



Auditor General
MANITOBA

Report to the Legislative Assembly

Department of Infrastructure: Oversight of Commercial Vehicle Safety

Independent Audit Report



December 2019

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MANITOBA

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The Honourable Myrna Driedger
Speaker of the House
Room 244, Legislative Building
450 Broadway
Winnipeg, Manitoba R3C 0V8

Honourable Ms. Driedger:

It is an honour to submit my report titled, *Oversight of Commercial Vehicle Safety*, to be laid before Members of the Legislative Assembly in accordance with the provisions of Sections 14(4) and 28 of *The Auditor General Act*.

Respectfully submitted,

Norm Ricard, CPA, CA
Auditor General

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Auditor General's comments

Heavy commercial vehicles (such as semi and straight trucks greater than 4,500 kg) are important to Manitoba's economy. They transport goods to customers, contribute to Manitoba's Gross Domestic Product, and create Manitoba jobs. However, while they provide many benefits, their size and loads present unique safety risks. As they share the road with others, everyone's safety is affected. Manitoba's 2018 Traffic Collision Report showed that almost 16% of the annual fatalities involved commercial vehicles. Further, collisions involving these vehicles resulted in 11 deaths, 533 injuries (39 serious), property damage, and significant financial costs.

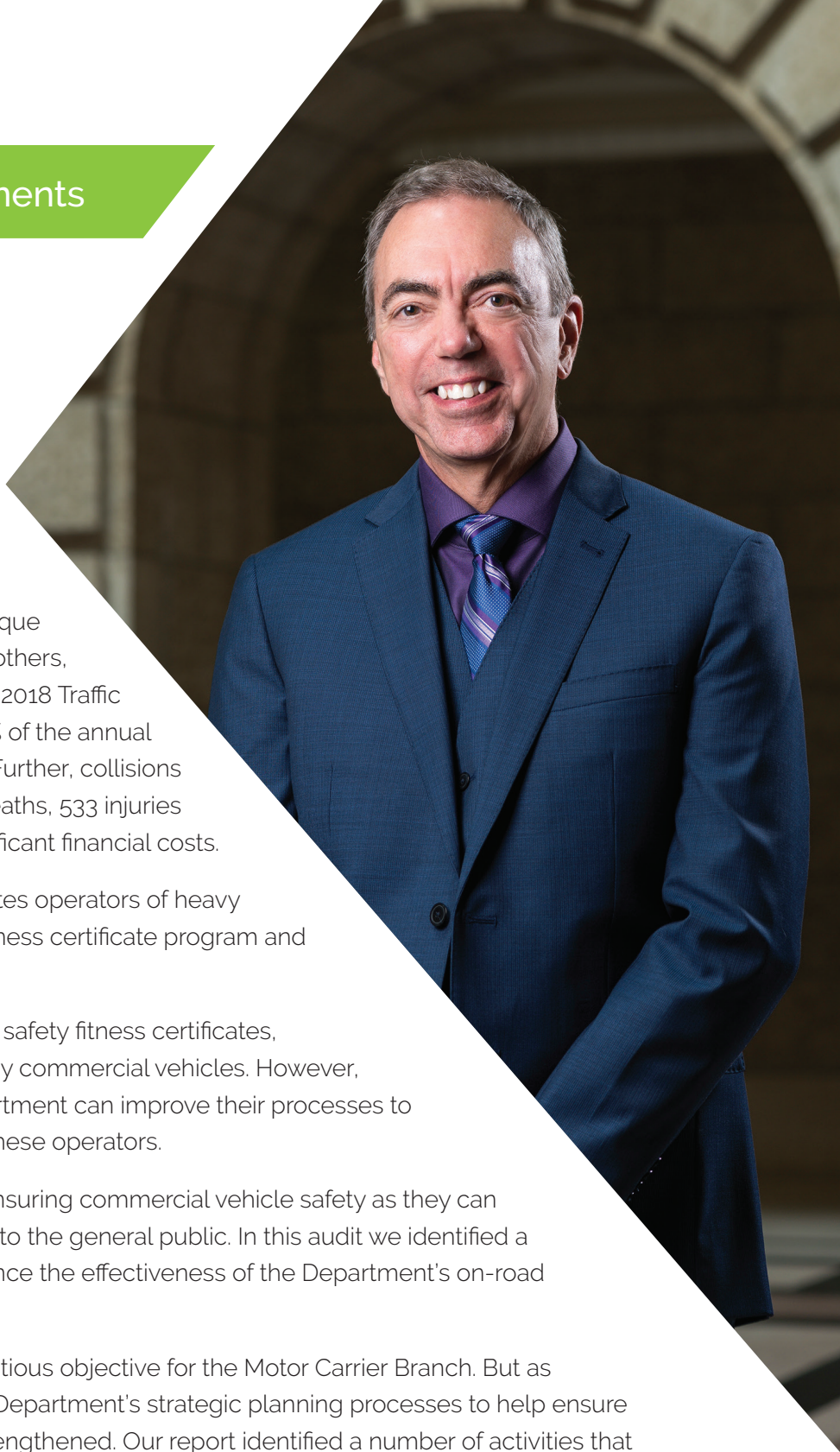
The Department of Infrastructure regulates operators of heavy commercial vehicles through a safety fitness certificate program and on-road inspection activities.

The Department has issued about 7,500 safety fitness certificates, allowing operation of about 45,000 heavy commercial vehicles. However, we note in this audit ways that the Department can improve their processes to better verify and promote the safety of these operators.

On road inspections play a vital role in ensuring commercial vehicle safety as they can detect when a vehicle poses added risk to the general public. In this audit we identified a number of opportunities to further enhance the effectiveness of the Department's on-road inspection efforts.

The Department has articulated an ambitious objective for the Motor Carrier Branch. But as we have seen in many other audits, the Department's strategic planning processes to help ensure this objective is achieved need to be strengthened. Our report identified a number of activities that would enhance existing planning efforts.

Overall we concluded that the Department needs to do more to ensure commercial vehicle safety.



This report includes 17 recommendations. I am pleased that the Department agrees with the recommendations and with their commitment to resolve the underlying issues. Our first follow-up of these recommendations will be as at September 30, 2021.

I would like to thank all the Department officials we met with during our audit for their cooperation and assistance.

I would especially like to thank my audit team for their dedication and hard work, and pursuit of excellence.



Norm Ricard, CPA, CA
Auditor General

Other audits recently conducted related to licensing and inspection processes:

- Management of Provincial Bridges – July 2016
- Manitoba Early Learning and Child Care Program – January 2013
- Food Safety – January 2012

Other audits we recently conducted which included a section related to strategic planning:

- Management of Manitoba's Apprenticeship Program – July 2017
- Management of MRI Services – April 2017
- Special Needs Education – January 2012

Oversight of Commercial Vehicle Safety

- The Department regulates operators of heavy commercial vehicles (motor carriers and other businesses) by requiring them to have safety fitness certificates. In 2017/18:
- about **7,500** certificates issued, covering about **45,000** heavy vehicles
- about **6,800** detailed on-road inspections of heavy vehicles conducted

SIZE and **WEIGHT** of Heavy Commercial Vehicles present unique **SAFETY RISKS**

1 in 10 registered vehicles in Manitoba are **HEAVY COMMERCIAL**

- Heavy commercial vehicles involved in
- on average, about **20%** of Manitoba's traffic **FATALITIES**
 - **4%** of collisions with only injuries/property-damage

What we found

The Department needs to do more to ensure commercial vehicle safety

Safety fitness program insufficient

No checking operator safety knowledge/practices when first issuing safety fitness certificate

Follow-up to poor safety performance inadequately focused on risk and operator improvement

Gaps in management of on-road inspections

Almost **50%** of truck traffic is when major weigh stations are closed; station/patrol operating hours too predictable

Most Level 1 inspections done during just **5 months** (May – Sept)

Limited monitoring of officer performance and inspection results

Weak planning, performance measurement

No measures to assess effectiveness of safety efforts

Planning needs to focus more on risks, data, MPI coordination

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What we examined

We examined the adequacy of the Department of Infrastructure's oversight of commercial vehicle safety. This included examining processes related to its:

- Motor-carrier safety-fitness program.
- On-road commercial-vehicle inspections.
- Strategic planning and performance management.

What we concluded

We concluded that the Department's oversight of commercial vehicle safety is inadequate. The Department's safety-fitness-program practices are insufficient to verify and promote safety; there are gaps in its management of on-road inspections; and it has weak planning and performance measurement processes.

What we found

Our report includes 17 recommendations. An overview of our major findings follows:

MOTOR-CARRIER SAFETY FITNESS PROGRAM

The Department's safety-fitness-program practices are insufficient to verify and promote motor-carrier safety.

- The Department regulates operators of heavy commercial vehicles (such as motor carriers and other business establishments) by requiring them to have safety fitness certificates. However, the Department doesn't adequately check operators' safety knowledge and safety practices before it registers them in its safety fitness program and issues them certificates. Better practices found in other jurisdictions (such as administering safety-knowledge tests, reviewing applicants' safety plans, and performing site reviews or initial-entrant audits) are absent in Manitoba.
- The Department's ongoing monitoring and management of operators' safety

performance is inadequate. The method the Department uses to grade and assess operators' safety performance needs to be more rigorous and logical (for example, negative points should be assigned for failed inspections, even if the deficiencies found aren't serious enough to place the vehicle or driver out-of-service). In addition, the Department's follow-up interventions (facility audits and warning letters) are insufficiently focused on risk and improvement.

- The Department has adequate assurance that it is identifying the Manitoba-based

operators who may need to register in its safety-fitness program. However, there are legal, safety, and efficiency issues associated with the Department's current practice of registering all commercial operators of heavy farm trucks in the safety-fitness program—but then not requiring them to obtain safety-fitness certificates. And there are economic, legal, and efficiency issues related to its practice of not registering U.S. carriers operating in Manitoba and exempting them from requiring Manitoba safety-fitness certificates.

MANAGEMENT OF ON-ROAD INSPECTIONS

There are gaps in the Department's management of on-road inspections.

- The Department is unable to demonstrate that its staffing patterns (where and when staff are assigned to work) maximize coverage (the percentage of commercial truck traffic subject to inspection) and minimize the risk of predictability. For example, we found that almost 50% of commercial truck traffic occurs when major weigh stations are closed and that both weigh station and mobile patrol hours are overly predictable. The Department is also unable to demonstrate that it is using its existing inspection capacity fully and effectively. For example, we found that there is likely room for more Level 1 (the most detailed) inspections as currently almost all are done during just 5 months (May – September).
- There is limited monitoring of officers' performance and inspection results. Officers submit monthly reports to their regional managers, but the reports have gaps and managers don't typically use them to manage their officers' performance. We also found more variation than we expected in the percentage of vehicles that individual officers placed out-of-service during their inspections and in the number of tickets individual officers issued—even after considering that there are different types and volumes of commercial traffic at different locations.
- All on-road motor-carrier enforcement officers complete and maintain Commercial Vehicle Safety Alliance (CVSA) training and certification. They also have most required equipment.
- The Department follows-up on vehicle deficiencies found during inspections that can't be immediately corrected, but operators aren't required to provide actual proof of repair.

PLANNING AND PERFORMANCE MEASUREMENT

The Department's planning and performance measurement processes for commercial vehicle safety are weak.

- The Department performs some planning for the objective stated for the Motor Carrier Branch: "To regulate Manitoba's motor carriers in a manner that enhances road safety, protects infrastructure, and promotes economic development through innovation and collaborative stewardship". For example, it has provided input to the Province's plan for mandatory entry-level training for commercial truck drivers and it is planning for the further development of intelligent transportation systems and truck e-screening. In addition, at the time of our audit, the Department was nearing completion of a Safety Framework review, which was designed to identify issues and challenges and propose solutions. The Department also periodically consults with stakeholders.
- The Department hasn't sufficiently considered risks, available data, and the need for coordination with Manitoba Public Insurance (which also has some responsibilities related to commercial vehicle safety) in order to effectively plan and achieve its commercial vehicle safety objective.
- Most importantly, the Department has no performance measures to assess the effectiveness of its efforts to improve commercial vehicle safety. Current measures focus on outputs (for example, the number of vehicles inspected), as opposed to outcomes (for example, the percentage of operators with fully satisfactory safety-fitness ratings, or the percentage of commercial vehicles involved in fatal collisions).

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Response from officials

We requested a response from officials of the Department of Infrastructure. They provided a summary, which is included below, and specific responses to each recommendation which are included in the Recommendation section of the report.

Manitoba Infrastructure (the department) would like to thank the Auditor General (OAG) for its review of the processes related to oversight of commercial vehicle safety. The department views the recommendations by the OAG as an opportunity to foster excellence in safe and sustainable surface transportation.

The major themes as noted in the audit report centre around safety program practises, on-road inspection management, and planning and performance measurement processes. In relation to these themes, the department is pleased to offer the following observations:

- **Safety Program Practises:** A review of the safety regime in which commercial vehicles operate was recently completed by the department. This review identified many of the same opportunities as the audit report for enhancing program outcomes, such as incorporating a knowledge test for new commercial vehicle operators and requiring all safety fitness certificate holders or applicants to complete a safety plan. Overall, the department will begin to work on initiatives to address recommendations, including assessing improvements to the information technology (IT) system that supports monitoring of commercial vehicles in Manitoba (the Carrier Profile System).
- **On-Road Inspection Management:** The department continues to monitor coverage and adjust available resources to maximize on-road scrutiny of commercial truck traffic. The continued use of set targets for inspections for motor carrier enforcement officers, originally introduced in 2014-15, has helped to increase the number of inspections completed. Ways to optimize use of all-weather inspection sheds at locations near Winnipeg and Emerson to allow for enhanced consistency of detailed (Level 1) inspections throughout the year are being examined.
- **Planning and Performance Measurement Processes:** The department, which began a planning and performance measurement framework in 2017, will intend to transition this effort to better synergize with the balanced scorecard reporting system being rolled out across government. To support planning, the department is exploring the better use of data and information sharing opportunities going forward using its existing relationships with other agencies having a shared role in commercial vehicle safety. In particular, the department continues to be an active member of the Compliance and Regulatory Affairs (CRA) Committee of the Canadian Council of Motor Transport Administrators, which oversees the development and refinement of data sharing arrangements between provinces and territories.

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Significance of commercial vehicles and their safety

Heavy commercial vehicles (such as semi and straight trucks greater than 4,500 kg) are important to Manitoba's economy. They transport goods to customers, contribute to Manitoba's Gross Domestic Product, and create Manitoba jobs. However, while they provide many benefits, their size, weight, and loads present unique safety risks (as shown in **FIGURE 1**). As they share the road with others, everyone's safety is affected. Impacts from collisions involving these vehicles can include fatalities, injuries, property damage, and significant financial costs. As a result, the general public, the trucking industry, and government regulators all share a common interest in commercial-vehicle safety.

Figure 1: The size, weight and loads of commercial trucks present unique safety risks

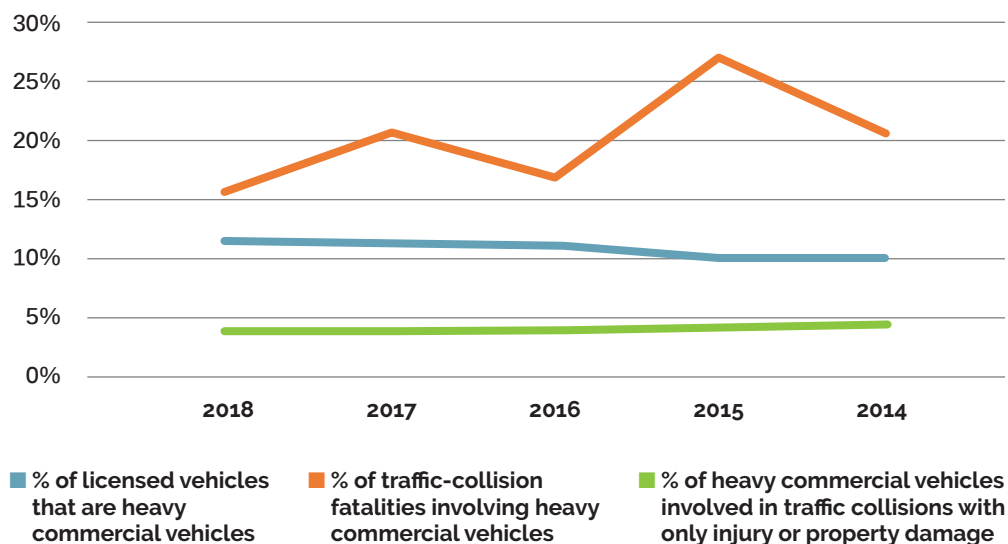


Manitoba's 2018 Traffic Collision Statistics Report showed that almost 16% of the annual traffic fatalities in the province involved heavy commercial vehicles. This partly reflects the size and weight of these vehicles. They were involved in about 4% of injury and property-damage-only collisions.

In total, there were 2,086 heavy commercial vehicles involved in collisions in Manitoba in 2018—a 7% increase over the previous 5-year average. While about 80% of the vehicles were in collisions involving only property damage, 11 people died, 39 people were seriously injured, and 494 people suffered minor or unspecified injuries. Using government data, the estimated annual cost of all these collisions was about \$135 million. This includes costs related to loss of life, medical treatment, rehabilitation, lost productivity, and property damage.

As shown in **FIGURE 2**, heavy commercial vehicles are over-represented in fatal collisions. Heavy commercial vehicles account for about 10% of all Manitoba-licensed vehicles. However, between 2014 and 2018, they were involved in 16 to 27% (on average, about 20%) of Manitoba's traffic-collision fatalities. They were also involved in about 4% of the collisions resulting in only property damage or injuries.

Figure 2: Heavy commercial vehicles over-represented in fatal collisions



Source: OAG Calculations based on Manitoba Public Insurance 2018 Traffic Collision Statistics Report

Legislative responsibility for commercial vehicle safety

Under the *Canada Transportation Act*, the Government of Canada is responsible for overseeing the safety of commercial vehicles that cross provincial borders. However, it delegates this responsibility to the provinces and territories through the federal *Motor Vehicle Transport Act* and related regulations. The provinces and territories are also responsible for overseeing the safety of commercial vehicles that travel only within their own borders.

Manitoba's *Highway Traffic Act* and related regulations set out safety-related responsibilities for motor carriers and other operators of heavy commercial vehicles (commercial vehicles that weigh 4,500 kg or more, unless they are farm trucks, and vehicles that seat 11 or more passengers). For example, consistent with Canada's National Safety Code (which is described further below), there are regulations related to cargo securement, vehicle weight and dimensions, drivers' hours of service, driver records, vehicle inspections, and assessing

carriers' safety. The Motor Carrier Branch of the Department of Infrastructure (the Department) administers this portion of *The Highway Traffic Act* and related regulations.

Manitoba's *Drivers and Vehicles Act* and related regulations set out requirements and standards for commercial vehicle registration and licensing, the licensing of commercial drivers, the operators of vehicle inspection stations, and other related safety matters. *The Drivers and Vehicles Act* and regulations are administered by Manitoba Public Insurance (MPI), a Crown corporation. The Minister of Crown Services is responsible for *The Manitoba Public Insurance Corporation Act*. The Minister of Infrastructure is responsible for both *The Highway Traffic Act* and *The Drivers and Vehicles Act*.

National Safety Code

In 1987, to support their oversight of the motor carrier industry, the federal, provincial, and territorial ministers responsible for transportation and highway safety agreed to develop and implement a National Safety Code (NSC). The new safety-fitness framework was expected to be adopted consistently across Canada, and generally consistent with the framework adopted by the Federal Motor Carrier Safety Administration (FMCSA) in the United States (U.S.). At the time, harmonization of transportation policy and regulation across Canada and with the U.S. aligned with the free trade goals of both countries.

The Canadian Council of Motor Transport Administrators (CCMTA) oversees the NSC standards, which were developed in consultation with the motor carrier industry. CCMTA is comprised of representatives from the federal, provincial, and territorial governments, and is ultimately accountable to the Council of Ministers Responsible for Transportation and Highway Safety.

The overall goal of the NSC is to support both safety and the efficient movement of trucks across Canada and North America. NSC standards cover a variety of matters related to driver licensing and motor carrier safety. Standards related to the latter include guidance on:

- Drivers' hours of service.
- Cargo securement.
- Vehicle inspections conducted by drivers, approved mechanics, and government enforcement officers.
- Records kept by drivers, motor carriers, and governments.
- Safety-fitness certificates and safety ratings issued to motor carriers by governments, plus related processes for assessing compliance with safety standards and a carrier's overall safety performance.

Given their respective legislative responsibilities, the Department and MPI share responsibility for administering NSC standards in Manitoba. Both have representatives on various CCMTA committees.

Motor Carrier Branch: Purpose, major activities and resources

The Motor Carrier Branch (the Branch) of the Department of Infrastructure regulates Manitoba's motor carriers to enhance road safety, protect infrastructure (for example, roads), and promote economic development. The Branch primarily oversees commercial vehicle safety through 3 major activities:

- A compulsory safety fitness program for motor carriers and others operating regulated heavy commercial vehicles.
- On-road inspection of these vehicles and enforcement of *The Highway Traffic Act*.
- Strategic planning and performance measurement.

In addition, the Branch protects infrastructure by issuing permits related to commercial vehicle size, weight, and cargo. According to Departmental records, it issues about 90,000 permits annually, which generate about \$2.7 million in annual revenue. This also contributes to commercial vehicle safety.

The Branch has an annual budget of about \$7 million and 70 staff, including 30 motor carrier enforcement officers who conduct on-road inspections in accordance with Commercial Vehicle Safety Alliance (CVSA) standards. CVSA is a North American, not-for-profit organization comprised of government and industry representatives from Canada, the U.S., and Mexico that sets standards for various types of on-road inspections (for example, an inspection may be a general, item-specific, or detailed review of the driver, the vehicle, or both the driver and the vehicle). In addition to their inspection duties, motor carrier enforcement officers also enforce weight and dimension limits for commercial vehicles, including limits related to spring road restrictions.

Other peace officers, such as local police forces and RCMP, also enforce *The Highway Traffic Act* and its regulations and some are certified to perform CVSA inspections.

Audit objective, scope and approach

Audit Objective

We assessed the adequacy of the Department of Infrastructure's (the Department's) oversight of commercial vehicle safety. This included examining processes related to its:

- Motor-carrier safety-fitness program.
- On-road commercial-vehicle inspections.
- Strategic planning and performance management.

Scope and approach

The audit included review and analysis of legislation, policies and practices, information systems, files, records, reports, correspondence, and other documentation. We interviewed Department staff, including managers, motor carrier enforcement officers, and individuals responsible for auditing safety processes at motor carriers' facilities. We also interviewed staff from Manitoba Public Insurance (MPI) and the Manitoba Trucking Association. In addition, we observed on-road enforcement and inspection activities.

In total, we randomly selected and examined 35 files to help us assess the Department's processes related to issuing safety fitness certificates, assigning safety fitness ratings, and performing motor-carrier facility audits.

We reviewed MPI processes related to commercial vehicle safety in order to assess how the Department coordinated its activities with those of MPI. However, we did not assess the adequacy of MPI processes.

Our audit also excluded detailed examination of the Department's processes related to enforcing vehicle weights and dimensions. While this enforcement contributes to commercial vehicle safety, its primary purpose is to protect and preserve road infrastructure.

Audit criteria

To determine whether the Department had adequate processes for administering its safety-fitness program, we used the following criteria:

All motor carriers requiring safety-fitness certificates should obtain them.
Safety fitness certificates (both initial and annual renewals) should only be issued to carriers who meet established safety-fitness requirements.
Safety-fitness determinations and ratings should be logically determined and properly supported.
Facility audits should effectively support improvements to carrier safety.

To determine whether the Department had adequate processes for managing its on-road commercial vehicle inspections, we used the following criteria:

Standards and policies should be in place to effectively guide on-road vehicle inspections, giving adequate consideration to underlying risks.
Inspectors' performance and results should be monitored and inspection deficiencies followed up with due diligence.

To determine whether the Department had an adequate planning and performance reporting framework for overseeing commercial vehicle safety, we used the following criteria:

Strategic plans and clear objectives should be developed, based on sufficient and relevant information.
Strategic planning should identify and consider risks, meaningful performance measures for major activities, and coordination in areas of shared responsibility.
The Department should report on key aspects of commercial vehicle safety.

1 Safety program practices insufficient to verify and promote safety

Before operating a vehicle regulated under Manitoba's *Highway Traffic Act*, business owners (known as operators) need to register with the Department of Infrastructure (the Department) and obtain a safety-fitness certificate. In general, these regulated vehicles weigh more than 4,500 kg or carry more than 11 passengers. First-time registrants need to complete a safety-fitness-certificate application, meet prescribed requirements, and renew their certificates annually. Department data shows about 7,500 safety-fitness certificates issued to operators in 2017/18, covering about 45,000 regulated vehicles.

Operators with Manitoba-issued safety fitness certificates don't need to be registered in other Canadian jurisdictions before their vehicles can cross provincial or territorial borders. And Manitoba reciprocates by accepting the safety-fitness certificates issued by other Canadian jurisdictions as equivalent to its own. This regulatory harmonization flows from applicable federal and provincial legislation.

Manitoba doesn't charge a safety-fitness application fee, although a recent Department review found that British Columbia, Alberta, Saskatchewan and Ontario all charged fees ranging from \$50-\$250. Based on information in its annual report, in 2017/18 the Department issued 684 new safety fitness certificates and renewed 6,791.

We concluded that the Department's safety-fitness-program practices were insufficient to verify and promote motor-carrier safety. We found that:

- The Department is issuing initial safety-fitness certificates without adequate safety vetting (**SECTION 1.1**).
- The Department's on-going monitoring and management of operators' safety performance is inadequate (**SECTION 1.2**).
- The Department has adequate assurance that it is identifying the Manitoba-based operators who may need to register in its safety-fitness program. Nonetheless, there are issues in ultimately deciding who needs a safety-fitness-certificate that need to be addressed (**SECTION 1.3**).

1.1 Initial safety-fitness certificates issued without adequate safety vetting

The Department isn't adequately vetting operators' safety knowledge and safety practices before issuing them initial safety-fitness certificates. Although the Department performs some vetting, it doesn't consider past compliance with highway safety rules as strictly as applicable legislation requires. More importantly, many better practices in place in other jurisdictions—such as verification of safety-fitness knowledge, review of safety plans and other safety-related documents, and site reviews or audits for new entrants—are absent in Manitoba. In addition, the Department lacks sufficient checks for what are referred to as “chameleon carriers”—carriers that are shut down for safety violations but get around this by reopening under a new name and identify. These findings are discussed in further detail below.

APPLICATIONS VETTED FOR COMPLETENESS AND LIABILITY INSURANCE; REQUIREMENT TO CHECK PAST SAFETY COMPLIANCE IS INTERPRETED LOOSELY

An operator applying for a Manitoba safety-fitness certificate is required to state its business name and address, the types of goods it will be transporting, the names of safety and maintenance officers, and the name of the individual submitting the application. Applicants are also asked if they have ever previously operated under a safety-fitness regime, and if the associated safety-fitness certificates were ever cancelled or suspended.

Manitoba's *Safety Fitness Criteria and Certification Regulation* sets out 2 key requirements before motor carriers can be granted safety fitness certificates. Operators of regulated vehicles need to have:

- Obtained a prescribed amount of liability insurance (generally \$1 million for each regulated vehicle; \$2 million for specified riskier circumstances, such as transporting dangerous goods).
- “Complied with every law relating to highway safety” in every North American jurisdiction in which they operated in the past 2 years.

Department staff check that safety-fitness applications are complete. They also verify that the appropriate amount of insurance is in place by requiring proof of insurance. In addition, they check company names with the Manitoba Companies Office to confirm that they are active companies. However, Department staff don't confirm that applicants who operated in the past “complied with every law relating to highway safety” in the preceding 2 years, as required by Manitoba's safety-fitness regulation. Department staff told us that they review the safety history of applicants who self-declare a past or on-going association with another safety-fitness certificate. But they don't interpret the regulation as strictly as it is written because “compliance with every law” would mean that a single speeding ticket could preclude a carrier from obtaining a safety-fitness certificate.

The Department assigns a safety-fitness rating to each safety-fitness certificate. New entrants to the safety-fitness program receive an initial rating of “satisfactory-unaudited”. Over time, the Department may downgrade the rating to “conditional” or “unsatisfactory”, or upgrade it to “satisfactory” (audited).

BETTER SAFETY-VETTING PRACTICES IN OTHER JURISDICTIONS ARE ABSENT IN MANITOBA

Some jurisdictions do more than Manitoba to vet operator safety before (or shortly after) issuing an initial safety-fitness certificate to a new entrant to their safety program. Better practices absent in Manitoba include requiring operators to:

- Complete safety fitness courses and/or pass safety knowledge tests (for example, one jurisdiction's online course covered the National Safety Code and its importance, how to build a good safety plan and set up business records to ensure compliance with the Code, and how compliance could save money).
- Submit satisfactory safety plans.
- Provide other safety-related documents, such as drivers' driving-record transcripts, vehicle inspection forms, or proof that manufacturers' defects have been remedied.
- Undergo reviews from government or government-certified auditors within the first year of operation to make sure the carriers understand safety regulations and have adequate safety management controls in place.

At the time of our audit, Department officials told us they were considering introducing a knowledge test. They also said staff had recently started visiting some new entrants to the safety-fitness program to ensure they properly understood both the regulatory requirements and the related safety management controls required, but that this was proving very time-consuming.

The Department's website has a *Guide to Transportation Safety* that explains commercial vehicle safety matters in detail. The Department's correspondence has a link to this guide, but doesn't always sufficiently emphasize the guide's importance.

New-entrant safety research published by the U.S.-based Federal Motor Carrier Safety Administration (FMCSA) supports increased safety education and oversight for new-entrant motor carriers so as to reduce their higher-than-average safety violations and crash rates. This research may also be applicable to Manitoba carriers.



Recommendation 1

We recommend that the Department better assess and promote new entrants' safety fitness by:

- Administering safety-knowledge tests.
- Reviewing applicant's safety plans and other safety-related documents (such as vehicle inspection forms).
- Performing site reviews or audits.
- Drawing greater attention to its transportation safety guide and its importance.

INSUFFICIENT CHECKING FOR CHAMELEON CARRIERS

A chameleon carrier is one that has been shut down for safety violations, but gets around this by reopening under a new name and identity. The carrier's management, vehicles, and drivers typically remain the same, as do most of the underlying safety problems. In the U.S., the General Accounting Office has estimated that chameleon carriers have a severe crash risk 3 times higher than other new carriers.

The Department does no checking for chameleon carriers, other than asking applicants to self-declare any past associations with Canadian or U.S. safety fitness programs. Stronger controls would collect additional information on the application form and use data-matching techniques to identify suspected chameleon carriers for closer examination.

The Department doesn't currently collect information on a company's shareholders, directors, or officers, although some other jurisdictions do. The Department also doesn't currently search its carrier database to look for companies with different names, but the same addresses, phone numbers, safety officers, maintenance officers, applicants, shareholders, directors, or officers. Flagging and further investigating such anomalies would reduce the risk of chameleon carriers.



Recommendation 2

We recommend that the Department strengthen its checks for chameleon carriers by collecting more information from applicants and developing processes to flag anomalies in its database for follow-up.

1.2 Inadequate monitoring of operators' safety performance

Through its Carrier Profile System, the Department tracks and grades each individual operator's safety performance. The Department then compares each operator's safety performance to all other operators with similar-sized fleets. This is done to flag poor performers for follow-up interventions, which vary depending on the operator's ranking relative to the others in its peer group. The bottom 15% in each group are listed for facility audits; the rest of the operators flagged as poor performers receive warning letters. This is done monthly. However, we found that these monitoring processes were inadequate because:

- The logic behind some aspects of grading and comparing operator performance needs to be reviewed for reasonableness.
- U.S. data is excluded when grading operator performance, contrary to legislation.
- Follow-up interventions (facility audits and warning letters) are insufficiently focused on risk and improvement.
- Processes for upgrading safety-fitness ratings from "satisfactory-unaudited" to fully "satisfactory" lack a solid rationale and don't treat similar operators consistently.

LOGIC BEHIND SOME ASPECTS OF GRADING AND COMPARING OPERATOR PERFORMANCE NEEDS REVIEW

The Department's database tracks the performance of registered operators in 3 areas: results of on-road inspections, involvement of regulated vehicles in accidents, and tickets issued to either the operator or one of its drivers. The database includes information from Manitoba, plus all other Canadian jurisdictions and the U.S.

The Department uses this information to grade and assess each operator's safety performance. It does this by assigning points to negative safety events, and then comparing each operator's accumulated points to those of all other registered operators with a similar number of vehicles. For example, points are assigned when the following events occur:

- A vehicle is placed out-of-service (not allowed to proceed until corrective action is taken) due to faulty brakes or some other mechanical defect.
- A driver is placed out-of-service because he or she has exceeded the allowed number of driving hours, is driving without a valid license, or is impaired.
- A driver is found to be at-fault in an accident.
- A ticket is issued to an operator or any of the operator's drivers (unless the ticket fails to be upheld).

The more serious the event, the more points awarded. In addition, the same event may lead to points in more than one category. For example, tickets may accompany out-of-service inspection results and accidents.

Every month, the Department's software compares the points awarded to each operator over the past 24 months to those awarded to all other operators with similar-sized fleets (for example, there are separate groups of operators with one regulated vehicle, 2-4 vehicles, 5-10 vehicles, etc.). The software then flags the poorer-performing operators in each group for further intervention.

The process doesn't compare all operators in the total population to a pre-determined standard, such as an acceptable number of negative events per vehicle or km driven. The "good" operators in a poor-performing group may in fact have more unsatisfactory safety records than the "poor" performers in a high-performing group (even after accounting for the difference in fleet size)—but they won't be flagged for follow-up.

Further, comparisons between operators based strictly on fleet size may not always be reasonable. A 10-vehicle fleet where all the trucks typically travel a short distance to job sites and are then stationary for most of the day isn't the same as a similar-sized fleet where all the trucks travel the highway for 12-24 hours/day, every day of the week. We noted that some other jurisdictions consider the km driven when they assess and grade operator performance.

We also noted that points are currently only awarded for the defects found during inspections that need to be addressed immediately and result in drivers or vehicles being put "out of service" until this is done. There are no points associated with the defects found during inspections that need to be corrected less urgently (which are referred to as "fails"). This means that "fails" are treated the same as "passes" in the grading process.

At the time of our audit, the Department was working with the Manitoba Trucking Association to update the Department's method of grading and comparing operators' safety performance. The current method is complex and not well-understood by either Department staff or operators, and it hasn't been periodically reviewed for validity and reasonableness.



Recommendation 3

We recommend that the Department improve the method it uses to grade and assess operators' safety performance by:

- Comparing all operators in the total population to a predetermined standard that takes into account the km driven by operators' fleets, as well as fleet size.
- Assigning negative points to inspection "fails" (and not just "out-of-services"), so that the "fails" are not treated the same as "passes".

U.S. DATA EXCLUDED WHEN GRADING OPERATORS' SAFETY PERFORMANCE, CONTRARY TO LEGISLATION

Although the Carrier Profile System tracks the safety performance of its registered operators across both Canada and the U.S., late in 2016 the Department began excluding the collected U.S. data (inspection, conviction, and accident information) when grading operators' safety performance. This is contrary to applicable legislation. Section 322.1(1) of *The Highway Traffic Act* states that a record of this information must be kept if the U.S. jurisdiction makes it available. Further, section 322.1(3) states that assessment of operator compliance with the Act and consideration of the need for operator improvement is to include review of this record.

By excluding U.S. data in its assessment of operators' safety performance, the Department is unlikely to flag for intervention or downgrade the safety rating of any Manitoba-based operator driving mostly in the U.S.—even if it has a poor safety-performance record.

In April 2015, trucking associations from all 4 western provinces wrote their respective governments asking them to stop assigning points for U.S. events when rating safety performance. The request was based on their long-standing complaint that U.S.-based carriers operating in these provinces don't need to be registered (and are therefore not subject to Canadian monitoring and rating), while Canadian-based carriers operating in the U.S. need to be registered with the Federal Motor Carrier Safety Administration (FMCSA), and are therefore subject to FMCSA monitoring and rating. The Manitoba Trucking Association's position was that having the same events trigger points on both sides of the border, and potentially duplicate follow-up interventions, constituted "double jeopardy". Also, the FMCSA doesn't use Canadian data to monitor and assess its registered carriers. Department staff told us Manitoba was the only one of the 4 western provinces that agreed to exclude the U.S. data, and that Ontario also excludes U.S. data.



Recommendation 4

We recommend that the Department include available U.S. data in grading and assessing operators' safety performance, as prescribed by section 322.1 of *The Highway Traffic Act*.

FOLLOW-UP INTERVENTIONS INSUFFICIENTLY FOCUSED ON RISK AND IMPROVEMENT

After grouping together operators with similar fleet sizes, the Department flags for follow-up those in each group that are in the bottom 15%; the next worst 20%; and after that, the next worst 25%. In total then, this process flags 60% of all operators (all but the top 40%) for some type of follow-up intervention, which is a wide net. An inter-jurisdictional review done by the Department showed some jurisdictions focus their interventions on a smaller total percentage of their registered operators.

Follow-up interventions include facility audits (for the bottom 15% in each group) and 2 different types of warning letters (for the next worst 45% in each group). However, these interventions are insufficiently focused on remedying poor safety performance. In addition, they aren't linked in any way to the annual renewal of safety fitness certificates. Processes for renewing safety fitness certificates focus instead on ensuring that name, address, and vehicle information is up-to-date and that insurance requirements have been met.

Facility audits

The Department lists the bottom 15% of the operators in each fleet-size group for a facility audit. The audit is an on-site visit to the operator's place of business, designed to assess compliance with vehicle and driver safety regulations by examining related records and paperwork.

The facility audits investigate all aspects of safety potentially applicable to the operator. However, in some cases, a more focused audit might make better use of auditors' time. For example, if an operator's negative safety events are all related to its drivers (speeding tickets, hours of service infractions, etc.) and a reasonable number of on-road vehicle inspections have shown only minor vehicle defects, then it may be appropriate to exclude or at least reduce the standardized review of vehicle maintenance records and other vehicle-related paperwork. It may also be reasonable to use the facility visit to better understand underlying problems and determine the actions needed to correct them. While Department staff discuss any non-compliance items and patterns found with operators, this isn't the same as discussing likely causes and potential solutions.

We noted from our review of motor carrier literature that in the U.S. the Federal Motor Carrier Safety Administration has been focusing its facility audits less on paperwork and more on interviews—not just with safety managers, but with drivers and even accounting and sales personnel. These changes address the concern that properly signed and completed pieces of paper may not fully reveal, or accurately reflect, an operator's true safety culture. Department staff told us that they had conducted some interviews with facility staff in the past. Despite their concerns about management influencing staff responses, the interviews provided insights into barriers to improved safety. However, they were also time consuming.

In addition to auditing the “bottom 15%” of operators, the Department also regularly conducts facility audits of registered bus operators because of the potentially higher impact of a negative safety event involving vehicles carrying multiple passengers. There may be other types of potentially high-risk operators who should be considered for facility audits, such as those who haul hazardous goods, lack exposure to on-road inspections, or are recent entrants to the safety-fitness program.

If an operator with a “bottom 15%” safety profile passes the facility audit (scores at least 85%), then they are eligible to have their “satisfactory-unaudited” safety rating upgraded to “satisfactory” once they move out of the bottom 15%. However, based on our audit work, this occurs relatively rarely.

At the time of our audit, operators who failed the facility audit (scored less than 85%) had their original safety ratings downgraded from “satisfactory-unaudited” to “conditional”. They were also required to provide a safety plan. However, Department staff didn’t typically take any further substantive action. The Department’s records show over 500 operators with conditional ratings, and that several have held this rating for 10 or more years.

Recently, the Department began a new initiative to help “manage operators into compliance”. Under this initiative, the Department will no longer assign an operator failing a facility audit a conditional rating if the audit score is at least 60% and the carrier submits an approved action plan for improvement. Instead, it will re-visit the facility and verify improvement within the next 6 months. This proposed initiative focuses only on the operators most likely to improve. There is no planned focus on improving the safety-management controls of operators with facility-audit scores less than 60%—even though these are the ones most in need of improvement.

Warning letters

Operators flagged as poor performers, but not so poor as to warrant a facility audit, receive increasingly stern letters warning that demonstrating a less than acceptable risk to the motoring public will subject them to progressive levels of review. However, in practice, no further escalated action is taken unless these operators are eventually flagged for facility audits.

The first and mildest warning letter is for the 25% of operators ranking just below the top-performing 40%; the second and sterner warning letter is for the next worse 20%. Each of the 2 types of warning letters are only sent once—even if the operators fail to improve.

The letters don’t highlight specific areas that the operators need to improve (such as drivers’ hours of service logs, vehicle maintenance, or drivers’ speeding). Nor do they include copies of operators’ safety profiles showing the points associated with each negative safety event. However, the letters do tell the operators if their poor safety performance stems from points related to inspections, tickets, accidents, or some combination of these 3 general areas. In addition, the letters inform operators that they can access their safety-performance profiles online.

If the warning letters focused on a smaller percentage of the population and known problem areas, the Department could increase its focus on remedying poor safety performance by requesting action plans for improvement. Ideally, this process would be linked to the annual renewal of the safety fitness certificates.



Recommendation 5

We recommend that the Department flag for follow-up those operators within the total population who pose the greatest safety risk to the public and are most in need of improvement. In doing this, we further recommend that the Department assess whether there are operators not currently subject to facility audits who nonetheless pose significant safety risks (such as those who haul hazardous goods).



Recommendation 6

To help poor-performing operators identify underlying safety-management weaknesses and take appropriate corrective action, we recommend that the Department include in the warning letters it sends to these operators:

- Copies of safety-performance records and safety scores, together with explanatory material.
- Requests for action plans for improvement.



Recommendation 7

In order to better focus on the actions needed for improvement when conducting facility audits on operators with poor safety-performance profiles, we recommend that the Department determine and document the likely underlying causes and corrective actions needed to address any identified non-compliance with safety regulations. This should include interviews with a variety of facility staff, including drivers, so as to better understand the operator's safety culture.



Recommendation 8

To better link its annual safety-fitness-certificate renewal process to its monitoring activities, we recommend that the Department require all operators flagged as poor performers to include reports on their progress in implementing action-plans for improvement when renewing their certificates.

PROCESSES FOR ISSUING SATISFACTORY SAFETY-FITNESS RATINGS LACK SOLID RATIONALE AND TREAT SIMILAR OPERATORS INCONSISTENTLY

There is no solid rationale for the Department's various processes (facility audit, alternative assessment model, and "managing operators into compliance") for awarding an operator a fully "satisfactory" safety-fitness rating. In addition, the Department's processes may treat operators with similar safety records inconsistently. These processes and related issues are described in further detail below.

Facility audit requirement

The Department conducts most of its facility audits on operators with poor safety-performance profiles (those in the bottom 15% compared to their deemed peers). However, per the Department's policies and practice, the only way for an operator to obtain a fully "satisfactory" safety rating is to not be in the bottom 15% and to pass a facility audit. Therefore, upon request, the Department will conduct facility audits for operators who want to increase their safety-fitness ratings from "satisfactory-unaudited" to "satisfactory". One reason that operators may want the higher rating is that certain shippers prefer to do business with a fully "satisfactory" carrier.

Alternative assessment model

In 2017/18, the Department started using what it called an "alternative assessment model" to better meet some operators' desire for a "satisfactory" rating, especially when they wanted it quickly. It awarded 11 operators a satisfactory rating with this model without first conducting facility audits.

The Department didn't develop any written criteria for its alternative assessment model. It considered the operator's safety performance record, including noting whether or not the operator had been exposed to a reasonable number of on-road inspections, as well as the points accumulated for negative events. It also considered the perceived strengths and weaknesses of the operator's management and corporate safety culture, although it was unclear from the documentation provided if site visits and/or interviews with safety managers informed its conclusions.

In addition, if available, the Department also considered:

- Operators' safety plans.
- The results of any loss prevention audits carried out by MPI as part of its fleet management program (for operators with fleet insurance obtained through MPI).
- The results of any Federal Motor Carrier Safety Administration (FMCSA) operator reviews (for operators holding U.S.-based safety-fitness certificates in addition to their Manitoba safety-fitness certificates).

The reviews done by the FMCSA and MPI are similar in many respects to the Department's facility audits, but there are some differences. The Department didn't fully explore the similarities and differences before accepting these alternative documents. We also found that the alternative assessment model wasn't widely communicated to all registered operators. Instead, it began as an accommodation for one operator and then spread on an ad hoc basis. In addition, one carrier failed a standard facility audit shortly after being awarded a satisfactory rating, but the Department allowed it to keep its satisfactory rating. Department officials told us that they stopped using the alternative assessment model in May of 2018.

Managing operators into compliance and satisfactory safety ratings

The Department's new initiative to "manage operators into compliance" allows an operator failing a facility audit, but scoring at least 60%, to submit an approved action plan for improvement, rather than receive an automatic "conditional" safety rating. The Department will then re-visit the facility and verify improvement within the next 6 months. Department staff told us that this will include verification that the action plan has been implemented and a review of records related to the previously noted areas of non-compliance. This review of records will be more limited than what is typically done as part of a standard facility audit.

Once the Department verifies improvement, it plans to change the operator's "satisfactory-unaudited" rating to "satisfactory" as soon as the operator's safety performance improves beyond the "bottom 15%" threshold. This will result in operators with marginal safety records being granted "satisfactory" ratings—even though their performance is no better than other operators with similar-sized fleets receiving warning letters. We understand the need to change a "satisfactory- unaudited" rating once an audit has taken place, as well as the Department's desire to increase the number of operators with "satisfactory" ratings. However, operators with similar safety records should be treated more consistently. In addition, operators in the top 15% of the registered population may feel that they should be the first ones given an opportunity to obtain "satisfactory" ratings.



Recommendation 9

We recommend that the Department ensure that all methods used to award operators "satisfactory" safety-fitness ratings are transparent, can be logically defended, and treat all operators with similar safety-records consistently.

1.3 Issues in deciding who needs a safety-fitness certificate

Through reliance on MPI's licensing processes, plus receipt of data from MPI, the Department has adequate assurance that it is identifying the Manitoba-based operators who may need to register in its safety-fitness program. Nonetheless, the Department needs to resolve issues in deciding who needs a safety-fitness-certificate:

- The Department doesn't currently require any U.S.-based carriers operating in Manitoba to hold Manitoba safety-fitness certificates. However, given the current impasse in Canada/U.S. discussions on harmonized oversight of motor-carrier safety, the Department needs to seek greater clarity on the legality of this practice.
- The Department needs to resolve the legal, safety, and efficiency issues associated with its current practice of registering all commercial operators of heavy farm trucks in the safety-fitness program—but then not requiring them to obtain safety-fitness certificates.

These issues are discussed in further detail in the sections below.

MPI HELPS IDENTIFY OPERATORS WHO NEED SAFETY-FITNESS CERTIFICATES

The Department relies on MPI processes and data to help it ensure that all operators who need to register and acquire safety fitness certificates actually do so. Generally, MPI staff check this when licensing a regulated vehicle. They also assign each applicable operator a unique National Safety Code (NSC) number. In addition, MPI sends license information to the Department, which the Department then matches to its own records. This helps the Department track all operators with NSC codes, their regulated vehicles, and subsequent carrier or fleet changes.

DEPARTMENT DOESN'T REQUIRE U.S. CARRIERS TO REGISTER IN MANITOBA

The Department doesn't require U.S. motor-carriers operating in Manitoba to register in Manitoba and obtain Manitoba-based safety-fitness certificates. U.S. operators are governed by the safety-fitness regime overseen by the U.S. Federal Motor Carrier Safety Administration (FMCSA) and Manitoba treats them the same way it treats operators with safety-fitness certificates from other Canadian jurisdictions; it accepts U.S. safety-fitness certificates as equivalent to its own. This practice doesn't strictly comply with federal legislation, and the U.S. doesn't make a similar accommodation for Canadian motor-carriers.

Federal legislation allows for the recognition of a foreign country's "analogous" (similar) safety-fitness certificates under the terms of an arrangement between Canada and the foreign country—but there is no official agreement between Canada and the U.S. Both countries originally assumed agreement would be reached following economic de-regulation of the trucking industry. However, although the 2 countries' safety fitness regimes are similar, attempts to harmonize practices and reach an agreement have been unsuccessful.

As a consequence of delayed harmonization, Manitoba-based motor carriers operating in the U.S. need to register and comply with 2 separate safety fitness regimes: the one operated by Manitoba and the one operated by the FMCSA in the U.S. But the U.S.-based motor carriers operating in Manitoba only need to register and comply with the FMCSA regime. This creates an administrative and economic disadvantage for the Manitoba-based carriers.

Most Canadian jurisdictions treat U.S. motor carriers the same way Manitoba treats them. However, both Ontario and Quebec require U.S. motor carriers to register provincially and obtain provincial safety-fitness certificates, in addition to their U.S. certificates. The Manitoba motor-carrier industry has advocated for the Department to adopt a similar approach. This would level the playing field, but it would also create unnecessary duplication and additional administrative costs for the Department.

A June 2018 legal opinion obtained by the Department stated that while a U.S. carrier operating in Manitoba needs a safety-fitness certificate issued by a provincial authority or similar document, the Department doesn't need to begin enforcing this immediately without specific direction to do so. It also recommended seeking guidance from the province's Department of Intergovernmental Affairs and International Relations. Department staff were unable to demonstrate that they followed-up on this recommendation.

While U.S. based carriers don't require Manitoba-issued safety fitness certificates, their vehicles are subject to inspection by Manitoba's motor carrier enforcement officers. The officers may inspect any regulated commercial vehicle or driver on Manitoba highways.

A fully harmonized Canada/U.S. system would reduce unnecessary duplication and be the most efficient. However, the Department can't accomplish this alone. It needs to work collaboratively with many other parties (the Department of Intergovernmental Affairs and International Relations, the Canadian Council of Motor Transport Administrators, the other provinces, provincial and federal motor-carrier-industry representatives, and the federal government) to re-activate Canada/U.S. discussions on reducing duplication in overseeing motor-carrier safety.



Recommendation 10

We recommend that, while continuing to collaborate with others to harmonize Canada/U.S. oversight of motor-carrier safety, the Department seek greater clarity and central government direction on its current practice of not requiring any U.S.-based carriers operating in Manitoba to be registered in Manitoba's safety-fitness program.

REGISTERED OPERATORS OF FARM TRUCKS DON'T HAVE SAFETY-FITNESS CERTIFICATES

Manitoba's heavy vehicle legislation specifically excludes all vehicles licensed by MPI as farm trucks. Despite this, MPI assigns National Safety Code (NSC) numbers to these vehicles' operators and the Department registers them—but without requiring them to obtain safety-fitness certificates.

A December 2017 statistics report from the Department's database showed 7,421 active operators with valid safety fitness certificates—and another 11,985 without certificates. Based on conversation with Department staff and review of related records, this mostly relates to how the Department treats operators of farm trucks.

The Department includes these farm trucks in their on-road enforcement activities and tracks their inspection results, enforcement tickets, and accidents. However, it doesn't actively monitor these operators' safety performance, excluding them from its processes for flagging poor performers and follow-up intervention. While the Department intended to eventually require these operators to obtain safety-fitness certificates and participate fully in its safety-fitness program, this hasn't happened. Department staff told us they hadn't formally analyzed the underlying safety risk associated with this. Nor had they formally considered the efficiency issues associated with registering operators who don't actually participate in the safety-fitness program.

The Department's 2017 review of safety-fitness programs in other provinces found some were exempting carriers operating farm trucks strictly within their province—but Manitoba was alone in also exempting commercial operators of farm trucks that cross provincial borders. Further, federal legislation concerning heavy commercial vehicles crossing provincial borders doesn't allow for such an exemption. Department officials were unable to tell us how many, if any, of the currently-registered operators of farm trucks travel strictly within the province, as opposed to outside provincial borders.



Recommendation 11

We recommend that the Department stop registering commercial operators of heavy-farm-trucks in the safety-fitness program without requiring them to obtain safety-fitness certificates and that it instead:

- Require those crossing provincial borders to both register and obtain safety-fitness certificates, consistent with applicable federal legislation and practice in other provinces.
- Decide if those operating strictly within Manitoba should be registering and obtaining safety-fitness certificates by assessing the underlying safety risk.

2 Gaps in management of on-road inspections

On-road inspections of drivers, vehicles, and related records (such as shown in **FIGURE 3**) are a critical component of commercial vehicle safety. The Department employs about 30 motor carrier enforcement officers to carry out these inspections. Approximately 40% of the officers are assigned to the Department's 8 fixed weigh stations; the balance are mobile patrol officers assigned to one of the Department's 16 patrol districts. Officers are required to be trained and certified to perform inspections in accordance with Commercial Vehicle Safety Alliance (CVSA) standards. Departmental data showed that the Department conducted about 6,800 CVSA inspections in 2017/18.

Figure 3: On-road inspections are a critical component of commercial vehicle safety



Source: Office of the Auditor General, taken June 2017, Headingley Weigh Station

Most of the Department's CVSA inspections are either Level 1 or Level 2 inspections. A Level 1 inspection includes a complete mechanical inspection of the vehicle, plus inspection of vehicle and driver documents. A Level 2 inspection is identical in most respects; the only difference is that the inspectors don't get underneath the vehicle, so items such as brakes, air and fuel lines, axles, and steering components can't be inspected in as much detail. For safety reasons, departmental policy requires at least 2 officers present for a Level 1 inspection.

We found that the Department's management of on-road inspections needed strengthening, based on the following:

- The Department is unable to demonstrate that its staffing patterns (where and when staff are assigned to work) maximize coverage (the percentage of commercial truck traffic subject to inspection) and minimize the risk of predictability (**SECTION 2.1**).
- Nor is the Department able to demonstrate that it is using its existing inspection capacity fully and effectively (**SECTION 2.2**).
- There is limited monitoring of officers' inspection results. We found gaps in officers' monthly inspection reports and that the reports were not typically used by managers to review and manage officers' performance (**SECTION 2.3**).
- All officers completed and maintained CVSA training and certifications. Officers also had most required equipment, and upgrades related to communications equipment were underway (**SECTION 2.4**).
- Vehicle deficiencies found during inspections that can't be immediately corrected are followed-up, but operators aren't required to provide actual proof of repair (**SECTION 2.5**).

2.1 Staffing patterns not maximizing coverage; overly predictable

The Department is unable to demonstrate that its staffing patterns (where and when staff are assigned to work) maximize coverage (the percentage of commercial truck traffic subject to inspection) and minimize the risk of predictability in its inspections. This is important because too little coverage and too much predictability will allow unscrupulous operators to work around the Department's staffing patterns. We found that:

- The Department doesn't adequately analyze traffic data to decide how best to locate and schedule inspectors at weigh stations and in patrol districts.
- There was no sound rationale for staffing at 2 weigh stations.
- Coverage at 3 major weigh stations was missing almost half the commercial truck traffic.
- Patrol territories were often left unmanned.
- The operating hours for weigh stations and patrol territories hours were overly predictable.

INADEQUATE ANALYSIS OF TRAFFIC DATA

The Department doesn't adequately analyze traffic data to decide how best to position and schedule inspectors at weigh stations and in patrol districts. Through a partnership with the University of Manitoba, the Department has access to an information system and annual reports on highway traffic volumes. Senior Department officials are generally aware of these reports, and where and when peak commercial traffic occurs. They are also generally aware of MPI's traffic collision data and its annual report on traffic accidents. However, the Department doesn't formally review any of this information (for example, where and when commercial traffic flows and truck crashes occur) to determine how best to locate and schedule staff.

NO SOUND RATIONALE FOR STAFFING AT WEIGH STATIONS

We found no sound rationale for the staffing at either the Headingley or the Rosser fixed weigh stations. The Headingley station, located west of Winnipeg on the TransCanada Highway, sees more commercial vehicle traffic than any other station. To accommodate this, it has 2 weigh scales, allowing staff to monitor both east-bound and west-bound traffic. However, at the time of our audit, the station was staffed with only a single officer during each of two, 8-hour shifts. Therefore, when the station was open (between 8 a.m. and 12 a.m.), the scale in at least one direction needed to remain closed. In addition, the officer operating the scale had to balance weighing and inspecting activities, and couldn't do any Level 1 inspections (given the Department's policy of requiring 2 officers to be present for this type of inspection). In contrast, the Rosser station, located on Highway 7, north of the Perimeter Highway near Stony Mountain (about 15 km from the Headingley station), sees significantly less traffic and has just one weigh scale that accommodates traffic going in both directions. Yet, this station was open approximately 10 hours/day, and staffed with 2 officers working overlapping shifts (typically 6 hours together and 2 hours alone).

COVERAGE AT 3 MAJOR WEIGH STATIONS MISSING ALMOST HALF THE COMMERCIAL TRUCK TRAFFIC

Department officials told us staffing levels make it impossible to have weigh stations open 24/7—even though the trucking industry operates on this basis. They further told us they felt the stations' hours of operation covered peak traffic levels. However, they did not formally assess the percentage of truck traffic they were currently missing.

To get a better idea of the Department's coverage, we analyzed data from the Manitoba Highway Traffic Information System's 2017 annual report for 3 major weigh-stations located close to traffic counters. As shown in **FIGURE 4**, almost half (48%) of the commercial traffic occurred when the stations were closed. During weekdays, missed traffic ranged from 12-60% of the daily traffic; on weekends, it ranged from 45-100%, reflecting the more limited operating hours.

Figure 4: 48% of commercial truck traffic occurs when major weigh stations are closed

Weigh Station	Average Daily Traffic (Monday-Friday)		Average Weekend Traffic (Saturday and Sunday)		Average Weekly Traffic	
	Total	Estimated % missed	Total	Estimated % missed	Total	Estimated % missed
Headingley	2,380	60%	3,689	90%	15,589	67%
West Hawk	1,155	12%	2,310	100%	8,086	37%
Emerson	1,160	12%	1,624	45%	7,424	19%
Total	4,695	36%	7,623	83%	31,099	48%

Source: OAG Calculations based on Manitoba Highway Traffic Information System 2017 Annual Report

PATROL TERRITORIES OFTEN LEFT UNMANNED

The Department allows mobile patrol officers to choose where within their territories they patrol, as well as their own hours (within allowed core timeframes). Based on our discussion with mobile patrol officers, they made these choices based on past experience, very informal risk assessments, and personal preference.

We obtained work hours reported by 5 of the 16 full-time mobile patrol officers for the 2017 calendar year. We then calculated the number of days each officer worked in his or her patrol territory. On average, territories weren't patrolled 146 days of the year, or about 40% of the time. This reflected weekends, vacation time, time taken in lieu of overtime, sick time, court time, and training time. In addition, since officers patrol alone rather than in pairs, they may spend some time at weigh stations to ensure that they complete the number of Level 1 inspections required to keep their CVSA (Commercial Vehicle Safety Alliance) certification. Combined, these factors decreased the percentage of patrol-territory traffic subject to inspection.

Some of the factors noted above may be difficult to control. However, patrol officers could potentially reduce the time spent at weigh stations by doing more of their Level 1 inspections when managers ride with them as part of the Department's performance management process (Monitoring of officers' performance is described more fully in **SECTION 2.3**).



Recommendation 12

We recommend that the Department improve the percentage of commercial truck traffic subject to inspection, using available data (such as commercial-truck traffic data) to:

- Estimate and monitor the percentage of commercial-truck traffic occurring when weigh-stations are closed and patrols are inactive.
- Rationalize where weigh-station staff are located.
- Decrease the frequency of unmanned patrol territories.
- Provide guidance to inspectors on areas to patrol within their assigned territories.

WEIGH STATION AND PATROL TERRITORY HOURS OVERLY PREDICTABLE

Weigh stations are generally open 12 to 16 hours a day, Monday to Friday, with some Saturday staffing. For the most part, these hours are predictable.

Mobile patrols generally work 8-hour shifts within an allowed 12-hour core timeframe, mostly Monday to Friday, with fewer Saturdays. We examined a sample of 5 (of the total 16) mobile patrol officers' reported work-hours for the 2017 calendar year, including start and end times for each shift. About 85% of the shifts were worked at the same times and on the same days each week, with about 15% less predictable.

Department staff told us the trucking industry is aware of this predictability and some operators take advantage of it, deliberately choosing to travel when it is less likely that an officer will stop them.



Recommendation 13

We recommend that the Department adopt greater variability in its weigh station and patrol operating hours in order to make them less predictable.

2.2 Existing inspection capacity not used fully and effectively

The Department is unable to demonstrate that it is using its existing inspection capacity fully and effectively. We found that:

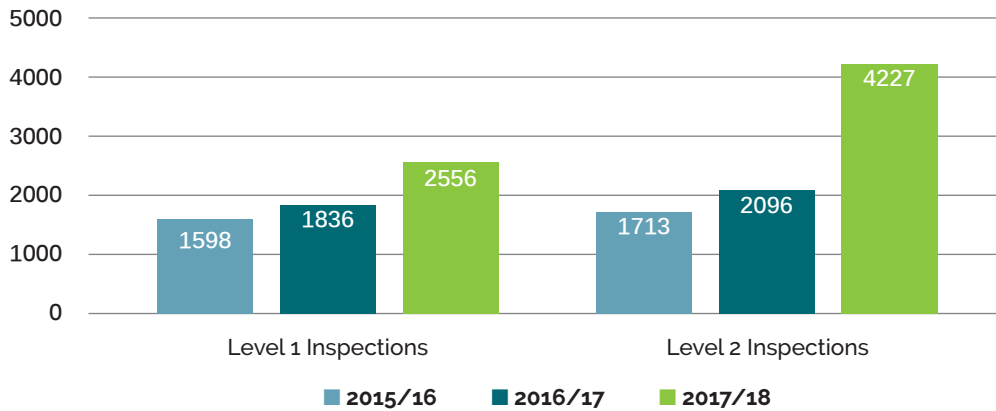
- Management began setting annual inspection targets for officers in 2014/15 and this has significantly increased the number of Level 1 and 2 inspections being performed.
- Our analysis of the Department's 2017/18 data shows that there is likely room for additional inspections using existing inspection resources.
- Management increased officers' initial Level 1 and 2 inspection targets by 50% in 2017/18. Almost all officers met the higher targets (75 Level 1 inspections; 150 Level 2 inspections), and a few significantly exceeded them.
- Almost 90% of Level 1 inspections occurred during just 5 months (May to September). The number of Level 2 inspections didn't increase when Level 1 inspections decreased.
- In 2019/20, citing concerns over difficulties in arranging the 2-person teams required for Level 1 inspections, management decreased the officers' Level 1 target by 20%. It also altered their Level 2 target to a monthly average of "one per day at work", with the expectation that this would result in an increased number of Level 2 inspections and help offset the decreased Level 1 target.

These matters are discussed in further detail below.

TARGET-SETTING HAS SIGNIFICANTLY INCREASED THE INSPECTIONS BEING PERFORMED

The annual number of Level 1 and 2 inspections performed has increased significantly over the past 3 years. Between 2015/16 and 2017/18, the total number of annual inspections (both Levels 1 and 2) rose from 3,311 to 6,783—an increase of 104%. As **FIGURE 5** shows, Level 1 inspections increased from 1,598 to 2,556, or 60%; Level 2 inspections increased from 1,713 to 4,227, or 147%.

Figure 5: On-road inspections increased significantly between 2015/16 and 2017/18



Source: Department of Infrastructure records

The Department's initial inspection targets were 50 Level 1s and 100 Level 2s per officer. Senior management told us that Ontario inspectors did 200 level 1 inspections a year, considerably more than Manitoba inspectors and that these initial targets were a start at moving in this direction. In 2017/18, the target for Level 1 inspections increased to 75 per officer; the target for Level 2 inspections increased to 150 per officer.

POTENTIAL ROOM FOR ADDITIONAL INSPECTIONS WITH EXISTING CAPACITY

We analyzed officers' performance to see if they were meeting their 2017/18 targets and to consider if there was potential room within existing capacity for still more inspections. As shown in **FIGURE 6**, both the mean and median number of inspections per officer were almost precisely the same as the target. Almost all officers met the targets, and a few significantly exceeded them.

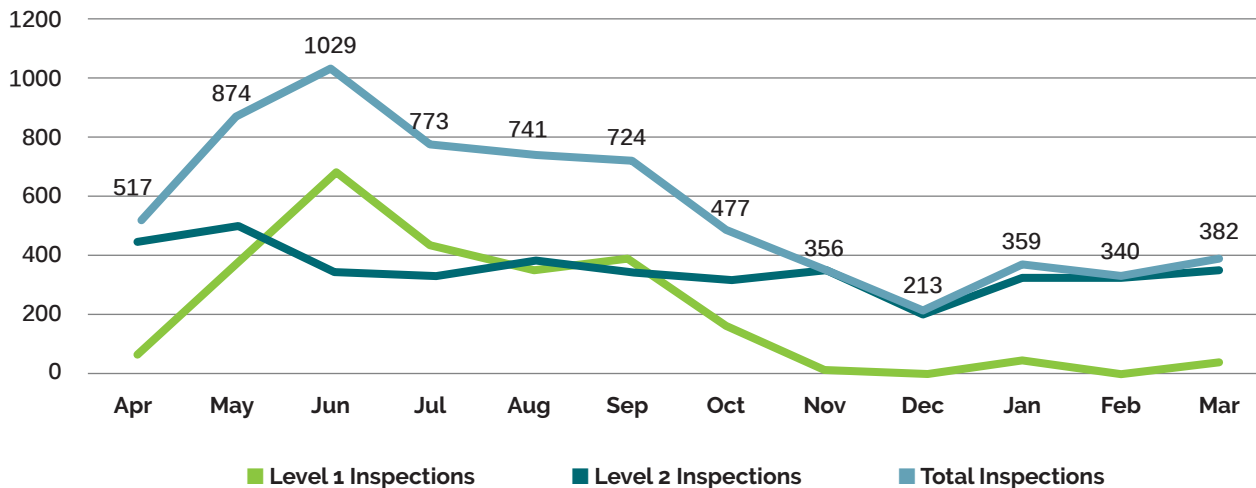
Figure 6: Most officers met their 2017/18 Level 1 and 2 inspection targets

Per officer in 2017/18	Min	Max	Mean	Median	Target
# Level 1 inspections	64	101	77	76	75
# Level 2 inspections	5	461	151	150	150

Source: Department of Infrastructure records.

As shown in **FIGURE 7**, we also found that the Department was not fully using its inspection capacity year-round. In 2017/18, most (88%) Level 1 inspections occurred over just 5 months—May through September. The Level 2 inspections occurred relatively evenly throughout the year and didn't increase when the number of Level 1 inspections decreased—despite the capacity available to do more. A similar pattern was observed for 2015/16 and 2016/17.

Figure 7: Inspection capacity not fully utilized year-round



Source: Department of Infrastructure 2017/18 data

Department officials told us that winter weather makes it difficult to conduct Level 1 inspections (which require getting underneath vehicles) as significant amounts of heavy ice can build up on the underside of the truck and trailers. They note this buildup of snow and ice may hinder the officers from inspecting all of the critical underside items. Also, this snow and ice may fall off of the vehicle, placing officers at risk of injury. In addition, they told us officers find it difficult to get under trucks with bulky winter clothing. They also told us that other jurisdictions provide insulated coveralls, as well as face shields, to protect officers when under trucks.

We noted that only the Emerson and Rosser weigh stations had inspection sheds (which more easily accommodate Level 1 inspections in the winter months). These sheds were constructed in 2012 and 2015 respectively. The Department doesn't track whether or not it is maximizing use of its existing sheds.

During our audit, the Department set revised inspection targets for 2019/20. It decreased the Level 1 inspection target by 20% (from 75 to 60), citing challenges in coordinating the required 2-person teams. It also revised the 2019/20 target for Level 2 inspections, altering it from 150 to "at least the same number of Level 2 inspections as days attended at work". Management expected this to increase the number of Level 2 inspections to help offset the decrease in Level 1 inspections, and to promote more uniform level 2 inspection activity throughout the year.

As previously shown in **FIGURE 6**, most officers met the higher Level 1 target—despite the challenges in coordinating 2-person teams. We also noted that not all jurisdictions require a 2-person team for Level 1 inspections. An inter-jurisdictional survey performed by the Department showed varying practices: 4 jurisdictions only require 1 officer; 4 (including Manitoba) require a 2-person team; and 3 "prefer" a 2-person team. Department management told us that Manitoba's 2-person requirement reflects their view that a single officer under a truck or trailer is too vulnerable without another officer present, creating a potential safety hazard.

Officers carry out other duties, apart from performing Level 1 and 2 inspections. For example, they also ensure that vehicles are not overweight. While the officers located at weigh stations spend more time on this than patrol officers, patrol officers are equipped with portable scales and also spend a portion of their time weighing vehicles—particularly from March to May when allowable weights on select roads are lower due to spring road restrictions. Nonetheless, there may be room for a greater number of inspections than allowed for in the 2019/20 targets, even after accounting for other officer duties.

Finding a safe way to conduct more year-round Level 1 inspections would likely enhance the effectiveness of the Department's inspections in promoting commercial vehicle safety. The Department's inspection statistics show that the most frequent reason for placing a vehicle out-of-service is faulty brakes—which are only inspected fully in a Level 1 inspection where the officer gets underneath the vehicle.

Alternatively, if officers can't do more Level 1 inspections, it would seem reasonable to use the existing available capacity to perform more Level 2 inspections. Management has recognized the importance of Level 1 and 2 inspections, noting in an email to staff that "the CVSA inspections remain our best tool for finding non-weight/dimensions violations; they are our greatest and most tangible contribution to promoting road safety in Manitoba".

Some motor carrier enforcement officers expressed concerns with the inspection targets. The major concerns highlighted in our discussions with them included:

- Being unable to monitor patrol-territory traffic or weigh scales while doing inspections.
- Having to leave patrol territories entirely in order to travel to a weigh station for a Level 1 partner.
- Performing "unwarranted" Level 1 inspections simply to meet targets.

The Department needs to ensure that officers meet their inspection targets in a logical and efficient manner. For example, managers may be able to help reduce the need for patrol officers to travel to weigh stations by more frequently riding with patrol officers, both to observe performance and to act as Level 1 inspection partners. The Department may also need to communicate the value of performing random inspections, in addition to inspections based on noting something wrong while monitoring traffic.



Recommendation 14

To build on its past success in increasing the number of inspections being performed, we recommend that the Department:

- Investigate refining its inspection targets to see if it can more fully and effectively use its existing inspection capacity while continuing to balance the various demands on officers' time.
- Provide officers with the insulated coveralls and face shields needed for more year-round inspections.
- Clearly communicate to officers how and why targets have been set, plus expectations as to how they should be met.

2.3 Limited monitoring of officers' performance and inspection results

Management monitoring of officers' performance and inspection results was limited. This increases the risk of inappropriate and/or inconsistent inspection decisions, which may undermine the Department's safety objectives and create a perception of unfairness. We found that:

- Officers submit monthly reports to their regional managers, but the reports have gaps and managers don't typically use them to manage their officers' performance.
- Even after considering the different types and volumes of traffic at different locations, there was more variation than we expected in the percentage of vehicles officers placed out-of-service during their inspections, as well as in the number of tickets they issued. Better monitoring of officer performance would flag and investigate these anomalies to ensure they are reasonable.
- The Department has a quality assurance process for Level 1 inspections, but it is narrow in scope: At least once every two years, a senior officer observes each enforcement officer carry out a Level 1 inspection and provides feedback. The senior officer also makes recommendations for officer training sessions based on the results of his observations.

OFFICERS' MONTHLY REPORTS HAD GAPS AND ARE NOT TYPICALLY USED BY MANAGERS

Officers submit monthly reports to their regional managers. For each day of the month, the reports show the officer's hours at work, areas patrolled (for patrol officers), the number and types of inspections performed, and the number and types of tickets issued. However, we found the reports were often incomplete or completed inconsistently.

In addition, the report information is sometimes confusing. For example, we found that most officers reported performing a large number of "general" inspections—far more than the number of Level 1 and 2 inspections reported. Per written direction from senior management, "general" inspections occur when officers process vehicles in any manner, even if they just direct them through a weigh station. In a January 2018 memo to staff, management clarified that watching trucks drive by while parked on the side of the road didn't count as general inspections. However, detailed inspections (Level 1 and 2 inspections) were to be included in the general inspection count.

The monthly reports don't fully reflect the results of the inspections. They report the different types of tickets issued, but not all inspections result in tickets. Information about the number of inspected vehicles that passed, failed or were put out of service during the month isn't included.

Perhaps most importantly, we found that regional managers didn't typically use the reports to review and manage officers' performance. They told us that they managed their officers by keeping in touch by phone and occasionally riding with them or visiting them at weigh stations. The Director of Motor Carrier Enforcement told us that he reviewed the officers' monthly reports as a way of keeping himself generally informed about their work activity.

MORE VARIATION THAN EXPECTED IN THE RESULTS OF OFFICERS' INSPECTIONS

We found wide variation in the results of officers' inspections. As shown in Figure 8, the percentage of units placed out-of-service after inspection ranged from 3% to 47%; the percentage failing inspections ranged similarly.

Figure 8: Wide variation in percentage of officers' out-of-service placements and fails				
Per roadside officer in 2017/18	Min	Max	Mean	Median
% of units placed out-of-service after inspection	3%	47%	20%	15%
% of units failing inspection	15%	55%	32%	31%

Source: OAG Calculations based on Department of Infrastructure records

As shown in **FIGURE 9**, there was also a wide variation in the number of tickets issued and upheld, and the dollar value of related fines. We also found that some officers were more likely than others to issue warnings, rather than offense notices.

Figure 9: Wide variation in officers' tickets and dollar amount of fines				
Per roadside officer in 2017/18	Min	Max	Mean	Median
# of offense notices issued and upheld	4	397	119	92
\$ value of fines	\$950	\$182,143	\$56,534	\$42,578

Source: OAG Calculations based on Department of Infrastructure records

The variation shown in **FIGURES 8** and **9** was more than we expected, even after considering the different types and volumes of commercial traffic at different locations. More robust monitoring of officer performance would flag and investigate these anomalies to ensure they are reasonable.

LIMITED QUALITY ASSURANCE PROCESS FOR LEVEL 1 INSPECTIONS

Although regional managers are ultimately accountable for their officers' performance, a Senior Officer looks after CVSA training initiatives, develops policies related to vehicle inspections, and monitors enforcement officers' performance of Level 1 inspections for consistency with CVSA and Department standards. At the time of our audit, the Senior Officer had recently observed all but 2 officers perform one or two Level 1 inspections and provided individualized feedback. Based on his observations and the training opportunities available, the Senior Officer also recommends and arranges the provision of periodic refresher training. For example, at the time of our audit, there had recently been refresher training on inspecting dangerous goods. Department officials told us that these quality assurance activities reflect an increased focus on the depth and quality of training that began in 2015.

Department management told us they intend to have the Senior Officer observe each officer at least once every 2 years, making the quality assurance process described above relatively narrow in scope. Regional managers told us that they occasionally ride with their patrol officers or observe their weigh station officers, but that any quality-assurance related to this monitoring is informal and undocumented.



Recommendation 15

We recommend that the Department develop a documented performance management process for its on-road enforcement officers that includes monitoring individual officer's performance and inspection results, investigating anomalies, and taking corrective action where necessary.

2.4 Officers adequately trained and have most required equipment

Motor-carrier enforcement officers can't effectively do their jobs without adequate training and equipment. We found that:

- Officers obtained and maintained CVSA certification.
- At the time of our audit, officers' had most of the equipment they needed. The Department was working to address communications equipment issues (together with the government), and improve staffing of the supporting dispatch office.

ALL OFFICERS CVSA-CERTIFIED

All motor carrier enforcement officers are CVSA-certified. New hires are required to complete the Department's 81-day classroom training program in their first year. This training covers all aspects of CVSA inspections and applicable Manitoba legislation. CVSA certification requires officers to pass CVSA exams and observe experienced CVSA-certified officers conduct at least 32 Level 1 inspections. In addition, once certified they need to complete 32 Level 1 inspections on an on-going annual basis.

We verified that the 8 most recent hires had been properly CVSA-certified. We also verified that in the most recent year all officers had completed the required number of CVSA Level 1 inspections needed to maintain their certification (barring mitigating circumstances, such as prolonged illness).

MOST EQUIPMENT NEEDS MET OR BEING ADDRESSED

Motor carrier enforcement officers have most of the equipment needed to do their jobs: uniforms, ballistics vests, coveralls, protective headgear (bump caps), gloves, radios, cellphones, computers, and various inspection tools. Nonetheless, we found some equipment issues.

For safety, patrol officers and officers working alone at weigh stations are equipped with radios and expected to call in to a base station when they start and complete inspections. However, there have been problems with the radio network. To address this, at the time of our audit government was working to replace the province-wide network and hardware. In addition, the Department has worked to resolve

staffing issues in its dispatch office that affect its ability to promptly respond to officers' calls. Both these improvements are important because they reduce potential risks to officers' safety.

Although officers have coveralls, they aren't insulated and are therefore inadequate in winter. This impacts their ability to perform year round inspections, as previously described in **SECTION 2.2**.

2.5 Vehicle deficiencies followed-up, but proof of repair not always required

The final step in the on-road inspection process is ensuring that operators fix the vehicle deficiencies found by on-road enforcement officers. Without this last step, the Department has no assurance that operators have corrected the safety issues found during inspections.

Drivers can fix some identified deficiencies immediately, allowing inspectors to confirm appropriate repair. However, in some cases, additional tools or expertise may be required. The Department follows up on these vehicle deficiencies by requiring operators to return their copy of the vehicle inspection report, signed by both the person who performed the repair and a representative of the operator's management. However, it doesn't require actual proof of repair, such as a copy of an external mechanic's invoice or a photo. Nor does it generally have a way to follow-up whether vehicles placed out-of-service due to mechanical defects get repaired before they proceed.

The Department allows operators 14 days to send in the signed inspection report; then sends them a letter warning that failure to comply may result in MPI suspending the vehicle's registration. If that produces no result within the next 14 days, it sends a second warning letter. If another 14 days elapses without receipt of the signed report, the Department asks MPI to suspend the registration. The Department tracks outstanding vehicle inspection reports through an automated management report.



Recommendation 16

We recommend that the Department require operators to provide proof that vehicle deficiencies not immediately corrected during inspection have been repaired, in addition to signatures indicating the deficiencies were corrected.

3 Weak planning and performance measurement processes

We concluded that the Department of Infrastructure's planning and performance measurement processes for commercial vehicle safety were weak. We found that:

- The Department performs some strategic planning. For example, it does some ad hoc planning for specific initiatives (such as mandatory entry-level training for commercial truck drivers) and periodically consults with stakeholders. It also has done work to align the activities and goals of the Motor Carrier Branch with overall Departmental priorities and conducted a review of its safety framework (**SECTION 3.1**).
- The Department hasn't sufficiently considered risks, data, and the need for coordination with MPI in order to effectively plan and achieve its vision for commercial vehicle safety (**SECTION 3.2**).
- The Department has no measures to assess the effectiveness of its efforts to improve commercial vehicle safety (**SECTION 3.3**).

3.1 Some strategic planning underway

The Department conducts some strategic planning for commercial vehicle safety. For example, it has worked to align the activities and goals of the Motor Carrier branch with overall Departmental priorities. The Department has also strategically decided, for safety reasons, to limit the Peace Officer role assigned to motor carrier enforcement officers under Manitoba's *Highway Traffic Act*. In addition, at the time of our audit, it was nearing completion of a Safety Framework Review, which was designed to identify issues and challenges and propose solutions.

The Department also plans for specific initiatives and periodically consults with stakeholders to guide its planning efforts. Recent planning efforts have focused on mandatory entry-level training for commercial drivers and readiness for the use of Intelligent Transportation Systems that would allow e-screening of vehicles, plus a number of proposed improvements to its safety framework, such as changes to its processes for facility audits and safety-fitness ratings (previously discussed in **SECTIONS 1.2** and **1.3**).

Mandatory entry-level training, Intelligent Transportation Systems, stakeholder consultation, and the limitation to the Peace Office role are discussed further below.

INPUT PROVIDED TO PROVINCIAL PLAN FOR MANDATORY ENTRY-LEVEL TRAINING (MELT)

Following the April 2018 Humboldt Broncos tragedy in Saskatchewan, where a bus was struck by a commercial truck, several Canadian jurisdictions have implemented or announced plans to implement mandatory entry-level training (MELT) for semi-truck drivers. It is hoped that more rigorous training will help reduce the number of commercial vehicle accidents.

Until recently, MPI would issue a semi-truck driving license to an individual after he or she successfully completed a knowledge-based written test and a practical road test. However, in March of 2019, the Province announced mandatory training of at least 121.5 hours for all new semi-truck drivers, effective the following September—except for a one-year deferral for the agriculture sector to allow additional consultation. Only driving schools approved by MPI can provide the new training, and drivers with existing licenses do not need to retest or take MELT. MPI is leading the implementation of the MELT initiative; however, the Department is providing input.

Prior to the MELT initiative, MPI funded a non-mandatory Entry-Level Professional Truck Driver Training Program, which ran from 2008 until 2017. After that, Manitoba Education and Training began offering some tuition funding for non-mandatory truck-driver training—but only in specific circumstances. The training had to be provided by a school authorized by MPI and was about 240 hours, including approximately 80 hours of supervised in-truck experience.

PLANNING FOR INTELLIGENT TRANSPORTATION SYSTEMS UNDERWAY

At the time of our audit, the Department was planning how to handle the trucking industry's increasing demand for e-screening through Intelligent Transportation Systems. Using this technology, vehicles with transponders communicate with weigh stations to see if they need to stop, but can also be electronically checked for dimensions, weight, and safety credentials—all without stopping. Some other jurisdictions are ahead of Manitoba in implementing this technology.

Similar technological innovation will likely continue to shape advances in commercial vehicle inspections. For example, the technology to assess engines and brakes remotely is in use in other jurisdictions, but is not yet in use in Manitoba. Manitoba is a relatively small jurisdiction, but once these types of advances are implemented in busier and larger jurisdictions, there will be a demand for them everywhere as fewer stops save the trucking industry both time and money.

The Department has also done some preliminary capital planning for its weigh stations, but other than re-building the weigh station at the intersection of Highway 2 and Highway 10, it wasn't advancing any concrete plans in light of fiscal constraints.

STAKEHOLDER CONSULTATION IS OCCURRING

The Department meets at least semi-annually with MPI, the Manitoba Trucking Association, the Manitoba Heavy Construction Association, the Heavy Equipment and Aggregate Truckers Association of Manitoba, and Keystone Agriculture Producers. It also periodically meets with representatives from the forestry and oil sectors. And it participated in Manitoba's stakeholder consultation regarding the implementation of MELT.

At the time of our audit, the Department had recently conducted its own online stakeholder survey, which was designed to assess how stakeholders viewed the Department's commercial vehicle safety services. The survey covered satisfaction with the processes for obtaining safety fitness certificates and over-dimension or over-weight permits, safety-fitness ratings, operators' safety profiles, facility audits, and on-road enforcement. Department officials told us they had not yet compiled the survey results.

PEACE OFFICER ROLE STRATEGICALLY LIMITED FOR SAFETY REASONS

The job description for motor carrier enforcement officers states that they are to function as peace officers, inspectors of federally-mandated hours of service rules, and as CVSA-certified inspectors. However, the Department has strategically decided (through departmental policies and directives) that officers' enforcement activities shouldn't include all the powers granted to peace officers under *The Highway Traffic Act* (the Act). The Department has restricted officers' use of the arrest and seizure powers that the Act grants peace officers. For example, the officers can't seize a driver's licence and issue a short-term licence suspension when they believe a commercial-vehicle driver has been using a hand-operated electronic device while driving.

We noted that not all motor carrier enforcement officers in other jurisdictions are similarly restricted. Department officials told us that the motor carrier enforcement officers are appointed as inspectors under the Act and that the officers' enforcement activities are limited in order to meet the motor carrier enforcement program's mandate while managing the safety risk to staff. In other words, they believe that some peace officer duties are better left to local police forces and the RCMP.

The motor carrier officers we spoke to during our audit were divided in their support of the restricted peace officer role. Under the Act, a peace officer is "any person lawfully authorized to direct or regulate traffic, or to enforce the Act or traffic by-laws or regulations". The Act also states that the Minister "may appoint persons or classes of persons as inspectors for the purpose of enforcing this Act and the regulations".

3.2 Insufficient consideration of risks, data, and need for MPI coordination

NO FORMAL RISK MANAGEMENT PROCESS

The Department has no regular and systematic process to identify, analyze, and then address risks to achieving its stated objective for the Motor Carrier Branch: "To regulate Manitoba's motor carriers in a manner that enhances road safety, protects infrastructure, and promotes economic development through innovation and collaborative stewardship." This makes achieving the objective more difficult and less likely.

We noted that one key and challenging risk stems from enhancing road safety through regulatory oversight, while also promoting economic development (generally the trucking industry). At times, the dual roles may conflict.

For example, the alternative assessment model (which was used by the Department to assess if certain operators qualified for a ‘fully satisfactory’ safety-fitness certificate, without performing a facility audit as was normally required) and the removal of U.S. data from operators’ safety profiles were responses to industry claims that the Department’s regulatory policy was having adverse economic consequences. Both are described more fully in **SECTION 1.2**.

This audit report outlines several other important risks related to the Department’s safety-fitness program (such as the risk associated with issuing safety-fitness certificates without adequate safety vetting) and its management of on-road inspections (such as the risk associated with staffing patterns that don’t adequately maximize coverage and minimize predictability). It also notes risks related to technology advances and the need for coordination with MPI (as the Department is not solely responsible for commercial vehicle safety; it shares this responsibility with MPI). The Department’s Safety Framework review, in process during our audit, has also flagged some of these risks.

AVAILABLE DATA NOT REGULARLY USED TO HELP GUIDE PLANNING

The Department isn’t regularly using available MPI and CVSA data to help it plan. Senior officials were unaware of the section of MPI’s annual traffic collision statistics report devoted to collisions involving vehicles with National Safety Code numbers. And the Department posts an annual CVSA inspection statistics report on its website, but makes little use of the information. Department officials told us that it considers MPI data on an ad hoc basis for special projects.

We analyzed the CVSA out-of-service statistics and noted that approximately 27% of vehicles inspected in 2018 were placed out of service. We further noted that the most common reason for putting a vehicle out-of-service was a deficiency related to its brakes. Department officials noted that the Department’s on-road inspection program puts considerable effort into various annual brake blitzes. However, we expected the Department’s planning to provide some ongoing focus on reducing the number of brake deficiencies, which was not the case.

The Department’s CVSA inspection report only covered inspections of vehicles, not drivers. It therefore only reported statistics for vehicles placed out of service; not drivers placed out of service. Department officials were unaware of this until we pointed it out and then had trouble fixing the report. By the time we concluded our audit field work the Department had made some related software changes; however, the report still didn’t include the missing driver data. The Department needs to be able to identify the most common reasons drivers are placed out of service in order to plan its safety efforts accordingly.

The Department also isn't making best use of recent industry literature or performing evaluations of its past initiatives to guide its planning for commercial vehicle safety. The Department belongs to various associations that perform research, such as the Transportation Association of Canada and the Canadian Council of Motor Transport Administrators. However, we noted that the Department's planning for commercial vehicle safety has little focus on recent literature showing that people might be able to avoid a significant number of accidents involving commercial vehicles if they had a better understanding of appropriate driving behavior when in proximity to large commercial vehicles. We also noted that the Department hasn't evaluated if a past initiative to include more trucks in its definition of "regulated vehicles" resulted in the safety gains originally expected.

Department officials told us that the responsibility for campaigns to make the motoring public more aware of how to drive safely when near commercial vehicles lies with MPI and its 60-Second Driver Video Series (see below for further discussion of coordination with MPI). The Video Series has over 90 videos, including one on Commercial Vehicles.

LACK OF COORDINATION WITH MPI CREATES GAPS AND OVERLAPS IN PLANNING

The Department is not solely responsible for commercial vehicle safety. MPI also handles some aspects of this, including:

- Assigning motor carriers and operators National Safety Code numbers, as required.
- Licensing commercial vehicles and commercial vehicle drivers, and implementing mandatory entry-level training for commercial truck drivers.
- Authorizing mechanics and inspection stations to conduct Periodic Mandatory Vehicle Inspections (PMVIs) for commercial vehicles, required by both the Department and MPI.
- Compiling Manitoba's traffic collision statistics.
- Leading the development and implementation of the overall provincial road safety plan, and educating the public on road safety.
- Cancelling vehicle licenses, as requested by the Department when operators don't correct mechanical deficiencies noted during inspections within specified timeframes.
- For those operators who purchase their required liability insurance through MPI, maintaining a fleet safety program that incentivizes safety through rebates and surcharges, includes quarterly reports on progress, and provides on-site loss prevention audits with many similarities to the Department's facility audits.
- Maintaining a mobile safety inspection station that can test brakes and suspension as a free service to MPI's fleet customers.

Without sufficient coordination and communication, the sharing of responsibility for commercial vehicle safety between the Department and MPI creates the potential for both gaps and overlaps. Examples are provided below.

As noted in the section above, there are likely opportunities for the Department and MPI to work together to further and better educate the public to be more aware of commercial vehicles when using the roads.

MPI's on-site loss prevention audits review various aspects of the insured's operation, from management to driver selection to maintenance and road safety programs. There is overlap between these audits and the Department's facility audits. Staff from both MPI and the Department agreed that there were some similarities, but felt the two were different as MPI viewed things from an "insurance" perspective and the Department viewed things from a "regulatory compliance" perspective. However, ultimately both audits are focused on improving safety. The Department reduces its sample size during a facility audit if a carrier provides evidence that it received a MPI audit and there were no concerns raised. With better information-sharing, there are likely opportunities for further efficiencies.

The Department relies on MPI processes to ensure that the inspection stations and mechanics performing Periodic Mandatory Vehicle Inspections (PMVIs) are functioning as intended. However, it receives no formal assurance or information from MPI on this. As motor carriers own and operate some of the inspection stations, the Department could better assess these carriers' safety risks if it periodically received updates from MPI on inspection stations with problems or under MPI investigation. Similarly, the Department's roadside inspectors sometimes find vehicles with deficiencies that a recent PMVI should have identified, indicating potential problems with the associated mechanic or inspection station. Department staff told us there is no formal process for reporting these problems back to MPI, and that problems reported in the past have sometimes received no acknowledged response. Overall, these matters reflect coordination and communication gaps in the processes related to ensuring the validity of PMVIs and the integrity of the associated mechanics and inspection shops.

During our audit, we also noted that the Department's facility audits of coach fleets were regularly using reduced sample sizes, relying on the fact that MPI also performed audits of coach fleets. However, MPI officials told us that they had stopped their audits because they overlapped with those of the Department. The Department was not aware of this change.

3.3 No measures to assess effectiveness of efforts to improve safety

Part of the Department's stated objective for the Motor Carrier Branch is to regulate Manitoba's motor carriers in a manner that enhances road safety. However, the Department has no related targets or performance measures, and conducts no related benchmarking. Existing targets and performance measures centre on outputs (for example, the number of Level 1 and 2 inspections conducted; the number of facility audits performed), rather than safety outcomes.

Some other jurisdictions have goals more centered on safety outcomes, such as to "reduce the number of fatal crashes involving commercial vehicles". Manitoba has a provincial goal of "zero fatalities" stated in its 2017-2020 *Road to Zero: Manitoba Road Safety Plan*, issued by MPI. However, while the Plan doesn't specifically exclude commercial vehicle safety, it doesn't specifically focus on it either.

The Department is not monitoring the effectiveness of its safety efforts over time. For example, it doesn't track trends in fatal crashes and other accidents involving commercial vehicles, the percentage of operators with fully satisfactory safety-fitness ratings, or the percentage of vehicles and drivers placed out-of-service each year. Ideally, it would monitor trends over time and use this information to guide planning efforts and improvement.

Department officials told us that development of performance measures (started in 2011) has been delayed by staffing issues and then to ensure alignment with the government's balanced scorecard initiative. We noted that the Department's Safety Framework review identified several useful "intended strategic outcomes" that could be used as potential performance measures. These included "reduced accidents involving commercial motor vehicles, along with reductions in related fatalities, injuries and property damage" and "improved safety ratings for audited carriers".



Recommendation 17

We recommend that the Department develop and implement a formal plan for commercial vehicle safety that:

- Identifies, analyzes, and addresses risks.
- Uses available CVSA and MPI statistical data, as well as recent industry literature and evaluation of past departmental initiatives, to guide planning.
- Acknowledges and addresses MPI's role in commercial vehicle safety and the need for strengthened coordination and communication.
- Sets targets and performance measures that will help it assess the effectiveness of its efforts to improve commercial vehicle safety.

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Conclusion

We concluded that the Department's oversight of commercial vehicle safety is inadequate. The Department's safety-fitness-program practices are insufficient to verify and promote safety; there are gaps in its management of on-road inspections; and it has weak planning and performance measurement processes.

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Additional information about the audit

This independent assurance report was prepared by the Office of the Auditor General of Manitoba on the Department of Infrastructure's Oversight of Commercial Vehicle Safety. Our responsibility was to provide objective information, advice, and assurance to assist the Legislature in its scrutiny of the government's management of resources and programs, and to conclude on our audit objectives and criteria.

All work in this audit was performed to a reasonable level of assurance in accordance with the *Canadian Standard for Assurance Engagements (CSAE) 3001—Direct Engagements* set out by the Chartered Professional Accountants of Canada (CPA Canada) in its Assurance Handbook.

The Office applies CPA Canada's Canadian Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

In conducting the audit work, we have complied with the independence and other ethical requirements of the *Rules of Professional Conduct* of Chartered Professional Accountants of Manitoba and the *Code of Values, Ethics and Professional Conduct* of the Office of the Auditor General of Manitoba. Both the Rules and the Code are founded on fundamental principles of integrity, objectivity, professional competence, due care, confidentiality, and professional behavior.

In accordance with our regular audit process, we obtained the following from management:

1. Confirmation of management's responsibility for the subject under audit;
2. Acknowledgment of the suitability of the criteria used in the audit;
3. Confirmation that all known information that has been requested, or that could affect the findings or audit conclusion, has been provided; and
4. Confirmation that the audit report is factually accurate.

Period covered by the audit

The audit primarily covered the period between April 1, 2017 and August 31, 2018, and this is the period to which the audit conclusion applies. However, in some cases, we also examined periods prior and/or subsequent to this timeframe to better understand audit matters.

Date of the audit report

We obtained sufficient and appropriate audit evidence on which to base our conclusion on November 19, 2019 in Winnipeg, Manitoba.

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Summary of recommendations

RECOMMENDATION 1

We recommend that the Department better assess and promote new entrants' safety fitness by:

- Administering safety-knowledge tests.
- Reviewing applicant's safety plans and other safety-related documents (such as vehicle inspection forms).
- Performing site reviews or audits.
- Drawing greater attention to its transportation safety guide and its importance.

Response of officials:

The department agrees with this recommendation.

RECOMMENDATION 2

We recommend that the Department strengthen its checks for chameleon carriers by collecting more information from applicants and developing processes to flag anomalies in its database for follow-up.

Response of officials:

The department agrees with this recommendation. Best practices from other jurisdictions are currently being reviewed for adoption in Manitoba. The department is examining ways to implement improvements, in the short and medium term, to improve functionality within its IT system to strengthen checks on commercial vehicle operators.

RECOMMENDATION 3

We recommend that the Department improve the method it uses to grade and assess operators' safety performance by:

- Comparing all operators in the total population to a predetermined standard that takes into account the km driven by operators' fleets, as well as fleet size.
- Assigning negative points to inspection "fails" (and not just "out-of-services"), so that the "fails" are not treated the same as "passes".

Response of officials:

The department agrees with this recommendation. It is examining the replacement of the Carrier Profile System, and the methodology used to assess carrier safety performance. The department will review the policy failed inspection point counts.

RECOMMENDATION 4

We recommend that the Department include available U.S. data in grading and assessing operators' safety performance, as prescribed by section 322.1 of *The Highway Traffic Act*.

Response of officials:

The department agrees with this recommendation.

RECOMMENDATION 5

We recommend that the Department flag for follow-up those operators within the total population who pose the greatest safety risk to the public and are most in need of improvement. In doing this, we further recommend that the Department assess whether there are operators not currently subject to facility audits who nonetheless pose significant safety risks (such as those who haul hazardous goods).

Response of officials:

The department agrees with this recommendation. The department plans to study alternate methods for calculating a carrier's performance ratings or thresholds, with the goal of identifying a clear methodology that provides a more accurate picture of the overall risk.

RECOMMENDATION 6

To help poor-performing operators identify underlying safety-management weaknesses and take appropriate corrective action, we recommend that the Department include in the warning letters it sends to these operators:

- Copies of safety-performance records and safety scores, together with explanatory material.
- Requests for action plans for improvement.

Response of officials:

The department agrees with this recommendation.

RECOMMENDATION 7

In order to better focus on the actions needed for improvement when conducting facility audits on operators with poor safety-performance profiles, we recommend that the Department determine and document the likely underlying causes and corrective actions needed to address any identified non-compliance with safety regulations. This should include interviews with a variety of facility staff, including drivers, so as to better understand the operator's safety culture.

Response of officials:

The department agrees with this recommendation. It conducts facility audits according to National Safety Code standard #15; the use of forensic interviews of a broader cross section of carriers' employees has been tested by Motor Carrier staff. Sustainable ways to incorporate forensic interviews into standard facility audit practise are being examined and implemented as appropriate.

RECOMMENDATION 8

To better link its annual safety-fitness-certificate renewal process to its monitoring activities, we recommend that the Department require all operators flagged as poor performers to include reports on their progress in implementing action-plans for improvement when renewing their certificates.

Response of officials:

The department agrees with this recommendation. In the long term, replacing the Carrier Profile System will improve the department's ability to link information on carrier safety performance with the safety fitness renewal process. Manual process improvements are being considered and will be implemented in the near term.

RECOMMENDATION 9

We recommend that the Department ensure that all methods used to award operators “satisfactory” safety-fitness ratings are transparent, can be logically defended, and treat all operators with similar safety-records consistently.

Response of officials:

The department agrees with this recommendation. It assigns satisfactory ratings to carriers that successfully pass a facility audit and have acceptable on-road performance in accordance with National Safety Code standard #15. The department concluded the alternative assessment model pilot in 2018 and is no longer using that method to assign carrier safety ratings.

RECOMMENDATION 10

We recommend that, while continuing to collaborate with others to harmonize Canada/U.S. oversight of motor-carrier safety, the Department seek greater clarity and central government direction on its current practice of not requiring any U.S.-based carriers operating in Manitoba to be registered in Manitoba's safety-fitness program.

Response of officials:

The department agrees with this recommendation and will collaborate with other government of Manitoba entities to pursue an appropriate course of action.

RECOMMENDATION 11

We recommend that the Department stop registering commercial operators of heavy farm trucks in the safety-fitness program without requiring them to obtain safety-fitness certificates and that it instead:

- Require those crossing provincial borders to both register and obtain safety-fitness certificates, consistent with applicable federal legislation and practice in other provinces.
- Decide if those operating strictly within Manitoba should be registering and obtaining safety-fitness certificates by assessing the underlying safety risk.

Response of officials:

The department agrees with this recommendation. The development of alternative options for monitoring the safe operation of heavy farm vehicles in Manitoba requires consultation with the agriculture sector and across government departments.

RECOMMENDATION 12

We recommend that the Department improve the percentage of commercial truck traffic subject to inspection, using available data (such as commercial-truck traffic data) to:

- Estimate and monitor the percentage of commercial-truck traffic occurring when weigh-stations are closed and patrols are inactive.
- Rationalize where weigh-station staff are located.
- Decrease the frequency of unmanned patrol territories.
- Provide guidance to inspectors on areas to patrol within their assigned territories.

Response of officials:

The department agrees with this recommendation. It will continue to assess coverage gap risks and adjust resources as required, to ensure a principle of deterrence which encourages carriers to operate in a legal manner.

RECOMMENDATION 13:

We recommend that the Department adopt greater variability in its weigh station and patrol operating hours in order to make them less predictable.

Response of officials:

The department agrees with this recommendation and is working on options to introduce greater variability in weigh station and patrol operating hours.

RECOMMENDATION 14

To build on its past success in increasing the number of inspections being performed, we recommend that the Department:

- Investigate refining its inspection targets to see if it can more fully and effectively use its existing inspection capacity while continuing to balance the various demands on officers' time.
- Provide officers with the insulated coveralls and face shields needed for more year-round inspections.
- Clearly communicate to officers how and why targets have been set, plus expectations as to how they should be met.

Response of officials:

The department agrees with this recommendation. It continues to balance inspection requirements with other demands (such as infrastructure protection, industry education events, etc.) within the resources available. Best practices from similar climate jurisdictions are being examined in an effort to increase year-round Level 1 CVSA inspections, while also ensuring enforcement officers are adequately protected on the job. Inspection targets per officer are regularly communicated to enforcement officers; these targets are being monitored and will be adjusted as required.

RECOMMENDATION 15

We recommend that the Department develop a documented performance management process for its on-road enforcement officers that includes monitoring individual officer's performance and inspection results, investigating anomalies, and taking corrective action where necessary.

Response of officials:

The department agrees with this recommendation. It has implemented formal performance feedback from regional managers, and regular quality assurance co-inspections with senior officers to observe and correct. A time/activity report is currently under development within the TraCS software system, which will enable more robust analysis of MCEO activities, outputs, and geographical data.

RECOMMENDATION 16

We recommend that the Department require operators to provide proof that vehicle deficiencies not immediately corrected during inspection have been repaired, in addition to signatures indicating the deficiencies were corrected.

Response of officials:

The department agrees with this recommendation. It is consulting with other jurisdictions to consider best practices. Not all defects require repair receipts, as the driver is able to remedy problems on site, such as adjusting brakes, replacing light bulbs and so forth.

RECOMMENDATION 17

We recommend that the Department develop and implement a formal plan for commercial vehicle safety that:

- Identifies, analyzes, and addresses risks.
- Uses available CVSA and MPI statistical data, as well as recent industry literature and evaluation of past departmental initiatives, to guide planning.
- Acknowledges and addresses MPI's role in commercial vehicle safety and the need for strengthened coordination and communication.
- Sets targets and performance measures that will help it assess the effectiveness of its efforts to improve commercial vehicle safety.

Response of officials:

The department agrees with this recommendation. Improved coordination with MPI is needed to better understand the risks in the commercial vehicle industry. The department has begun discussions with MPI to improve data sharing opportunities, and will work to improve coordination of commercial vehicle safety monitoring. For new initiatives, the department is incorporating safety performance measurement as a reporting tool and a measure of success. The department has done a lot of the base work to identify branch mandates and key performance indicators and is well positioned to incorporate this work into the broader spectrum of provincial performance measurement when government's balanced scorecard system is ready.

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Communications Manager

Frank Landry

Admin Support

Jomay Amora-Dueck

Tara MacKay

Graphic Design

Waterloo Design House






Auditor General
MANITOBA

For more information, please contact our office at:

Office of the Auditor General
500-330 Portage Avenue
Winnipeg, Manitoba R3C 0C4

Phone: 204-945-3790 Fax: 204-945-2169
contact@oag.mb.ca | www.oag.mb.ca

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