Annual Report

Chief Safety and Risk Officer

Technical Standards and Safety Authority

Province of Ontario

November 2019

Daniel Hoornweg, PhD, PEng
This Annual Report covers the period May 1, 2018 to April 30, 2019.

This review reinforces recommendations provided in previous reports. It is recommended that TSSA continue to consider those past recommendations and find appropriate ways to embed them in TSSA’s transition to an “Outcome based regulator”

Typically the CSRO provided two reports every year; a review of TSSA’s Annual Public Safety Performance Report (ASPR) and this Annual Report. The current CSRO was directed not to assume an audit role or duplicate functions within TSSA or the Ministry of Government and Consumer Services. See Annex 1 for FY19 (completed) and FY20 (in progress) work plans.

Combined recommendations are provided in the review of TSSA’s 2019 ASPR (draft received 2 August, 2019 – report completed November, 2019).

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1. Summary of Recommendations

(i) As recommended in several earlier reports, as soon as possible, TSSA should make public its elevating devices data (on website or alternate location). Similarly, a dynamic registry of licensees and certified operators and facilities should be available on TSSA’s website. As much as possible, access and usability of TSSA data should be consistent with other ‘Open Ontario’ data sets (this is understood to be a TSSA 20/20 priority, however partial steps can be taken now).

(ii) TSSA is commended for inclusion of baseline comparisons provided in reports such as the ASPR. This should continue and be expanded, in partnership with other safety regulators, to enable ongoing provision of key performance indicators. Table 1 provides an initial, and partial, list of possible performance indicators. A draft Benchmarking Report by the CSRO suggests establishment of a global peer group of public safety regulators.

(iii) TSSA’s goal to be a ‘modern regulator’, revised to ‘outcomes-based regulator’ needs to: (i) reflect the aspirational nature of modern regulators (i.e. that it is a continuous process); (ii) encourage multi-sector and inter-agency collaboration; (iii) support and substantiate the potential economic contribution of effective public safety regulation; and, (iv) recognize the critical nature of the relationship with the Government of Ontario (e.g. MGCS).
The CSRO reported to the SRAC on September 5, 2018 a brief summary of the 2018 ASPR review. Key observations included:

1. Higher risks are shared with several stakeholders (e.g. CO, fuel in private dwellings, elevator use, and special buildings). Risk management requires partnerships.
2. Appendix E, ‘Legislation and Regulatory Information’ is a good addition – a modern regulator needs modern (and timely) governance.
3. Data systems – role of TSSA 20/20 (this is an on-going issue; some data sets should be disaggregated and made public now).
4. Schools, hospitals and other ‘special buildings’ (most are operated by governments, or their direct agents, requiring special partnerships and programs).
5. Water exposure to elevators and escalators (a growing issue especially to larger municipalities and their transit agencies).
6. Only 1% of TSSA inspections find serious safety concerns – 89% of inspected sites ‘low risk’ (suggesting reforms to scheduling, prioritization, and benefits from partnerships).

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 more than 10 years ago and steps to remedy and develop a more robust system are proceeding (e.g. the TSSA 20/20 program). Data management system upgrades are a challenge to many agencies; since beginning 20/20 TSSA has replaced three CIOs and a CEO, and the timetable is again extended. Interim steps should be undertaken while 20/20 is under development (or delayed).

The following suggestions were made in previous reports and remain outstanding:

- Make elevator inspection schedules public, and ensure that results are included in elevator renewal licenses (reconcile with new fee structure);
- Review and report on the merits of opening TSSA data on other inspected operators and sectors, e.g. boilers and pressure vessels;
- Prepare a time-bound plan for TSSA database(s) to be placed on ‘Ontario Open Data’;
- Develop and share analytic tools on risk events and maintenance priorities, particularly with local governments.
3. Baseline Comparisons and Benchmarking

Previous CSRO reports discussed benchmarking performance of activities overseen by TSSA compared to other jurisdictions (with a focus outside Canada). These included safety performance and cost levels. This benchmarking should continue. The means and frequency of regulatory updates should also be benchmarked.

A draft CSRO Benchmarking Report for fuels regulations in Ontario, Washington State, United Kingdom, France and New Zealand will be provided with the ASPR review (see Table 1). This complements an earlier CSRO review of elevating devices for Ontario, New York City, Illinois, France and New Zealand (2015), and TSSA-MGCS commissioned consultant reports for upholstered and stuffed articles (USA, 2015), elevating devices (2017) and operating engineers (2016). These reviews are consistent with ongoing coordination efforts by the National Public Safety Advisory Committee (Canada).

International benchmarking is best achieved when undertaken sector by sector, such as EDs and fuels, rather than by agency, as agencies can vary significantly, while regulating elevators or fuels is generally consistent across most jurisdictions. Ideally a peer group of public safety regulators will emerge, similar to the ‘five-eyes’ security pact between Australia, Canada, New Zealand, UK, and USA. Possible members could be: France; New Zealand; UK; Chicago and/or New York City, and States of Illinois and New York. A challenge with this benchmarking process is that most global comparators have stronger regulatory oversight at the national level rather than state/province jurisdiction, as in the case in Canada.

4. A Modern Regulator

Like most regulators, TSSA aspires to be a ‘modern regulator’, or outcome-based regulator. TSSA’s vision is to be ‘a valued authority for a safer Ontario’. 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).

In addition to regulatory models, financial structures, and compliance history, efforts toward a modern regulator recognize:

- The role of trust;
- Shifts to digital and platform technologies (including machine learning and artificial intelligence);
• Accommodation of requests for ‘value for money’ and ‘burden reduction’;
• Coordination with other regulators that may have overlapping jurisdiction (within the province of Ontario as well as with the federal Government and municipalities and local distribution companies); 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 (Annex 2). The modern regulator will need to acknowledge this 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. So too remote operations capabilities for BPVs and HVAC systems. These advances could have a profound impact on TSSA – what is regulated and where revenues are derived.

With good and sufficient data, regulators are able to apply rapidly developing advanced analytics. For example, most outcome based regulators are already using predictive analytics to reduce risk (enhancing public safety at less cost).

Annex 2 provides a preliminary discussion on efforts toward a modern regulator.

Future reform initiatives to improve public safety and transition TSSA to an “outcome based regulator” to improve safety outcomes should consider partnerships with other regulators and industries to, identify best practices, share data and determine trends that give rise to public safety harms. For example, these could include: (i) being part of efforts to advance regulatory cooperation in the Great Lakes region; (iii) partnering with a municipality(ies) to provide a long-term pilot area for regulatory experimentation; (iii) differentiating service provision by region of the province; (iv) working across the Government of Ontario to survey customer satisfaction through random and anonymous surveying techniques; (v) identifying key sectors where safety and sustainability are merging and a more dynamic regulatory approach is needed, e.g. elevators and natural gas; (vi) establishing key performance targets, and; (vii) emphasizing data integrity and availability for applications such as AI, and enhanced stakeholder involvement.
Table 1: Fuel Regulations Benchmarking

<table>
<thead>
<tr>
<th>Activities</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ontario</td>
</tr>
<tr>
<td>1. Framework</td>
<td></td>
</tr>
<tr>
<td>a. Regulator exists</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Legislation exists</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Regulatory information readily</td>
<td>Yes</td>
</tr>
<tr>
<td>available to public</td>
<td></td>
</tr>
<tr>
<td>d. Third-party operated</td>
<td>No</td>
</tr>
<tr>
<td>e. Harmonized, single-regulator system</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Certification / Licensing</td>
<td></td>
</tr>
<tr>
<td>a. People and organizations</td>
<td>Yes</td>
</tr>
<tr>
<td>i. Graduated licensing system</td>
<td>Yes</td>
</tr>
<tr>
<td>ii. Audit/renewals required</td>
<td>Yes</td>
</tr>
<tr>
<td>iii. Continuous education required</td>
<td>Unknown</td>
</tr>
<tr>
<td>b. Appliances and installations</td>
<td>Some</td>
</tr>
<tr>
<td>i. Frequency of inspections</td>
<td>Regular</td>
</tr>
<tr>
<td>ii. Prioritization</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Register of license-holders</td>
<td>No</td>
</tr>
<tr>
<td>d. Portal Area</td>
<td>No</td>
</tr>
<tr>
<td>3. Regulatory burden</td>
<td></td>
</tr>
<tr>
<td>a. Financial costs (fees/permits)</td>
<td>High</td>
</tr>
<tr>
<td>b. Training, experience, licensing</td>
<td>High</td>
</tr>
<tr>
<td>process commitment</td>
<td></td>
</tr>
<tr>
<td>c. Installation costs</td>
<td>High</td>
</tr>
<tr>
<td>(appliance/device)</td>
<td></td>
</tr>
<tr>
<td>4. Safety outcome</td>
<td></td>
</tr>
<tr>
<td>a. Risk-based system of decision</td>
<td>Yes</td>
</tr>
<tr>
<td>making</td>
<td></td>
</tr>
<tr>
<td>b. Standards/regulations/codes</td>
<td>Yes</td>
</tr>
<tr>
<td>readily available to public</td>
<td></td>
</tr>
<tr>
<td>c. Data collection/integrity/ownership</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Advisory board and stakeholder</td>
<td>Yes</td>
</tr>
<tr>
<td>development</td>
<td></td>
</tr>
<tr>
<td>5. Customer service</td>
<td></td>
</tr>
<tr>
<td>a. Appeals process exists</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Complaints process</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Statistics available</td>
<td>No</td>
</tr>
<tr>
<td>d. Public transparency</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>e. Performance information availability</td>
<td>Yes</td>
</tr>
<tr>
<td>f. Performance information quality</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Summary table from Gas, Fuels and Petroleum Inspection Framework Benchmarking Review, CSRO. See Draft report for details (2019, to be submitted with the ASPR review).
Annex 1: Annual Work Plans – Chief Safety and Risk Officer

FY19 Work Plan (1 May 2018 - 30 April, 2019) – completed

Review Key Reports Review and provide comments on the 2018 Annual Public Safety Performance Report (ASPR) and TSSA Annual Report. [final reports submitted]

Prepare CSRO’s Annual Report - 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 2018 Risk in Ontario report. [update included in 2019 Annual Report]

Data Management - Continue to review TSSA’s data management system modernization and support with other Provincial agencies; comment on data robustness. [audit conducted October, 2018, and July 2019, see ASPR Review Reports]

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

Benchmarking Continue review on global comparators of TSSA’s delegated tasks where available, and assess global practices on Fuels [draft Benchmark Review of Washington State, United Kingdom, New Zealand, France and Ontario complete].

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. [Bruce Power visited May, 2018 and five Parry Sound area marinas visited July 2018]

Respond to possible requests from the TSSA Board and/or Minster of Government and Consumer Services. [none received]

The Board-approved CSRO budget for FY19 provided an allocation of up to $85,200 (time and expenses, including HST). Total CSRO payment for FY19 was $43,281 (including HST and expenses). No additional requests were received, and this was a transitional year as TSSA passes through a point of inflection with major renewal (new CEO and Board Chair, Auditor General’s review, more than half the SLT and Statutory Directors changed).
FY20 Work Plan – in progress

**Review Key Reports** Review and provide comments on the 2019 Annual Public Safety Performance Report (ASPR) and TSSA Annual Report.

**Prepare CSRO’s Annual Report** Consolidate reviews and recommendations and summarize observations for the year. Discuss report with TSSA staff and the Board, as well as MGCS. This may be a truncated report as the Board and MGCS are in the process of hiring a new CSRO with revised title and mandate. This is reflected in this budget proposal, which is approximately half that of FY19.

**Benchmarking** Provide the Fuels Benchmarking Report to TSSA and discuss with Statutory Director and others.

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.

**Data Management** Continue to review TSSA’s data management system and TSSA 20/20 progress. Conduct random audit.

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

**Proposed Budget for FY20**

<table>
<thead>
<tr>
<th>Description</th>
<th>No of days</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Per Diem</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report reviews (TSSA’s AR and ASPR and miscellaneous internal TSSA and MGCS reports); Preparation of CSRO Annual Report; Meeting attendance, Field Visits and Benchmark Study Oversight</td>
<td>20 days @ $1,880/day</td>
<td>$37,600*</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td>$5,000</td>
</tr>
<tr>
<td>TOTAL:</td>
<td></td>
<td>$42,600</td>
</tr>
</tbody>
</table>

* includes HST

This is half the FY19 budget and reflects changes to the current CSRO role, and revisions to TSSA oversight and mandate.
Annex 2: Initial Discussion – ‘Modern Regulation’

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. Trends that impact progress toward being an outcome-based regulator include incorporating ‘value for money’ and ‘burden reduction’ initiatives, along with application of rapidly evolving tools, e.g. advanced analytics. The modern regulator must also grapple with changing risk profiles, and shifting priorities and responsibilities between governments and respective agencies (regional and international).

Furthermore, modern regulators need to operate in an environment where overall mandates and defined roles are shifting. A modern regulator moves forward with partner agencies, Ministry oversight and capacity, and general public acceptance.

Often the focus is naturally on the modern regulator, however a more comprehensive goal is modern regulation as intractable regulatory challenges require rules, laws and standards, and practices. However they also involve aspects of social norms, communication and resilience capacity. Resilience is especially important as agencies such as the American Society of Civil Engineers advise that with current climate and other risks the concept of ‘stationarity’ no longer applies. Today, design, and regulation, needs to proceed in a more dynamic and iterative environment.

The pace of change associated with the governance of regulators also appears to be shifting. For example since establishment in 1972 the average tenure of the Ontario Minister of Government Services and/or Minister of Government and Consumer Services was: 1972 – 1982 (1.7 years); 1982 – 1992 (2 years); 1992 – 2002 (2 years); 2002 – 2012 (1.5 years); 2012 – 2019 (11 months). Oversight of public safety and consumer protection regulations are often the remit of more junior ministries, and with minister tenures less than one year, there may be declining continuity in political oversight.

In many jurisdictions the role of regulation, and its potential to ‘dampen competitiveness’ is raised by governments and the business community, among others. The World Bank’s ease of doing business report is the most commonly cited global comparator for business competitiveness. The 2019 World Bank ‘Ease of Doing Business’ report ranked Canada the 22nd most competitive economy in the world. The evaluation is made up of ten categories such as

1 From previous reports, augmented with the Ontario Auditor General’s review of TSSA, December 2018
3 https://www.doingbusiness.org/content/dam/doingBusiness/country/c/canada/CAN.pdf
starting a business, dealing with construction permits, getting electricity, and contractual and legal aspects. The categories are assessed through collection of some 285 data points. These activities fall under the mandates of the Government of Canada (~160), Province of Ontario (~58), City of Toronto (~45), Toronto Hydro (~15) and professionals and companies (~8). Results could vary by city and by province (and electric utility), yet these values are presented as Canada’s ease of doing business score overall, highlighting the challenges of measuring something as complex and temporal as starting and running a business.

**Regulatory modernization principles in Ontario**

The Ontario government reaffirmed its commitment to modernize 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

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4 The country’s largest city is selected for analysis
5 This section from Annex 1 of the 2018 CSRO report, refers to previous Ontario government mandate, however many of the modernization objectives and programs remain.
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 newly installed government of Ontario (June 28, 2018) reinforced a strong commitment to ensure the province is ‘open for business’. Priorities with the Minister of Government and Consumer Services included: improved digital service offerings; build a ‘one-window’ concierge service for small business; put taxpayers at the centre of government service delivery (e.g., internal reviews, identify best practices, advancing digital design); and reform government procurement to emphasize value and innovation.

There are several areas where TSSA could advance these suggestions. For example ‘mystery shoppers’\(^6\) similar to those in the retail sector, and disaggregating service provision. The majority of TSSA’s risk profile is with private dwellings and public agencies such as schools and hospitals, while the majority of complaints and government initiatives to ‘modernize the regulator’ are focused on small business (e.g. gas station operators) and competitiveness (see ASPR review). Small business operators could be an important partner with TSSA as they increasingly move toward licensed home inspectors and ongoing maintenance contracts for public buildings, condominiums and special buildings.

**Efforts of Other Governments**

The Government of Alberta recently launched the next phase of its plan to ‘cut regulatory red tape’ by establishing two industry panels to identify ‘redundant and ineffectual rules’ in the oil and gas sector and tourism and hospitality industries.

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\(^6\) Random (anonymous) customer satisfaction professional monitors – ideally consistently applied across Government of Ontario service provision.
“Cutting red tape is beneficial for every Albertan. Reducing regulatory burden and unnecessary processes encourages economic growth and job creation; which is of utmost importance to our government.”

Grant Hunter, Associate Minister of Red Tape Reduction, Alberta

The Government of Canada’s efforts

The Community of Federal Regulators (CFR) brings together public servants in some 29 Federal Government agencies with regulatory functions. The CFR’s recent environmental scan identified several key drivers on the regulatory landscape. These include: full regulatory agenda (e.g. modernization and emerging areas); technology and the digital economy; changing political and trade environment; changing workforce (one quarter of regulatory professionals plan to leave their profession within two years); and open government. The CFR is working with the Impact and Innovation Unit of the Privy Council Office.

In 2012 the Government of Canada introduced the Red Tape Reduction Action Plan. The Plan includes a one-for-one rule requiring regulators to offset new regulations with removal of an existing regulation. In 2015 the Government of Canada was the first in the world to enact a law that one regulation (and equivalent burden) be eliminated for every new one introduced. The vote received near-unanimous support (245 votes in favor, one opposed).

The Government of Canada reiterated its commitment to regulatory reform in the most recent Budget and Economic Update. A center for regulatory innovation is planned (Figure A2.2). Calls were made to make Canada the most globally connected economy, accessing new global markets, removing barriers to trade within Canada, and making codes and standards freely available.

The new Canada-EU CETA and USMCA trade agreements contain regulatory cooperation chapters, endeavoring to ‘harmonize’ regulations and provide a recognized forum for public input (mostly from larger corporations). The application of ‘good regulatory practices’ (GRP, see Article 28.2.1 of USMCA) such as the use of science-based or risk-based regulations versus precautionary principle or hazard-based is raised as a concern by some, as regulators face a more onerous workload in adding, amending or removing regulations.

This year marked the ten-year anniversary of the Canadian Federation of Independent Business (CFIB) annual Red Tape Report Card. BC slipped from seven consecutive years of ‘A’ to ‘A-‘, while Ontario increased to ‘A-‘ from ‘C+’ in 2018. Alberta remained at ‘F’, Manitoba and Saskatchewan both received ‘A’

7 Stuart Trew, CCPA’s Trade and Investment Research project and Sharon Treat, Senior Attorney, Institute for Agriculture & Trade Policy
Manitoba was ‘most improved in 2018). The federal government received ‘B+’ up from ‘B-’ in 2018.

The CFIB estimates the cost of government regulation on Canadian businesses and finds that regulation is far more burdensome for small businesses. Costs are measured per employee and include all levels of government (federal, provincial and municipal). For businesses with fewer than five employees average annual regulation cost per employee is $6,744 ($2017). Costs are made up of wages, professional fees, required spending on special equipment and renovations, and losses due to regulation delays. Costs for businesses with 5 – 19 employees, $3,489 per employee; 20 – 49, $2,549; 50 – 99, $1,711; 100 or more employees, $1,253. The 2017 CFIB regulation survey had 68% of respondents agree with the statement ‘Excessive government regulations significantly reduce productivity in my business’, n = 7,823.

Figure A2.1: A More Modern Regulatory System

Economic Update, Government of Canada, 2019

Perceptions on regulator effectiveness vary. In the US for example, Canadian provincial regulators are seen as potential models for US equivalents. Last fall, the US Congressional and House and Senate subcommittee heard testimony about British Columbia’s success at reducing red tape. British Columbia started its red tape reform program in 2001. Within the first three years the province
reduced its regulatory requirements by one-third, and to-date about half of the rules have been eliminated\(^8\).

The Mercatus Center at George Mason University maintains State RegData (dataset), QuantGov that effectively counts the number of restrictions. The dataset was recently augmented with RegData Canada to allow for cross-border comparisons of regulatory restrictions in areas such as the Great Lakes region. Figure A2.3 highlights the number of restrictions by state and for Ontario and Quebec. New York has more restrictions than any other state in the region (307,636) while Quebec and Ontario have fewer restrictions than any state in the region at 59,362 and 77,139 restrictions respectively.

Figure A2.2: Restriction Counts for the Great Lakes Region


The Great Lake region lends itself well to innovation and regulatory experimentation. In addition to the Mercatus Center’s focus on the region, there is a long-standing Canada-US partnership, anchored in the region. With USMCA, the emergence of the sharing economy, and a keen desire by many governments within the region, pilot initiatives could readily emerge. The Council of the Great

Lakes Region published a report in June 2018: Untapped Opportunities – Advancing regulatory cooperation in the Great Lakes region.

Local Governments and Regulation

Local governments are leading in many areas of regulatory reform. For example, the Smart Cities Challenge is a recent initiative supported by Infrastructure Canada and the Privy Council Office’s Impact and Innovation Unit. Over 200 communities submitted proposals – over half of which included aspects of regulatory reform. Under the program Montreal was awarded $50 million by Infrastructure Canada. The Smart City program is focusing on mobility and food supply, and includes a regulatory innovation laboratory⁹.

Sidewalk Labs at Waterfront Toronto and Oshawa ‘Teaching City’ are additional examples of on-the-ground efforts to explore regulatory changes (elevators and buildings in the case of Sidewalk Labs and integrating autonomous vehicles with non-motorized traffic in Oshawa). Communities like Toronto and Innisfil are establishing new policies and approaches to ridesharing and ride hailing operators.

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 competitiveness, e.g. burden reduction targets of $100 million in cost savings.

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

⁹ See, https://www.infrastructure.gc.ca/cities-ville/winners-gagnants/50m-montreal-eng.html and https://www.youtube.com/watch?v=8mLNKm3hGZY
and urban regions), for example, are exploring ways to regulate mobility platforms and data-management systems.

The shifting role of the TSSA CSRO is illustrative. When the incumbent was selected there was an express directive that the role was less about auditing and more about a broader overview of TSSA’s existing and potential role. Following the Auditor General’s review there is now a shift to an audit function.

Many regulatory agencies are undertaking ‘value for money’ and ‘modernization’ reviews. There may be growing overlap and need for coordination. For example, the Ontario Energy Board (OEB) Modernization Review Panel’s Final Report of October 2018, outlined how the OEB’s operating expenses grew from $24.5M in 2004-05 to $43.8M in 2017-18. The Review Panel’s recommendations include establishment of a new governance framework, development of key performance indicators and a human capital plan, and a financial review of operations.

A recommendation of the Auditor General’s review of TSSA, December 2018, is a ‘move toward a risk-based oversight approach based on each pipeline operator’s specific safety risks’. With the recently completed merger of Enbridge and Union Gas, this one company operates 108,521 km of the 111,308 km of pipelines regulated by TSSA (about 98%)\(^\text{10}\). As the OEB presumably has primacy of regulation of Enbridge/Union Gas, perhaps a risk-based approach can be included in OEB regulated operating conditions.

Natural gas pipelines provide another example of the complexities of modern regulation. Responding to an editorial in Science (Jul 19, 2019)\(^\text{11}\) that referenced a comprehensive study quantifying the large, and under-counted fugitive methane emissions associated with natural gas distribution pipelines, John McGrath of TV Ontario wrote, “Why the government will have to come for your gas stove someday” (Jul 30, 2019)\(^\text{12}\). Methane is a powerful greenhouse gas and leakage levels were high enough to pose an explosion risk in some areas. The TVO article opined how “at some point, some level of government is going to have to start restricting the sale of new gas-fired homes and appliances”. This article was quickly rebutted by the Timothy Egan, CEO of Canadian Gas Association, emphasizing the ‘value proposition’ of natural gas for Ontario, and ways it can help reduce overall climate change impacts (mitigation of carbon and enhanced resilience)\(^\text{13}\).

Natural gas generation, usage, and distribution (e.g. pipelines) are moving toward a more harmonized and dynamic regulatory environment that will likely merge safety (shorter term) and sustainability (longer term) objectives. This move

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\(^{10}\) Annex 4, Auditor General report

\(^{12}\) [https://www.tvo.org/article/why-the-government-will-have-to-come-for-your-gas-stove-someday](https://www.tvo.org/article/why-the-government-will-have-to-come-for-your-gas-stove-someday)

\(^{13}\) [http://www.cga.ca/news/](http://www.cga.ca/news/)
to a more modern (outcomes) regulator is likely to impact most of TSSA’s regulatory mandate.

Regional Differences and the growing challenge of regulating in Ontario

Ontario regions are diverse. Depending on where people live they tend to view issues very differently. For example, responding to the question “do governments have a positive impact on people’s lives”, 41 percent of Toronto-416 residents said ‘yes’; while in the North the number was only 23 percent. Answering “do governments have a negative impact on people’s lives” 60 percent of residents in the more rural North and Southwest answered ‘yes’; while in Toronto-416 the number was 33 percent.

From 2003 to 2017, the Greater Toronto Area and Central Ontario accounted for more than 93 percent of new jobs created in the province. During that same time period Northern Ontario saw its employment decline by 23,600 net jobs. While 51.4 percent of the Toronto CMA population identifies as visible minorities, visible minorities make up only about 4 percent of the populations of Greater Sudbury, Thunder Bay and Belleville. Ontario’s four largest metropolitan areas – Toronto, Ottawa, Hamilton and Kitchener-Waterloo experienced the province’s fastest population growth between 2011 and 2016, while smaller communities grew much less, and areas in the North, Southwest and East experienced population declines. The patterns of population aging are also starkly uneven as smaller and more rural communities age much faster than others.

The regional differences in Ontario are intensifying. For example, the Toronto Region (Greater Golden Horseshoe) and Ottawa today contribute about 25 percent of Canada’s economy (the fastest growing share). By 2067 this will grow to about 35 percent of Canada’s economy. The rest of Ontario will likely see economic stagnation or decline, along with shrinking populations as immigrants gravitate to the jobs of urban centers.

The Role of Trust

‘Trust is important for the success of a wide range of public policies that depend on behavioural responses from the public.

‘Trust in institutions is important for the success of many government policies, programmes and regulations that depend on cooperation and compliance of citizens.’

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14 Survey results and statistics from Regional Differences in Ontario (Portraits 2017, by K. Alwani and A. Parkin, Mowat Centre, 2019)
15 OECD, Government at a Glance, 2013
Trust is the corner-stone of a successful society, and public regulator. However, trust is steadily eroding across many countries. Canada is no exception (Figure A2.3). Any effort toward a more modern regulator requires measures to protect against further erosion of trust, and ideally find ways to re-build trust within society (see 2017, Annual Report).

Figure A2.3: The Rapid Loss of Trust in Government (including Canada)

Trust in Government Further Evaporates

Percent trust in government, and change from 2016 to 2017


Performance Targets

Effective performance indicators need to reflect the complexities of issues such as jurisdiction, history, safety targets, and ways to communicate to regulatory peers, the public, and political oversight.

Table A2.1: Possible Performance Indicators for TSSA

- Share of licensed mechanics and technicians undergoing continuing education programs.
- Percent of designated facilities with a Risk and Safety Management Plan, and exhibited progress toward risk reduction.
- Public safety achievement (likely as measured by fatalities and injury, e.g. DALY) by sector, and relative to peer jurisdictions (largely already provided in ASPR).
- Public satisfaction; employee satisfaction (trends as measured through credible surveys).
- Fees charged and budget relative to comparators.
Figure A2.4: Opportunities for the ‘regulator of tomorrow’ (Deloitte)
Annex 3: Ontario Risks Outlook

Introduced in the 2015 CSRO Annual Report a consolidated Ontario risks outlook is proposed as a way to help place risk in context. The Risk Outlook is a consolidated risk profile to the well-being of Ontario residents. The risks combine the annual World Economic Forum’s (WEF) Global Risks Report and Parachute Canada’s latest assessment (Cost of Injury in Canada, 2015). The WEF Risks Report from 2015 to 2019 shifted slightly with greater risk identified from lack of climate change adaptation and mitigation. This year the Global Risks & Trend Framework (GRAFT) is included in the analysis. GRAFT (Figure A4.1) is published by the Global Risk Institute and intends to ‘identify and assess the perils and opportunities posed by global risks and trends unfolding around the world’.

Ontario’s main risks remain failure of critical infrastructure and failure to sufficiently adapt to extreme weather events. Risks to individuals remain falls, transport incidents and self-harm (including accidental poisoning and drug-overdose).

The global bio-physical and technological trends most likely to contribute to increased longer-term risk in Ontario are: (i) the rise of cyber-dependency and technology failures, e.g. wide scale data theft (and failure of service delivery and trust); (ii) failure of regional/global governance; (iii) climate impacts intensifying regional and global risks such as spread of infectious disease, economic and fiscal shocks, increasing national sentiment, and (iv) regional and global ecosystem collapse.

The socio-economic trends most likely to contribute to increased longer-term risk in Ontario are: (i) aging population; (ii) inability to adapt to immigration, rising geographic mobility, involuntary resettlement; (iii) failure of governance structures and institutions, e.g. banking, healthcare.

Ontario Risks Outlook – 2019 Draft

- Failure of critical infrastructure – including cyber-attacks
- Failure of climate change mitigation and adaptation, extreme weather
- Falls
- Self-harm, drug-overdose
- Transport Incidents
- 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, fiscal crises/sovereign debt
- Violence (personal)
Global Risks 2015 to 2019 (WEF annual reports)

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<tr>
<th>Likelyhood, 2015</th>
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<td>Weapons of mass destruction</td>
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<td>Under-, Unemployment</td>
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<td>Large-scale terrorist attacks</td>
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<td>Massive incident of data fraud/theft</td>
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<td>Biodiversity loss and ecosystem collapse</td>
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Water crises
Asset bubbles in a major economy

**Impact, 2019**

Weapons of mass destruction  
Failure of climate-change mitigation and adaptation  
Extreme weather events  
Water crises  
Natural disasters  
Biodiversity loss and ecosystem collapse  
Cyber-attacks  
Critical information infrastructure breakdown  
Man-made environmental disasters  
Spread of infectious diseases

### Table A4.1: Global Risk Institute’s, Global Risks & Trends Framework, GRAFT

![Table A4.1: Global Risk Institute’s, Global Risks & Trends Framework, GRAFT](image)