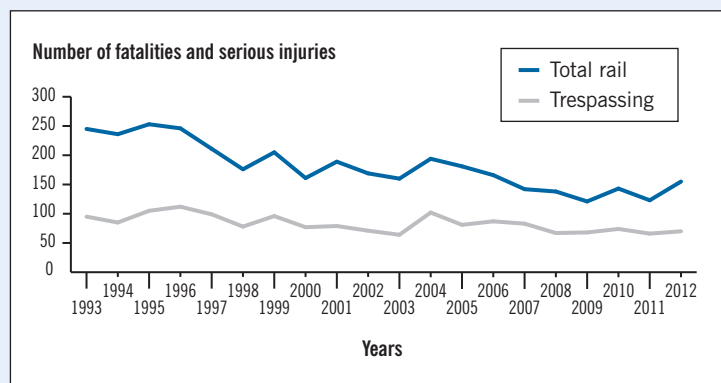
#### Exhibit 7.7 The Department has made progress on trespassing, but more work is needed

In the past 20 years, an average of 83 people have died or been seriously injured each year as a result of being hit by a train while trespassing on railway property. Many of the accidents occurred in urban developments close to railway tracks. In the early 1990s, concerns were raised about trespassing because of an increasing number of deaths or serious injuries (94 deaths or serious injuries on average in those years). After investigating the accidents, the Transportation Safety Board recommended that Transport Canada establish minimum standards for the type and location of fencing near railway properties where there was a high risk of trespassing. The Department agreed with the recommendation in 1992.

As part of the safety management system approach, federal railways are expected to evaluate potential trespassing sites to identify high-risk areas. They must implement proper access control methods to mitigate the risk of accidents and injuries in these areas.

Transport Canada and the industry have taken action to mitigate risk in high-risk areas. For example, federal railways installed fences in some urban areas near railway properties and hired security guards to monitor intrusions. Transport Canada takes enforcement actions related to trespassing issues by issuing notices, orders, and letters of safety concerns to federal railways on a number of occasions, identifying railway management's lack of oversight with respect to trespassing. Transport Canada and the industry have held education sessions with municipalities and local organizations, such as schools, to raise awareness about high-risk pedestrian crossings; this action is part of the industry's rail safety program, Operation Lifesaver. However, it is a constant challenge to educate people on the risks of trespassing on railway property or walking on a rail track.

The Department made progress in addressing the trespassing issue but more work is needed. The Department still needs to clarify the roles and responsibilities of federal railways in controlling access to their property. According to Transport Canada, it has taken a long time to clarify the multi-jurisdictional responsibilities. The Department has drafted regulations to reduce trespassing, but at this time it is still working to integrate them into the regulatory process. Trespassing continues to account for a high number of rail fatalities and serious injuries reported by federal railways. It is recognized that a proportion of these incidents are suicides.



**Exhibit 7.8** The Department has taken action on several significant and long-standing safety issues, and work is ongoing to resolve the issues

Issue	Actions taken to date by Transport Canada to mitigate risks	Further necessary actions planned by the Department
Trespassing	<ul style="list-style-type: none"> <li>• Developed standards for the type and location of fences near railways.</li> <li>• Took a number of steps when working with the industry and municipalities to mitigate trespassing risk. Took enforcement action, such as issued notices, orders, and letters of safety concerns to federal railway companies.</li> <li>• Renewed funding contribution to the industry program “Operation Lifesaver” to increase public awareness, especially for children, of the risks of trespassing at rail crossings (\$5.2 million spent since 1990–91).</li> <li>• Funded a 10-year awareness and advertising program with the industry (\$5 million).</li> <li>• Increased its staff capacity in regions to strengthen its education and awareness activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop regulations for access control requirements and clarify the roles and responsibilities of federal railways for controlling access to their property.</li> </ul>
Grade crossings	<p>Took a number of steps when working with the industry and municipalities to mitigate grade crossing risk:</p> <ul style="list-style-type: none"> <li>• Funded the closure of 124 crossings (\$1.4 million since 2003–04).</li> <li>• Spent over \$200 million since 1989 on grade crossing improvements (\$11.9 million in 2012–13).</li> <li>• Started consultations on the Railway-Roadway Grade Crossings Policy.</li> <li>• Increased its capacity to carry out education and awareness activities.</li> <li>• Published draft Canadian Railway-Roadway Grade Crossings Standards.</li> </ul>	<ul style="list-style-type: none"> <li>• Finalize regulations for grade crossing requirements and clarify the roles and responsibilities of federal railways for the maintenance of grade crossings.</li> </ul>
Bridge safety management	<ul style="list-style-type: none"> <li>• Worked with industry to identify the key elements of a bridge safety management program and published a guideline in 2012 for implementing them.</li> </ul>	<ul style="list-style-type: none"> <li>• No action required.</li> </ul>
Environmental protection	<ul style="list-style-type: none"> <li>• Although not a long-standing issue, the <i>Railway Safety Act</i> was amended in 2013 to address this, authorizing the Department to make regulations requiring a railway company to file environmental management plans, and to prevent and control fires on railway works.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop regulations for environmental management plans.</li> <li>• Develop regulations for the control of fires on railway property to replace existing rule.</li> <li>• Identify what needs to be addressed to oversee the federal railways’ management of environmental protection.</li> </ul>



**Exhibit 7.8 The Department has taken action on several significant and long-standing safety issues, and work is ongoing to resolve the issues (continued)**

Collection of safety performance data from federal railways	<ul style="list-style-type: none"> <li>• Drafted possible performance indicators to identify areas of concern for federal railways, in consultation with the Transportation Safety Board and industry.</li> <li>• Identified possible options for developing a secure database to enable electronic filing.</li> <li>• The <i>Railway Safety Act</i> was amended in 2013, allowing the Minister to order a company to provide information necessary for ensuring compliance with the Act.</li> </ul>	<ul style="list-style-type: none"> <li>• Finalize the performance indicators it needs from federal railways, and develop a system to collect rail safety performance data from federal railways.</li> <li>• Develop a regulation to require federal railways to submit additional safety performance data on a regular basis.</li> </ul>
Progress on safety management system implementation and oversight	<ul style="list-style-type: none"> <li>• Published the Railway Safety Management System Guide in 2010.</li> <li>• Started work to develop a safety culture perception survey, to be used by the industry.</li> <li>• Reorganized the structure and accountabilities of the Rail Safety Program.</li> <li>• The <i>Railway Safety Act</i> was amended in 2013, authorizing the Department to modify the SMS regulations with respect to several safety issues.</li> </ul>	<ul style="list-style-type: none"> <li>• Publish amendments to strengthen the SMS regulations.</li> <li>• Develop an action plan for the full implementation of SMS.</li> <li>• Develop a tool for continuous oversight of SMS implementation.</li> </ul>

**Planning for oversight activities****Planning decisions lack proper consideration of federal railways' safety management systems**

**7.33** The primary responsibility for the safety of day-to-day operations rests with the federal railways. At the same time, the regulatory framework in Canada requires Transport Canada to verify that federal railways have effective safety management systems (SMSs) for managing their operations. Since Transport Canada cannot oversee each railway location, kilometre of track, piece of equipment, and train crew, the Department must rely on an effective risk-based oversight approach to assess whether federal railways are managing rail safety risks appropriately and are complying with Canada's regulatory framework at all times.

**7.34** We looked at the information Transport Canada used in developing its oversight plans for the 2011–12 fiscal year. Our goal was to determine whether the Department had assessed whether federal railways had implemented effective SMSs to manage their operations and comply with the rail safety regulatory framework. When implemented and maintained adequately, safety management systems provide assurance that a railway's operations are functioning safely on a day-to-day basis, or continuously improved when hazards or risks are identified (Exhibit 7.9).

**Exhibit 7.9** Examples of federal railways' key safety systems generating safety performance data

Component of the railway	System generating safety performance data
Signals	Automatic warning systems
Equipment	Wheel load impact detectors (to identify defective wheels)
People (Operations)	Crew management system
Tracks	Cars to test geometry of tracks
Bridges	Bridge management system (including inspections conducted by qualified engineers)

**7.35 Risk and performance information.** We examined the information collected by the Department for planning its oversight activities for the 2011–12 fiscal year. To target higher-risk federal railways as well as railway components and locations, it is essential to use complete and up-to-date risk and performance information in planning decisions. We found that Transport Canada collected data from different sources to identify what it should oversee. For example, it collected data on accidents reported by federal railways to the Transportation Safety Board and other data from federal railways. However, some of the information collected by the Department was incomplete or not up to date, such as federal railways' capital plans and track geometry data. Transport Canada was also missing key information on the federal railways' safety management systems in making planning decisions, such as safety performance data collected to demonstrate that these safety systems were working as intended (Exhibit 7.9). This is important because the safety management systems are implemented by federal railways to show compliance with federal rules and engineering standards in their day-to-day operations.

**7.36** In addition, the Department was missing other important risk and performance data to supplement inspectors' knowledge gained from previous inspections. Missing were

- the federal railways' risks assessments,
- information on the sections of track used in transporting dangerous goods,
- information on the condition of railway bridges, and
- the financial information of privately owned federal railways not publicly available.

**7.37** This information is also important because it enables the Department to make risk-based planning decisions and to ensure that inspectors are assigned to work on higher-risk areas. The Department identified improving data collection as an important priority and it allocated additional funding for this purpose in 2009. As at 31 March 2013, Transport Canada had spent about \$2.7 million to determine the performance indicators and information that it needs from federal railways, and to start developing a data collection system. As of the completion of our audit work, it had not yet finalized which performance indicators and information it needs from federal railways or developed a system to collect that information.

**7.38 Risk assessments.** In our discussions with the Department's management and inspectors, we found that they used their knowledge and experience when assessing the federal railways under their jurisdiction, but the way they assessed risks varied significantly between companies and regions. We examined the risk assessments that regions prepared for the 2011–12 fiscal year to identify their local areas of concern for planning oversight activities. We found that each region developed its own model, including risk factors used for assessing the risks of most federal railways' components within their region. Issues were identified based on the inspectors' previous audits and inspections.

**7.39** However, we found that the assessments used to plan the 2011–12 oversight activities did not cover some key risk factors, such as changes in management personnel, changes in operations, financial and labour difficulties, changes in management practices, and changes in safety management systems, as well as factors such as new technology, exemptions to safety rules, and routes for hauling dangerous goods. The use of these risk factors is essential to ensure that Transport Canada is targeting the right locations, equipment, operations, and infrastructure, and is carrying out its oversight activities at the right time. Also, it would help identify the risks that are of a regional or national nature.

**7.40 Planning methodology.** The Department has a methodology for planning its oversight activities of federal railways. However, we found that Transport Canada's methodology does not require the use of uniform risk and performance indicators to help staff identify areas of railway operations that might be more likely not to comply with the regulatory safety framework. Use of uniform indicators would facilitate a more consistent approach in overseeing national and smaller federal railways. This gap in methodology may explain the varied approaches used by regions in assessing risks of national and other smaller federal railways.

**7.41** We also found that the methodology does not require inspectors to document their understanding of key components of a railway's safety management system, including management controls, or performance indicators used to identify what can go wrong in each area of the railway's operations. Collecting and using up-to-date performance information on the SMS would help Transport Canada to make more strategic planning decisions. The Department's risk assessment would also be enhanced if it obtained and used the federal railways' current risk assessments in planning their annual oversight plans.

**7.42 Recommendation.** To oversee the safety management systems implemented by federal railways, including their compliance with the regulatory framework, Transport Canada should

- review its methodology to identify key safety risk and performance indicators, and the safety performance information it needs from railway companies, in order to make risk-based planning decisions;
- collect the relevant risk and safety performance information from federal railways and assess its completeness and reliability; and
- develop an approach to make better use of the information on federal railways' safety risks and performance when preparing annual oversight plans.

**The Department's response.** Agreed. As the Department continues to enhance its safety management system (SMS) approach to oversight, it will continue to develop/refine its methodology for identifying safety risks, performance indicators, and safety performance information needed from federal railways so that oversight activity can be targeted to the areas of greatest risk.

To this end, by winter 2014, the Department will complete a review of its methodology with a view to updating and strengthening performance and risk indicators.

By early 2016, the Department will introduce revised regulations clearly setting out the performance information that must be provided by federal railways. Once the regulations are in place, the Department will take account of this information into its annual risk-based planning process, the foundation for its annual oversight plans. The adequacy of federal railways' own oversight policies and practices will be an important factor when preparing annual risk-based oversight plans.

### Too few audits were planned for assessing federal railways' safety management systems

**7.43** Federal railways have to implement adequate and effective safety management systems to demonstrate that they comply with the rail safety regulations and manage their safety risks on a day-to-day basis. In overseeing the safety management systems implemented by federal railways, Transport Canada's role includes examining their safety reporting systems and management controls. Transport Canada is supposed to set clear minimum requirements for its oversight of federal railways so that it will obtain the assurance it needs that federal railways have implemented adequate SMSs and to comply with regulations, rules, and engineering standards for conducting safe operations.

**7.44** We looked at Transport Canada's oversight plans and interviewed staff involved in their preparation to determine whether the Department had established minimum oversight requirements. We found that Transport Canada's oversight activities included 14 **audits** completed or substantially completed between the fiscal years 2009–10 and 2011–12, and over 20,000 **inspections** in 2011–12.

**Audit**—An assessment of a railway's safety policies, procedures, and processes to determine whether it has implemented an adequate and effective safety management system to manage its safety risks.

**Inspection**—An assessment of a railway's component (for example, a crossing, a bridge, a car, or a locomotive) to determine whether the component complies with the applicable regulations, rules, or engineering standards.

**7.45 Audits.** We found that the Department had set a three-year cycle for auditing the safety management system of each federal railway. However, the Department has not been able to meet that minimum. It completed or substantially completed a total of 14 audits in the three fiscal years ending 31 March 2012 in eight federal railways—about 26 percent of what its policy requires. Six of these audits were conducted at Canadian National and two at Canadian Pacific, which together carry 76 percent of freight moved by federal railways in Canada. However, in that three-year period, Transport Canada did not conduct an audit of VIA Rail Canada Inc., which alone carries about four million passengers annually. Since 2004, the Department has been conducting focused audits. These audits examine specific known issues rather than the overall safety management system of each federal railway, including the key safety management system changes submitted to the Department annually. As a result, the scope of the Department's audits is very limited; they provide assurance on only a few aspects of those systems. At the current rate of conducting partial audits, the Department would take many years to audit all key components of the SMS regulations, including key safety systems of each of the 31 federal railways. The Department is reviewing its audit frequency to determine the minimum level of oversight to assess whether federal railways operate safely on a day-to-day basis.

**7.46** We also noted that Transport Canada did not audit whether federal railways assessed the operations of non-federal railways using their tracks. Such assessments would ensure that they comply with safety rules and standards and have adequate safety management systems. Assessment of non-federal railways is important because they operate on high-speed tracks located in high rail traffic areas, and they transport about 69 million passengers a year out of the total of 73 million. We were told that the Department is developing its minimum level of oversight for these non-federal railways, which have come under Transport Canada's oversight since 1 May 2013.

**7.47** These findings indicate that Transport Canada does not have the assurance it needs that federal railways have implemented adequate and effective safety management systems. Federal railways were required to implement such systems 12 years ago. At the same time, the government approved risk-funding for Transport Canada to oversee the systems. The Department has yet to establish an audit approach that provides a minimum level of assurance to senior management that federal railways have implemented adequate and effective safety management systems for managing their safety risks in day-to-day operations, and for complying with safety requirements.

**7.48 Inspections.** We found that, to determine the minimum number of railway inspections a year, Transport Canada uses a methodology developed in the early 1990s. The methodology establishes the minimum number of inspections required for each region so that the Department can measure deficiency rates across the national federal rail network. The Department uses inspections to identify whether federal railways are meeting the minimum applicable rules and engineering standards. It also uses the inspection results to plan its focused audits. However, we found that the methodology in use is outdated. The rail environment has changed significantly since 1994: Canadian National has been privatized; portions of regional freight services of the Canadian National and Canadian Pacific railways have been sold to smaller federal railways; and implementation of safety management systems has become mandatory for federal railways. Transport Canada has not updated its methodology to take into account these important changes. If the Department took these changes into account and relied more on the results of its audit work, it might have to conduct fewer inspections. It could conduct more audits using resources now devoted to inspections. The Department is in the process of updating its methodology for determining the minimum number of inspections.

**7.49 Recommendation.** Transport Canada should reassess the number of its planned audits and inspections so that it takes into account the new safety management system environment. It should review how it allocates resources, with the aim of conducting the minimum level of oversight necessary to obtain assurance that federal railways have implemented adequate and effective safety management systems to comply with the regulatory framework. The Department should conduct this minimum level of oversight.

**The Department's response.** Agreed. By spring 2014, Transport Canada will review its risk-based oversight program to more fully integrate the safety management system (SMS) environment and plan for increased audits. By fall 2014, Transport Canada will adjust the number of risk-based inspections to reflect required levels of oversight based on the latest safety and risk information, traffic volumes, and taking into consideration the number and findings of SMS audits.

## Conducting oversight activities

### **Transport Canada conducted many inspections, but did not exercise enough oversight of federal railways' safety management systems**

**7.50** We randomly selected a sample of 66 planned inspection files for the 2011–12 fiscal year in addition to all eight audits completed or substantially completed in the 2010–11 and 2011–12 fiscal years. We did not examine the inspectors' judgments. Rather, we reviewed the documentation they provided to us, and met with Transport Canada's inspectors and managers to discuss the approach and methods used. We examined whether the Department had assessed the effectiveness of the safety management system (SMS) implemented by each federal railway. It is important for Transport Canada to have assurance that federal railways have adequate safety management systems, and that they implement management controls in their day-to-day operations to assess whether their systems are adequate and functioning well.

**7.51 Preparation work.** The methodology requires inspectors to prepare for on-site visits by reviewing key documentation from federal railways and other sources; among other things, this is to help them to focus on the highest-risk areas. We found that a plan was prepared in advance of on-site visits for audits, but not for inspections. The plans included elements such as the audit scope, team members, and a schedule. However, we found little information on the key documentation reviewed, the tests to be performed, the number of records to be examined, and the interviews to be conducted. Such information is necessary to ensure that inspectors are planning to do sufficient work.



**7.52** In the eight audit files that we reviewed, we found that inspectors planned to assess some components of the safety management system to determine whether each audited federal railway met the minimum documentation requirement with respect to the SMS regulations. In each file, inspectors identified weaknesses in the SMS documentation, such as the lack of risk assessments or the lack of records of management observations of employees. Inspectors communicated their findings in writing to the federal railways. This was not the first time that Transport Canada identified issues with federal railways' safety management systems. In previous audits, the Department had already found that some federal railways had not documented their systems in compliance with the regulations, and had not adhered to their safety management systems. The Department did not take any enforcement action to require railways to maintain adequate and effective systems in place, even when inspectors identified deficiencies that could affect the safety of railway operations. Instead, the Department conducted inspections of specific railways' components (for example, a crossing, a bridge, or a locomotive) to determine whether, at the time of the inspection, the components complied with applicable regulations, rules, and engineering standards. Transport Canada is currently developing amendments to the regulations; these will include additional requirements for federal railways to implement and maintain adequate and effective safety management systems.

**7.53 Conduct and documentation of audits and inspections.**

The Department relies on the inspectors' judgment, training, and experience to assess a railway's safety management system, including its compliance with the regulatory framework. Good file documentation is important to facilitate review by management and to demonstrate that enough work has been done. Since different inspectors in different regions oversee the same federal railways, it is important that inspectors document their work so that the Department can ensure consistency in assessing the compliance of federal railways with the regulatory framework across the country. To perform its role, the Department needs information on what inspectors assessed, what they found, and their key judgments.

**7.54** In our review of inspection and audit files, we found examples of good documentation that included interview strategies, company records reviewed (such as results of efficiency tests), minutes of interviews, company documents and SMS documentation reviewed by inspectors (such as railways' internal audit protocols), and results of the inspectors' reviews. However, most of the files that we reviewed



were missing many of these elements. Unless results have been documented, management cannot demonstrate that all the important findings noted by inspectors were included in the reports. In our view, if Transport Canada's documentation practices were significantly improved, it would facilitate management review and follow-up on findings with the federal railways.

**7.55 Evaluation and communication of results.** Accurate and complete reporting of significant findings is essential to help federal railways take corrective action to minimize the risk of accidents. We found that audit reports included findings as to whether some aspects of safety management systems met the minimum regulatory requirements or whether operations were in accordance with the federal railway's systems. However, reports did not include a conclusion as to whether the safety management system was effectively implemented. Although the Department told us that only the most significant findings are included in reports and communicated to the federal railways, the audit files do not demonstrate that this is the case, because key judgments are often not documented.

**7.56** In most inspection files that we reviewed, reports showed that inspectors found defects. However, inspectors did not assess whether these defects were caused by deficiencies in the safety management system of the railway. Assessing the SMS would help the Department determine where the railway's systems failed to identify and correct the defects. Although some inspectors told us that they reviewed safety management system documentation to identify weaknesses, they rarely documented these weaknesses in their inspection files. The information also was not included in reports to the federal railways. If that information is not documented and communicated to the federal railways, Transport Canada misses an opportunity to document its knowledge of the federal railways' safety management systems and to require the railways to make the necessary corrections to their systems.

**7.57** We also found that inspectors received a corrective action plan from the federal railway to address the findings of their audits and inspections. However, in almost all the files that we reviewed, the inspectors did not follow up to verify that the railway had implemented adequate corrective actions. We recognize that it may not be practical to follow up on some findings. However, the Department did not document the rationale for not following up on findings and did not analyze the risks of not doing so.

**7.58 Recommendation.** Transport Canada should

- provide better documentation tools to inspectors to carry out their oversight activities, so that they can better document and communicate to federal railways what they assessed and what they found;
- improve its oversight of federal railways' safety management systems by having inspectors assess their quality and effectiveness;
- require federal railways to make the necessary changes to correct deficiencies affecting the safety of their operations; and
- conduct timely follow-up on deficiencies affecting the safety of federal railways' operations, to assess whether they have been corrected.

**The Department's response.** Agreed. By mid-2014, Transport Canada will complete implementation of Rail Safety Integrated Gateway system audit and inspection modules, including training for Transport Canada staff on documentation and communication of oversight activity findings and follow-up requirements.

By mid-2014, following completion of training for all inspectors, Transport Canada will increase the number of system audits that are planned and conducted. Any deficiencies found in railway companies' safety systems will be communicated to the companies, and the companies will be asked to address them. Where significant deficiencies have been identified, Transport Canada will, on a risk basis, conduct follow-up activity to ensure that the deficiencies have been addressed.

By late 2014, Transport Canada will introduce amendments to Railway Safety Management System Regulations that require railways, in addition to having specific processes in place, to also document corrective action decisions and their implementation.

By spring 2014, Transport Canada will develop a follow-up procedure and provide all inspectors with training on the procedure to enhance the consistency of follow-up activity.

**Evidence of sufficient management review is lacking**

**7.59** The International Organization for Standardization developed guidelines for auditing safety management systems. These state that management should review and approve the plans; evaluate conformity with plans; evaluate the adequacy of audit findings and the report; and evaluate the adequacy of corrective actions. We examined

whether the Department has developed a process for management to review the results of its inspectors' oversight work. Management reviews help to ensure that inspectors applied the methodology correctly and that the Department has obtained the desired level of assurance that federal railways are operating safely and complying with the regulatory framework.

**7.60** We found that there is a formal process to review plans and reports in the case of audits, but not for inspections. In several inspections, we found that management approved which railway and location to inspect in its regional oversight plans for 2011–12. For each inspection, however, management does not review and approve the extent and nature of the inspection work. Also, we found that there was little evidence of review of the results of work performed in audits and inspections to evaluate conformity with the plan, the adequacy of findings, and corrective actions taken or planned. We recognize that it may not be practical for managers to review the results before draft findings are communicated to the railways. However, in our opinion, there should be a minimal level of management review of the planning, execution, and draft reports for audits and inspections. This would ensure that inspectors

- focus on the right safety risks and issues,
- perform sufficient audit and inspection work to assess the quality and effectiveness of the railway's safety management system to comply with the regulatory framework, and
- submit reports that are complete and accurate.

**7.61** Defining the expected level of management involvement will also be important for the Department's new certification activities and additional oversight activities (see paragraph 7.12).

**7.62 Recommendation.** Transport Canada should set a clear expectation for management review and approval in the planning, conducting, and reporting of oversight activities, with the aim of ensuring that inspectors comply with the methodology and that their reports are accurate. Transport Canada should provide guidance to management on how to document the timing and extent of management involvement.

**The Department's response.** Agreed. In keeping with its continuous improvement practices, by March 2014, Transport Canada will have strengthened management review of staff's oversight activities,

including adherence to established oversight methodology, to ensure staff is thorough and exercising due diligence in the conduct of inspections and audits.

Performance expectations will be clearly outlined in annual agreements with managers.

### **The methodology and tools for assessing safety management systems need improvement**

**7.63** We examined whether the Department had provided a methodology to inspectors for overseeing a railway's safety management system. This is important to ensure that inspectors are conducting their oversight activities consistently and with the same rigour and depth. Transport Canada has developed an oversight methodology that includes instructions for inspections and audits. The methodology is to be used in each region to oversee the 31 federal railways. We looked at Transport Canada's methodology to determine whether it included the elements of good oversight. We compared it with key principles recommended by the International Organization for Standardization.

**7.64** We found that the Department's methodology lists the roles and responsibilities of senior management and supervisors. It also lists some tasks related to preparing and conducting an audit or inspection, as well as to drafting and communicating findings to the federal railways. However, we found that the methodology contained few or no requirements on

- preparing a sampling plan;
- the minimum documentation needed to support key judgments and decisions made by inspectors when preparing and conducting an inspection, and reporting on findings;
- drawing conclusions from findings on the audit and inspection objectives and safety requirements;
- the content to be included in the report to the federal railways;
- the extent of management review of key judgments and decisions, and the minimum required documentation of management's involvement;
- key steps for following up on findings to determine that federal railways have implemented adequate corrective actions;
- which components of the SMS regulations and which railway safety systems (such as systems for accident reporting or for

identifying and mitigating safety hazards, or automated systems for collecting safety performance) inspectors are to oversee;

- the assessment of the quality of SMSs and management controls;
- which performance indicators and other criteria are to be used for these assessments; and
- the extent to which federal railways have implemented adequate safety management systems and controls.

**7.65 Recommendation.** Transport Canada should improve its methodology to set clear expectations for planning and conducting audits and inspections, and for drafting and communicating findings to the federal railways.

**The Department's response.** Agreed. As Transport Canada progresses to a full systems-based approach to oversight, the Department will update its audit and inspection methodology and procedures, setting clear expectations for the planning, conduct, drafting, and communication of findings to railways.

## Human resource planning

### Transport Canada has not assessed its staff's skills for overseeing the federal railways' safety management systems

**7.66** We looked at whether Transport Canada has assessed that it has the right number of qualified staff for delivering its Rail Safety Program and oversight activities. We interviewed Transport Canada officials responsible for human resource planning and management at headquarters and in the regions; we also met with several inspectors and managers. We reviewed key planning documents, such as the 2007 Integrated Human Resources Plan, which was still in place in 2011–12, and the Rail Safety Strategic Plan 2010–2015. We also looked at the human resource business plan approved in April 2013.

**7.67** We found that Transport Canada performed a preliminary assessment in 2009 of the number of employees it needed to oversee the safety management systems (SMSs) implemented by the 31 federal railways on a three-year cycle. At that time, the Department estimated that it needed 20 system auditors to audit each railway once every three years. However, that assessment was prepared before the Department had developed its audit methodology and before determining the minimum frequency and level of oversight needed to obtain assurance that federal railways have implemented adequate and effective safety management systems to manage safety risks in day-to-day operations and demonstrate compliance with

safety requirements. According to the Department, there are currently 10 qualified inspectors available for conducting audits. With the current workforce, the Department has conducted very few audits: only 26 percent of the 31 federal railways underwent focus audits in the three fiscal years ending 31 March 2012. At this pace, it would take many years before the Department audits all key components of SMS regulations and key safety systems of each national and other federal railway. It is likely that it will take even longer now that the Department has to oversee some key components of the 39 additional non-federal railways.

**7.68** We found that the Department has determined the skill set needed by inspectors to conduct inspections and safety management system audits. According to the Department, inspectors' technical skills are not sufficient for that purpose. The required skills include system-based auditing and analytical skills, as well as other skills such as report writing. In addition to technical skills, these skills will enable inspectors to assess the performance and effectiveness of federal railways' safety management systems. However, we found that Transport Canada has not assessed whether its current staff of inspectors has the required skills and competencies for overseeing the safety management systems implemented by federal railways. We recognize that acquiring system-based auditing and analytical skills may be a challenge, but these skills are important if the Department is to fully implement its SMS oversight approach.

**7.69** We also found that the inspectors' work description has not been updated since 2001 to reflect the responsibility of overseeing the effectiveness of federal railways' safety management systems. The work description needs to reflect the tasks that the Department expects its inspectors to perform. Otherwise, there is a risk that existing and new employees will not implement the SMS oversight approach. Having an up-to-date work description will also be helpful when hiring new inspectors to ensure that they have the skills and experience needed to oversee safety management systems. This is especially important because 40 percent of inspectors will be eligible for retirement by 2015.

**7.70 Recommendation.** Transport Canada should identify and develop a strategy to ensure that it has the needed number of inspectors with the necessary skills and competencies required to plan and conduct the oversight of federal railways, including oversight of safety management systems.

**The Department's response.** Agreed. In order to fully integrate its systems-based approach to oversight, Transport Canada has developed a human resource strategy to ensure that it has the needed number of inspectors with the skills and competencies to plan and conduct the oversight of federal railways, including oversight of safety management systems.

Training, recruitment, and retention strategies will be reflected in an updated human resource plan for the Rail Safety Program, which will also take account of the number of planned audits.

By December 2014, Transport Canada will complete the skills and competencies assessment. Going forward, this information will be used to develop annual program oversight plans.

### **Inspectors and managers were not trained on a timely basis**

**7.71** Inspectors are delegated the authority to act on behalf of the Minister in performing certain inspection and audit duties, and they must be trained accordingly. We examined whether inspectors received the training they needed to perform their tasks. Completing the right training on time is important for inspectors to understand the methodology applicable to their oversight activity.

**7.72** We found that Transport Canada has a curriculum of training courses for inspectors to maintain their core competencies. It includes mandatory courses on the *Railway Safety Act* and on safety management system audits. However, we found that the curriculum does not include training for some of the skills needed to adequately oversee the federal railways' safety management systems—for example, risk analysis skills. The Department has recognized that gap and is developing additional training, including a course on risks for the 2013–14 fiscal year.

**7.73** We also examined how the Department monitored whether employees took the training they needed. We found that the Department had offered several training courses in 2012 and 2013 on the *Railway Safety Act* and upcoming changes, a safety management system course, and an auditor course on the Department's audit methodology. We also found that the Department implemented a process to track attendance at these training courses. By the end of March 2013, a majority of inspectors had attended the training course on the *Railway Safety Act*. However, at that time, only 33 percent of managers and 67 percent of inspectors were trained in the audit methodology. Attendance rates at the course on safety management



system concepts and principles were 33 percent for managers and 70 percent for inspectors. These rates might help to explain the weaknesses we found in our review of Transport Canada audit files. Some inspectors told us they were more comfortable participating in inspections rather than audits because of their experience and background. It is important for the Department that inspectors and managers complete the mandatory training courses so that they understand and apply the requirements of the oversight methodology. Mandatory training is also important so that the Department can improve its oversight of the federal railways' safety management systems.

**7.74 Recommendation.** Transport Canada should ensure that inspectors and managers receive in a timely manner training to carry out their responsibilities.

**The Department's response.** Agreed. Transport Canada will put in place an annual schedule to ensure that all rail safety inspectors receive mandatory training on a timely basis to carry out their responsibilities.

**The existing process does not confirm the continued independence and objectivity of inspectors in their work**

**7.75** Transport Canada has hired its rail inspectors and managers mainly from federal railways, where they acquired their technical expertise and experience in rail operations. We examined whether the Department assessed inspectors' independence from the federal railways they inspect. This is important to ensure the objectivity of the personnel who perform the assessment of a railway's compliance with regulations, rules, and engineering standards. We found that the Department applies the Values and Ethics Code for the Public Service, and assesses potential conflicts of interest for inspectors during the hiring process. However, it does not reassess that information after inspectors are hired. In March 2013, the Department modified its code of conduct so that it requires executives and key employees such as inspectors to confirm every two years whether their situation has changed and to prepare a new declaration of conflict of interest in case of changes. The Department does not require a new declaration when an inspector is assigned to inspect a specific railway. It is important for inspectors to maintain their independence and objectivity when conducting audits and inspections of federal railways.

**7.76 Recommendation.** The Department should put a process in place to monitor whether inspectors maintain their independence and objectivity when conducting audits and inspections of federal railways.



**The Department’s response.** Agreed. Transport Canada addressed this recommendation during summer 2013 by providing information and awareness sessions on the updated Treasury Board Values and Ethics Code as well as developing its own Transport Canada Code of Values and Ethics.

In addition, Transport Canada will require all inspectors to regularly update their “Conflict of Interest” declarations, and it will require an update when changes in circumstances would impact on an inspector’s independence or objectivity.

### Quality assurance

#### **Transport Canada’s quality assurance did not include an assessment of core oversight activities**

**7.77** In 2009, Transport Canada implemented a quality management framework for its Rail Safety Program. One important element of the framework is periodic internal reviews of oversight activities; these enable the Department to assess how well the activities conform to established methodologies, and to identify opportunities for improvement. We examined whether Transport Canada has put in place an adequate quality assurance program to promote continuous improvement in its Rail Safety Program. We looked at whether the Department conducted periodic assessments to provide the necessary level of assurance to senior management that its methodology for audits and inspections was aligned with best practices. We also looked at whether the Department assessed if it conducted audits and inspections according to established methodology.

**7.78** We found that, since 2009, the Department performed three internal assessments. We examined the methodology used for planning, conducting, and reporting findings of these assessments. We found that the methodology included some good elements for the conduct of internal assessments. We also examined the documentation of the most recent assessment, which was the review of the planning process for the 2011–12 fiscal year. We found that the assessment was conducted according to the established methodology and was well documented. The documentation included a plan, results of assessment work, and a report that contained findings and recommendations. The Department is now developing a corrective action plan to address the recommendations for improving some aspects of the planning process.

**7.79** We also found that the Department has not assessed whether the oversight methodology for conducting audits and inspections met best practices, and whether audits and inspections were conducted

according to that methodology. The Department has yet to plan to conduct these assessments in the near future. A well-functioning quality assurance program involves planning assessments according to the priorities and risks of the organization. For the Department, it would mean that the quality assurance program is required to assess how oversight activities are planned, conducted, and reported.

**7.80** We also found that one region in 2008 and another region in 2012 took the initiative to review adherence to the inspection methodology. Each assessment had a regional scope and was limited to determining whether the inspection procedure instructions were applied. The reviews made recommendations to address the weaknesses identified. The regions developed corrective actions to be implemented.

**7.81 Recommendation.** Transport Canada should develop a detailed quality assurance plan to assess its oversight methodology against best practices and to regularly evaluate audits and inspections against its methodology, with the goal of promoting continuous improvement.

**The Department's response.** Agreed. Transport Canada will expand its quality assurance program to include periodic testing of inspectors' oversight activities, including testing practices related to systems-based audits. This will be completed by late 2014.

## Conclusion

**7.82** In 2001, Transport Canada moved the Canadian rail industry towards a regulatory framework that includes a safety management system (SMS) approach. The traditional approach to managing and overseeing the safety of railways' day-to-day operations was determined to be no longer sustainable and sufficient to improving safety performance. We found that the Department has made limited progress in shifting from the traditional oversight approach—largely based on inspecting federal railways' compliance with rules and engineering standards—to a system-based approach that integrates oversight of safety management systems into activities. As a result, we conclude that Transport Canada needs to address significant weaknesses in its oversight of safety management systems implemented by federal railway companies to manage safety risks on a day-to-day basis. In particular:

- The Department has not fully integrated the assessment of federal railways' safety management systems into its oversight planning activities.

- The Department's level of oversight was not sufficient to obtain assurance that federal railways have implemented adequate and effective safety management systems.
- The guidance and tools it provides to inspectors for assessing federal railways' safety management systems need improvements.
- Transport Canada has not assessed whether its current workforce has the competencies it will need to oversee the safety management systems implemented by federal railways.
- Transport Canada does not have a quality assurance plan to continuously improve its oversight of rail safety.

**7.83** Transport Canada has made significant progress on many important recommendations of the Review Advisory Panel. It has implemented a regulatory framework for rail safety to identify, analyze, and respond to safety risks. However, much work remains to be done to resolve long-standing and important safety issues.

**7.84** The Department faced challenges as it moved to an SMS-based approach in the federal railways. It has made progress working with federal railways on the SMS regulatory framework. Transport Canada has revised its oversight methodology and training to align its oversight activities with the new approach. Senior management now needs to concentrate its efforts on ensuring that oversight plans are based on up-to-date safety risk and performance information, that inspectors and auditors are given training and tools to better assess the safety management systems, and that managers provide the necessary review and supervision. Otherwise, the Department may not have the assurance it needs that federal railways are operating on a day-to-day basis in compliance with the regulatory framework for rail safety in Canada, or that they continuously improve their safety management systems.

## About the Audit

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set out in The Canadian Institute of Chartered Accountants Handbook—Assurance. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

As part of our regular audit process, we obtained management’s confirmation that the findings reported in this chapter are factually based.

### Objectives

The overall audit objective was to determine whether Transport Canada has adequately overseen the management of safety risks by federal railways.

The audit sub-objectives were to determine whether Transport Canada has

- implemented a rail safety regulatory framework that is responsive to significant safety issues and emerging high risks in a timely manner;
- adequately assessed the effectiveness of the safety management systems of federal railways;
- adequately assessed whether it has the human resources it needs to deliver its Rail Safety Program; and
- put in place an adequate quality assurance program to promote continuous improvement with regard to rail safety.

### Scope and approach

Our audit focused on branches in five regions and at headquarters that are involved in the delivery of Transport Canada’s Rail Safety Program. We examined the regulatory framework.

We selected and reviewed, based on risks, six significant safety issues and emerging high safety risks raised by stakeholders, in order to assess how Transport Canada has monitored and responded to them.

We examined the information used for planning oversight decisions and the process followed by Transport Canada for planning its annual oversight activities in the 2011–12 fiscal year. We also examined the methodologies used by inspectors in 2011–12 for conducting planned oversight activities. We randomly selected 66 inspection files from 2011–12 from among the 31 federal railways, and selected all of the eight audit files from federal railways from the fiscal years 2010–11 and 2011–12.

We did not examine the inspectors’ judgments or their competency. Rather, we examined whether inspectors conducted oversight activities according to the established oversight methodologies.

We also did not examine Transport Canada’s compliance with other legislation applying to federal railways, such as the *Canadian Transportation Accident Investigation and Safety Board Act* and the *Canadian Transportation Act*, investigations into accidents, and health and safety issues regulated under the *Canada Labour Code* and the *Transportation of Dangerous Goods Act*.

The Commissioner of the Environment and Sustainable Development’s 2011 December Report to Parliament, Chapter 1—Transportation of Dangerous Products reports the findings of our audit on this topic. It can be found on our website at [www.oag-bvg.gc.ca](http://www.oag-bvg.gc.ca). The audit looked at, among other things, Transport Canada’s management of the handling and transportation of dangerous goods by rail.

Lac-Mégantic derailment, Quebec. On 6 July 2013, a train of a federal railway company with 72 tank cars of crude oil and 5 locomotive units derailed in Lac-Mégantic, in the Eastern Townships region of Quebec. The train derailment caused many fatalities and significant damage to the town’s infrastructure and the environment. The Transportation Safety Board of Canada dispatched rail safety experts to the site to investigate the causes of the derailment. At the end of its investigation, the Board will publish a report. Our report is not an inquiry into this tragic event or an investigation of how it happened or of other subsequent rail accidents.

Finally, we looked at Transport Canada’s planning for human resources and quality assurance activities.

We also collected evidence through interviews with Transport Canada’s officials at headquarters in Ottawa and at several regional offices. We met with representatives from the rail industry to obtain an understanding of the industry.

We did not examine the safety of the rail industry, nor its efficiency. As well, we did not audit security issues, including potential terrorist attacks and educational and awareness activities.

**Criteria**

Criteria	Sources
<b>To determine whether Transport Canada has implemented a rail safety regulatory framework, we used the following criteria:</b>	
Transport Canada has implemented a rail safety regulatory framework that is responsive to significant safety issues and high emerging risks in a timely manner.	<ul style="list-style-type: none"> <li>• <i>Railway Safety Act</i> and related regulations</li> <li>• Stronger Ties: A Shared Commitment to Railway Safety—Review of the <i>Railway Safety Act</i>, Advisory Panel for the <i>Railway Safety Act</i> Review, 2007</li> </ul>
<b>To determine whether Transport Canada has adequately assessed the effectiveness of the safety management systems of federal railways, we used the following criteria:</b>	
Transport Canada has adequately assessed the effectiveness of safety management systems of federal railways according to established annual oversight plans and an adequate oversight methodology.	<ul style="list-style-type: none"> <li>• Transport Canada Rail Safety Monitoring Directive, 2010</li> <li>• Transport Canada Rail Safety Monitoring Directive, Audit Procedure, 2011</li> <li>• Transport Canada Rail Safety Monitoring Directive, Inspection Procedure, 2011</li> <li>• Guidelines for Auditing Management Systems, International Organization for Standardization (ISO), ISO 19011:2011</li> </ul>

Criteria	Sources
<b>To determine whether Transport Canada has adequately assessed whether it has the human resources it needs to deliver its Rail Safety Program, we used the following criteria:</b>	
Transport Canada has assessed whether it has the number of qualified staff it needs to deliver its Rail Safety Program.	<ul style="list-style-type: none"> <li>• Integrated planning guide, Treasury Board of Canada Secretariat, 2007</li> <li>• Integrated planning handbook for deputy ministers and senior managers, Treasury Board of Canada Secretariat, 2008</li> </ul>
<b>To determine whether Transport Canada has an adequate quality assurance program to promote continuous improvement of the Rail Safety Program, we used the following criteria:</b>	
Transport Canada has put in place an adequate quality assurance program to promote continuous improvement of its Rail Safety Program.	<ul style="list-style-type: none"> <li>• Guidelines for Auditing Management Systems, ISO 19011:2011</li> <li>• Quality Management Systems—Requirements, ISO 9001:2008</li> <li>• Transport Canada Rail Safety Quality Management Manual, 2009</li> <li>• Transport Canada Rail Safety Quality Management Directive, 2010</li> </ul>

Management reviewed and accepted the suitability of the criteria used in the audit.

**Period covered by the audit**

The period examined was the 2011–12 fiscal year. Audit work for this chapter was completed on 28 June 2013.

**Audit team**

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## Appendix List of recommendations

The following is a list of recommendations found in Chapter 7. The number in front of the recommendation indicates the paragraph where it appears in the chapter. The numbers in parentheses indicate the paragraphs where the topic is discussed.

Recommendation	Response
<b>Regulatory framework</b>	
<p><b>7.26</b> Transport Canada should complete the implementation of the recommendations raised in the <i>Railway Safety Act</i> review and relevant recommendations of the rail safety review conducted by the House of Commons Standing Committee on Transport, Infrastructure and Communities. It should integrate the changes into the regulatory framework for federal railways to comply with and for the Department to oversee. (7.17–7.25)</p>	<p>Agreed. With industry and other important stakeholders, Transport Canada will continue to act on recommendations of the <i>Railway Safety Act</i> review and the study of the Standing Committee on Transport, Infrastructure and Communities. For some recommendations, this will involve the integration of recommended changes into the Department’s regulatory framework.</p>
<p><b>7.32</b> Transport Canada should accelerate the resolution of important and long-standing safety issues. The Department should establish a formal process with clear timelines to monitor significant safety issues, from the time they are identified until they are mitigated to an acceptable level. (7.27–7.31)</p>	<p>Agreed. Transport Canada will continue to work with industry and other important stakeholders to mitigate important safety issues: for example, it will continue its efforts to increase public awareness of the dangers of trespassing. It will use its national database as a tool to monitor timelines and progress.</p>

Recommendation	Response
<p><b>Planning for oversight activities</b></p> <p><b>7.42</b> To oversee the safety management systems implemented by federal railways, including their compliance with the regulatory framework, Transport Canada should</p> <ul style="list-style-type: none"> <li>• review its methodology to identify key safety risk and performance indicators, and the safety performance information it needs from railway companies, in order to make risk-based planning decisions;</li> <li>• collect the relevant risk and safety performance information from federal railways and assess its completeness and reliability; and</li> <li>• develop an approach to make better use of the information on federal railways' safety risks and performance when preparing annual oversight plans. (7.33–7.41)</li> </ul> <p><b>7.49</b> Transport Canada should reassess the number of its planned audits and inspections so that it takes into account the new safety management system environment. It should review how it allocates resources, with the aim of conducting the minimum level of oversight necessary to obtain assurance that federal railways have implemented adequate and effective safety management systems to comply with the regulatory framework. The Department should conduct this minimum level of oversight. (7.43–7.48)</p>	<p>Agreed. As the Department continues to enhance its safety management system (SMS) approach to oversight, it will continue to develop/refine its methodology for identifying safety risks, performance indicators, and safety performance information needed from federal railways so that oversight activity can be targeted to the areas of greatest risk.</p> <p>To this end, by winter 2014, the Department will complete a review of its methodology with a view to updating and strengthening performance and risk indicators.</p> <p>By early 2016, the Department will introduce revised regulations clearly setting out the performance information that must be provided by federal railways. Once the regulations are in place, the Department will take account of this information into its annual risk-based planning process, the foundation for its annual oversight plans. The adequacy of federal railways' own oversight policies and practices will be an important factor when preparing annual risk-based oversight plans.</p> <p>Agreed. By spring 2014, Transport Canada will review its risk-based oversight program to more fully integrate the safety management system (SMS) environment and plan for increased audits. By fall 2014, Transport Canada will adjust the number of risk-based inspections to reflect required levels of oversight based on the latest safety and risk information, traffic volumes, and taking into consideration the number and findings of SMS audits.</p>



Recommendation	Response
<p><b>Conducting oversight activities</b></p> <p><b>7.58</b> Transport Canada should</p> <ul style="list-style-type: none"> <li>• provide better documentation tools to inspectors to carry out their oversight activities, so that they can better document and communicate to federal railways what they assessed and what they found;</li> <li>• improve its oversight of federal railways' safety management systems by having inspectors assess their quality and effectiveness;</li> <li>• require federal railways to make the necessary changes to correct deficiencies affecting the safety of their operations; and</li> <li>• conduct timely follow-up on deficiencies affecting the safety of federal railways' operations, to assess whether they have been corrected. (7.50–7.57)</li> </ul>	<p>Agreed. By mid-2014, Transport Canada will complete implementation of Rail Safety Integrated Gateway system audit and inspection modules, including training for Transport Canada staff on documentation and communication of oversight activity findings and follow-up requirements.</p> <p>By mid-2014, following completion of training for all inspectors, Transport Canada will increase the number of system audits that are planned and conducted. Any deficiencies found in railway companies' safety systems will be communicated to the companies, and the companies will be asked to address them. Where significant deficiencies have been identified, Transport Canada will, on a risk basis, conduct follow-up activity to ensure that the deficiencies have been addressed.</p> <p>By late 2014, Transport Canada will introduce amendments to Railway Safety Management System Regulations that require railways, in addition to having specific processes in place, to also document corrective action decisions and their implementation.</p> <p>By spring 2014, Transport Canada will develop a follow-up procedure and provide all inspectors with training on the procedure to enhance the consistency of follow-up activity.</p>
<p><b>7.62</b> Transport Canada should set a clear expectation for management review and approval in the planning, conducting, and reporting of oversight activities, with the aim of ensuring that inspectors comply with the methodology and that their reports are accurate. Transport Canada should provide guidance to management on how to document the timing and extent of management involvement. (7.59–7.61)</p>	<p>Agreed. In keeping with its continuous improvement practices, by March 2014, Transport Canada will have strengthened management review of staff's oversight activities, including adherence to established oversight methodology, to ensure staff is thorough and exercising due diligence in the conduct of inspections and audits.</p> <p>Performance expectations will be clearly outlined in annual agreements with managers.</p>

Recommendation	Response
<p><b>7.65</b> Transport Canada should improve its methodology to set clear expectations for planning and conducting audits and inspections, and for drafting and communicating findings to the federal railways. (7.63–7.64)</p>	<p>Agreed. As Transport Canada progresses to a full systems-based approach to oversight, the Department will update its audit and inspection methodology and procedures, setting clear expectations for the planning, conduct, drafting, and communication of findings to railways.</p>
<p><b>Human resource planning</b></p>	
<p><b>7.70</b> Transport Canada should identify and develop a strategy to ensure that it has the needed number of inspectors with the necessary skills and competencies required to plan and conduct the oversight of federal railways, including oversight of safety management systems. (7.66–7.69)</p>	<p>Agreed. In order to fully integrate its systems-based approach to oversight, Transport Canada has developed a human resource strategy to ensure that it has the needed number of inspectors with the skills and competencies to plan and conduct the oversight of federal railways, including oversight of safety management systems.</p> <p>Training, recruitment, and retention strategies will be reflected in an updated human resource plan for the Rail Safety Program, which will also take account of the number of planned audits.</p> <p>By December 2014, Transport Canada will complete the skills and competencies assessment. Going forward, this information will be used to develop annual program oversight plans.</p>
<p><b>7.74</b> Transport Canada should ensure that inspectors and managers receive in a timely manner training to carry out their responsibilities. (7.71–7.73)</p>	<p>Agreed. Transport Canada will put in place an annual schedule to ensure that all rail safety inspectors receive mandatory training on a timely basis to carry out their responsibilities.</p>
<p><b>7.76</b> The Department should put a process in place to monitor whether inspectors maintain their independence and objectivity when conducting audits and inspections of federal railways. (7.75)</p>	<p>Agreed. Transport Canada addressed this recommendation during summer 2013 by providing information and awareness sessions on the updated Treasury Board Values and Ethics Code as well as developing its own Transport Canada Code of Values and Ethics.</p> <p>In addition, Transport Canada will require all inspectors to regularly update their “Conflict of Interest” declarations, and it will require an update when changes in circumstances would impact on an inspector’s independence or objectivity.</p>

Recommendation	Response
<p><b>Quality assurance</b></p> <p><b>7.81</b> Transport Canada should develop a detailed quality assurance plan to assess its oversight methodology against best practices and to regularly evaluate audits and inspections against its methodology, with the goal of promoting continuous improvement. (7.77–7.80)</p>	<p>Agreed. Transport Canada will expand its quality assurance program to include periodic testing of inspectors' oversight activities, including testing practices related to systems-based audits. This will be completed by late 2014.</p>

