

Chapter 11

Saskatchewan Government Insurance—Monitoring Fines from the Automated Speed Enforcement Program

1.0 MAIN POINTS

Unsafe speed continues to be a serious concern in Saskatchewan. Speed and aggressive driving are a key cause of collisions. Failure to properly monitor vehicle speed increases the risk of vehicle collisions. Vehicle collisions put the lives of drivers and passengers in the vehicle speeding, and in the vehicle(s) in which they collide at risk.

Saskatchewan Government Insurance, on behalf of the Auto Fund, operates the Automated Speed Enforcement Program under *The Traffic Safety Act* and related regulations. *The Traffic Safety Act* allows for the use of photographs of a vehicle from speed monitoring devices. In September 2018, the Government announced that it had decided to continue with the Program on a permanent basis.

We found SGI had effective processes in place to monitor that the fines issued from its automated speed enforcement program were accurate and reliable for the 12-month period ended September 30, 2018, other than SGI needs to:

- Maintain formal written enforceable contracts with each party key to delivering its automated speed enforcement program and consistently enforce the provisions within each of those contracts.

Operating under expired contracts may make it difficult for SGI to enforce the components of each contract. Not enforcing all provisions of each contract (e.g., inconsistent issuance of fines to out-of-province vehicles) results in inequitable treatment of registered vehicle owners.

- Periodically determine whether its service provider sufficiently maintains the integrity of data in the IT system used to process automated speed enforcement program fines.

Not periodically determining the integrity of data in the IT system may result in the IT system not being sufficiently protected and may affect the ability to issue fines timely. This increases the risk that fine information may not be readily available if challenged in court.

- Regularly determine whether rejected violations are consistent with its policies.

Improving the monitoring of rejected violations will allow SGI to better monitor that the service provider and applicable police services are issuing fines in compliance with SGI's expectations.



2.0 INTRODUCTION

The Saskatchewan Auto Fund registers vehicles, licences drivers, and provides related services to about 812,000 drivers and about 1.2 million vehicles and trailers in Saskatchewan.¹

2.1 Automated Speed Enforcement Program

Since June 2014, Saskatchewan Government Insurance, on behalf of the Auto Fund, operates the Automated Speed Enforcement Program under *The Traffic Safety Act* and related regulations. *The Traffic Safety Act* allows for the use of photographs of a vehicle from speed monitoring devices. It places restrictions on the use of photographs of a vehicle and speed monitoring devices. *The Traffic Safety (Speed Monitoring) Regulations* sets requirements about the use of speed monitoring devices in Saskatchewan.

SGI introduced this Program as a two-year pilot in response to recommendations of an all-party Special Committee on Traffic Safety.² In September 2018, the Government announced that it had decided to continue with this Program on a permanent basis.³ It made this decision based on a May 2018 evaluation of the pilot.⁴

The May 2018 evaluation reported that the pilot had a positive impact on both the frequency and the severity of collisions, especially speed-related collisions at the camera location corridor. In addition, it stated that the benefits of the pilot Program outweighed the cost to deliver the pilot, suggesting the program worked from a safety perspective. See **Figure 1** for a brief summary of the results of the evaluation.

Figure 1 – Reduction in Number of Speed-Related Collisions at High-Speed and School Zone Camera Location Corridors since Introduction of Automated Speed Enforcement Program to 2016

Camera Location Corridor	Baseline Average Annual Collisions before Program (January 2010 to December 2014)	Average Annual Collisions After Program (January 2015 to December 2016)	Per Cent Change in Average Annual Collisions From Baseline to 2016
High-Speed Location Corridors – Speed Related Collisions	97	45	-53%
School Zone Corridors – All Collisions ^A	99	55	-44%

Source: SGI Evaluation of the Photo Speed Enforcement Pilot Program in Saskatchewan Final Report (March 2015 – March 2017) www.sgi.sk.ca/documents/625510/627014/Photo+Speed+Enforcement+Evaluation+Report.pdf/49b180a0-a9b3-45af-9c41-f53a0a180040 (13 February 2019).

^A SGI did not track speed-related collisions in school zones separately as it did for high-speed locations.

¹ 2017-18 Saskatchewan Auto Fund Annual Report, p.9. The Auto Fund is responsible for these activities under *The Traffic Safety Act*.

² In 2013, the Government of Saskatchewan formed an all-party Special Committee on Traffic Safety that conducted extensive public consultation directed at enhancing road safety in Saskatchewan. Based on public submissions, the Special Committee on Traffic Safety recommended that SGI implement an automated speed enforcement pilot project.

³ www.saskatchewan.ca/government/news-and-media/2018/september/17/photo-radar (14 February 2019).

⁴ In May 2018, SGI published, on its website, its evaluation of the pilot Program. It concluded the pilot met its primary objectives, and the target violation rate at almost all camera locations.

www.sgi.sk.ca/documents/625510/627014/Photo+Speed+Enforcement+Evaluation+Report.pdf/49b180a0-a9b3-45af-9c41-f53a0a180040 (13 February 2019).

The Program fits within the Auto Fund's vision to achieve the safest roads in Canada while caring for customers.⁵ The Auto Fund's traffic safety goals are to prevent deaths and injuries due to traffic collisions by addressing driver, vehicle and road safety issues.⁶ By August 2020, the Auto Fund is targeting a 30% reduction in injuries and fatalities on Saskatchewan roads from 2010 to 2014 July to June averages.⁷

The overarching goal of the Program is "zero speeding fines, zero crashes." The Program target violation rate is less than 1% of drivers (exceeding a selected location-based speed threshold) for all camera locations.⁸ The primary objectives of the Program are:

- To provide a consistent deterrence to speeding
- To reduce the incidences of speeding
- To reduce speed-related collisions and resulting injuries and deaths

In addition, the Program reduces the need for manual policing enforcement of speeding in high-speed corridors and school zones giving enforcement officers more time to enforce other safety concerns and improves officer safety.^{9,10}

2.2 Significance in Saskatchewan

Unsafe speed continues to be a serious safety concern in Saskatchewan. In 2017, speeding accounted for 8% of the total fatal crashes in Saskatchewan (2015: 21%; 2013: 20%). Speed-related fatal collisions are more prevalent on high-speed provincial highways or rural roads (69%) than in urban locations (31%).

The Canadian Council of Motor Transport Administrators identified in its 2016 Road Safety Strategy that speed and aggressive driving were a key cause of collisions. It defines speed and aggressive driving as driving at speeds beyond posted legal limits on all road types in urban and rural settings, and drivers' behaviour deemed outside of socially acceptable norms that put other road users at risk of injury or contribute to crashes and casualties.¹¹

Studies have also shown that driving at a speed not appropriate for existing conditions or driving at a speed exceeding the posted speed limit increases the likelihood of collisions and casualties. The risk associated with collision severity increases exponentially with increasing vehicle speed. Similar studies have indicated that a 5% reduction in average speed will result in a 20% reduction in the likelihood of fatal collisions.¹²

Failure to properly monitor vehicle speed increases the risk of vehicle collisions. Vehicle collisions put the lives of drivers and passengers in the vehicle speeding, and in the vehicle(s) in which they collide at risk. It also puts pedestrians crossing the road

⁵ 2017-18 Saskatchewan Auto Fund Annual Report, p. 10.

⁶ Ibid., p. 10.

⁷ Ibid., p. 12.

⁸ www.sgi.sk.ca/documents/625510/627014/Photo+Speed+Enforcement+Evaluation+Report.pdf/49b180a0-a9b3-45af-9c41-f53a0a180040 (13 February 2019).

⁹ Ibid.

¹⁰ Enforcement (e.g., policing) of traffic safety laws is the responsibility of law enforcement – not SGI.

¹¹ crss-2025.ccmta.ca/files/RSS-2025-Report-January-2016-with%20cover.pdf (13 February 2019).

¹² www.sgi.sk.ca/documents/625510/627014/Photo+Speed+Enforcement+Evaluation+Report.pdf/49b180a0-a9b3-45af-9c41-f53a0a180040 (13 February 2019).



(e.g., in school zones) or walking on the sidewalk at greater risk of being hit. Actively monitoring the speed of vehicles prioritizes public safety on roads and highways.

Not effectively monitoring the automated speed enforcement technology and related process increases the risk of not securing and/or maintaining public confidence in the Program's ability to effectively enforce speed limits, and in turn, reduce speeds, and reduce speed-related collisions.

3.0 AUDIT CONCLUSION

We concluded that for the 12-month period ending September 30, 2018, Saskatchewan Government Insurance had, other than the following areas, effective processes to monitor that the fines issued from its automated speed enforcement program were accurate and reliable.

Saskatchewan Government Insurance needs to:

- **Maintain enforceable formal written contracts with each party key to delivering its automated speed enforcement program**
- **Consistently enforce provisions of its automated speed enforcement program contracts with participating municipal police services (e.g., consistently issue fines to out-of-province speeders)**
- **Periodically determine whether its service provider sufficiently maintains the integrity of data in the IT system used to process fines**
- **Regularly determine whether rejected violations are consistent with its policies**

Figure 2—Audit Objective, Criteria, and Approach

Audit Objective: To assess the effectiveness of Saskatchewan Government Insurance's processes to monitor that the fines issued from its automated speed enforcement program are accurate and reliable for the 12-month period ending September 30, 2018.

Accurate means roadside equipment captures the vehicle speed accurately, and fines are calculated in accordance with applicable legislation. Reliable means only the right vehicle owners receive fines when they should (i.e., when they exceed the speeding threshold), and do so within a reasonable timeframe.

We did not examine SGI's processes to select locations to use automated speed enforcement technology.

Audit Criteria:

Processes to:

1. Set clear responsibilities of key parties involved in issuing fines under the program
 - 1.1 Identify key parties
 - 1.2 Assign responsibilities in writing with key parties consistent with the law (e.g., between SGI, service provider, law enforcement)
 - 1.3 Specify service standards and reporting requirements
2. Oversee issuance of fines under the program
 - 2.1 Identify data required to monitor and issue fines
 - 2.2 Collect required data
 - 2.3 Determine that roadside equipment works as expected (e.g., service provider maintains roadside equipment)
 - 2.4 Monitor integrity of processes to issue fines (e.g., transfer of fine data between parties, IT systems used to issue fines operating as expected)
 - 2.5 Analyze information to identify issues with fines (e.g., trends in issued fines statistics, complaints)
 - 2.6 Promptly adjust program to resolve issues with fines as necessary

Audit Approach:

To conduct this audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance* (CSAE 3001). To evaluate SGI's processes, we used the above criteria based on our related work, reviews of literature including reports of other auditors, and consultations with management. SGI's management agreed with the above criteria.

We examined SGI's policies, procedures, contracts, and records related to monitoring the fines issued from its automated speed enforcement program. We interviewed relevant staff responsible for monitoring and administering the automated speed enforcement program, including staff of SGI's service provider. We tested samples of fines issued, violations not resulting in a fine, and other records (such as training of third party technicians that maintain roadside equipment, technicians' logs from daily roadside equipment testing, and camera calibration certificates).

4.0 KEY FINDINGS AND RECOMMENDATIONS

4.1 Roles and Responsibilities of Key Parties Clearly Defined

SGI identified the key parties necessary to deliver the Program. Contracts between SGI and key parties clearly and appropriately defined the roles and responsibilities of participating municipal governments and their applicable police services, and of its service provider.

At September 2018, the cities of Regina, Saskatoon and Moose Jaw (participating municipal governments) and the Ministry of Highways and Infrastructure participated in the Program along with their applicable police services.

Since the Program's inception, SGI uses a third-party service provider to install, maintain, and operate the technology for the Program, as well as process the identified violations. In general, police services of participating municipal governments and the Royal Canadian Mounted Police (for provincial highways) issue the speeding fines for vehicles identified as violating speed thresholds. Not all violations result in an issued fine.

See **Figure 3** for a summary of this process, and the key responsibilities of each party.

Figure 3—Summary of SGI's Automated Speed Enforcement Program Process

Service provider:

- Cameras take pictures of offending vehicles using laser technology. Laser technology detects and photographs vehicles exceeding a pre-set speed enforcement threshold with no immediate human interaction or traffic stop. The photograph shows the speeding vehicle's make, model and licence plate; and the camera technology records on the photograph information including the date, time, location and speed.
- Each day, technicians send picture files from the cameras to its processing locations, and maintain the cameras; technicians also move location of cameras, as required.
- At its processing locations, in its IT system, validate that the licence plate is legible (e.g., not obscured by snow, ice, a trailer hitch, etc.) using employees who are sworn in Saskatchewan as a Commissioner for Oaths.



For Vehicles Licensed in Saskatchewan	For Vehicles Licensed by other Canadian Provinces
<p>Service provider:</p> <ul style="list-style-type: none"> Gives SGI a list of licence plate numbers from legible photographs <p>SGI:</p> <ul style="list-style-type: none"> Gives service provider registered owner information for listed licence plate numbers <p>Service provider:</p> <ul style="list-style-type: none"> Validates that the registered vehicle information from SGI is consistent with photograph (e.g., vehicle make and model) <p>Applicable police service in area of camera location:</p> <ul style="list-style-type: none"> Issues the fine within seven business days of the violation date, meaning they access the service provider's IT system to validate the fine and it is populated with the peace officer's badge number <p>Service provider:</p> <ul style="list-style-type: none"> Mails the fine along with the photograph to the registered owner of the offending vehicle <p>Registered owner of vehicle identified as speeding:</p> <ul style="list-style-type: none"> Pays the fine to the Ministry of Justice (Provincial Court of Saskatchewan) <p>Ministry of Justice:</p> <ul style="list-style-type: none"> Administers the Provincial Court of Saskatchewan, collects fines, and distributes collected Program fines to participating parties 	<p>Applicable police service in area of camera location:</p> <ul style="list-style-type: none"> Gather the registered vehicle owner information from a national database Issues the fine within seven business days of the violation date, meaning they access the service provider's IT system to validate the fine and it is populated with the peace officer's badge number Mails the fine along with the photograph to registered vehicle owner <p>Registered owner of vehicle identified as speeding:</p> <ul style="list-style-type: none"> Pays the fine to the Ministry of Justice (Provincial Court of Saskatchewan) <p>Ministry of Justice:</p> <ul style="list-style-type: none"> Administers the Provincial Court of Saskatchewan, collects fines, and distributes collected Program fines to participating parties

Source: Provincial Auditor of Saskatchewan adapted from info at www.sgi.sk.ca/photo-speed-faqs (13 February 2019). Blue font identifies difference between processing identified violations for vehicles with in-province and out-of-province licence plates.

Also, SGI gave its service provider policies for the Program (e.g., technicians will visit each camera daily).

Our review of contracts between SGI and each participating municipal government and their applicable police services, Ministry of Highways and Infrastructure, and SGI's service provider found each contract clearly defined each party's roles and responsibilities for the Program, and assigned responsibilities consistent with applicable law.

As noted in **Figure 3**, the Ministry of Justice administers the Provincial Court of Saskatchewan, collects fines, and distributes collected Program fines to participating parties as per applicable legislation.¹³ From March 2015 to December 2018, participating municipal governments and SGI received 75% of the fines assessed from the cameras within their jurisdiction less their share of program costs. The Ministry of Justice retained 25% for the administration of the Court and collections processes. Effective January 1, 2019, the AutoFund will make the net revenues available to any municipal governments approved to receive funding for traffic safety initiatives.¹⁴

Figures 4 and 5 provides a summary of the Program revenues, expenses, and net revenues from 2016 to 2018.

¹³ Following *The Summary Offence Procedures Act, 1990* and *The Traffic Safety (Speed Monitoring) Regulations*.

¹⁴ Order in Council 612-2018 amended *The Traffic Safety (Speed Monitoring) Regulations*.

Figure 4—Automated Fine Revenue and Program Expenses from 2016 to 2018

Calendar Year	(in thousands)		
	Fine Revenue (net of Admin Fees) ^A	Expenses ^B	Net Revenue ^C
2018	\$5,858	\$2,508	\$3,350
2017	4,292	2,390	1,902
2016	5,285	2,338	2,947
Total	\$15,435	\$7,236	\$8,199

Source: SGI Records.

^A Total fines assessed less Ministry of Justice court administration and collection processes fee of 25%.

^B Expenses include cost of the cameras, technicians to maintain the cameras, etc.

^C Net Revenue is Fine Revenue (net of Admin Fees) less Expenses.

Figure 5—Combined 2016 to 2018 Automated Fine Revenues and Program Expenses by Camera Location

Camera Location	(in thousands)		
	Fine Revenue (net of Admin Fees) ^A	Expenses ^B	Net Revenue ^C
Highway Locations ^D	\$1,298	\$861	\$437
Saskatoon	4,419	1,987	2,432
Regina	5,762	2,328	3,434
Moose Jaw	3,956	2,060	1,896
Total	\$15,435	\$7,236	\$8,199

Source: SGI Records.

^A Total fines assessed less Ministry of Justice court administration and collection processes fee of 25%.

^B Expenses include cost of the cameras, technicians to maintain the cameras, etc.

^C Net Revenue is Fine Revenue (net of Admin Fees) less Expenses.

^D Highway locations refer to cameras located in high-speed zones on provincial highways (e.g., near Martensville and White City/Emerald Park). The RCMP issued fines at the Martensville camera location until July 2017, and at the White City/Emerald Park camera location until December 2017. These cameras were moved permanently to the City of Regina and City of Moose Jaw.

Because laws require the Ministry of Justice to collect and administer fines payable to the Provincial Court of Saskatchewan, SGI did not need a contract with it.

In addition, we found it reasonable that SGI did not have a separate contract with the RCMP for this Program, in that it utilized the agreement between the Government of Saskatchewan and the RCMP about policing services provided to Saskatchewan.

4.2 Roadside Equipment Properly Maintained

Roadside technology and cameras (equipment) were maintained properly using qualified personnel, and were properly calibrated. At September 2018, the Program utilized nine cameras (i.e., eight cameras installed in predetermined locations, and one spare).

We found SGI's service provider used trained technicians to complete daily maintenance at each camera location. Our assessment of the training and qualifications of the technicians maintaining the equipment found each technician had sufficient and appropriate training regarding the technology used in the Program.

We found that roadside equipment did not have significant equipment downtime (i.e., time in which the equipment did not operate) for the 12-month period ended September 2018.



For each of the thirty different days we tested, proper maintenance took place at that location as expected (e.g., confirmed proper signage was in place, technology operated correctly). In addition, on one day, we observed a technician completing the expected activities (e.g., maintenance, retrieval of picture files from camera, logging daily activities) at two of the camera locations.

We found all nine cameras had up-to-date certification from the manufacturer to show the cameras were properly calibrated.

As shown in **Figure 6**, about 24.2 million vehicles passed through SGI’s automated speed enforcement cameras during 2018. This resulted in almost 130,000 records (i.e., photographs taken) and about 110,000 violations. Not all photographs are violations (e.g., technicians take photographs daily while testing each camera).

Figure 6—2018 Automated Speed Enforcement Camera Activity^A

(thousands)			
Camera Location	Traffic Count	Total Violations	Violation Percentage
Moose Jaw	3,415	40.8	1.19%
Regina	9,812	35.7	0.36%
Saskatoon	10,968	32.9	0.30%
Total	24,195	109.4	0.45%

Source: Provincial Auditor of Saskatchewan derived from SGI’s service provider monthly program reports.

^A For calendar year.

4.3 Contracts with Key Parties Not Renewed Prior to Expiration

At February 2019, SGI is operating the Program with expired agreements with key parties. Also, SGI’s contracts with each of the key parties did not contain provisions that allow them to continue past their stated term. At February 2019, they continued to do so.

SGI’s contracts with each of the key parties necessary to deliver the Program expired near or before the beginning of February 2019. SGI did not finalize new contracts with these parties prior to their expiration even though it knew before September 2018 that the Program would become permanent.¹⁵

SGI’s contract with:

- The City of Saskatoon expired in March 2017, and Saskatoon Police Service in early February 2019. The City of Regina, Regina Police Service, City of Moose Jaw, Moose Jaw Police Service, and Ministry of Highways and Infrastructure each expired early February 2019. SGI signed a contract amendment with the City of Saskatoon in November of 2018. This contract expired in February 2019.
- SGI’s contract with its service provider expired in January 2019. They signed an amendment to this contract in February of 2019. The amended contract expires in January 2020.

¹⁵ www.saskatchewan.ca/government/news-and-media/2018/september/17/photo-radar (14 February 2019).

- As of March 2019, SGI is in discussions with key parties about finalizing new contracts with its key parties.

By operating under expired contracts with key parties, SGI may have difficulty enforcing the components of each contract (e.g., issuing all fines within seven business days of when a photograph is taken).

1. **We recommend that Saskatchewan Government Insurance maintain enforceable formal written contracts with each party that is key to delivering its automated speed enforcement program.**

4.4 Service Provider Contract Includes Almost All Expected Service Requirements

SGI's contract with its service provider outlined almost all key service standards that it expected the service provider to provide.

Key service standards included were periodic rotation of camera locations between specified locations, payment parameters, and training requirements.

Although SGI clearly expected its service provider to give the applicable police service the photograph of the speeding violation within five business days from the date the photograph was taken, it did not set this expectation in the contract.

For each of the 40 photographs we tested, the service provider consistently processed photographs within the informal five-business day target.

Not including its expectation in the contract may make it more difficult for SGI to enforce its expectation if the service provider does not meet SGI's expectation. See **Recommendation 1** about maintaining enforceable contracts.

4.5 SGI Collected Relevant Data from the Service Provider to Enable Monitoring of Program

SGI, through its service provider, collected sufficient and appropriate data to determine whether the cameras were operating as expected, and to monitor issuance of fines under the Program.

SGI identified data that it considered necessary to monitor the Program. Key data was by camera location and included traffic count, number of pictures taken, number of speeding violations, and listing of fines issued. It required its service provider, through contract, to provide it with this data (at least quarterly).

SGI received detailed monthly reporting from its service provider that included the expected data.



4.6 Municipal Police Services Not Always Processing Violations within Expected Timeframes

SGL did not actively monitor whether applicable municipal police services reviewed violations within seven business days as required.

SGL's contracts with police services of participating municipal governments require the police service to reject, or review and approve violations (i.e., photographs) within seven business days from the violation date.

For 12 of 30 (40%) fines we tested, the applicable municipal police service did not reject or approve the violation within seven business days. One fine took 31 business days for the police service to approve.

Issuing fines to registered owners of vehicles caught speeding promptly provides an earlier opportunity to impact motorist behaviour and encourage driving within the speed limit. See **Recommendation 2** about consistently enforcing contracts with participating municipal police services.

4.7 Fines Not Issued Consistently to Out-of-Province Speeders

Even though its contracts required it, SGL did not require two of the three police services of participating municipal governments to issue Program fines to registered owners of out-of-province vehicles caught speeding.

In practice, only the RCMP and Moose Jaw police service issued fines to out-of-province speeding vehicles under the automated speed enforcement program. The Regina and Saskatoon police services did not.

We did not observe that SGL actively attempted to enforce its contracts to require these municipal police services to issue fines to out-of-province speeders.

For the twelve-month period ending September 30, 2018, there was about 13,400 out-of-province violations at Moose Jaw camera locations. Moose Jaw Police Service issued over 12,300 fines to registered owners of out-of-province vehicles based on violations identified by the Moose Jaw camera locations.

Our review of Program data estimates that the Regina and Saskatoon police services did not issue fines for about 4,200 violations combined because the vehicle was from another province.

Not issuing fines to all registered owners of out-of-province vehicles identified as speeding results in inequitable treatment of registered owners of in-province and out-of-province vehicles that the Program caught speeding in Regina or Saskatoon. Not issuing fines to registered owners of out-of-province vehicles results in not using fines to provide a deterrence to speeding. If SGL chooses to give municipal police services the option to issue Program fines to out-of-province speeders, it should amend its contract requirements.

2. We recommend that Saskatchewan Government Insurance consistently enforce all provisions of its automated speed enforcement program contracts with participating municipal police services.

4.8 Better Monitoring of the Automated Speed Enforcement IT System Needed

SGI did not periodically determine the integrity of data in the IT system that its service provider used to process photographs of vehicles (the automated speed enforcement IT system).

Data integrity is keeping data consistent throughout its entire processing. This includes appropriately protecting it to keep it reliable. Data integrity includes data security (e.g., user access), IT change management, disaster recovery, and back ups.

The service provider uses an IT system to process speed violations and related fines (automated speed enforcement IT system). For example, the automated speed enforcement IT system electronically matches information captured by the laser technology to SGI-provided information (i.e., pertinent data on the licence plate like vehicle make, vehicle model, and registered owner of vehicle). In addition, the service provider shares information in this system with applicable police services to enable them to validate fines (i.e., issue fines) and to enable registered vehicle owners receiving fines to view the photographs that led to the fines.

SGI did not ask its service provider to give it information about the integrity of the data in the automated speed enforcement IT system. In addition, since the inception of the program (in 2014), SGI had not done this assessment itself.¹⁶

Rather SGI limited its assessment to determining whether changes to fine rates in the automated speed enforcement IT system were correct, monitoring complaints about the Program, and monitoring whether fine recipients challenged fines in the courts. See **Section 4.12** for further detail about SGI's liaison with the Ministry of Justice.

We found SGI sufficiently tested the May 2018 change of fine rates in the service provider's IT system.¹⁷ SGI assessed that the system correctly calculated fines using the updated rates, and approved the changes.

We assessed the integrity of data processed in the automated speed enforcement IT system, and found the following.

- For each of the 40 photographs we tested, the service provider processed the photograph as expected (e.g., rejected the photograph if it did not meet SGI's Program policies or passed the photograph on to the appropriate municipal police service if the photograph met SGI's Program policies).

¹⁶ SGI's contract with its service provider gives SGI access to audit the service provider's records.

¹⁷ At times, changes in legislation (e.g., *The Traffic Safety Act*, *The Summary Offences Procedures Regulations*, 1991) necessitate changes to the automated speed enforcement IT system. For example, fine amounts changed in May 2018.



- The service provider properly segregated and assigned user access. That is, it gave access to SGI Program information to users with identified business needs, and the abilities it gave them aligned with their business needs (e.g., police services access related to validating the fines).
- Password requirements were adequate.
- The service provider operated the automated speed enforcement IT system at multiple locations in Canada (i.e., Winnipeg and Edmonton). This meant the service provider could process photographs from Saskatchewan's laser technology in an alternate location in the event of a disruption.

However, the service provider could not show us that it backed up data from the automated speed enforcement IT system each day. The service provider did not keep complete logs of its backups. Backing up data is copying data, and storing it in a location for use in restoring the original data in event of a data loss event.

Not maintaining sufficient evidence of backups increases the risk that the service provider may not complete backups appropriately. Failure to back up data increases the risk that important Program data could be lost if the IT application were to fail. Lost data may affect the ability to issue fines in a timely way (e.g., have to re-enter and re-process photograph data), and increases the risk that fine information may not be available if challenged in court.

Not periodically determining the integrity of data in the automated speed enforcement IT system meant SGI did not know whether data in the automated speed enforcement IT system was sufficiently protected.

- 3. We recommend that Saskatchewan Government Insurance periodically determine whether its service provider sufficiently maintains the integrity of data in the IT system the service provider uses to process automated speed enforcement program fines.**

4.9 Fines Issued in Accordance with Legislation and SGI Policy

Fines from the speed enforcement program were issued consistent with legislation and to the registered owners of vehicles identified as speeding.

For each of the 30 fines issued that we tested, the fines levied were consistent with applicable legislation (e.g., *The Traffic Safety Act*, *The Summary Offences Procedures Regulations*, 1991). For each of these, SGI's service provider appropriately processed, and the applicable police service approved the fine, before mailing it to the registered owner of the vehicle.

Also, we found SGI extracted vehicle owner information from its AutoFund IT system for violations by vehicles licensed in Saskatchewan. Each day, it gave this information to its service provider.

4.10 Steps Taken to Reduce Violations

SGI actively monitored violation percentages, and took steps to try to reduce violations in areas with higher than expected rates of violations.

SGI reviewed monthly Program statistics received from its service provider. SGI tracked various statistics each month, and assessed whether monthly violations (from all camera locations) was within its target violation rate of below 1%.

SGI met its overall goal of a violation percentage of below 1% during the 12-month period ending September 2018. As shown in **Figure 7**, this percentage varied by camera location, and between school zones and high-speed locations (e.g., Ring Road in Regina).

We found that SGI was aware that a number of camera locations exceeded this 1% goal. For example, both Moose Jaw and Saskatoon school zones had violation percentages in excess of 1%. It took steps to try to reduce the violation rate in these areas. For example, SGI added more signage for cameras located in school zones.

During the 12-month period ending September 30, 2018, the total violation percentage for the province was 0.47%.

Figure 7—Violation Rates between October 1, 2017 and September 30, 2018

Location	Total Traffic Count (in thousands)	Violation % ^A
Moose Jaw – High-Speed Locations (Highway #1)	2,572	1.31%
Moose Jaw – School Zones	452	1.01%
Regina – High-Speed Locations	6,870	0.20%
Regina – School Zones	2,976	0.71%
Saskatoon – High-Speed Locations	9,704	0.23%
Saskatoon – School Zones	458	2.11%
RCMP (White City/Emerald Park) – High-Speed Location	494	1.03%
Total	23,526	0.47%

Source: Provincial Auditor of Saskatchewan derived from SGI's service provider monthly program reports.

^ABlue font indicates locations where the violation percentage exceeded SGI's goal of below 1%.

Other than for rejected violations, SGI made key monthly statistics public by posting them on its website within a reasonable timeframe (about monthly). Key monthly statistics include the monthly number of violations, the violation percentage each month, the highest recorded speed each month, and the total number of fines issued.

4.11 Monitoring of Rejected Violations Needed

SGI did not periodically determine whether rejections of violations were consistent with its policies and expectations.

Although it received information about violations rejected, SGI did not review the reasonableness of reasons for rejecting violations, or determine whether it needed to take steps to reduce rejections. As previously stated, a rejected violation is where a violation occurs (i.e., motorist exceeds the pre-determined speed threshold and a photograph of



the motorist's vehicle is taken) but a fine is not ultimately issued to the registered owner of the vehicle.

In addition, SGI did not establish a threshold(s) of what it viewed as a reasonable amount of rejected violations.

We found that the provincial violation rejection percentage of speeding violations for the 12-month period ending September 30 2018 was about 44%. As shown in **Figure 8**, obstructed plates (for almost 60%) was the most common reason for the service provider or police services to reject violations, with policies (including police services choosing not to issue fines to out-of-province speeders) being the second most common reason (for about 34%).

Figure 8—Reasons for Rejecting Violations between October 2017 and September 2018

Reason for Rejecting a Violation	Number of Violations Rejected	Percentage of Violations Rejected
Obstructed Plate (e.g., licence plate covered by snow or mud)	29,279	59.85%
Policy (e.g., out-of-province licence plate [i.e., choice made by Regina and Saskatoon police service], out-of-country licence plate)	16,684	34.10%
Bad Photograph (e.g., too much glare)	1,121	2.29%
Emergency Vehicle (e.g., ambulance)	527	1.08%
No Plate	751	1.54%
Equipment Issue	10	0.02%
Other	551	1.12%
Total	48,923	100%

Source: Provincial Auditor of Saskatchewan derived from SGI's service provider monthly program reports.

For each of the 10 rejected violations tested, the reason for the rejection aligned with SGI's policies and supported the decision to not to issue a fine. For the items we tested, the common reasons for rejecting a violation included an obstructed licence plate, a bad photograph (e.g., glare made the licence plate number unreadable), or a policy decision by a police service (e.g., out-of-country licence plate).

Establishing a threshold(s) and/or reviewing trends may help SGI monitor the amount of rejected violations and identify trends. This in turn may help to identify Program improvements or areas for additional public education of traffic safety laws (e.g., making public aware fines exist for failure to maintain readable licence plates).

Improving its monitoring of rejected violations would allow SGI to better monitor that the service provider and applicable police services issue all fines that should be, and comply with SGI's Program policies. It will also help ensure equitable treatment of violators.

- We recommend that Saskatchewan Government Insurance periodically determine whether its service provider or police services of participating municipal governments rejected automated speed enforcement program photograph violations in accordance with its policies.**

4.12 SGI Reaches Understanding of Results of Fines Taken to Court

SGI takes steps to be aware of, and actively understand the results of fines from the Program taken to court.

SGI participates on a Ministry of Justice Committee on Traffic Safety Initiatives. Through this Committee, SGI periodically meets with Ministry of Justice officials about various matters including the Program. SGI also periodically discusses issues that arise with traffic safety court prosecutors pertaining to the Program.

SGI indicated it leveraged information from its participation on the Committee, and through discussions with the prosecutors, to identify potential issues or trends that may affect the Program.

4.13 Process to Track and Respond to Complaints Established

SGI systematically tracks complaints received about the Program.

SGI receives very few complaints about the Program each year. For the 12-month period ending September 2018, SGI received and responded to two complaints about the Program.

We found SGI responded to each complainant in an appropriate (i.e., formal letter) and timely manner.

5.0 SELECTED REFERENCES

ACT Auditor-General's Office. (2014). *Speed Cameras in the ACT*. Canberra: Author.

Provincial Auditor of Saskatchewan. (2014). *2014 Report – Volume 2, Chapter 32 Economy-Monitoring IT Service Providers*. Regina: Author.

Queensland Audit Office. (2015). *Road Safety – Traffic Cameras*. Brisbane: Author.

SGI. (2018). *2017-18 Saskatchewan Auto Fund Annual Report*. Regina: Saskatchewan Government Insurance.
www.sgi.sk.ca/documents/625510/626999/2948_Auto_Fund_2017_Annual_Report_final_web.pdf/58428697-7574-4b35-a413-2bc97a01c807 (13 February 2019).

SGI. (2018). *An Evaluation of the Photo Speed Enforcement Pilot Program in Saskatchewan: (March 2015 – March 2017) Final Report*. Regina: Saskatchewan Government Insurance.
www.sgi.sk.ca/documents/625510/627014/Photo+Speed+Enforcement+Evaluation+Report.pdf/49b180a0-a9b3-45af-9c41-f53a0a180040 (13 February 2019).

Tasmanian Audit Office. (2009). *Special Report No. 85 – Speed-Detection Devices*. Hobart: Author.

Victorian Auditor-General's Office. (2011). *Road Safety Camera Program*. Melbourne: Author.

