

Chapter 28

Highways and Infrastructure – Enforcing Vehicle Weight and Dimension Requirements

1.0 MAIN POINTS

This chapter is our first follow-up audit of five recommendations initially made in 2017. By December 2018, the Ministry had made several improvements.

The Ministry had developed a risk-based enforcement plan that took into account weight and dimension risks, and completed weight and dimension enforcement activities consistent with that plan.

Senior management received periodic information on weight and dimension enforcement activities including monthly actual-to-planned comparisons for key activities. Such comparisons assist the Ministry in monitoring the performance of the Highway Patrol branch, and help it determine whether the Ministry's weight and dimension enforcement activities are sufficient and appropriate.

Through the implementation of a new IT system, the Ministry was working on consistently documenting its responses to inquiries or complaints received. Consistently documenting responses to inquiries helps show it handles inquiries sufficiently and appropriately, and considers whether adjustments to its activities are warranted.

2.0 INTRODUCTION

Under *The Highways and Transportation Act, 1997*, the Ministry of Highways and Infrastructure is responsible for ensuring transport law is followed within Saskatchewan.¹ As part of that overall responsibility, the Ministry has made its Highway Patrol (formerly Commercial Vehicle Enforcement) branch responsible for the enforcement of commercial vehicle weight and dimension regulations on provincial highways.²

In 2017-18, the Highway Patrol branch spent about \$5 million (\$5 million budgeted for 2018-19) enforcing commercial vehicle regulations, including weight and dimensions.^{3,4}

2.1 Vehicle Weight and Dimension Requirements Set in Legislation

Restricting vehicle weight and dimensions is one way the Ministry promotes public safety on provincial highways and protects highway quality. The Ministry has the authority to

¹ *The Highways and Transportation Act, 1997*, section 3(2)(d).

² *The Highways and Transportation Act, 1997*, section. 2(p), defines a provincial highway as a public highway or a proposed public highway that is the subject of a departmental plan or is prescribed as a provincial highway, and includes a weighing and inspection facility.

³ *Government of Saskatchewan Public Accounts 2017-18 Volume 2* (p. 22).

⁴ *Government of Saskatchewan 18-19 Estimates* (p. 83).



restrict gross weight or the dimension of vehicles travelling on provincial highways or prohibit their operation.⁵

The Vehicle Weight and Dimension Regulations, 2010 (issued under the Act) set out the allowable weights and dimensions for vehicles travelling on provincial highways. They include:

- Allowable weights that refer to maximum gross vehicle weight.⁶

The Ministry varies the maximum allowable weights based on its classification of the provincial highway. Provincial highway classification reflects the type of the provincial highway (e.g., pavement, thin membrane) and degree of service provided (e.g., primary, secondary). To maximize the economic movement of goods and minimize long-term damage to road structures, the Ministry assigns special weights to certain provincial highways.⁷

Maximum allowable gross vehicle weight is dependent on a vehicle's maximum registered gross vehicle weight (e.g., 24,300 kilograms for a truck with three axles, 48,300 kilograms for truck and trailer with six axles), tire size, and axle spacing combined with the provincial highway classification.

- Allowable dimensions for vehicles that set specific maximum widths (e.g., 2.6 metres), heights, and lengths for vehicles travelling on provincial highways.

In addition, cities and municipalities have authority to set their own allowable weights and dimensions for vehicles travelling on their streets and roads (e.g., municipal bylaws, road bans). They use law enforcement agencies (such as the RCMP and municipal policing services [e.g., the Regina Police Service]) to enforce these municipal bylaws. These agencies may have officers assigned, trained, or equipped to conduct enforcement of weight or dimension requirements.

2.2 Risks Associated with Over-Dimension and Overweight Vehicles

Saskatchewan's provincial highway network is the largest in Canada on a per capita basis, consisting of over 26,182 kilometres of provincial highways.⁸ Saskatchewan's economy includes significant bulk-commodity exports of agriculture, livestock, oil, and mined mineral resources.

Figure 1 shows the increase in the number of large vehicles (e.g., truck tractors, trailers) registered in Saskatchewan in 2010 and 2017. More large vehicles increases the risk of overweight or over-dimension vehicles travelling on provincial highways.⁹

⁵ *The Highways and Transportation Act, 1997*, section 35.1.

⁶ Gross vehicle weight means the combined weight of a vehicle and the load carried on that vehicle, or the combined weight of two or more vehicles coupled together and the combined weight of the loads carried.

⁷ www.saskatchewan.ca/business/transportation-and-road-construction/information-for-truckers-and-commercial-trucking-companies/regulations-and-road-restrictions/special-weights-and-road-restrictions (18 March 2019).

⁸ The Ministry of Highways and Infrastructure, *2017-18 Annual Report*, p. 3.

⁹ Overweight and over-dimension vehicles are vehicles that exceed weight and dimension regulations and any permits obtained.

Figure 1—Increase in Large Vehicles Registered in Saskatchewan in 2010 and 2017

Type of Vehicle	Number of Registered Vehicles		Percentage Increase (Decrease)
	2010	2017	
Vans (light & heavy, commercial & private)	78,985	58,724	(25.7)%
Commercial & Farm straight trucks	117,797	127,927	8.6%
Truck tractors (semi power units)	19,453	27,345	40.6%
Trailers (commercial, private, farm)	177,927	218,976	23.1%

Source: SGI, *2017 TAIS Annual Report*, p. 46. www.sgi.sk.ca/news?title=2017-traffic-collision-statistics (18 March 2019). 2017 was the most recent information available at March 2019.

Overweight vehicles can damage pavement and bridges. Overweight vehicles can cause rutting, potholes, and other distresses to pavement and bridges.¹⁰ Increased damage to provincial highways increases the frequency in which they need repairs. In addition, overweight vehicles pose safety risks to the driving public. Overweight vehicles may have increased stopping distances and decreased handling capabilities; increasing their risk of being involved in collisions.

Over-dimension vehicles also have increased risk of collisions as:

- Wider loads may obstruct driver views, take up more than one lane, or obstruct signals (e.g., turning and brake lights)
- Tall loads are more likely to tip over, fall off the trailer (e.g., bales falling off onto nearby vehicles), or hit overhead infrastructure (e.g., bridges or power lines)
- Long loads need more room to turn than normal-length loads

While vehicle weight and dimension as the cause of collisions is not tracked; statistics show large vehicles, when in a collision, more often result in fatal collisions. For example, in 2017, truck tractor units were involved in 2% of Saskatchewan's total collisions, with 14% of them involved in fatal collisions.¹¹

The Ministry estimates it spends at least \$10 million each year to repair damage to provincial highways caused by overweight vehicles. In 2017-18, the Ministry spent a total of \$102.9 million for surface preservation on provincial highways.¹²

Effective enforcement of vehicle weight and dimension regulations reduces traffic safety risks and costly damage to the provincial highway system.

2.3 Focus of Follow-Up Audit

This chapter describes our first follow-up of management's actions on the recommendations we made in 2017.

In 2017, we assessed the Ministry's processes to enforce vehicle weight and dimension requirements. Our *2017 Report – Volume 1*, Chapter 7 concluded that its processes, for

¹⁰ Rutting is surface distortions in the wheel paths caused by either wear or heavy loads, or a combination of the two.

¹¹ SGI, *2017 TAIS Annual Report*, p. 42.

¹² *Government of Saskatchewan Public Accounts 2017-18 Volume 2* (p. 22).



the 12-month period ended August 31, 2016, were not effective in enforcing vehicle weight and dimension requirements on provincial highways. We made five recommendations.

To conduct this follow-up audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance* (CSAE 3001). To evaluate the Ministry's progress towards meeting our recommendations, we used the relevant criteria from the original audit. Ministry management agreed with the criteria in the original audit.

We discussed changes to Ministry processes since 2017 with relevant management. We reviewed pertinent documents (e.g., 2018-19 Saskatchewan Highway Patrol Work Plan, tracking of inquiries). We tested a sample of weight and dimension enforcement activities completed, and analyzed related data and handling of inquiries.

3.0 STATUS OF RECOMMENDATIONS

This section sets out each outstanding recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at December 31, 2018, and the Ministry's actions up to that date.

3.1 Risk Assessment Used to Prepare Work Plan and Direct Officer Activity

We recommended that the Ministry of Highways and Infrastructure rationalize, in writing, the nature and extent of its annual vehicle weight and dimension enforcement activities based on assessed risks.

(2017 Report – Volume 1, p. 92, Recommendation 1; Public Accounts Committee agreement June 12, 2018)

Status – Implemented

The Ministry developed an annual work plan for the Highway Patrol branch that sets priorities based on risk.

The Ministry uses data from its periodic province-wide highway risk assessment to aid in the development of the Highway Patrol annual work plan. The Ministry's highway risk assessment identified specific risks that overweight or over dimension vehicles have on Saskatchewan highways. For example, the Ministry had determined the spring-thaw period increases the risk of damage to road surfaces.

We found the Highway Patrol 2018-19 annual work plan reflected these risks. For example, the plan expects officers to increase the percentage of their time on patrolling during the spring-thaw period.

We recommended that the Ministry of Highways and Infrastructure complete vehicle weight and dimension enforcement activities as planned. (2017 Report – Volume 1, p. 94, Recommendation 2; Public Accounts Committee agreement June 12, 2018)

Status – Implemented

The Ministry completes vehicle weight and dimension enforcement activities as outlined in the Highway Patrol annual work plan.

We found the Ministry determined the placement of the fixed scales based on its risk assessment. The purpose of the fixed-position scales is to protect the most important highways in the province. The location of these scales reflects that objective.

The Ministry uses the Officer Activity Tracking System (an IT system) to monitor officer activity. Officers update this system daily and, as part of that update, record time spent at a scale and time spent on patrol.

Our analysis of officer scale and patrol time as compared to the work plan found officers were appropriately adjusting their day-to-day activities (e.g., patrol time versus scale time) consistent with expectations set out in the annual work plan, and Ministry risk assessment.

Preparing a work plan based on assessed risks and completing enforcement according to that plan helps to reduce damage to Saskatchewan highways and helps to monitor that heavy vehicles operate in accordance with legislation.

3.2 Reporting on Enforcement Activities Can Be Improved

We recommended that the Ministry of Highways and Infrastructure follow its established policy requiring Highway Officers to report the results of completed vehicle weight and dimension joint-enforcement activities. (2017 Report – Volume 1, p. 95, Recommendation 3; Public Accounts Committee agreement June 12, 2018)

Status – Partially Implemented

The Ministry reports high-level information related to weight and dimension activities through its Officer Activity Tracking System (e.g., number of hours spent on an activity), and through activity-reporting forms.

The Ministry requires officers to submit activity-reporting forms to management when they complete any kind of focused enforcement activity (e.g., radar in a certain location, blitzes, etc.) or enforcement activity jointly with policing services (e.g., the RCMP). Ministry management receives these forms by email, and files them.



During the September 1, 2016 to December 31, 2018 audit period, there were no joint-enforcement activities undertaken specifically relating to weight or dimensions.¹³

For each of the 30 completed activity-reporting forms we tested that included weight and dimension enforcement activities, Ministry officers consistently completed them. These completed forms contained sufficient information on the activity completed (e.g., officers involved, date of activity, violations identified, etc.). However, we did not find evidence of any detailed compilation or analysis of the completed forms.

The Ministry implemented a new records management system in April 2019 that it expects to use to compile and analyze completed enforcement activities.

Compilation and analysis of completed activity-reporting forms would provide senior management with insight on the appropriateness of the nature and extent of its weight and dimension enforcement activities. Without this information, management may have difficulty providing effective oversight relating to the work completed by Highway Patrol officers.

3.3 Appropriate Reporting Provided to Management

We recommended that the Ministry of Highways and Infrastructure periodically report to senior management on the effectiveness of its activities for enforcing vehicle weight and dimension requirements, including a comparison of planned to actual activities. (2017 Report – Volume 1, p. 97, Recommendation 5; Public Accounts Committee agreement June 12, 2018)

Status – Implemented

Senior management periodically receives reporting about the Ministry's vehicle weight and dimension enforcement activities. This reporting includes comparisons of actual-to-planned for key activities.

Management presents the results of Highway Patrol operations to the Ministry's Executive Committee about three times per year. These presentations summarize recent activities (including weight and dimension enforcement) and include information such as:

- Total number of inspections completed and the type of inspections completed
- Number of tickets issued and the dollar value of those tickets

The Ministry uses the Deputy Minister's Monthly Report Card to report actual activities completed as compared to planned. Reported activities include key vehicle weight and dimension objectives such as comparing the actual year-to-date number of roadside weight inspections performed to planned.¹⁴

¹³ The Ministry attends essentially the same joint enforcement activities each year. None of them are specifically related to weight and dimensions. No other provincial policing services is properly equipped to enforce weights/dimensions (e.g. portable scales, training). This limits the number of joint activities related to enforcing weight and dimensions.

¹⁴ The monthly report card is a report provided to senior management that compares planned to actual performance for metrics that have been identified as key by the Ministry.

Periodically reporting on the effectiveness of vehicle weight and dimension activities allows senior management to monitor and assess whether the Highway Patrol branch is meeting its objectives. It also allows management to determine if the Ministry's weight and dimension enforcement activities are sufficient and appropriate.

3.4 Inquiries Logged But Response to Inquiries Needs Consistent Documentation

We recommended that the Ministry of Highways and Infrastructure follow its established transport investigation policies and procedures for completing investigations related to vehicle weights and dimensions.

(2017 Report – Volume 1, p. 97, Recommendation 4; Public Accounts Committee agreement June 12, 2018)

Status – Recommendation No Longer Relevant

In August 2017, the provincial government announced the creation of the Provincial Protection and Response Team. The creation of this Team expanded the roles and responsibilities of commercial vehicle enforcement officers to include general police duties including responding to 911 calls and carrying a firearm. This increase in responsibility resulted in a re-organization of the Commercial Vehicle Enforcement branch into the Highway Patrol branch. As a result, the Ministry no longer completes investigations specific to vehicle weight and dimensions. Rather it handles them the same way as it handles inquiries and complaints.

While the Ministry consistently tracks receipt of inquiries (including complaints) about Ministry activities, its documentation about Ministry responses to these inquiries is inconsistent.

In November 2018, the Ministry implemented a process to document all calls received from the public about transport compliance. It receives most of these calls through its inquiry line, a public phone line staffed by the Ministry's Trucking Policy, Regulation, and Programs branch.¹⁵ The Ministry documents the date of the call, caller details, and a description of the inquiry along with other pertinent information. When possible, the inquiry line responds directly to inquiries and documents their response.

We found the Ministry does not document its response when a specific Highway Patrol detachment or branch responds to an inquiry. As a result, it could not show us whether the Ministry responded to the inquiry sufficiently, within a reasonable timeframe, and, if necessary, completed appropriate work to address these inquiries.

In April 2019, the Ministry implemented a new records management system. It expects the new system will better document the responses of Highway Patrol detachments to inquiries directed to those detachments.

¹⁵ www.saskatchewan.ca/government/government-structure/ministries/highways-and-infrastructure#information-you-might-be-looking-for (5 April 2019). The phone number is 1-866-933-5290.



Inconsistently documenting Ministry responses to inquiries increases the risk of not handling inquiries sufficiently, and appropriately. Furthermore, without documentation of responses, supervisors cannot monitor the quality of work done and assess whether the Ministry completed sufficient work to address each inquiry.

- 1. We recommend that the Ministry of Highways and Infrastructure consistently document its response to calls received through its inquiry line and actions taken to address each call.**