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Oversight of Passenger Vehicle Safety—Transport Canada



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du Canada

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Introduction

Background

The Canadian automotive industry

4.1 In 2014, approximately 25 million Canadians were licensed to drive vehicles, and motor vehicle registrations exceeded 23.5 million. Of that number, automobiles and light trucks totalled more than 21.7 million.

4.2 Automobile deaths and injuries have declined in recent decades. In 2014, fatalities and injuries were at their lowest levels since Transport Canada started tracking these statistics in the early 1970s. This decrease can be attributed to a number of factors, including improvements in vehicle manufacturing, effective public outreach programs, and changes in driving behaviour. In 2014, Transport Canada recorded 149,900 injuries, including 9,647 serious injuries and 1,834 fatalities. The statistics do not reveal whether injuries and fatalities could be attributed to design and manufacturing defects. According to US data, less than 5 percent of motor vehicle injuries and fatalities can be attributed to vehicle maintenance and vehicle **safety-related defects**.

4.3 It is important to identify safety issues and emerging risks because vehicles are becoming increasingly complex. Technology is evolving faster than the regulations and standards designed to protect Canadians. Semi-autonomous vehicles, for example, are currently on Canadian roadways despite being controlled by unregulated software. Regulators will eventually have to assess the safety risks and benefits, decide whether these vehicles must be regulated, and if so, decide how to regulate them. Other emerging issues that present challenges to regulators around the world include vehicle cyber security and the rapid rate at which safety-related technologies are introduced.

4.4 The federal government enacts laws and develops regulations to set standards for vehicle safety, as well as for air pollutants and greenhouse gases. In doing so, it consults with industry. Provincial and territorial governments are responsible for driver licensing and vehicle registration.

Motor Vehicle Safety Oversight Program, Transport Canada

4.5 **Transport Canada.** Transport Canada oversees road safety through three acts of Parliament: the *Canada Transportation Act*, the *Motor Vehicle Safety Act*, and the *Motor Vehicle Transport Act*. This audit focused on the *Motor Vehicle Safety Act*, which governs passenger vehicles. It regulates the manufacture and import of motor vehicles and related equipment to

Safety-related defect—A fault or failure in a vehicle or component that could endanger the vehicle occupants, other road users, or pedestrians. The problems do not appear to develop gradually in a manner that would allow an average driver to take corrective action.

reduce the risk of death, injury, and damage to property and the environment. The legislation applies to all companies that manufacture, distribute, or import regulated vehicles or vehicle equipment.

4.6 The *Motor Vehicle Safety Act* establishes the regulatory framework that guides Transport Canada's oversight work. It requires that manufacturers follow the guidelines in its regulations, standards, and test methods to demonstrate that their vehicles comply with safety standards and other requirements. Transport Canada carries out its oversight responsibilities based on evidence obtained from field investigations, research, vehicle testing, collision statistics, and regulatory work with trading partners.

4.7 **Motor Vehicle Safety Oversight Program.** This Transport Canada program oversees regulated vehicles and equipment, as well as their manufacturers and importers, to ensure that they meet the requirements of the *Motor Vehicle Safety Act* and related regulations. The program's compliance and enforcement activities include

- compliance promotion, such as publishing electronic information and consultations;
- verification of compliance through vehicle testing, audits, and investigations; and
- enforcement through actions such as seizure or prosecution.

4.8 A passenger vehicle that is subject to the *Motor Vehicle Safety Act* must have a label to indicate that the vehicle complies with the applicable standards. Companies selling vehicles are responsible for ensuring compliance with relevant standards and for affixing the compliance labels. This is known as a self-certification regime.

4.9 Transport Canada conducts oversight of vehicles sold to consumers by requesting evidence that vehicles conform to regulations and standards. It may request records relating to the vehicle's design, manufacture, testing, and field performance. The Department also conducts compliance inspections and testing of selected products and vehicles. It investigates alleged safety-related defects by reviewing complaints from Canadians and other informed sources. It also monitors safety recalls.

Regulatory collaboration with the United States

4.10 In 2011, the governments of Canada and the United States created the Regulatory Cooperation Council to facilitate closer regulatory cooperation and facilitate harmonization. The Council seeks to enhance economic competitiveness by aligning the Canadian and American regulatory systems where appropriate, while maintaining high levels of protection for health, safety, and the environment.

4.11 Under the auspices of the Regulatory Cooperation Council, Transport Canada and the United States Department of Transportation discuss aligning their respective motor vehicle safety standards. While the Council facilitates cooperation and discussions about aligning standards and regulations, it does not give policy direction to departments and agencies. Unless agreed in the Council's work plan, Canadian or American regulators can choose not to proceed with alignment initiatives. Both governments are responsible for fulfilling their mandates and pursuing their respective safety goals.

Focus of the audit

4.12 This audit focused on passenger motor vehicles sold in Canada, specifically passenger cars, SUVs, minivans, and light trucks such as pickups. We examined whether Transport Canada's regulatory framework and its oversight of vehicle safety defects and recalls have been adequate to respond to emerging safety risks and issues in a timely manner. More specifically, we examined the process to make amendments to regulations for emerging technologies and issues. We also looked at Transport Canada's oversight and analysis of public complaints, investigations, and monitoring of manufacturers' recalls.

4.13 This audit is important because passenger vehicles must be as safe as possible to protect the lives of Canadians. Proper oversight of passenger vehicle safety and an up-to-date regulatory framework help ensure that Canadians are driving the safest vehicles.

4.14 We did not examine Transport Canada's oversight of equipment such as child seats or tires, or other types of vehicles such as commercial vehicles, recreational vehicles, or motorcycles. We did not examine Transport Canada's compliance testing, the process for importing vehicles, or the Department's road safety promotion activities.

4.15 For the purpose of this audit, the term "manufacturers" refers to companies that sell passenger vehicles in Canada that are assembled in Canada or abroad.

4.16 More details about the audit objective, scope, approach, and criteria are in **About the Audit** at the end of this report (see pages 28–30).

Findings, Recommendations, and Responses

The regulatory framework for motor vehicle safety

Overall message



4.17 Overall, we found that Transport Canada did not develop motor vehicle safety standards to respond to emerging risks and issues in a timely manner. It generally waited for the United States to change its motor vehicle safety standards before modifying Canadian standards. The Department often limited consultations to the automotive industry. We also found that it did not have complete collision and injury data to inform its decisions. We could not always determine how the Department used evidence and research to develop or amend safety standards. Transport Canada did not plan or fund its research and regulatory activities for the longer term.

4.18 This is important because Transport Canada needs to integrate emerging safety risks and new technologies into the regulatory framework in a timely way so that Canadians are safe on our roads. Canadians must have access to the safest vehicles possible. Our regulatory framework should not prevent Canadians from accessing new safety features that will keep them safer on our roadways. Also, it should ensure that specific Canadian safety needs are properly addressed. These needs include climate, more variable hours of daylight, road infrastructure, and differences in the vehicle fleet. Finally, our regulations must be timely and based on evidence so the Department does not limit access to innovative products and create barriers to trade.

Context

4.19 We identified 46 Canadian motor vehicle safety standards that fall within the scope of our audit. Standards are the performance requirements that industry must meet. Regulations are measures that Transport Canada uses to oversee issues such as how manufacturers communicate with the Minister and how they keep records. Regulations also prescribe new standards or amendments to existing standards.

4.20 Transport Canada's Motor Vehicle Safety Directorate conducts research—crashworthiness, crash avoidance systems, and ergonomics—on vehicles with the intent to improve safety. The Directorate may amend standards to mitigate a safety risk or issue, or may develop new standards to address an emerging technology. It also conducts collision investigations, especially when there are fatalities. Most research is conducted at the Department's Motor Vehicle Test Centre in Blainville, Quebec.

4.21 Once a policy decision such as a new or revised standard for passenger vehicles is taken, the proposed regulation is published in the *Canada Gazette*, the official newspaper of the Government of Canada. Typically, a proposed regulation—including the regulatory impact

analysis—is published first in the *Canada Gazette*, Part I. Stakeholders are invited to review and comment. After comments are received, Transport Canada revises the draft regulation. The **Governor in Council** approves the final regulation, and it is then published in the *Canada Gazette*, Part II. It generally takes no more than 18 months to amend regulations from the moment a proposal is presented in the *Canada Gazette*, Part I to its publication in the *Canada Gazette*, Part II.

Transport Canada did not maintain motor vehicle safety regulations in a timely and proactive manner

What we found

4.22 We found that Transport Canada did not maintain an up-to-date regulatory framework for passenger vehicle safety. There were lengthy delays, sometimes of more than 10 years, from the time work began on an issue to the Department's implementation of new standards or changes to existing ones. We found that Transport Canada had discussions with manufacturers prior to announcing its intention to implement or modify a particular regulation in the *Canada Gazette*, Part I. These consultations often went beyond technical feasibility issues, which contributed to these delays. Finally, we found that Transport Canada did not systematically consult with other important stakeholders, such as vehicle parts and equipment suppliers, insurance companies, medical associations, and police.

4.23 Our analysis supporting this finding presents what we examined and discusses

- safety standards,
- regulatory amendment process, and
- stakeholder consultations.

Why this finding matters

4.24 This finding matters because up-to-date standards and regulations that address safety risks and emerging technologies, combined with broad public consultations on safety-related issues, will help keep Canadians safer on our roads.

Recommendations

4.25 Our recommendations in this area of examination appear at paragraphs 4.35 and 4.36.

Analysis to support this finding

4.26 **What we examined.** We examined whether Transport Canada maintained a regulatory framework that was responsive to vehicle safety

Governor in Council—The Governor General, acting on the advice of Cabinet, as the formal executive body that gives legal effect to those decisions of Cabinet that are to have the force of law.

issues and emerging risks in a timely manner. We also looked at whether Transport Canada monitored new technologies to improve vehicle safety and included them in the development of new regulations. Further, we examined whether the Department consulted with manufacturers on emerging safety technologies and risks.

4.27 Safety standards. Our review of selected relevant Canadian motor vehicle safety standards (CMVSS) and the regulatory process showed that three important standards were outdated or not working as expected. We found the following:

- **CMVSS 108 Lighting System and Retroreflective Devices:** While most vehicles are equipped with light-emitting diode (LED) or other new lighting systems, this lighting standard refers to old reflective lightbulb technology and incandescent lightbulbs. We also found that the lighting standard was not working as intended. Transport Canada received complaints from vehicle owners whose headlights did not light up the road properly even though the headlights complied with the standards.
- **CMVSS 210.2 Lower Universal Anchorage Systems for Restraint Systems and Booster Seats:** This standard pertains to the anchors built into passenger vehicles for securing child restraint systems. It has been updated to align with the increased maximum child weight of 30 kg permitted for child restraints, which are regulated separately (Exhibit 4.1). Since that update, heavier child restraints have become available in Canada. A 2010 Transport Canada test used a child test dummy exceeding 30 kg and it resulted in one of the three child seat anchorages failing. This research was referenced by the US National Highway Traffic Safety Administration in 2012 when it updated the US regulation for child restraint systems. Additional 2015 Transport Canada research found that securing the child restraint with both lower universal anchorages and the vehicle seat belt provided adequate retention, should an anchor in the vehicle or anchor connector from the child restraint fail. While Transport Canada discussed the issue with passenger vehicle manufacturers, it had yet to propose a new regulation or issue an advisory for child restraint users. The Department indicated to us that introducing a unique-to-Canada requirement for anchorage strength in passenger vehicles would be detrimental to trade.
- **CMVSS 214 Side Door Strength:** In 2003, Transport Canada put in place memoranda of understanding, which are voluntary agreements. However, these agreements are not legally enforceable. At the time of our audit, the Department had not updated the Canadian standard to improve side door strength. We found that the memoranda of understanding were not respected by two manufacturers. This approach was therefore not working as intended and was ineffective.

Exhibit 4.1 Transport Canada had not yet clarified the issue of lower universal anchorage systems

Action	Date	Details
The US National Highway Traffic Safety Administration (NHTSA) issued Federal Motor Vehicle Safety Standard (FMVSS) No. 225, Child Restraint Anchorage Systems.	Mandatory for all new vehicles 1 September 2002 (issued 23 February 1999)	This US regulation required vehicle manufacturers to equip vehicles with child restraint anchorage systems that were standardized and independent of the vehicle seat belts. The strength of the anchorage system was calculated assuming a child weight of 48 lb. (or approximately 22 kg).
Transport Canada issued CMVSS 210.2 Lower Universal Anchorage Systems for Restraint Systems and Booster Seats.	Effective 1 September 2002 (issued 30 May 2002)	Canada aligned child restraint anchorage systems to the US standard (child weight allowed of 22 kg).
NHTSA amended FMVSS No. 213, Child Restraint Systems.	Effective 24 June 2003 (issued 1 May 2002)	The US child restraint systems regulation was amended to apply it to child restraints for children weighing up to 65 lb. (or approximately 30 kg).
Transport Canada issued interim orders for child restraint systems and Booster Seats Safety Regulations.	2007 to 2009	As an interim measure, between 2007 and 2009, Transport Canada issued interim orders to permit child restraint systems designed for use by children weighing up to 30 kg.
Transport Canada amended Motor Vehicle Restraint Systems and Booster Seats Safety Regulations.	Effective 29 April 2010 (issued 10 October 2009)	Canada amended regulations to align child restraint systems to those of the United States (for children weighing up to 30 kg).
Transport Canada research identified a failure on a lower anchor during testing to measure the dynamic load of child seat anchors.	July 2010	The results of an “overload test” were documented in this study. Among other things, the research paper observed that there had been failure of a child restraint anchorage system in testing, demonstrating a finite limit to the strength of the anchorages.
NHTSA amended FMVSS No. 213 Child Restraint Systems.	Effective 25 February 2014 (issued 27 February 2012)	The US child restraint regulations were amended to apply to child restraints for children weighing up to 80 lb. (or approximately 36 kg). NHTSA also issued a warning label advising child restraint users to remove restraints from bottom anchors and use only the seat belt to secure the child restraint once the total load (the weight of the child plus the restraint) exceeds 65 lb. (30 kg). At the time of this audit, Transport Canada remained opposed to increasing the maximum child weight to 80 lb. (36 kg).

Exhibit 4.1 Transport Canada had not yet clarified the issue of lower universal anchorage systems
(continued)

Action	Date	Details
Transport Canada conducted research on securing large-capacity child restraints.	October 2015	The report concluded that: “the continued use of the Lower Anchors and Tethers for Children (LATCH) should be strongly encouraged. The addition of the seat belt distributes the attachment loads of the CRS [child restraint system] over three additional anchorages and reduces the loads to the LATCH and top tether anchors.” At the time of this audit, Transport Canada felt that more research was required before amending the regulation.

4.28 **Regulatory amendment process.** We conducted a five-year analysis of the Department’s regulatory changes to the *Motor Vehicle Safety Regulations*. For six out of nine substantive regulatory amendments (67 percent), we found that the Department waited for the National Highway Traffic Safety Administration in the United States to develop new standards or change existing ones before proposing regulatory action in Canada. This reactive approach created significant delays in implementing new standards, and meant that some passenger vehicles were not equipped with the newest safety features available in other countries. For example, Europe allows innovative, software-controlled lighting that dims headlights so they do not affect the visibility of oncoming and preceding vehicles. The headlights continue to cast their full light on the zones between and beside them. Transport Canada staff advised us that this lighting technology did not meet Canadian or American standards. Transport Canada also advised us that it had concerns regarding potential glare issues.

4.29 We found that pre-Part I consultations on motor vehicle safety standards amendments sometimes spanned many years, resulting in an unnecessarily long process. We examined three standards amendment examples that took from 8 to 13 years to complete. Two of these amendments were not complete at the time of our audit.

- **CMVSS 208 Occupant Protection in Frontal Impacts:** While work began on this standard in 2000, we found that it took Transport Canada 13 years to update it. Further, we found that the Department weakened the standard for lighter vehicles (under 2,722 kg). For instance, the standard permitted more chest deflection, which causes greater chest compression in a collision. We could not determine why the Department agreed to this change when the previous standard was more stringent.

- **CMVSS 108 Lighting System and Retroflective Devices:** Transport Canada had been seeking to modify parts of this standard for eight years. At the time of our audit, the most recent proposal requested comments on whether the Department should allow certain new lighting technologies into Canada and introduce a new requirement for better nighttime lighting on vehicles. This standard had yet to be updated.
- **CMVSS 214 Side Door Strength:** After the United States implemented its standard for side-impact collisions in 2007, it took nine years for Canada to take steps to amend our side-door strength standard. At the time of our audit, this standard was still not updated.

4.30 Stakeholder consultations. We found that before notification in the *Canada Gazette*, Part I, Transport Canada frequently did not seek input from stakeholders other than manufacturers. This meant there was little opportunity for others to influence regulatory initiatives. In particular, the Department did not issue public notifications of regulatory proposals for two of the three regulations noted above: CMVSS 108 Lighting System and Retroflective Devices and CMVSS 214 Side Door Strength. It published a notification for CMVSS 208 Occupant Protection in Frontal Impacts in 2001.

4.31 While Transport Canada did not publicly disclose its intentions to commence discussions on specific regulations, it consulted extensively with manufacturers when regulations were developed. Manufacturers' comments addressed the technical feasibility of regulatory proposals, consistency with American regulations, costs, potential trade barriers, and even the relocation of a manufacturing plant in Canada. It is unclear how the Department balanced the safety of Canadians relative to these factors. For example, manufacturers used some of these factors to oppose the proposed standards for CMVSS 108 Lighting System and Retroflective Devices and CMVSS 208 Occupant Protection in Frontal Impacts prior to publication in the *Canada Gazette*.

4.32 We found that, when developing regulations in advance of publication in the *Canada Gazette*, Transport Canada generally did not consult with stakeholders such as consumer associations, safety advocacy groups, vehicle parts and equipment suppliers, the insurance industry, medical associations, and police. Furthermore, consultations that preceded publication in the *Canada Gazette* did not have time limits. Because Transport Canada did not engage these groups, it is our view that manufacturers may have exercised disproportionate influence on regulatory decision making and caused delays in updating the regulations.

4.33 We found that Transport Canada did not require that stakeholders' opinions on proposed regulatory amendments be made public when developing standards. At the time of this audit, the Part I process allowed individuals or organizations providing comments to opt out of public disclosure.

4.34 Finally, the Department did not act in an accountable and transparent manner to report on progress achieved with respect to its regulatory plan, which should list work to be performed in regard to the regulatory framework. For example, Transport Canada did not explain why it took years to implement regulatory changes. We also found that Transport Canada did not fully disclose manufacturers' arguments for and against regulatory changes.

4.35 **Recommendation.** Transport Canada should provide regular public updates on the status of its regulatory plans.

***The Department's response.** Agreed. Transport Canada information on planned motor vehicle safety regulatory amendments, including status and notification of when the Department is ready to seek input for the development of draft regulations, along with contact information, will be published. This list will be updated every six months.*

The target completion date is April 2017.

4.36 **Recommendation.** Transport Canada should

- publicly announce its intention to prepare or update regulations, and invite comments on technical feasibility and other considerations within a reasonable time limit;
- actively seek input from expert stakeholders such as the insurance industry, medical associations, and police; and
- publicly disclose a summary of all stakeholder comments, including technical and other considerations, within a reasonable time limit.

***The Department's response.** Agreed. Transport Canada will*

- *for the expanded regulatory amendments list (see recommendation paragraph 4.35), Transport Canada will specifically invite comments,*
- *actively seek input from expert stakeholders, and*
- *publish a summary of comments received by stakeholders during its pre-consultation period.*

The target completion date is September 2017.

Transport Canada had incomplete collision and injury data, and could not demonstrate how research informed safety regulations

What we found

4.37 We found that Transport Canada's national database of collision information did not include complete Canadian data, and that the Department did not obtain other relevant information, such as insurance industry statistics. While the Department stated that it used evidence to develop regulations, we found that it was not always clear if it used

Transport Canada evidence and international research to make regulatory amendments. We also found that the Department did not use its research on rear-seat occupants to develop a standard that would keep some passengers safer, despite conducting research on the issue for more than 15 years.

4.38 Our analysis supporting this finding presents what we examined and discusses

- Canadian data, and
- use of research.

Why this finding matters

4.39 This finding matters because Canadian data and evidence are required to support decision making at Transport Canada. Failure to collect complete data, establish collision and injury trends, or consider evidence might reduce the Department's ability to keep Canadians as safe as possible. This is particularly important in a context where vehicle technology is evolving so quickly.

Recommendations

4.40 Our recommendations in these areas of examination appear at paragraphs 4.44 and 4.50.

Analysis to support this finding

4.41 **What we examined.** We assessed whether Transport Canada collected sufficient and reliable Canadian data to update regulations. We also examined whether the Department conducted research and used evidence to update standards or develop regulations.

4.42 **Canadian data.** We found that Transport Canada possessed only partial data on collisions and injuries in the National Collision Database. The database contains information about police-reported motor vehicle collisions on public roads, including fatalities and injuries. While the provinces and territories provide and maintain the data, not all provinces and territories provide it in a timely manner. Transport Canada cannot compel provinces and territories to provide data, so the database is incomplete.

4.43 In addition, we found that Transport Canada did not have access to complete data from insurance companies, hospitals, police, and others involved in vehicle safety matters. It is our view that this information could be used to develop cost-benefit and impact analyses to support the introduction or amendment of safety standards. Without complete and reliable data from stakeholders, Transport Canada's ability to identify collision and injury trends, shape vehicle safety priorities, and prioritize research activities is limited.

4.44 **Recommendation.** In developing new or modifying existing safety standards, Transport Canada should

- assess whether its collision and injury data can adequately support evidence-based decisions based on its quality, reliability, and relevance; and
- take appropriate measures, including working with provinces, territories, and other stakeholders, to improve the quality and scope of data needed to inform decisions.

The Department's response. Agreed. Transport Canada will assess the adequacy of collision and injury data, and will work with stakeholders and the provinces and territories that own and provide the collision and injury data to develop an action plan to improve data quality.

The target completion date is June 2018.

4.45 **Use of research.** We found that the Department did not consistently disclose publicly how its research informed standards development. For example, as part of its crashworthiness research, Transport Canada spent 15 years researching the safety of rear-seat passengers. The Department's researchers found that there were often more serious injuries and deaths involving rear-seat passengers, while front-seat passengers had less serious injuries or survived more often. Upon request from the United States, Transport Canada provided its most recent research on rear-seat occupant protection. However, Transport Canada did not publish this research on its website, a practice followed in the United States. We found that Transport Canada had not yet explored the safety measures it could undertake based on that research.

4.46 Transport Canada officials explained that the Department shared its research with the United States and other jurisdictions to place Canada in a better position to influence regulations elsewhere, and to align regulations in Canada and internationally. We found that the Department generally followed the lead of other countries, most often the United States, when modifying Canadian standards instead of using its own work to initiate changes. In our view, this approach was problematic because it may have caused delays in updating Canada's regulatory framework. In addition, Canada has unique considerations, such as climate, more variable hours of daylight, road infrastructure, and vehicle fleet differences that need to be appropriately addressed when making changes to its regulations.

4.47 We found that Transport Canada developed some standards with little data to support them. For instance, rear-view (or back-up) cameras will become mandatory in the United States in 2018 following a US Congress request to protect pedestrians. Transport Canada officials told us they will follow suit, even with limited data and safety benefits.

4.48 Automatic Emergency Braking Systems (AEBS) will become mandatory in the United States by 2022 through a letter of intent rather than a regulation. This means that manufacturers agreed to equip their vehicles with AEBS. Transport Canada is of the view that, at this time, regulating AEBS may prevent innovation. At the time of this audit, Transport Canada was studying the technology and supporting international research to develop performance metrics. The performance of AEBS is still being studied and it is unclear whether AEBS will become mandatory in Canada.

4.49 We found that the Department did not consistently use results from its own collaborative international research in its development of Canadian standards. For example, the Department participated in pedestrian safety research to develop and monitor international standards for the United Nations. Yet, Transport Canada had not adopted a Canadian standard. We also found that the Department was active in developing international lighting systems and reflective device standards for a decade, but failed to include many of those standards in the Canadian regulations.

4.50 **Recommendation.** Transport Canada should clearly disclose how it used evidence and scientific research to inform its development or modification of motor vehicle safety standards.

The Department's response. Agreed. Transport Canada will provide information on what evidence and scientific research has been used to inform standards development.

The target completion date is January 2017.

Transport Canada did not have a long-term operational plan for the Motor Vehicle Safety Directorate

What we found

4.51 We found that the Motor Vehicle Safety Directorate had no long-term operational plan for its activities. It also lacked stable funding to fulfill its research and regulatory mandate. We found that the absence of a long-term operational plan, including stable financial resources, led to short-term budgetary decisions with negative consequences. In particular, we found that the Directorate

- purchased vehicles in anticipation of budgetary restrictions, but did not use some of them for testing for several years after purchase;
- cut the operating budget, yet proceeded with a major infrastructure project;
- cancelled meetings with stakeholders and conference attendance; and
- cancelled outreach programs that provided useful information to Transport Canada's collision investigators.

4.52 Our analysis supporting this finding presents what we examined and discusses

- long-term planning and budget decisions,
- technical expertise and influence, and
- collision investigations.

Why this finding matters

4.53 This finding matters because without a long-term operational plan, including stable funding for the Motor Vehicle Safety Directorate, it is difficult for Transport Canada to carry out its responsibilities and to establish work priorities.

Recommendation

4.54 Our recommendation in this area of examination appears at paragraph 4.63.

Analysis to support this finding

4.55 **What we examined.** We looked at whether Transport Canada had a long-term operational plan that included emerging safety technologies and risks. We also examined whether the Department prioritized emerging technologies and risks according to a set of criteria, and allocated resources accordingly.

4.56 **Long-term planning and budget decisions.** While Transport Canada has joint 6-, 12-, and 18-month plans with the Regulatory Cooperation Council, we found that the Motor Vehicle Safety Directorate did not have its own long-term operational plan. It is our view that the Department needs one to guide its activities, including research and standards development. Transport Canada's 2016–17 Report on Plans and Priorities identified a total budget for the Motor Vehicle Safety Directorate from the 2016–17 fiscal year through to the 2018–19 fiscal year. However, we found that the Directorate did not create an operational plan corresponding to its budget that prioritized spending according to key activities.

4.57 We found that the Directorate developed annual work plans as part of the budgetary process. Managers prioritized activities, and senior management allocated available resources. We found that, from year to year, there was uncertainty in funding levels when work plans were submitted. The absence of a long-term operational plan meant that funding priorities had not been identified for several years.

4.58 We found that the absence of long-term operational planning led to several decisions that affected research activities and other operations. From April 2012 to December 2015, Transport Canada bought 98 passenger vehicles for research testing. By December 2015, 24 of these vehicles, costing a total of \$529,815, remained untested. Transport Canada officials advised us that unpredictable funding contributed to these decisions.

4.59 We also found that the operating budget for crashworthiness testing was cut by 59 percent for the 2016–17 fiscal year, from \$1.2 million to \$492,000. Despite these cuts, the Department chose to build a \$5.4-million outdoor crash barrier at the Motor Vehicle Test Centre in Blainville, Quebec. Given that the budget allocated for testing vehicles was significantly reduced, we questioned the rationale for proceeding with the project.

4.60 During this audit, the Treasury Board of Canada Secretariat oversaw Transport Canada's expenditure review, which was required because of budget overallocations in the 2015–16 fiscal year. Departmental officials advised us that measures necessary to address the Secretariat's review requirements have resulted in funding uncertainty from one year to the next, making it difficult to plan program work beyond the current year.

4.61 **Technical expertise and influence.** We found that senior management did not approve, or sometimes cancelled or significantly reduced, staff attendance at stakeholder engagement meetings, such as conferences and workshops, from the 2011–12 to the 2015–16 fiscal year. In our view, it is important for technical staff to participate in such events to acquire and maintain business knowledge and technical expertise in their fields. Their attendance may also help the Department influence standard setting globally and gain access to a network of international motor vehicle safety colleagues.

4.62 **Collision investigations.** We also found that in the spring of 2016, Transport Canada cut funding for six regional teams contracted to assist with outreach activities. Many of these teams are located in engineering departments at academic institutions. Through these activities, Transport Canada had access to a network of stakeholders built over many years. Relationships sustained by those outreach activities provided the Department with information and data that supplemented Transport Canada's areas of interest on key safety issues to help inform regulatory decision making. Team members obtained input from local police, first responders, hospitals, and coroners' offices, supplying Transport Canada investigators with items such as

- vehicle injury statistics or other key information from hospitals,
- coroners' reports, and
- access to accident scenes identified by police services.

In our view, there is a risk that these cuts may affect the quality of information that feeds into the Directorate's planning decisions and regulatory decision making.

4.63 **Recommendation.** Transport Canada should develop a long-term operational plan for the Motor Vehicle Safety Directorate. This plan should identify planned activities, budget, and level of effort needed to deliver on its mandate.

***The Department's response.** Agreed. Transport Canada will review the linkages between the departmental planning, research, and regulatory activities to update the long-term planning process.*

The Motor Vehicle Safety Directorate will have a multi-year operational plan for motor vehicle safety.

The target completion date is October 2017.

Oversight of defects

Overall message



4.64 Overall, we found that Transport Canada adequately assessed complaints from the public to identify vehicle safety defects. However, it did not request information about critical safety issues that manufacturers were investigating, or their internal processes to identify safety issues.

4.65 This finding matters because assessing and documenting complaints helps identify defect trends and safety issues. Having knowledge about manufacturers' internal processes for identifying safety issues, and gathering information about their ongoing safety-related investigations, would allow Transport Canada to identify safety defects early and influence manufacturer recalls.

Context

4.66 The Motor Vehicle Safety Oversight Program staff investigates alleged safety-related defects. Transport Canada had a team of 12 defect investigators at the time of this audit. They documented public complaints and assessed potential safety-related defects associated with the design, construction, or functioning of vehicles. In 2015, Transport Canada received 2,426 complaints related to passenger vehicles.

4.67 Transport Canada documented every complaint in its Public Complaints Database. Defect investigators documented and assessed all public complaints concerning alleged safety defects. They come from stakeholders such as

- the Canadian public,
- police agencies,
- Transport Canada researchers, and
- consumer agencies.

Complaints come from Transport Canada's online complaint forms and telephone calls from the public.

4.68 Section 10 of the *Motor Vehicle Safety Act* requires that manufacturers give notice of a vehicle or equipment defect that affects, or is likely to affect, a person's safety. The responsibility for identifying defects rests with manufacturers. However, Transport Canada documents complaints to identify defects as part of the Motor Vehicle Safety Oversight Program.

Transport Canada had internal processes to identify safety defects and trends, and it appropriately communicated with manufacturers

What we found

4.69 We found that Transport Canada had implemented a risk-based approach to analyze public complaints and identify the presence of safety defects. The Department collected sufficient information to assess those complaints. We found that investigators supported their reports with adequate technical tests and analyses when needed, and that their reports had clear conclusions about whether a safety defect existed. We also found that Transport Canada communicated alleged safety defects with manufacturers through quarterly reports.

4.70 Our analysis supporting this finding presents what we examined and discusses

- analysis and investigation of complaints, and
- advising manufacturers of complaints.

Why this finding matters

4.71 This finding matters because documenting complaints helps identify safety defect trends and highlights safety issues.

Recommendation

4.72 We made no recommendations in these areas of examination.

Analysis to support this finding

4.73 **What we examined.** We examined the process and selected a judgmental sample of 25 complaints and investigations (out of a total of 4,710) related to alleged safety defects that were collected between 2014 and 2015. We determined whether Transport Canada

- collected sufficient information to assess complaints,
- supported reports using adequate technical tests and analyses,
- concluded whether there was a safety defect,
- initiated and completed its analyses and investigations in a timely manner, and
- communicated identified safety defects to the manufacturer in a timely manner.

4.74 Analysis and investigation of complaints. We found that Transport Canada officials completed a report for every complaint. They collected sufficient information to assess the presence of safety defects by searching the complaints database and other sources to identify similar alleged defects and trends.

4.75 Transport Canada reviewed all complaints, but it only further analyzed those where there was a perceived safety-related defect. The Department used a graduated approach based on risk principles, which helped determine the need for further analysis or investigation. In this approach, the ultimate step is prosecution of a manufacturer by Transport Canada if the manufacturer does not issue a notice of defect and implement the corrective action.

4.76 For complaints requiring more analysis, we found that defect investigators documented the results of databases searched, inspections, and tests. Each analysis concluded whether there was a safety defect, and determined if the Department should keep monitoring the issue. For example, it specified whether the component (such as a seat belt or airbag) worked as intended, and whether the complaint was an isolated case or part of a larger trend. We also found that Transport Canada responded to complaints in a timely fashion.

4.77 We found that the analysis of complaints relied heavily on the analysts' judgment. The decision to assign resources to review a complaint was usually influenced by the following factors:

- injuries or fatalities;
- warnings to the vehicle operator;
- whether the complainant had received a diagnostic from the automotive dealer; and
- other factors, such as the vehicle's age, the complainant's location, investigators' workload, and resource availability.

4.78 In 2015, Transport Canada categorized 2,062 out of 2,426 complaints (85 percent) "for information only." It took no further action because the information collected was not safety-related or did not justify further analysis. However, this information remained accessible for future reference. Transport Canada conducted further work on the remaining 364 complaints. We found that the Department did not document why it chose to elevate complaints for further analysis, or why it chose not to do so. We also found that when more than one vehicle had potentially the same defect, Transport Canada did not always record why it chose to conduct additional work on one, but not the others. In our opinion, properly documented decisions could improve the tracking of trends and provide better transparency.

4.79 Advising manufacturers of complaints. We found that Transport Canada sent quarterly reports to manufacturers to inform them about

- newly received complaints, and
- updates on previous complaints.

Moreover, through our review of selected complaints, we found that Transport Canada communicated with manufacturers in a timely fashion, when necessary, to share alleged defects or trends regarding the safety-related issues it had identified. This is important because manufacturers are responsible for issuing a notice of defect, so they must be made aware of all potential safety-related issues raised by Canadians as soon as possible.

Transport Canada had limited knowledge of manufacturer investigations related to critical safety issues

What we found

4.80 We found that Transport Canada requested information from manufacturers on alleged safety defects, but that manufacturers provided only a fraction of the information they possessed to Transport Canada. We found that manufacturers frequently investigated critical safety issues without informing Transport Canada. At the time of this audit, there was no legal requirement for manufacturers to provide information. As we concluded the audit, Transport Canada had proposed changes to legislation to increase reporting requirements for manufacturers. Finally, we also found that the Department knew little about manufacturers' internal processes to identify and report safety defects.

4.81 Our analysis supporting this finding presents what we examined and discusses

- communications about alleged safety defects,
- information from manufacturers, and
- manufacturers' processes to identify and report safety defects.

Why this finding matters

4.82 This finding matters because collecting information about manufacturers' ongoing safety-related investigations and internal processes helps the Department investigate safety defects in a timely manner, and thereby better protect Canadians.

Recommendations

4.83 Our recommendations in these areas of examination appear at paragraphs 4.91 and 4.94.

4.84 What we examined. We examined documentation from meetings held with manufacturers, including meeting agendas and manufacturers' presentations, to assess whether the Department had received information related to safety issues from manufacturers. We analyzed the Public Complaints Database and Motor Vehicle Safety Recall Database from 2010 to 2015.

4.85 Communications about alleged safety defects. We found that Transport Canada frequently communicated with manufacturers to discuss alleged safety defects that were identified through complaints or its own investigations. We also found that Transport Canada requested information on these safety defects from manufacturers. Examples of information that Transport Canada requested included

- lists of all affected part numbers;
- number of complaints received to date;
- warranty claims;
- installation information, such as the point at which a part was assembled on the production line;
- the manufacturer's assessment of failures; and
- whether the manufacturer was conducting its own investigation or review related to a specific ongoing issue.

4.86 Because of its analysis of complaints and its own investigations, Transport Canada influenced nine percent of recalls between 2010 and 2015. For example, while doing research on rear-seat occupant safety, Transport Canada triggered a safety investigation by a manufacturer that prompted a recall in Canada and abroad. Exhibit 4.2 summarizes how Transport Canada's work led to a recall.

Exhibit 4.2 Transport Canada identified a potentially dangerous defect in Toyota RAV4 vehicles

In a February 2016 news release, Transport Canada made public that the Department had found the problem after reconstructing a fatal crash using a 2011 Toyota RAV4 in Canada, in which the front occupants would have survived the frontal crash while the rear passengers would not have. The replicated crash used dummies similar in weight to the actual human passengers, as well as an impact speed and crash angle that aligned with the fatal crash. The news release mentioned that, during the test, both rear seatbelts severed and both dummies sustained potentially deadly injuries. Transport Canada determined that in a severe frontal crash, contact with the steel seat structure in the seat may have caused the rear seat belt to sever.

Toyota was informed of Transport Canada's findings and investigated the problem. A recall of nearly 150,000 RAV4s in Canada was initiated for 2006 to 2012 models. Toyota installed seat flange covers to prevent contact of the seatbelt with the steel seat structure. It was estimated that, globally, over 2.7 million RAV4s may have been affected by this issue.

Source: Based on a Transport Canada news release, February 2016

4.87 **Information from manufacturers.** Our file review found that manufacturers provided information requested, but they did not share information related to other internal safety investigations with Transport Canada. As a result, manufacturers had much more information on potential safety defects. This is because they are often the first line of contact for complaints from vehicle owners and parts changed under warranty claims. For example, we found that General Motors Corporation had been aware of problems with its ignition switches as early as 2004, and that it had been actively investigating the issue prior to the recall issued in February 2014. While the US parent company had knowledge, General Motors Canada was not aware of the issue (Exhibit 4.3).

4.88 We found that between 2010 and 2015, manufacturers issued at least 318 recalls for which Transport Canada had not received any complaints. This represented about one third of all recalls issued for that period. This means that manufacturers investigated potential safety issues and sent out recall notices without Transport Canada's prior knowledge.

4.89 We found that Transport Canada did not request information about other important or critical safety-related issues that manufacturers identified and were actively investigating. In our opinion, if Transport Canada regularly requested information about manufacturers' ongoing safety investigations, the Department could raise relevant complaints with manufacturers as soon as they are received. This is important because it would help ensure early identification and analysis of safety-related defects.

4.90 As we were concluding this audit, the federal government introduced Bill S-2 in the Senate to amend the *Motor Vehicle Safety Act*. Among other things, it proposed new regulatory powers to establish information reporting requirements that would help Transport Canada identify safety defects sooner. It would also require companies operating in Canada to be more aware of foreign defects and issues of non-compliance for vehicles that are similar to those sold in Canada. It is our view that if enacted, these amendments would address the information imbalance between Transport Canada and the manufacturers.

Exhibit 4.3 Transport Canada did not have information on General Motors Corporation's ignition switch investigation before the recalls in 2014

General Motors (GM) Canada issued three recalls between 10 February 2014 and 28 March 2014 relating to ignition switches, which under certain conditions could rotate out of the "run" position and into the "accessory" position. This could affect proper airbag deployment. The recall campaign included approximately 370,000 vehicles in Canada.

General Motors Canada informed Transport Canada that it had not become aware of the issue until December 2013, and that a decision to initiate a recall was taken by its parent company on 31 January 2014.

General Motors Corporation started investigating the issue in 2004 and pursued several tests, analyses, and investigations over the next decade. The Corporation actively investigated an issue that was likely to affect human safety many months before the recall. Transport Canada was only informed on 10 February 2014.

After the recall announcement, Transport Canada initiated a series of actions:

- Transport Canada advisories: The Department published advisories on 22 October 2014 and 12 December 2014 asking owners of GM recalled vehicles to have ignition switch repairs completed.
- Reviews and investigations of complaints: Transport Canada reviewed complaints that it had received in relation to ignition switch problems and determined that there was no trend leading to this specific defect. It also investigated two cases of fatal collisions. In one case, the Department could not determine definitively whether the vehicle's airbag should have deployed in the collision. In the other case, Transport Canada determined that the ignition switch in that vehicle had already been replaced in 2008 with a modified switch design that GM had implemented to address previous ignition switch torque deficiencies.
- Examination of new complaints: While the Department was aware of only one fatal crash linked to the ignition switch defect in Canada, it examined new complaints received from Canadians regarding recalled vehicles to determine whether the defective switch played a role in the collision or in the airbag non-deployment.
- GM Canada investigation: Transport Canada launched an examination into GM's timeliness in reporting the ignition switch defect. The Department reviewed a chronology of events provided by GM Canada. It also examined the manufacturer's global process to review potential safety defects and make recall decisions, which included the decision to initiate a recall in Canada. The Department concluded that there was no evidence of concealment or delay in reporting information to Transport Canada. Transport Canada monitored the recall campaign's completion and effectiveness. The recall repairs' completion rate was reported at 79.1 percent in Canada as of May 2016.

4.91 **Recommendation.** Transport Canada should request from manufacturers information on their internal investigations into critical ongoing safety-related issues with their vehicles.

The Department's response. Agreed. Under Bill C-62, Safer Vehicles for Canadians Act (introduced into Parliament on June 2015) and again under Bill S-2, Strengthening Motor Vehicle Safety for Canadians Act (introduced into Parliament on May 2016), new authorities have been proposed that

would require companies that make or sell vehicles in Canada to acquire, maintain, and report to the Minister records that would facilitate the identification and analysis of safety-related defects. If the proposed authorities are approved, regulations will be developed to implement approved legislation.

4.92 Manufacturers' processes to identify and report safety defects.

We found that Transport Canada did not have the authority to assess whether manufacturers implemented effective processes to identify and report safety defects. Transport Canada could only obtain this information through collaborative arrangements with individual manufacturers. This meant that while the Department had some knowledge of a few manufacturers' processes to identify defects, it had very little information about others' processes, including those related to their global operations. Transport Canada did not know how most manufacturers addressed Canadian complaints provided in the Department's quarterly reports.

4.93 In contrast, the US National Highway Traffic Safety Administration recommended regular audits of manufacturers' internal processes for finding potential safety defects in 2015. In our opinion, gathering information about a manufacturer's internal processes to identify safety issues would help the Department identify safety issues early. This is important because it could improve Transport Canada's ability to investigate defects and better protect Canadians.

4.94 Recommendation. Transport Canada should request information from manufacturers on their internal processes for identifying and reporting safety defects.

***The Department's response.** Agreed. Transport Canada will request that major auto manufacturers provide information on their data sources and internal processes for identifying and reporting safety defects.*

The target completion date is January 2017.

Safety recalls

Overall message



4.95 Overall, we found that Transport Canada adequately assessed vehicle manufacturers' efforts to complete safety recalls. However, Transport Canada advised us that manufacturers had difficulty identifying and contacting owners of recalled passenger vehicles in some cases, especially for those owning older vehicles. Efforts are under way with the provinces and territories to improve the repair rates.

4.96 This is important because identifying and repairing vehicles with safety defects in a timely manner reduces the risks to Canadians.

Context

4.97 The number of safety-related recalls of passenger vehicles in Canada increased by 74 percent over the six-year period from 2010 to 2015, rising from 133 in 2010 to 232 in 2015. The 2015 recalls covered approximately 5 million passenger vehicles, and involved 24 manufacturers of both domestic and imported vehicles. According to Transport Canada, the factors that led to increased recall rates included more cautious approaches by manufacturers, and increasing vehicle complexity.

4.98 By law, manufacturers must notify Transport Canada of defects that affect or are likely to affect human safety upon becoming aware of the problem. They must also notify owners of affected vehicles about the existence and nature of the defect, and what to do about it as soon as possible. Notices must be sent no later than 60 days after becoming aware of the problem.

4.99 Following the start of a recall, manufacturers must report repair completion rates for recalled vehicles to Transport Canada every quarter for two years. Transport Canada monitors these rates and may follow up on low rates by ordering the company to issue a subsequent notice to owners who have not had the defect corrected. Transport Canada does not define a specific threshold for low completion rates.

4.100 Responsibility for identifying and notifying owners of affected vehicles rests with the manufacturers. They identify owners based on dealer data on their customers, and on provincial and territorial vehicle registry information.

Transport Canada ensured that manufacturers' safety defect notifications were timely and complete

What we found

4.101 We found that manufacturers advised Transport Canada of their plans to initiate safety recalls soon after making the decision to do so. In more than half of the recalls we examined (nearly 57 percent), we found that manufacturers advised owners within approximately six weeks, on average, after making the decision to issue a recall. In the remaining cases, we were not able to determine when owners were notified.

4.102 Our analysis supporting this finding presents what we examined and discusses the

- timeliness of manufacturers' safety defect notifications to Transport Canada, and
- timeliness of manufacturers' safety defect notifications to the owners of affected vehicles.

Why this finding matters

4.103 This finding matters because it is critical that vehicle owners be informed about safety issues soon after the decision to conduct a recall. Failure to do so may place the safety and lives of Canadians at risk.

Recommendation

4.104 We made no recommendations in this area of examination.

Analysis to support this finding

4.105 **What we examined.** We examined a random sample of 46 recalls (out of a total of 1,030) conducted from 2010 to 2015 to determine whether manufacturers notified Transport Canada and affected owners about safety recalls on a timely basis.

4.106 **Timeliness of manufacturers' safety defect notifications to Transport Canada.** We found that 6.2 workdays, on average, elapsed between manufacturers' decisions to initiate recalls and the date they sent out the required notifications to Transport Canada. This indicated that manufacturers typically advised Transport Canada soon after making a decision to issue a recall.

4.107 **Timeliness of manufacturers' safety defect notifications to the owners of affected vehicles.** We found that manufacturers sent 26 of the 46 defect notifications to vehicle owners within the required 60 days following the decision to conduct a recall. An average of 29.2 workdays elapsed between the time manufacturers decided to issue a recall and the date they sent notifications to owners. We found that the remaining 20 notices of defect sent to Transport Canada did not indicate when manufacturers notified owners.

Transport Canada monitored repair rates for recalled vehicles and was exploring ways to increase them

What we found

4.108 We found that Transport Canada adequately monitored repair rates for recalled vehicles in the two years following the start of a recall. While an average of nearly 8 in 10 vehicles were repaired following a recall notification, we found that there were barriers to achieving higher response rates. Manufacturers are responsible for advising vehicle owners of recalls, but it is up to owners to have their vehicles repaired.

4.109 Our analysis supporting this finding presents what we examined and discusses

- monitoring of repair completion rates, and
- efforts to improve repair rates.

Why this finding matters

4.110 This finding matters because vehicles that are not repaired quickly after a recall is issued may compromise the safety of drivers, passengers, other vehicle occupants, and pedestrians.

Recommendation

4.111 We made no recommendations in this area of examination.

Analysis to support this finding

4.112 **What we examined.** We examined Transport Canada's Motor Vehicle Safety Recalls Database for 2010 to 2013 to determine whether the Department monitored repair rates. We also examined the schedule and agendas for meetings between Transport Canada and vehicle manufacturers during the audit period.

4.113 **Monitoring of repair completion rates.** We found that Transport Canada monitored repair completion rates on recalled vehicles through its review of quarterly reports prepared by manufacturers. These reports were required for two years following the start of a recall.

4.114 We found that Transport Canada did not have a specific definition of an "adequate" repair rate. Recall repair rates were approximately 78 percent. Transport Canada officials told us that efforts to achieve higher recall repair rates faced challenges:

- Owners of older vehicles and vehicles transferred across provincial or international borders could be difficult for manufacturers to identify and contact.
- Once notified, some owners chose not to present their vehicles to a dealer for the required repairs even though manufacturers typically paid all related costs.

4.115 Under the *Motor Vehicle Safety Act* and its regulations, manufacturers are responsible for notifying vehicle owners of a recall. However, manufacturers are not responsible if owners choose not to take action. Ultimately, it is up to the consumer to bring the vehicle to a dealer for the required repair if it is the subject of a recall. Transport Canada's website encourages vehicle owners to take action on recalls once they receive notification from a manufacturer.

4.116 **Efforts to improve repair rates.** Transport Canada participated in a federal-provincial project to identify strategies to improve repair completion rates. The Department presented a vehicle recall completion rate proposal to the Canadian Council of Motor Transport Administrators, a federal-provincial-territorial organization, in June 2015. The project included a draft options analysis for review in April 2016. The Council was considering converting it into a code of practice and action plan, but work had not begun at the time of this audit.

4.117 We found that vehicle manufacturers and Transport Canada had discussed ways to increase repair completion rates. Similar discussions had taken place in the United States. At the time of our audit, no solutions had been reached. It is important that the Department continue its work with the provinces, territories, and manufacturers to improve repair rates.

Conclusion

4.118 We concluded that Transport Canada did not maintain an up-to-date regulatory framework that responded to emerging safety risks and technological issues. As a result, the approach failed to ensure that Canadian-driven passenger vehicles had the highest possible safety features and technologies. While the Department's oversight of vehicle safety defects and recalls was adequate, Transport Canada knew little about the critical safety issues that manufacturers were investigating in their vehicles. This limited the Department's ability to identify safety defects early and to influence manufacturers' recalls.

About the Audit

The Office of the Auditor General's responsibility was to conduct an independent examination of Transport Canada's Motor Vehicle Safety Oversight Program to provide objective information, advice, and assurance to assist Parliament in its scrutiny of the government's management of resources and programs.

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set out by the Chartered Professional Accountants of Canada (CPA Canada) in the CPA Canada 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 in this report are factually based.

Objective

The objective of this audit was to determine whether Transport Canada's regulatory framework and oversight of vehicle safety defects and recalls have been adequate to respond to emerging safety risks and issues in a timely manner.

Scope and approach

The audit focused on passenger motor vehicles, specifically passenger cars, SUVs, minivans, and light trucks, such as pickups.

The scope of the audit included Transport Canada's Motor Vehicle Safety Oversight Program. We conducted interviews with representatives of all branches of Transport Canada's Motor Vehicle Safety Directorate. In addition, we interviewed manufacturers and industry associations, as well as academic experts and stakeholders. We also met with US National Highway Traffic Safety Administration representatives.

In order to determine whether Transport Canada had managed the Canadian regulatory framework to adequately respond in a timely manner to emerging safety risks and issues, we interviewed departmental officials and experts both in Canada and in the United States as well as representatives from the automotive industry. We reviewed information provided by the Department and documented the process used to amend existing regulations or used to introduce new regulations. We examined how consultations, collision and injury data, and science-based information support the regulatory framework in Canada. We also reviewed the planning process for regulatory development at Transport Canada. We examined the Department's development of regulations for two emerging technologies: automatic emergency braking and lighting systems. We also examined Transport Canada's regulatory development work on five safety issues: rear seat passenger protection, side-door strength, occupant protection in frontal impacts, pedestrian safety, and anchorage for child restraint systems.

In order to assess whether manufacturers had identified and reported vehicle safety defects in a systematic and timely way, we interviewed defect analysts and investigators. Our audit work involved the examination of 25 records from the Public Complaints Database and 46 from the recalls database. The sample was selected such that priority was given to complex cases, or cases suspected of presenting errors. We reviewed meeting agendas, presentations prepared by manufacturers at the request of Transport Canada, and quarterly reports sent to manufacturers. Finally, in order to review whether Transport Canada had adequately assessed manufacturers' efforts to complete safety recalls, we interviewed officials and analyzed data maintained by Transport Canada on recall notifications and repair completion rates. We also reviewed the role played by the Department in identifying strategies to improve repair rates.

Criteria

Criteria	Sources
To determine whether Transport Canada's regulatory framework and oversight of vehicle safety defects and recalls have been adequate to respond to emerging safety risks and issues in a timely manner, we used the following criteria:	
Transport Canada maintains a regulatory framework that is responsive to important vehicle safety issues and emerging risks in a timely manner.	<ul style="list-style-type: none"> • <i>Motor Vehicle Safety Act</i> and related regulations • Regulatory Work Plan 2013–2015, Transport Canada • Overview of NHTSA Priority Plan for Vehicle Safety and Fuel Economy, 2015 to 2017, US National Highway Traffic Safety Administration • NHTSA's Path Forward, US National Highway Traffic Safety Administration, 2015 • Cabinet Directive on Regulatory Management, 2012
Transport Canada adequately assesses whether manufacturers and importers identify and report safety vehicle defects in a systematic and timely manner.	<ul style="list-style-type: none"> • Standard Operating Procedures of the Defect Investigations and Recalls Program, Transport Canada • Defect Investigation Procedures, Transport Canada, 1984 • Consent Order, TQ14-001, NHTSA Recall No. 14V-047, US National Highway Traffic Safety Administration, 2014 • Office of Inspector General Audit Report, Inadequate Data and Analysis Undermine NHTSA's Efforts to Identify and Investigate Vehicle Safety Concerns, US Department of Transportation, 2015 • NHTSA's Path Forward, US National Highway Traffic Safety Administration, 2015

Criteria	Sources
To determine whether Transport Canada's regulatory framework and oversight of vehicle safety defects and recalls have been adequate to respond to emerging safety risks and issues in a timely manner, we used the following criteria: (continued)	
Transport Canada adequately assesses the timely completion of safety recalls by manufacturers and importers of vehicles.	<ul style="list-style-type: none"> • <i>Motor Vehicle Safety Act</i> and related regulations • Directive on Safety and Security Oversight, Transport Canada • Motor Vehicle Safety Oversight Program, Guidelines on Enforcement and Compliance, Transport Canada • Standard Operating Procedures of the Defect Investigations and Recalls Program, Transport Canada • Assessment of NHTSA's Path Forward, Transport Canada, 2015

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

Period covered by the audit

The audit covered the period between January 2010 and September 2016. Audit work for this report was completed on 15 September 2016.

Audit team

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List of Recommendations

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

Recommendation	Response
The regulatory framework for motor vehicle safety	
<p>4.35 Transport Canada should provide regular public updates on the status of its regulatory plans. (4.22–4.34)</p>	<p>The Department's response. Agreed. Transport Canada information on planned motor vehicle safety regulatory amendments, including status and notification of when the Department is ready to seek input for the development of draft regulations, along with contact information, will be published. This list will be updated every six months.</p> <p>The target completion date is April 2017.</p>
<p>4.36 Transport Canada should</p> <ul style="list-style-type: none"> publicly announce its intention to prepare or update regulations, and invite comments on technical feasibility and other considerations within a reasonable time limit; actively seek input from expert stakeholders such as the insurance industry, medical associations, and police; and publicly disclose a summary of all stakeholder comments, including technical and other considerations, within a reasonable time limit. <p>(4.22–4.34)</p>	<p>The Department's response. Agreed. Transport Canada will</p> <ul style="list-style-type: none"> for the expanded regulatory amendments list (see recommendation paragraph 4.35), Transport Canada will specifically invite comments, actively seek input from expert stakeholders, and publish a summary of comments received by stakeholders during its pre-consultation period. <p>The target completion date is September 2017.</p>
<p>4.44 In developing new or modifying existing safety standards, Transport Canada should</p> <ul style="list-style-type: none"> assess whether its collision and injury data can adequately support evidence-based decisions based on its quality, reliability, and relevance; and take appropriate measures, including working with provinces, territories, and other stakeholders, to improve the quality and scope of data needed to inform decisions. <p>(4.37–4.43)</p>	<p>The Department's response. Agreed. Transport Canada will assess the adequacy of collision and injury data, and will work with stakeholders and the provinces and territories that own and provide the collision and injury data to develop an action plan to improve data quality.</p> <p>The target completion date is June 2018.</p>

Recommendation	Response
<p>4.50 Transport Canada should clearly disclose how it used evidence and scientific research to inform its development or modification of motor vehicle safety standards. (4.37–4.49)</p> <p>4.63 Transport Canada should develop a long-term operational plan for the Motor Vehicle Safety Directorate. This plan should identify planned activities, budget, and level of effort needed to deliver on its mandate. (4.51–4.62)</p>	<p>The Department's response. Agreed. Transport Canada will provide information on what evidence and scientific research has been used to inform standards development.</p> <p>The target completion date is January 2017.</p> <p>The Department's response. Agreed. Transport Canada will review the linkages between the departmental planning, research, and regulatory activities to update the long-term planning process.</p> <p>The Motor Vehicle Safety Directorate will have a multi-year operational plan for motor vehicle safety.</p> <p>The target completion date is October 2017.</p>
<p>Oversight of defects</p> <p>4.91 Transport Canada should request from manufacturers information on their internal investigations into critical ongoing safety-related issues with their vehicles. (4.80–4.90)</p> <p>4.94 Transport Canada should request information from manufacturers on their internal processes for identifying and reporting safety defects. (4.80–4.93)</p>	<p>The Department's response. Agreed. Under Bill C-62, <i>Safer Vehicles for Canadians Act</i> (introduced into Parliament on June 2015) and again under Bill S-2, <i>Strengthening Motor Vehicle Safety for Canadians Act</i> (introduced into Parliament on May 2016), new authorities have been proposed that would require companies that make or sell vehicles in Canada to acquire, maintain, and report to the Minister records that would facilitate the identification and analysis of safety-related defects. If the proposed authorities are approved, regulations will be developed to implement approved legislation.</p> <p>The Department's response. Agreed. Transport Canada will request that major auto manufacturers provide information on their data sources and internal processes for identifying and reporting safety defects.</p> <p>The target completion date is January 2017.</p>