Annual Report

Chief Safety and Risk Officer

Technical Standards and Safety Authority

Province of Ontario

November 2018

Daniel Hoornweg, PhD, PEng

Reporting Period

This Annual Report covers the period May 1, 2017 to April 30, 2018.

The CSRO is required to provide a minimum of two reports every year; a review of TSSA's Annual Public Safety Performance Report (ASPR) and this Annual Report.

Combined recommendations will be provided in the review of TSSA's 2018 ASPR.

1. Summary of Recommendations

- (i) Attachment 1 <u>Action Plan to Address TSSA Undertakings to CSRO</u> <u>Review</u> and Attachment 2 <u>MGCS Comments on CSRO Report</u> provide last year's CSRO recommendations and TSSA and MGCS responses.
- (ii) As recommended in several earlier reports, as soon as possible, TSSA should have at least its elevating devices data publicly available on its website (or alternate location). So too should a dynamic registry of licensees and certified operators and facilities be available on TSSA's website. As much as possible, access and usability of the data should be consistent with other 'Open Ontario' data sets (this is understood to be a TSSA 20/20 priority).
- (iii) TSSA is commended for inclusion of the baseline comparisons regularly provided in the ASPR. This should continue and ideally grow in partnership with other safety regulators, e.g. how safe are Ontario's elevators (or ski lifts, etc.) relative to another jurisdiction.
- (iv) TSSA's goal to be a 'modern regulator' needs to reflect the aspirational nature of a modern regulator (i.e. it is a continuous improvement process), the need for multi-sector and intra-agency collaboration, the potential economic contribution of good public safety regulation, and the critical nature of the relationship with the Government of Ontario (e.g. MGCS).

2. Data Management

Consistent with earlier recommendations and establishment of the Chief Information Officer (CIO) position June 2012, review of current approaches and development of an improved management system is underway. Shortcomings with the current system were identified and steps to remedy and develop a more robust system are proceeding (i.e. the TSSA 20/20 program). The following suggestions were made in previous reports:

- (i) Make elevator inspection schedules public;
- (ii) Review and report on the merits of opening TSSA data on other inspected operators and sectors, e.g. boilers and pressure vessels;
- (iii) Prepare a plan for TSSA database(s) to be placed on 'Ontario Open Data';
- (iv) Develop and share analytic tools on risk events and maintenance priorities, particularly with local governments.

3. Baseline Comparisons and Benchmarking

Previous CSRO reports discussed the need to benchmark performance of activities overseen by TSSA to other jurisdictions (with a focus outside Canada), e.g. safety performance and cost levels. This should continue. An additional aspect that should be benchmarked is the means and frequency of regulatory updates. A critical aspect of TSSA's capacity is the nature of the relationship between the government (regulator) and delegated authority. This relationship should be monitored, and benchmarked, as part of ongoing oversight.

4. Elevating Devices

A key development in the elevating device (ED) sector this FY was introduction of *The Reliable Elevators Act 2017*. Bill 109 would amend the law with respect to elevators in the following respects:

- First, a person who applies for a permit to construct a building with seven or more stories must show that building will have sufficient elevator capacity;
- Second, elevator maintenance contracts are subject to the protections under the *Consumer Protection Act, 2002*; and,
- Third, an elevator that breaks down must be repaired within 14 days for most buildings, seven days for long-term care homes and retirement homes, unless the regulations provide otherwise.

Regulating for Availability

The private members bill introduced by Han Dong MPP (Trinity-Spadina) commits Ontario to be the first jurisdiction in the world to legislate elevator repair timelines. The Trinity-Spadina (Toronto) neighborhood has one of Ontario's highest concentration of condominiums (many owners and occupants complained to their local MPP about elevator availability).

The impact of Bill 109 will take several years to manifest, however important lessons are already apparent. The Bill, mainly focused on elevator availability (i.e. convenience), was introduced with key aspects assigned to TSSA, the Province's ED *safety* regulator. It is similar to gas station *availability* in Northern Ontario, where the province's varied geography introduces unique challenges to public safety regulations.

The challenges of regulating public safety *vis a vis* availability were also evident when members of the International Union of Elevator Constructors across Ontario were on strike May 1 to July 10, 2013. The strike highlighted the critical role of elevators and the overlaps between safety and availability. As these inherent overlaps grow, safety regulators overseeing relatively large (geographic) jurisdictions may well rely more on local governments assuming some necessary functions. Local governments tend to be more reflective of local conditions, e.g. the City of Toronto may need to play a larger role in areas such as elevators in condominiums, while a remote municipality like Machin may take a larger role in the gas station(s) of Vermillion Bay. Elevator availability in retirement homes might be addressed through broader service contracts. Fees, taxes, and their assignment will influence much of the shift between potential overseers of safety and availability.

TSSA's recently-introduced 'Keeping Seniors Safe' program customizes regulatory oversight (see TSSA brochure and 16 April 2018 blog post by Jeff Lemoine). 'One of TSSA's primary objectives is to ensure public safety when elevators are being used; this is particularly so where seniors are concerned. By increasing awareness the risk of elevator-related injuries to residents in retirement and long-term care homes can be minimized.

TSSA is working to encourage owners, managers and operators within retirement facilities to:

- Leave the doors open on devices that have automatic firefighter's emergency operation (FEO) unless the elevator has been called from another floor;
- Extend the door time to the maximum allowable by code on those devices without FEO;
- Decrease the speed of door(s) to best accommodate the ability of the building's residents;
- Adjust closing force below the code maximum, yet sufficient to close the door;
- Eliminate door pre-opening to ensure the elevator is level before the doors open; and
- If your elevator has full automatic FEO you should consider disabling the nudging operation as it is not required during normal operation. Your contractor should ensure that the elevator is still compliant, and any smoke sensitive door reopening devices are by-passed during FEO.

The shift to a 'modern regulator' requires local-based, and as much as possible, stakeholder-specific solutions. Increasingly, other attributes of the regulated service, such as availability, cost and ease of operation, need to be integrated within safety requirements.

5. A Modern Regulator

Like most regulators, TSSA aspires to be a 'modern regulator'. TSSA's vision is to be 'a valued authority for a safer Ontario'. The foundational enablers to achieve this are engaged people and effective teams along with a solid operational foundation. Strategic goals include a modernized regulatory framework, service excellence, safety awareness and active compliance. These are all underpinned with the values of: safety, leadership, integrity, respect, accountability, communication and collaboration (from FY2017 Safety in Action).

Annex 1 provides an initiating discussion for efforts toward a modern regulator. Tom Ayres, Vice President and Chief Counsel, TSSA heads the review, with an initial draft expected in FY2019.

In addition to regulatory models, financial structures, and compliance history, key aspects that should be considered when reviewing efforts toward a modern regulator include:

- The role of trust,
- Shifts to digital and platform technologies, and
- The rapid onset of new and potentially disruptive technologies.

Trust in government – and by extension, government appointed regulators – is declining rapidly. The decline is evident in Canada (Figure 1). The modern regulator needs to acknowledge the decline in trust and actively nurture its renewal (the absence of trust quickly erodes public safety).

New technologies like autonomous vehicles, hydrogen, and electric vehicles (including watercraft) are emerging quickly (Figure 2). These could have a profound impact on TSSA – what is regulated and where revenues are derived.

New Victorians Needed¹

During the 19th century, while the negative impacts of industrialization became apparent, the Victorians passed laws and safety regulations to alleviate the most egregious side-effects. Contentious at the time, legislation was introduced to temper child labour, open sewers, and dangerous working conditions. These

¹ Paraphrased from 'Where are the Victorians when you need them? David Rimmer, blog June 12, 2018

regulations were underpinned by new institutions such as Factory Inspectorates, Public Health Boards and Interstate Commerce Commissions in the US.

Today's digital age demands a similar response yet analogous institutions have not evolved. Current institutions are based on physical constructs, whereas the digital world is virtual and global. New institutional models are needed but this requires public support. Modern regulation will need to develop these new intuitions or overhaul existing ones, and similar to London and the UK in the late 1800s, these institutions will likely need to evolve from local efforts, despite – or in full recognition of – global trends.

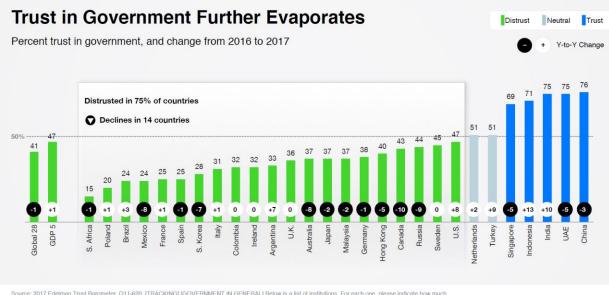


Figure 1: The Rapid Loss of Trust in Government (including Canada)

Source: 2017 Edelman Trust Barometer O11-620, [TRACKING] [GOVERNMENT IN GENERAL] Below is a list of institutions. For each one, please indicate how much you trust that institution to do what is right using a nine-point scale where one means that you "do not trust them at all" and nine means that you "trust them a great deal." (Top 4 Box, Trust) General Population, 28-country global total.

GDP 5 = U.S., China, Japan, Germany, U.K.

From, Edelman Trust Barometer. 2018 and 2017 Global Report.

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Figure 2: Shifting Fuels – the Emergence of Hydrogen



Three hydrogen-powered cars in front of Vancouver's first hydrogen fuel station. June 15, 2018. *Courtesy CTV News.* A similar station also opening in Quebec City in 2019

References

Community of Federal Regulators (CFR) International Workshop on Risk-Based Regulatory Delivery. Workshop summary and recommendations. January 2018

Edelman Trust Barometer. 2018 and 2017 Global Report.

Moller, Niklas and Sven Ove Hanson. Principles of engineering safety: Risk and uncertainty reduction. J. Reliability Engineering and System Safety 93(2008) 776-783

Ontario Digital Inclusion Summit: Summary Report, Public Policy Forum. May 2018

Ontario Public Service (OPS) of the Future. 2018 Action Plan

Technical Standards and Safety Authority (TSSA), Safety Matters, Annual Report FY 2017 and Safety in Action, Annual State of Public Safety Report FY 2017

World Economic Forum. Global Risks 2018 (Thirteenth Edition)

Annex 1: Initial Discussion – Modern Regulation (From previous reports)

Moving toward a 'modern regulator' is an objective of many agencies in many jurisdictions. The concept seeks a dynamic balance between reducing risks (enhancing safety) with as little imposition of cost and effort.

Regulatory modernization principles in Ontario

The Ontario government reaffirmed its commitment to modernizing regulations in the 2016 Fall Economic Statement. The Province's Regulatory Modernization Committee formulated six principles that serve as a lens through which to view burden reduction activities:

- 1. Focus on the user by writing regulations in plain language and creating a single point of contact for business to access information or government services.
- 2. Use international industry standards (e.g. ISO) where available/appropriate to eliminate redundant reporting requirements.
- 3. **Move to risk-based inspections**: reduce the enforcement burden on businesses with a strong safety and compliance record, using accreditation to distinguish good actors from high-risk targets; better coordinate inspections among ministries and agencies.
- 4. **Create a 'Tell Us Once'** culture where all ministries that interact with business use the Business Number so businesses do not provide the same information to government repeatedly.
- 5. **Apply a small business lens** by setting different compliance paths to achieve desired outcomes, rather than using a one-size-fits-all approach.
- 6. **Go digital** and reduce paper-based transactions by delivering simple and straightforward digital services and products that will modernize public service delivery and make government work better for businesses. [from website].

"The administrative and legal support to meet regulatory requirements is too costly. This is a serious risk to the future of the province as innovation is considered the driver of Ontario's future economic growth."

Ontario Institute for Competiveness and Prosperity, Sept 2017

In order to 'modernize' Ontario's regulatory system, and as a way to help build a 'smarter regulatory environment' for businesses the Government of Ontario is updating the Open for Business strategy to include:

- Red Tape Challenge a public consultation for Ontarians to identify and work with the government to reduce regulatory burdens while protecting public interest
- **Regulatory Centre of Excellence** to identify regulatory best practices from around the globe and promote them in the province
- Regulatory Modernization Committee to oversee the review of our existing regulatory environment
- **Government Modernization Fund** that will help improve service delivery and regulatory processes for businesses owners
- **Regulatory Burden Reduction Team** to address regulatory bottlenecks [from website].

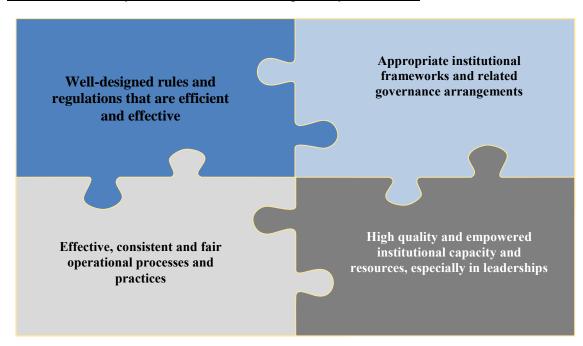
The modern regulator – A local and global need

The Regulator is empowered to execute the regulation, however in today's complex mix of risk and public safety objectives, rarely does one regulator have exclusive responsibility to reduce a risk or implement a public safety program. Modern regulation requires a dynamic team of safety partners. Identifying and nurturing these partnerships is an evolving task.

Partnerships evolve for competitive as well as cooperative purposes. Ontario's regulatory modernization efforts are part of the Business Growth Initiative, with a key objective to enhance Ontario's global competiveness, e.g. burden reduction targets of \$100 million in cost savings by 2017.

Cooperative regulatory partnerships are also evolving quickly, both within and across geographies. In Ontario, for example, new agencies and programs are emerging with great potential for cooperative efforts, e.g. in condominiums (newly mandated Condominium Authorities and CO and elevator availability objectives) and single-family residences (energy audits, licensed home inspectors, CO objectives).

Across jurisdictions, cooperative regulatory partnerships are developing. Provinces (and states) and national governments, along with cities (municipalities and urban regions), for example, are exploring ways to regulate mobility platforms and data-management systems (see Box 1).



Box 1. Necessary elements for better regulatory outcomes

From, OECD, 2016

Annex 2: Annual Work Plans – Chief Safety and Risk Officer

FY18 Work Plan – completed

<u>Review Key Reports</u> Review and provide comments on the 2016-2017 Annual Public Safety Performance Report (ASPR) and TSSA Annual Report. [final reports submitted]

<u>Prepare CSRO's Annual Report</u> - Consolidate reviews and recommendations and summarize observations for the year. Discuss report with TSSA staff and the Board, as well as MGCS. [final report submitted]

Prepare with TSSA and industry partners a 2017 Risk in Ontario report. [update included in 2017 Annual Report]

<u>Data Management</u> - Continue to review TSSA's data management system modernization and support with other Provincial agencies; comment on data robustness. [see Annual Report]

Monitor and where requested comment on safety policy proposals. [meetings attended and reports reviewed for Elevator Availability study]

<u>Benchmarking</u> Continue review on global comparators of TSSA's delegated tasks where available, and assess global practices on Elevating Devices (ED), Operating Engineers (OE) and fuels.

Attend representative Advisory Council meetings, review minutes, and conduct random field visits with TSSA inspectors. Attend TSSA staff meetings and Board meetings as requested. Conduct at least one visit to Northern Ontario. [Thunder Bay visit June 2017]

Respond to possible requests from the TSSA Board and/or Minster of Government and Consumer Services. [review of 'TSSA as Modern Regulator' deferred to FY2019, now led by Tom Ayers, TSSA]

FY19 Work Plan – in progress

<u>Review Key Reports</u> Review and provide comments on the 2017-2018 Annual Public Safety Performance Report (ASPR) and TSSA Annual Report.

<u>Prepare CSRO's Annual Report</u> - Consolidate reviews and recommendations and summarize observations for the year. Discuss report with TSSA staff and the Board, as well as MGCS.

Prepare with TSSA and industry partners a 2018 Risk in Ontario report; include in 2018 Annual Report.

<u>Benchmarking</u> Continue review on global comparators of TSSA's delegated tasks where available, and assess global practices with a particular focus on Elevating Devices (ED), Operating Engineers (OE) and fuels.

Continue to monitor progress on: (i) operating engineers, (ii) 'special' buildings and populations, e.g. seniors' residents and schools, (iii) reviews of elevator availability, and (iv) risk informed regulatory development.

<u>Data Management</u> Continue to review TSSA's data management system and TSSA 20/20 progress.

Attend representative Advisory Council meetings, review minutes.

Conduct random field visits with TSSA inspectors. Attend TSSA staff meetings and Board meetings as requested. Conduct at least one visit to Northern Ontario.

Respond to possible requests from the TSSA Board and/or Minster of Government and Consumer Services.

Proposed Budget for FY19

Description	No of days	Amount
Per Diem		
Report reviews (TSSA's AR and ASPR and miscellaneous internal TSSA and MCS reports); Preparation of CSRO Annual Report and ASPR Review; Meeting attendance, Field Visits and Benchmark Study Oversight	40 days @ \$1,880/day	\$75,200*
Expenses		
Travel, other		\$10,000
TOTAL:		\$85,200

*includes HST

Annex 3: Chief Safety and Risk Officer Mission

The Chief Safety and Risk Officer's (CSRO's) mission is to provide the Board of Directors with an independent review of safety activities related to the public safety responsibilities assigned to the Technical Standards and Safety Authority (TSSA) pursuant to the Technical Standards and Safety Act (Act). To this end, the CSRO will furnish analysis, recommendations and information concerning the safety activities reviewed within the scope outlined below. In performing his or her role, the CSRO will strive to be an advocate for public safety and take a forward-looking approach based on current best practices and trends.

Chief Safety and Risk Officer Charter

Role. The CSRO function and primary duties are established under the Act and supplemented by the Memorandum of Understanding (MOU) between TSSA and the Minister of Government and Consumer Services (Minister). This independent function, which is not performed by an employee of TSSA, reports to the Board of Directors with oversight provided by the Governance, Safety and Human Resources Committee (GSHRC).

Authorization and Responsibilities. Authorization is granted for full and complete access to any of the organization's records (either manual or electronic), physical properties and personnel relevant to the CSRO's engagement. Documents and information given to the CSRO during a periodic review will be handled in the same prudent and confidential manner as by those employees normally accountable for them.

The CSRO has no direct responsibility or any authority over any of the activities or operations that they review. In particular, the CSRO will not:

- report or comment on any finding of liability or fact or on any investigation, whether initiated by the corporation or another enforcement body, any legal proceeding, or reasonably foreseeable legal proceeding involving the corporation or the Ministry;
- report or comment on any action, or decision, by a statutory director under the Act, nor interfere in any duty, or power of a statutory director;
- investigate or review specific incidents, or individual complaints; or
- accept any statutory, regulatory, administrative or enforcement responsibilities.

The scope of the CSRO's engagement encompasses the following activities:

- pursue any safety matters that the Board or the Minister may request or any safety matters as determined by the CSRO to be in the public interest;
- review the adequacy and effectiveness of TSSA's public safety risk management systems;
- review established public safety risk management systems, policies and procedures to ensure the organization is operating consistent with best

practices;

- appraise TSSA's report on the adequacy and effectiveness of the organization's safety management framework to ensure compliance with the delegated act and regulations;
- appraise public safety strategies TSSA has established to ensure that the regulatory framework continues to meet the needs of public safety;
- appraise TSSA's report to the Board of Directors on recent developments involving the regulatory framework under which TSSA operates, including the proposed annual regulatory plan that outlines priorities and supporting rationale;
- review, analyze and report on TSSA's annual safety performance reports;
- provide draft reports and meet with the GSHRC annually or as required to report on the delivery of responsibilities and maintenance of independence; and
- submit an annual report to the Board of Directors.

Reporting Accountabilities

The CSRO shall prepare a report on his or her independent review of TSSA's safety activities or proposed safety activities related to TSSA's delegated responsibilities under its Act, including comments on TSSA's annual safety performance report.

The CSRO shall also prepare a report on an annual basis and this report shall include an overview of the CSRO's activities and operations highlighting key recommendations arising out of any other report issued by the CSRO in the preceding year, and any other safety matter the CSRO considers relevant consistent with the Act, MOU and this mission and charter.

The CSRO may also be required to prepare other reports as may be requested by the Board or the Minister.

The CSRO may also prepare a report on any mater related to TSSA's safety activities or proposed safety activities if the CSRO considers it in the public interest to do so.

Where either the Board or the Minister requests a report, the CSRO shall provide the report within the time indicated by the Board or the Minister as the case may be. For all CSRO reports other than reports requested by the Minister, the following process will be followed:

The CSRO will advise the Chair, GSHRC when a draft report has been prepared and TSSA management will be given an opportunity to correct any factual errors for the CSRO's consideration. In addition, management may provide comments on the draft report that will be included as an addendum when the report is reviewed by GSHRC. Following GSHRC's review, the finalized report will be provided to the Board of Directors (with a courtesy copy of the report provided to the Deputy Minister) for review, and acceptance. Following Board review, the CSRO will provide the Board accepted report to the Minister for review.

For reports requested by the Minister, the following process will be followed:

The CSRO will acknowledge the Minister's request for a report in writing and provide a draft Terms of Reference for review and approval by the Minister. A draft of the report will be provided to the Deputy Minister and TSSA management at the same time for factual review. The final report will be submitted concurrently to the Board and the Minister prior to its public release.

Final reports of the CSRO will include management's response as an addendum, if any. The CSRO will provide the Minister with thirty days to review all reports prior to public release. All reports will be made available at the corporation's annual meeting and otherwise made available to the public by such means as determined by the CSRO.

The CSRO will be reviewed and assessed on an annual basis by the Board of Directors.

Clarification of Organizational Responsibilities

The Board of Directors is accountable to the Minister for TSSA's safety performance, regulatory governance, including the appointment of the CSRO with the consent of the Minister and approval of the CSRO work plan and supporting budget.

The GSHRC assists the Board of Directors in fulfilling its responsibilities related to safety performance, regulatory governance and oversight of the CSRO, including making recommendations to the Board of Directors regarding the CSRO's appointment, mission and charter, work plans and budget, performance and independence.

The President and CEO is ultimately responsible and assumes ownership for the delivery of effective safety performance, regulatory governance, while acknowledging the independence of the CSRO and statutory directors appointed under the Act.

The Vice President, Operations, has responsibility and accountability for the delivery of the organization's safety services in all programs, contributes to organizational strategy and direction, and establishes and delivers on organizational goals and objectives.

The Program Directors combine the responsibilities of the statutory director with

those of an operational director with the following responsibilities:

- making independent statutory decisions as required by the Act and regulations;
- managing safety risks borne by the public;
- managing the quality of TSSA's regulatory performance with respect to its contribution to public safety risk management; and
- managing non-safety aspects of financial performance, organizational effectiveness, human resources, customer satisfaction, and other corporate goals.

The Senior Advisor, Public Safety and Risk Management (PSRM) is TSSA's internal safety accountability advisor. The Senior Advisor, PSRM works with the statutory directors to enhance the quality of public safety decision making by giving strategic advice that promotes objective, quality decision making and providing formal risk management tools and processes.

Work Plans

Annually the CSRO will develop and provide a work plan to GSHRC for review with input from management and approval by the Board of Directors. In addition, to the required annual review of safety performance reporting, the plan will identify the areas or safety activities of the organization selected for review. The areas and safety activities selected will be based on perceived risk to public safety with respect to TSSA's regulatory responsibilities. Other input for consideration includes:

- prior CSRO report findings; and
- requests by the Board and/or Minister;

The work plan will highlight the scope of the proposed review, estimate associated time to complete and detail applicable costs to the organization.

Annex 4: Ontario Risks Outlook – 2018

The Ontario Risks Outlook report (2014, CSRO) identified Ontario's risk landscape by combining downscaled global risks from the annual World Economic Forum (WEF) Global Risk Report (now in its 13th year) and ranking of Canada's leading rates of disability-adjusted life years (DALYs) relative to comparator countries (as provided by the Institute for Health Metrics and Evaluation).

The Health Metrics and Evaluation report provides ranking in terms of years of life lost to self-harm, road injury, falls, and interpersonal violence (costs quantified through Parachute Canada in collaboration with the Conference Board of Canada).

The updated 2018 WEF Global Risk Report prioritizes global risks (likelihood) as (i) Extreme weather events: (ii) Natural disasters; (iii) Cyber-attacks; (iv) Data fraud or theft; (v) Failure of climate change mitigation and adaptation. And potential impact of global risks as: (i) Weapons of mass destruction; (ii) Extreme weather events: (iii) Natural disasters; (iv) Failure of climate change mitigation and adaptation; (v) Water crises.

Below is an indicative combined Ontario Risks Outlook. The list includes the top five causes of injury in Ontario (direct and indirect costs) and top five regionally manifested large-scale risks (ranking based on actual and potential impacts).

Ontario Risks Outlook - 2018

- Failure of critical infrastructure including cyber attacks
- Failure of climate change mitigation and adaptation, natural disasters
- Falls
- Transport Incidents
- Self-harm
- Unintentional poisoning
- Rapid spread of infectious disease and food-borne ailments
- Water supply and quality
- Conflict including terrorism, collapse of governance, and weapons of mass destruction
- Violence (personal)



Attachment 2: The following table summarizes the status of pending actions arising from the Chief Safety and Risk Officer's Review of TSSA's Annual State of Public Safety Report for FY17. For ease of reference, action items that are completed are shaded in grey and will be deleted from the next report.

TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
Comme	nts and Recomm	endations			
2017-1	Enhancements and Future State	TSSA's top sources of risk in 2017 are: CO in apartments and condominiums; fuels in private dwellings, academic locations, business units, and retirement and long-term care homes; human factors on elevators in retirement and long-term care homes, and; fire in food service locations. These are shared risks where TSSA is only one safety partner. TSSA's top risks could be presented in a disaggregated manner, with TSSA-mandated risk trends outlined relative to human behaviour, and other key safety partners. (Reference page 1)	TSSA is committed to working with our safety partners, as stated in our strategic plan, and will identify them and their respective safety responsibilities in the FY2018 ASPR.	PSRM	April 2018



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
2017-2	Enhancements and Future State	TSSA deserves credit for addressing these complex risks, however the ASPR could provide clearer distinction on what risks fall solely within TSSA's mandate, and how these are linked (or not) to the overall, broader risk. The ASPR can also present a credible plan to address these risks, and notional outlines of various safety partner accountabilities. The ASPR's strength is its annual publication, allowing credible monitoring of trends. This can readily be adapted to monitor trends in broader multi- partner safety issues such as carbon monoxide poisoning and fuels. (Reference page 1)	TSSA will incorporate this recommendation in the FY2018 ASPR.	PSRM	April 2018
2017-3	Enhancements and Future State	The ASPR would benefit from a section outlining where TSSA's safety mandate is particularly shared with other safety partners. In the Sector	TSSA will outline partnership strategies in the FY2018 ASPR.	Boilers and Pressure Vessels and Operating Engineers (OE)	April 2018



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
		Directors comments section reference could be made to the areas that are a shared mandate, e.g. elevator reliability, carbon monoxide poisoning in buildings. The ASPR could then track progress made in these shared initiatives. (Reference page 1)		Statutory Director – Mike Adams	
2017-3	Enhancements and Future State	The ASPR would benefit from a section outlining where TSSA's safety mandate is particularly shared with other safety partners. In the Sector Directors comments section reference could be made to the areas that are a shared mandate, e.g. elevator reliability, carbon monoxide poisoning in buildings. The ASPR could then track progress made in these shared initiatives. (Reference page 1)	See above.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	April 2018
2017-3	Enhancements and Future State	The ASPR would benefit from a section outlining where TSSA's safety mandate is particularly	See above.	Fuels Safety (FS) Statutory	April 2018



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
		shared with other safety partners. In the Sector Directors comments section reference could be made to the areas that are a shared mandate, e.g. elevator reliability, carbon monoxide poisoning in buildings. The ASPR could then track progress made in these shared initiatives. (Reference page 1)		Director – John Marshall	
2017-3	Enhancements and Future State	The ASPR would benefit from a section outlining where TSSA's safety mandate is particularly shared with other safety partners. In the Sector Directors comments section reference could be made to the areas that are a shared mandate, e.g. elevator reliability, carbon monoxide poisoning in buildings. The ASPR could then track progress made in these shared initiatives. (Reference page 1)	See above.	Upholstered & Stuffed Articles (USA)	April 2018



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
2017-4	Enhancements and Future State	Statutory Directors should continue to provide the status of regulatory underpinnings and their opinions on effectiveness and areas for enhancement, e.g. when was legislation last updated, is there a review process underway (if so, expected schedule), are there other jurisdictions that are particularly noteworthy. Where a Regulatory Renewal Initiative is underway much of this information would be gleaned through that process, however the ASPR gives Directors an opportunity to signal trends and suggest legislative refinements and safety partner's activities within the sector. Statutory Directors may also want to use this section to signal potential areas for enhanced future integration as new	TSSA enhance this aspect for the FY2018 ASPR.	Boilers and Pressure Vessels and Operating Engineers (OE) Statutory Director – Mike Adams	April 2018



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
		administrative authorities and government-supported programs are announced, e.g. free home thermostats, licensing of home inspectors, education requirements to get a condominium manager licence. Some of the discussions by Directors in this year's ASPR are excellent. (Reference page 1)			
2017-4	Enhancements and Future State	Statutory Directors should continue to provide the status of regulatory underpinnings and their opinions on effectiveness and areas for enhancement, e.g. when was legislation last updated, is there a review process underway (if so, expected schedule), are there other jurisdictions that are particularly noteworthy. Where a Regulatory Renewal Initiative is underway much of this information would be	See above.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	April 2018



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
		gleaned through that process, however the ASPR gives Directors an opportunity to signal trends and suggest legislative refinements and safety partner's activities within the sector. Statutory Directors may also want to use this section to signal potential areas for enhanced future integration as new administrative authorities and government-supported programs are announced, e.g. free home thermostats, licensing of home inspectors, education requirements to get a condominium manager licence. Some of the discussions by Directors in this year's ASPR are excellent. (Reference page 1)			
2017-4	Enhancements and Future State	Statutory Directors should continue to provide the status of regulatory underpinnings and their opinions on	See above.	Fuels Safety (FS) Statutory Director – John Marshall	April 2018



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
		effectiveness and areas for			
		enhancement, e.g. when was			
		legislation last updated, is			
		there a review process			
		underway (if so, expected			
		schedule), are there other			
		jurisdictions that are			
		particularly noteworthy.			
		Where a Regulatory Renewal			
		Initiative is underway much of			
		this information would be			
		gleaned through that process,			
		however the ASPR gives			
		Directors an opportunity to			
		signal trends and suggest			
		legislative refinements and			
		safety partner's activities			
		within the sector. Statutory			
		Directors may also want to use			
		this section to signal potential			
		areas for enhanced future			
		integration as new			
		administrative authorities and			
		government-supported			
		programs are announced, e.g.			
		free home thermostats,			



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		licensing of home inspectors, education requirements to get a condominium manager licence. Some of the discussions by Directors in this year's ASPR are excellent. (Reference page 1)			
2017-4	Enhancements and Future State	Statutory Directors should continue to provide the status of regulatory underpinnings and their opinions on effectiveness and areas for enhancement, e.g. when was legislation last updated, is there a review process underway (if so, expected schedule), are there other jurisdictions that are particularly noteworthy. Where a Regulatory Renewal Initiative is underway much of this information would be gleaned through that process, however the ASPR gives Directors an opportunity to signal trends and suggest	See above.	Upholstered & Stuffed Articles (USA)	April 2018



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
		legislative refinements and safety partner's activities within the sector. Statutory Directors may also want to use this section to signal potential areas for enhanced future integration as new administrative authorities and government-supported programs are announced, e.g. free home thermostats, licensing of home inspectors, education requirements to get a condominium manager licence. Some of the discussions by Directors in this year's ASPR are excellent. (Reference page 1)			
2017-5	Enhancements and Future State	Nearly 5% of occurrences in mass transit locations (EM) involve intoxicated patrons (and the rate is increasing). The potential impact in this area from legalized marijuana may be high, and likely needs vigilance. This may be an issue	TSSA will continue to monitor risks at these locations. Mass transit locations have historically been better at reporting occurrences, thus, the increased level of risk at these locations is not surprising. It should be noted that intoxicated patrons at mass transit locations are	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate &	Complete



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2017-6	Enhancements	in other areas such as elevators, ski lifts, and amusement devices. (Reference page 2) Five years of compliance data are	avoiding drunk driving which is a much greater safety concern.	CAT	April 2018
2017-0	and Future State	presented in the ASPR; compliance ranges from a high of 98% (BPVs) to a low of 13% (EMs), with an aggregate 2013-2017 compliance rate of 35%. This year's ASPR includes cross-program compliance measures reflecting overall level of compliance across regulated sectors. This is a useful addition. Differentiation across baseline data is likely still warranted to better facilitate comparisons of Ontario's performance in specific sectors across jurisdictions, e.g. ED compliance in Ontario vs BC or New York State. The need to clearly connect compliance with risk continues – i.e. does 'non-compliant' indicate greater risk? (Reference page 2)	Such comparisons can be challenging since inspection frequencies and scope. Nevertheless, TSSA will leverage current networks such as the National Public Safety Advisory Council (NPSACC) in reaching out to other jurisdictions to determine whether their information is applicable to Ontario.	FJKM	April 2010



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2017-7	Enhancements and Future State	Elevator reliability is a complex issue with facets exceeding TSSA's safety mandate however on EDs (and possibly escalators) a short discussion on risk of inoperability (availability) continues to be warranted. This is not strictly a risk metric of the existing inspection regime, however absence of elevator (escalator) service can pose serious risks that could be acknowledged. Similarly, for EDs a discussion on entrapment trends is warranted. These issues could be raised in a 'shared mandate' section of the ASPR. (Reference page 2)	TSSA is waiting upon the results of a report soon to be completed.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	April 2018
2017-8	Open Data & Transparency	The ED and EM contractor rating system as proposed in the 2015 ASPR remains an important advancement, as is the suggestion of a clear time- bound strategy for improving	Unfortunately, the accuracy of current data related to contractors and specific devices is not at a level that supports public reporting. As part of the 20/20 initiative, TSSA is planning to	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	April 2019



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		compliance levels. Several jurisdictions publish similar contractor information. The importance of information on ED contractors is increasing in light of growing entrapments and (possibly) maintenance backlogs. Licenced condominium managers may also be a good source of information. As part of 20/20, ideally no later than 1 January, 2019, this information should be developed for monitoring, publicizing (perhaps with international comparators), and setting compliance levels (and service). These compliance level targets may need to be differentiated by type and location of building. (Reference page 2)	require licensees to register their maintaining contractor(s). Once validated contractor data is accumulated, TSSA will consider publishing contractor ratings.		
2017-9	Enhancements and Future State	The risk of elevators in retirement and long-term care homes is increasing. Fuel risk in retirement and long-term	TSSA has employed an integrated approach with both programs working together.	Elevating & Amusement Devices (ED) Statutory	Complete



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		care homes is also of concern (above the 50% of risk acceptability criteria). Perhaps an integrated approach is warranted, combining the two sectors, as well as other agencies. The 'special buildings pilot' might be expanded to bring in other safety partners. (Reference page 2)	TSSA will look to engage other agencies as well.	Director – Roger Neate Fuels Safety (FS) Statutory Director – John Marshall	
2017- 10	Enhancements and Future State	Information on disaggregated risk highlighting the heterogeneity of risks by location could be a useful addition, e.g. certain risks in Northern Ontario vs City of Toronto, relative to the Province overall. Larger cities may concentrate certain risks (and economies of scale in oversight may be possible). Remote communities may require unique and collective approaches to maintenance and regulation. Most risk data is now disaggregated by	TSSA will incorporate this recommendation in the FY2018 ASPR.	PSRM	April 2018



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		populations. Disaggregating by location may be equally useful. (Reference page 2)			
2017-11	Enhancements and Future State	TSSA may also wish to suggest a unique and combined approach to safety regulation for the Ring of Fire mining area. If the development goes ahead there may still be time to develop integrated approaches and combined inspections (integrating several Ministries and Agencies). (Reference page 3)	At the moment, the impact on TSSA's regulated sectors is limited – underground mining elevators are specifically excluded from the elevating devices regulation. BPV/OE is currently active in this area. BPV and OE inspections are very specific, with very specific qualifications, and integration with other inspections is not seen to be viable. BPV/OE is monitoring this area and has contingency plans in place in case workload in this area heats up.	All Program Areas	Ongoing
2017- 12	Enhancements and Future State	Similar to the catalytic role that TSSA took in helping MGCS and the province of Ontario address elevator availability, a multi-sector, multi-agency review of schools and hospitals may be warranted (e.g. CO, energy efficiency, resilience; Annex 1). (Reference page 3)	TSSA will monitor these issues, noting that hospitals do not exhibit an elevated level of risk.	All Program Areas	Ongoing



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2017- 13	Enhancements and Future State	A discussion on data availability and integrity continues to be useful, e.g. quality of data and trends on collection, compared to other Ontario agencies. This is especially the case in the fuels and elevating devices sectors. (Reference page 3)	TSSA will incorporate this recommendation in the FY2018 ASPR.	PSRM	April 2018		
2017- 14	Enhancements and Future State	Similarly, initiatives like the special buildings pilot may be useful to emerging programs such as the City of Toronto's multi-residential buildings operating license regime, and initiatives for institutions with vulnerable populations. (Reference page 3)	TSSA maintains an ongoing dialogue and collaboration with the City of Toronto and will explore emerging programs as they arise.	All Program Areas (Excluding USA)	Complete		
Review	Review of Specific Sectors						
2017- 15	Enhancements and Future State	The need for a target date remains for standardized orders and assessments in facilities overseen by both TSSA and those insured	TSSA has harmonized BPV orders with the National Board's Violation Tracking format. TSSA has shared BPV's standard orders and their NB mapping with the	Boilers and Pressure Vessels and Operating Engineers (OE) Statutory	Complete		



TSSA Index No.	TSSA Identified Theme	CSRO's Comments	TSSA's Response	Champion	Scheduled Completion
		facilities not inspected by TSSA staff. How and when this might be harmonized with the National Board's violation tracking form, perhaps through revisions in TSSA 20/20, should be provided. (Reference page 3)	CB&MUA in March 2017. Further standardization of orders will be part of BPV's regulatory review process. Target date to be determined after the processes below (2017-16) are implemented and TSSA-Insurer data protocols are established and proven effective.	Director – Mike Adams	
2017- 16		The total (estimated) number of BPVs in Ontario could be provided, and the number inspected by insurance representatives that year. This would help highlight the role of TSSA's inspection regime relative to inspections by insurance agents. (Reference page 3)	One of the primary requirements from the BPV regulatory review is the requirement for TSSA to maintain a database of all operating BPVs in Ontario. Work to implement such a capability is currently underway, with the process to be defined and implemented by 1 July 2018, and a completion date 3 years afterwards (to account for the 3-year inspection cycle of many BPVs).	Boilers and Pressure Vessels and Operating Engineers (OE) Statutory Director – Mike Adams	July 2019
2017- 17	Enhancements and Future State	There may be merit in integrating inspections of BPVs in schools with fuels inspections and energy efficiency – retrofit programs (as suggested in the	BPVOE's focus in schools (as everywhere else) is the safety of maintenance and operation of power and heating plants. Cross training of inspectors between fuels and BPV and OE would be very difficult to maintain with limited value added seen (difficulties are being	Boilers and Pressure Vessels and Operating Engineers (OE) Statutory	N/A



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		Environmental Commissioner of Ontario's review, 'the need for energy efficiency and modernization in schools'). (Reference page 3)	encountered today in cross training just BPV and OE, let alone adding fuels to the mix). BPVOE's focus is safety, not energy efficiency, and cases can be made that "more efficient" systems are not always as safe as more mature technologies (more failure modes).	Director – Mike Adams	
2017- 18	Enhancements and Future State	Continued comparison to the National Board's Violations Tracking KPI that started in 2017, should continue (TSSA compares favorably - ~98% to ~90% compliance). (Reference page 3)	TSSA will continue to compare with the National Board's Violations Tracking KPI.	Boilers and Pressure Vessels and Operating Engineers (OE) Statutory Director – Mike Adams	Complete
2017- 19	Open Data & Transparency	As quickly as practicable TSSA should publish the names of Operating Engineers licence holders, similar to Professional Engineers Ontario (perhaps this could proceed ahead of completion of TSSA 20/20). (Reference page 4)	TSSA has published this information in a pdf format (e.g. with an off-line search capability) in the Release of Records section of the OE web site. It is intended to add an on-line search capability in the near future.	Boilers and Pressure Vessels and Operating Engineers (OE) Statutory Director	Complete



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			User friendliness will be expanded with the introduction of the new corporate TSSA web site in November 2017.	– Mike Adams	
2017-20	Enhancements and Future State	Specific targeting of reduced risk on water slides, including continued public safety campaigns and sharing of incident information should continue (e.g. Canada Safety Council request and recent US incident). Plans to review root cause analysis data over the coming year should continue (results reported in next year's ASPR). (Reference page 4)	TSSA does not anticipate producing additional public safety campaigns in this area.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	Complete
2017-21	Enhancements and Future State	Follow up efforts to make rides more accessible to persons with disabilities should continue. Progress with water slide accommodation recommendation is commendable. (Reference page 4)	TSSA thanks the CSRO for this comment.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	N/A



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2017- 22	Enhancements and Future State	The presentation of each ride with two metrics is not clear, e.g. Coaster rides accounted for 14% and 38% of related observed injury burden. Perhaps this could be clarified (in following sectors as well). (Reference page 4)	TSSA will address this recommendation in the FY2018 ASPR.	PSRM	April 2018
2017- 23	Open Data & Transparency	TSSA should make much of its elevator data readily available through website, e.g. licenses and inspection dates; perhaps as part of the Province of Ontario's 'Open Data' efforts [pending completion of 20/20]. (Reference page 4)	TSSA intends to publish much of this information with completion of the 20/20 initiative. Note that inspection dates and frequencies will not be published in order to keep clients in a state of constant vigilance.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	April 2019
2017- 24	Enhancements and Future State	Identification and targeting the 'unacceptable risk' in retirement and long-term care homes (0.82 FE/mpy) is commendable. An ongoing program, perhaps in partnership with RHRA and/or ORCA, is warranted. (Reference page 4)	TSSA currently is leveraging their partnerships with these organizations.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	Complete



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2017-25	Open Data & Transparency	A specific target date for publication of ED information (and scope of data publication) should be proposed by TSSA, consistent with ongoing TSSA 20/20 efforts. Applicability of this data (e.g. by hospitals, homes for the aged, public housing, schools, rental residential buildings, commercial, etc.) should be assessed. (Reference page 5)	See TSSA response for Item 2017-23.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	
2017- 26	Open Data & Transparency	Related to above, with 83% of associated injury burden taking place in rental locations, despite accounting for only 17% of elevators, a tailored information and education campaign may be practical (likely in partnership with local municipality). (Reference page 5)	TSSA will continue to distribute and promote safety advocacy videos.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate & CAT	N/A
2017- 27	Open Data & Transparency	As soon as practicable, TSSA should post when elevators (and escalators) are ordered shut-down by TSSA (in the City	This will be part of the ongoing 20/20 program.	Elevating & Amusement Devices (ED) Statutory	April 2019



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		of Toronto this might be part of the new multi-unit residential building licensing program). [pending 20/20]. (Reference page 5)		Director – Roger Neate	
2017-28	Open Data & Transparency	Elevator entrapment incidences are typically compiled by local fire departments (and 911 calls). Strictly speaking, elevator entrapments are not under TSSA's mandate, however as entrapments present a potential safety risk (e.g. people trying to escape), and are a general reflection of the efficacy of overall maintenance, incidents should be tracked (and possibly posted), particularly in the Greater Toronto Area. Suggestions may emerge from the Deloitte review on how to collect and post this information – if not TSSA may	TSSA is waiting for the results of a study before proceeding.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	



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		propose a method. (Reference page 5)			
2017- 29	Open Data & Transparency	TSSA and MGCS should ensure that mandatory courses required for licencing Condominium Mangers include information on elevator maintenance standards, industry practices, and best- practices in service contracts. (Reference page 5)	See above.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	N/A
2017- 30	Open Data & Transparency	The Director's concern with the continued downward trend of compliance is warranted and should be reflected in the ongoing stakeholder sector review (i.e. Deloitte study). (Reference page 5)	Please refer to the FY2018 TSSA Business Plan for details of initiatives to address compliance with a focus on elevating devices.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	
2017- 31	Open Data & Transparency	Elevator occurrences caused by damage due to water exposure accounted for 34% (an increase). How these occurrences might be impacted by climate change and efforts toward greater	It is uncertain at this stage if there is an actual increase in water exposure or if the increase is due to increased reporting. TSSA will continue to monitor the situation.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	Complete



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		building resilience should be monitored. (Reference page 5)			
2017- 32	Enhancements and Future State	Continued focus at mass transit facilities is warranted. Occurrences are increasing 7% per year (5% involved intoxicated patrons – is there work underway on potential impact from legalized marijuana). Operating escalators in transit facilities are particularly important in emergency events. (Reference page 6)	See TSSA response to Item 2017-5.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate & CAT	Complete
2017- 33	Enhancements and Future State	Overall there remains a need for improved compliance rate (a summary of the time bound plan should be provided in the ASPR). This could be combined with a similar plan for elevators (following the Deloitte review). (Reference page 6)	Please refer to the FY2018 TSSA Business Plan for details of initiatives to address compliance with a focus on elevating devices.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate	Complete
2017- 34	Enhancements and Future State	The Director's messaging to industry to enhance level of compliance related to required	TSSA is appreciative of this note.	Elevating & Amusement Devices (ED)	N/A



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		maintenance is commendable. (Reference page 6)		Statutory Director – Roger Neate	
2017- 35	Open Data & Transparency	Addressing major non- compliance through complementary services such as Ski Instructors continues to provide benefits. With 97% of risk continuing to be due to factors external to the regulatory environment public education remains critical (perhaps in conjunction with other risks on the ski hill). (Reference page 6)	TSSA is creating new signage to enhance safety in this area.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate & CAT	Complete
2017- 36	Enhancements and Future State	Continued partnership development with Canadian Ski Instructors Alliance, Association of Day Care Operators, and Chirp (Owl Kids) and Chickadee is important, especially with regard to understanding and influencing user behavior. (Reference page 6)	TSSA is partnering with CSIA to produce a new safety video to increase ski safety.	Elevating & Amusement Devices (ED) Statutory Director – Roger Neate & CAT	Ongoing



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2017- 37	Enhancements and Future State	Fuels continue to represent the largest risk center under TSSA's oversight, with 64% of the risk of injury or fatality attributable to non-compliance with the regulatory system (the highest by sector under TSSA oversight). The potential risk of injury or fatality is 1.76 FE/mpy (an 'unacceptable le level'). Therefore, the fuels sector warrants continued focus for enhanced regulatory approaches, e.g. propane risk management systems. (Reference page 6)	TSSA will continue this focus, and will look to nominate the fuels regulations for phase II of MGCS/TSSA regulatory renewal process.	Fuels Safety (FS) Statutory Director – John Marshall	Ongoing
2017- 38	Enhancements and Future State	A long term strategy to address CO risk (across all sectors and facilities) remains. As a minimum, special buildings (especially schools and health-, long-term care facilities) and new building technologies (e.g. net zero energy homes) need to be included in the strategy. The	The TSSA is continuing to refine its CO strategy. The CO conference in November 2016 was one component in TSSA's long- term strategy to address CO risks at various locations. Advocacy work such as the ongoing Silent Killer campaign and the CO safety house and will also be continued.	Fuels Safety (FS) Statutory Director – John Marshall VP Safety Strategy David Scriven	Ongoing



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2017- 39	Enhancements and Future State	strategy also needs to reflect that the largest source of risk at private dwellings continues to be CO release (e.g. an unacceptably high of 3.83 FE/mpy at apartments and condominiums). The November 2016 workshop was an excellent input to the strategy. Support of the CO Collaborative Network appears to be a promising outcome. (Reference page 7) The CO strategy might take advantage of the new requirement that Home Inspectors are now licenced in Ontario (MGCS may be able to facilitate discussions with inspection programs to include potential CO release assessments, with input from TSSA). If the level of knowledge required to make an adequate CO release	TSSA will take this under consideration.	Fuels Safety (FS) Statutory Director – John Marshall	Ongoing
		an adequate CO release assessment is beyond the			



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		scope of a home inspection, revisions to the training or inspection process may be warranted (these may be the only options for – somewhat – qualified inspectors in the home). There may also be opportunity to review ways to reduce potential CO poisoning through installation of free home thermostats (carried out by trained installers, and combined with home energy audits – again, personnel in the home are rare, there may be potential synergies). Use of these personnel might be trialed on a pilot basis. (Reference page 7)			
2017- 40	Enhancements and Future State	Phase 2 of the Special Buildings Inspections Pilot to address schools is welcome. The review should include a focus on integrated support by various safety partners, and facilities upgrading, e.g.	TSSA will continue to work with the Ministry of Education and the various school boards in pursuit of greater school safety.	Fuels Safety (FS) Statutory Director – John Marshall	Complete



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		replacement of boilers and HVAC systems. (Reference page 7)			
2017-41	Enhancements and Future State	The success in introducing RBS for propane facilities is noted. Lessons learned could be applied to other fuels areas (and TSSA overall). (Reference page 7)	TSSA endeavours to use RBS for as many applications as practical. Applying it to other fuel areas would require a regulation change.	Fuels Safety (FS) Statutory Director – John Marshall	N/A
2017- 42	Enhancements and Future State	MGCS should ensure that through the recently enacted licencing requirements for Home Inspectors, (single family) home inspections include consideration of CO poisoning potential and assessment of common avenues of risk (as part of inspection process), or provide homeowners with alternate plan to address potential CO issues. (Reference page 7)	See TSSA response to Item 2017-39.	Fuels Safety (FS) Statutory Director – John Marshall	Ongoing
2017- 43	Enhancements and Future State	As efforts continue to make homes more energy efficient (e.g. net energy zero), the potential of CO poisoning may	See TSSA response to Item 2017-39.	Fuels Safety (FS) Statutory Director – John Marshall	Ongoing



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		increase, as homes are actually more air-tight. Municipalities will need to ensure that final building inspections of new homes consider this (perhaps with advice from TSSA). (Reference page 8)			
2017-44	Enhancements and Future State	Most of the 'special buildings' defined targeted in the fuels sector pilot program are government managed (and financed) facilities, e.g. hospitals and schools, Therefore punitive fees and shutting down elevators and fuel systems, may target the wrong people. A comprehensive program with a consolidated, integrated maintenance program is likely the most effective way to enhance compliance in a cost- effective manner, while also meeting other ancillary facilities requirements. Local municipalities are also	TSSA will continue to work with the Ministry of Education and the various boards of education.	Fuels Safety (FS) Statutory Director – John Marshall	Ongoing



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		important safety partners, e.g. Fire Departments. (Reference page 8)			
2017- 45	Enhancements and Future State	Mattresses by mail and other online purchases delivered directly to homes. Trade issues and online purchases. MGCS led review of sector proposes to apply regulation to bedding, mattresses and upholstered furniture only. All other articles will be exempt. Changes expected to take effect July 1, 2018. (Reference page 9)	TSSA performs inspections at distributors like Amazon and other online distributers located in Ontario.	Upholstered & Stuffed Articles (USA)	N/A
Review	ing the Data				
2017- 46	Enhancements and Future State	The ASPR and its fundamental underpinning through RIDM are based on probabilistic risk assessments from collected and inferred data. These evaluations are sufficiently robust to enable risk-based responses, e.g. shifting the	TSSA intends to publish as much data as possible as part of the 20/20 initiative.	PSRM	April 2018



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		timing of inspections in sectors such as licensed propane facilities. This can provide significant cost savings (without increasing risk) and help to focus inspections and regulations on areas of greater risk. As much of TSSA's risk profiling is based on available and interpreted data, this information should be as public and readily accessible as possible.			
		Public trust is a key aspect of effective RIDM. This trust is largely based on public respect in data and its interpretation. The ASPR presents much of this data. As part of the ongoing TSSA 20/20 process efforts should continue to look for ways that this data could continue to be readily available with enhanced 'user			



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		friendliness'. (Reference page 9)							
Annex 1: Continuing to look at schools and hospitals									
2017- 47	Enhancements and Future State	Similar to the catalytic role TSSA took in helping MGCS to address elevator availability, a multi-sector, multi-agency review of schools and hospitals may be warranted. (Reference page 12)	See TSSA response for Item 2017-12.	All Program Areas	Ongoing				