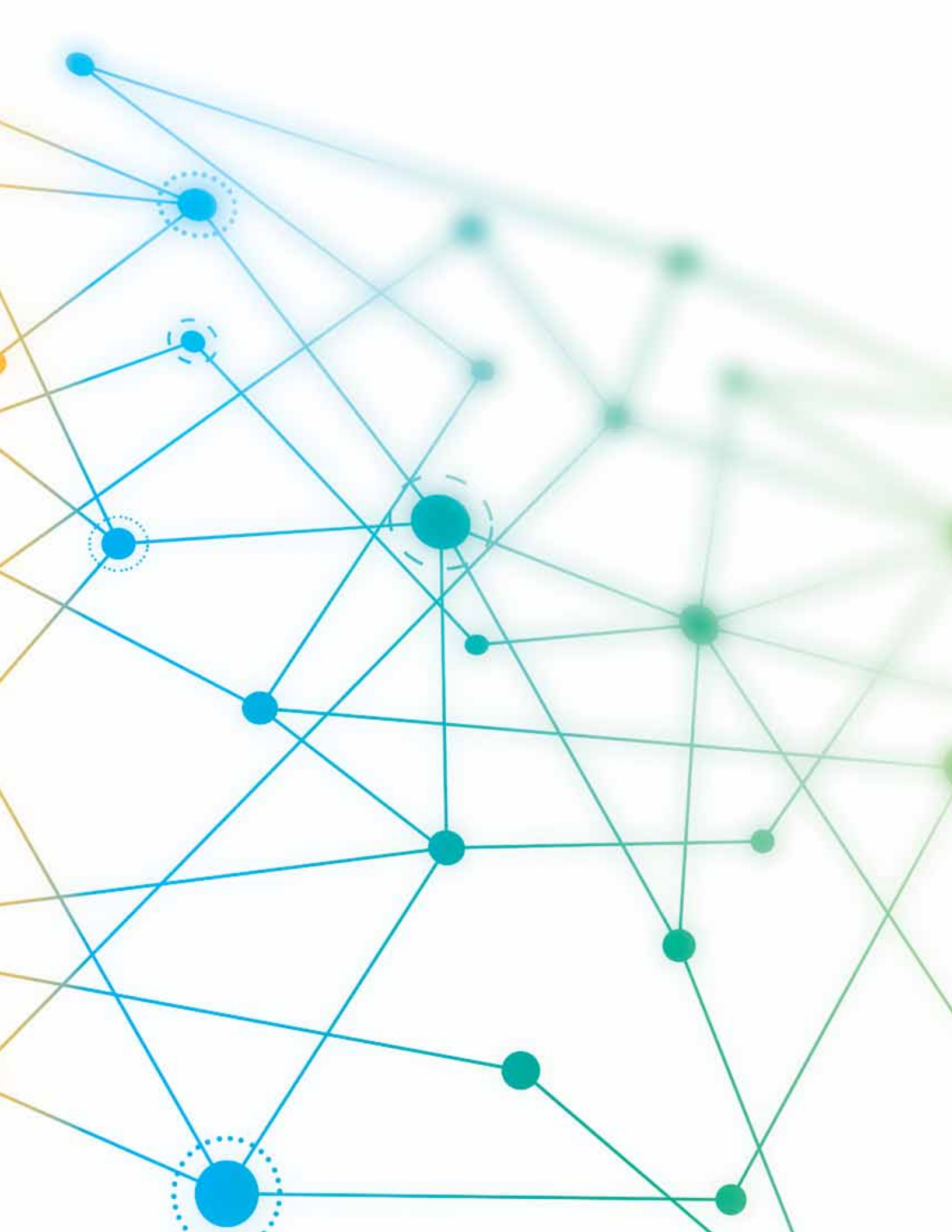


quality connections





quality connections

This business plan marks the halfway point in our 10-Year Strategy towards a comprehensive knowledge-based approach to safety oversight. It is an opportune time to reflect on what we have learned to date, and to recognize the work we have yet to do as we embark on year five of this strategy.

We acknowledge that safety culture centres around the willingness of people to participate – from stakeholders choosing to work within our safety system to our employees as ambassadors of safe practices. And so, we aim to deliver relevant safety services and resources to clients and stakeholders so they can better manage the safety of their own work and assets. This commitment is reflected in the theme of this 2017-2019 business plan: *Quality Connections*.

In the past year, we have grown participation by using technology tools to put more useful safety information into the hands of our employees, clients, stakeholders and the public. As we shift to integrating value, we will further develop innovative solutions to make it easier and worthwhile for those interacting and working with us.

We will leverage and improve on existing technology, products and processes to better serve our clients. We will update our technology architecture to support stronger data governance and business intelligence while building a better understanding of our stakeholder groups.

Through this increased understanding, we will be able to evolve our strategy to tailor services to the safety needs of different client groups, collect more data, and share it in a way that is useful and applicable to the operational needs of our clients.

This business plan outlines our 2017-2019 priorities and how we will deliver on our strategy to help enrich the efforts of our clients and stakeholders who contribute to maintaining the safety of BC's technical systems every day.

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assess
certify
support
educate
enforce
research

who we are

BC Safety Authority is an independent, self-funded organization mandated to oversee the safe installation and operation of technical systems and equipment. In addition to issuing permits, licences and certificates, we work with industry to reduce safety risks through assessment, education and outreach, enforcement, and research.

Our Mission

We build your confidence in safety systems for life – through a focus on risk and support for innovation.

Our Vision

Safe technical systems. Everywhere.

Our Values

- Simplicity
- Authenticity
- Accountability

what we do

We deliver safety services across the following technologies in the province:

- Electrical equipment and systems
- Boilers, pressure vessels and refrigeration systems
- Natural gas and propane appliances and systems, including hydrogen
- Elevating devices, such as elevators and escalators
- Railways, including commuter rail
- Passenger ropeways, such as aerial trams and ski lifts
- Amusement devices
- Complex and integrated technical systems involving multiple technologies



services

- Assessing technical work and equipment, including collecting information through physical assessment, incident investigation and registering new equipment and designs.
- Certifying individuals and licensing contractors and operators to perform regulated work.
- Supporting clients in the development of alternative safety approaches, and auditing their safety management plans or equivalent standard approaches.
- Educating and sharing technical systems safety information with our clients and the broader public to better control risks.
- Taking enforcement actions that promote an equitable safety system where all participants are compliant with regulations.
- Conducting research, including contributing to provincial and national safety code development and updating regulations for the technologies we serve.

framework

BC Safety Authority operates within a legislative and regulatory framework that includes:

- *Safety Authority Act*
- *Safety Standards Act* and Regulations
- *Railway Safety Act* and Regulations
- *Freedom of Information and Protection of Privacy Act*
- *Ombudsperson Act*

For further information, including our Annual Report and annual State of Safety Report, visit the 'About' section of our website at www.safetyauthority.ca/about

board of directors

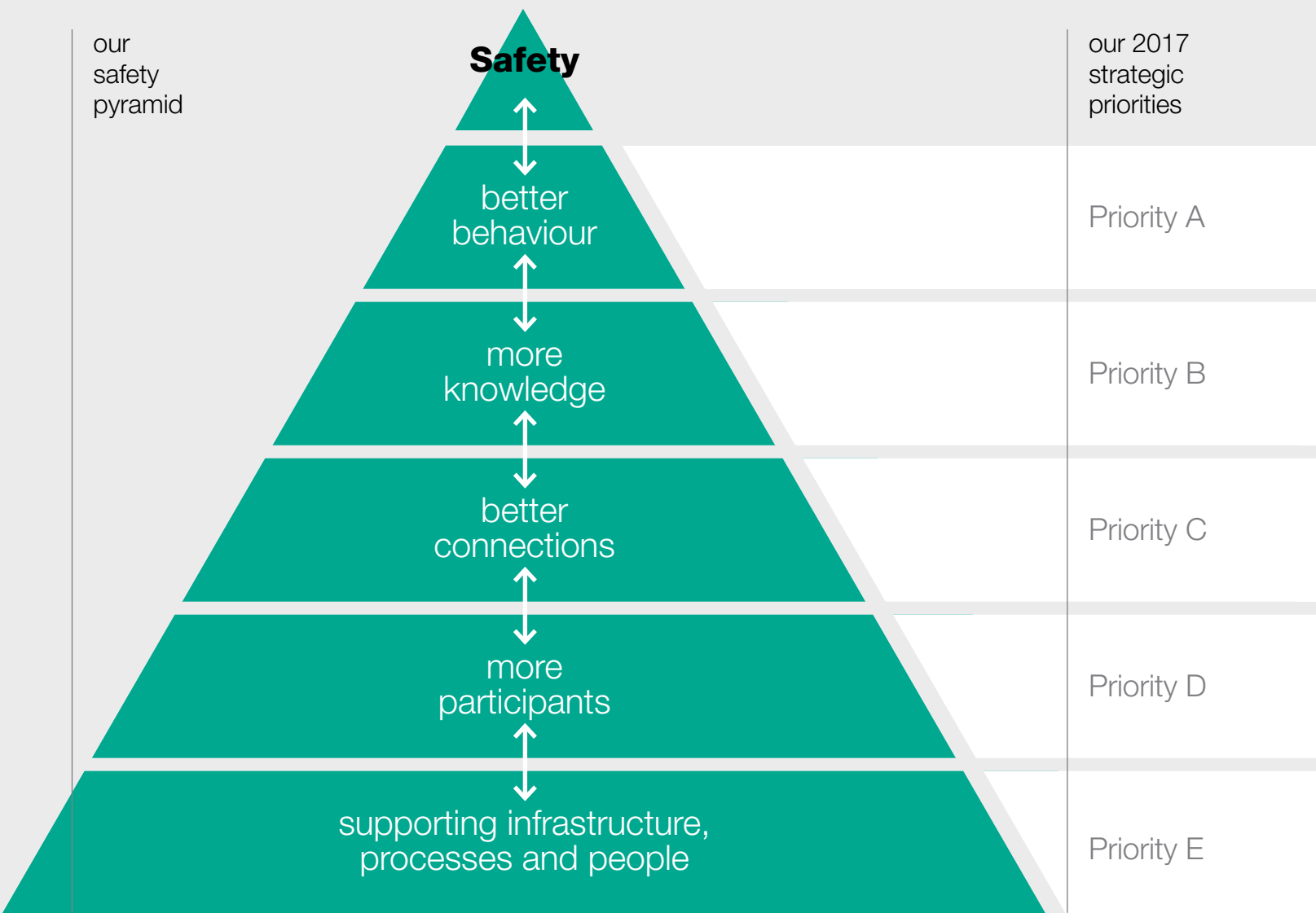
BC Safety Authority is governed by a board of 11 directors that monitors performance and sets the organization's strategic direction in consultation with management. Directors are appointed on the basis of merit; they must meet the qualifications established in the *Safety Authority Act* and abide by a code of conduct.

The work of the Board is supported by committees that provide additional focus on matters such as:

- financial affairs, audits, insurance and investments;
- governance and nominating functions, CEO performance evaluation and recruitment, compensation and other human resource issues;
- technical and enterprise risk oversight;
- regulatory development and compliance; and
- strategic advice and oversight.

Our 2017-2019 Business Plan at a Glance

The safety system comprises people, equipment, safety standards and work practices, and BCSA relies on industry and the public to actively participate in the system. As we continue to advance our 10-Year Strategy, we will enhance our technology infrastructure and invest strategically in the knowledge and skills of our employees and clients. We will increase the number of participants in the safety system and create better connections to enable ongoing participation. We will collect and analyze more data, resulting in better knowledge creation for our clients and employees. And we will hold certified individuals more accountable for safety, and identify more unpermitted work and equipment, leading to better behaviour. All of this is in service to enhancing technical systems safety in British Columbia.



In order to focus our business planning process for 2017, the following principles provide a framework of actions to deliver on our strategy for the coming year.

Grow the impact of our existing technology tools to improve safety outcomes through more client participation, data collection and utilization, and sharing of safety knowledge.

Implement a flexible information technology architecture for BCSA's core systems to better support agile development, and stronger data governance and business intelligence.

Increase the understanding and ownership of safety responsibilities in our clients, partners and the public through broader communications, deeper relationships, and strategies for corporate offices, BCSA brand evolution, and connecting our employees to the business.

Expand and evolve our service line strategy to better tailor our products and services to the safety needs of our different client groups.

Adapt to unforeseen changes in our external environment through agile project timelines and budget commitments.

In support of these principles, we established five strategic priorities that will contribute to the integrity of the safety pyramid depicted below. Achieving these strategic priorities will propel us towards being a knowledge-based organization and enable us to deliver on our mission to *build your confidence in safety systems for life – through a focus on risk and support for innovation*.

Expand tracking of safety issues and offerings to certificate holders

Support risk-informed decision making and data sharing

Promote awareness and connectivity through our online service channels

Enhance safety products and services for asset owners

Improve our technology infrastructure and support employee skill development

our strategic goals

SAFETY

To advance the understanding of safety risks and to develop the best ways to manage them.

Objectives

- Develop and share safety knowledge
- Build safety leadership in system participants
- Apply a risk-based approach to achieve better safety efficiently
- Make sound public policy choices

2017 Tactical Statement

We will increase the use of data to deliver knowledge-based safety services, and to inform our activities for assessment, certification, and compliance and enforcement. The safety oversight of operating equipment and systems in particular will continue to advance through education, audit, and enforcement.

2018-2019 Tactical Statement

We will continue to collect, analyze, package and share safety information and risk data to deliver knowledge-based safety services for our clients. We will continue to enhance our safety oversight of certified individuals and operating equipment and systems through education, audit programs, and enforcement activities to reinforce the integrity of the safety system.

CLIENTS

To contribute to our clients' success by providing valued services that attach clients to the safety system and drive higher safety performance.

Objectives

- Simplify the way clients do business with us
- Understand what our clients want and need to deliver safe technical systems
- Create specialized services that fit the safety needs of different client groups, especially large clients with complex technical assets

2017 Tactical Statement

We will continue to expand online self-service functionality to clients and put more self-service safety information into their hands. We will gain more insight into the specific safety needs of large and small asset owners, contractors and certified individuals, and use this insight to tailor our services.

2018-2019 Tactical Statement

We will expand the number of larger asset owners who receive our audit services and the educational offerings to certified individuals, contractors and asset owners. More knowledge will be web enabled for our clients, supporting better safety decisions.

PEOPLE

To have a courageous culture where employees build and deliver safety services for the future.

Objectives

- Implement technology that enhances internal knowledge and capability that translates into more effective service for clients
- Advance our employees' connection to our strategy
- Increase flexibility and adaptability

2017 Tactical Statement

We will encourage a culture that supports a flexible and adaptive workplace where employees have the tools to solve problems and implement new ideas. We will expand our access to talent by connecting with educational institutions to engage individuals in the safety system earlier in their career and by investing in development programs for employees to grow their capabilities and enhance their contribution to safety knowledge.

2018-2019 Tactical Statement

We will strengthen our learning culture and create a workplace where employees are actively engaged in our strategy and are committed and supported to stretch, adapt, and succeed in a complex and changing environment. Through curiosity, collaboration, and courage, we will generate insight and innovation to create knowledge and value for our partners in the safety system.

SUSTAINABILITY

To optimize human, financial and relationship capital, and to anticipate and adapt to changes in our marketplace.

Objectives

- Invest in our IT systems to create a platform to deliver more services online at the same or lower cost
- Create collaborative work environments that promote the transfer of knowledge and are energy and cost effective
- Identify and improve the primary cost drivers for the products and services we deliver

2017 Tactical Statement

We will enable collaboration and knowledge transfer between clients and employees by creating flexible and open physical spaces and by providing the right technology tools to support the capture, analysis and sharing of safety-related data.

2018-2019 Tactical Statement

We will deliver a better client experience with our services at a lower cost per transaction through improved processes, clearer fee structures and digitalization of services.

our strategic priorities

PRIORITY A

Expand tracking of safety issues and offerings to certificate holders

We will engage with certified individuals in a meaningful way through standardizing and enhancing our certification processes across technologies. As part of holding certified individuals more accountable for safety, and to give our employees more safety data about our clients' work performance, we will implement new tools and tracking systems to better capture, track and manage identified safety issues (i.e., non-compliances), and we will continue to identify unpermitted work and equipment.

2017 TACTICS	2017 MEASURES AND TARGETS
<p>Create a service line strategy for certification services, and launch new certifications either as regulatory requirements or voluntary (i.e., optional) services.</p>	<p>Launch new certification services as follows:</p> <ul style="list-style-type: none"> – Power Engineer renewals and Internationally Trained Worker (ITW) process for power engineering; and – Red Seal welder qualification for newly trained individuals, including revamped approaches for pressure welder qualification and welding procedure recording.
<p>Expand our safety education to newly certified individuals and licensees who employ them, and measure education's impact on safety behaviour.</p>	<p>Launch a pilot offering online certification service for new electrical field safety representative (FSR) applications.</p> <p>Develop and deliver a safety education program for one cohort of each: power engineers and elevating device mechanics. Report on the cohort's learning based on analysis of pre- and post-education testing.</p> <p>Design and run an experiment with a certificate holder group that tests the relationship between increased education or knowledge and behaviour with respect to technical safety, and report on results.</p>
<p>Improve the ability for duty holders and our employees to more effectively track, and remediate, identified safety issues (i.e., non-compliances).</p>	<p>Once improvements are in place, we will follow up within 90 days on 100% of new non-compliances on high hazard assessments.</p>
<p>Continue to identify unpermitted work and equipment, and bring these businesses and certified individuals into the safety system.</p>	<p>Increase by 25% the volume of directly identified unpermitted work and equipment accumulated across the electrical, gas, and boiler technologies for installation and operating permits; and, perform six audits of either a key licensee or asset owner, as evidenced by a documented and delivered audit report.</p> <p>Publish the rates of safety hazards associated with unpermitted work and equipment, and the longer-term client behaviour changes.</p>

PRIORITY B

Support risk-informed decision making and data sharing

We will continue to grow our knowledge base, delivering smarter safety by gathering more safety and client data, translating complex data into useful safety information for clients by improving our information technology (IT) architecture and database design. We will also expand the strategy and safety benefits of our resource allocation program (RAP) algorithms across all technologies.

2017 TACTICS	2017 MEASURES AND TARGETS
Allow clients who use the online portal to easily view consolidated client safety information.	<p>For clients using the portal, make available an online client safety profile for licensees (i.e., contractors) and asset owners that provides value by detailing information on related:</p> <ul style="list-style-type: none">- permits;- certified individuals or licensed contractors; and- assessments, where applicable. <p>As a new product, its usefulness to clients is evidenced by a minimum of 15% of registered portal clients that log on and click through to view their profile at least once in Q4 2017.</p>
Put more useful data into the hands of our employees to support decision making.	Ensure the safety risk management system is data driven, accessible to all BCSA employees, and includes risk response plans for all identified high risk issues.
Increase our ability to predict safety issues and to direct our resources toward areas of risk through enhancements to our RAP algorithms.	<p>For electrical installation permits, implement (through a Minimum Viable Product approach) system changes to improve RAP's predictive capability by 20% and display the prediction details for safety officers.</p> <p>Publish a report detailing the predictive capability of RAP as it relates to technical hazards.</p>

our strategic priorities

PRIORITY C

Promote awareness and connectivity through our online service channels

We will improve our connection with our clients, stakeholders and the broader public through enhancements to our electronic service channel, adding online transaction types, reducing transaction costs, improving the online experience, and making safety information and knowledge easily accessible and useful.

2017 TACTICS	2017 MEASURES AND TARGETS
<p>Increase the digitalization of our safety services and information by adding more transaction types to online services.</p>	<p>Unify the client online services – MyConnection and client portal – into a single portal while maintaining year-over-year online client transaction volume as a proportion of total client transaction volume. In addition, Q4 2017 Net Promoter Score (NPS) is at least equal to the Q4 2016 NPS score for the client portal.</p>
<p>Position our online channel as a primary resource for safety system information and safety knowledge for our clients and the broader public through an improved website experience.</p>	<p>Launch an updated BCSA website that offers an enhanced online experience for visitors and provides safety information and knowledge in a useful way.</p>

PRIORITY D

Enhance safety products and services for asset owners

We will improve our ability to connect with asset owners and provide them with more integrated approaches to safety oversight, including education programs, audits as an assessment tool, and better access to pertinent safety information.

2017 TACTICS	2017 MEASURES AND TARGETS
<p>Continue to build asset owner relationships to increase their awareness of their safety roles and responsibilities.</p>	<p>Improve our ability to connect and deepen our relationship with asset owners by growing asset owner email addresses on file by 50% over 2016.</p> <p>Implement a technical systems safety communication plan and deliver education programs for two asset owner segments with elevated risk potential based on our technical risk register and client segmentation analysis.</p>
<p>Implement assessment approaches that are most appropriate for different asset owner client types, including assessments of small asset owners and multi-technology audits for large asset owners.</p>	<p>Introduce operating equipment audit services to large multi-technology sites where the client has an elevated risk potential based on our technical risk register and client segmentation analysis.</p>

Priority E

Improve our technology infrastructure and support employee skill development

We will ready our organization to grow our impact on the entire safety system by enhancing our information technology (IT) infrastructure, improving our data management and the responsiveness of our IT systems, and implementing a competency-based skills development program for safety officers to grow their ability and consistency to evaluate and mitigate safety risks. We will also advance our incident investigation processes, improve our internal health and safety practices, and take steps to ensure our ongoing financial sustainability.

2017 TACTICS	2017 MEASURES AND TARGETS
<p>Make our IT systems and their development more nimble and adaptable to client and employee needs through a new system architecture strategy.</p>	<p>Build solutions for incident investigation, safety issue (i.e., non-compliance) tracking and client safety profiles that test the strategy and confirm our future architecture choices.</p>
<p>Provide our safety officers with a career-long skills development program to identify required competencies and to offer continuous learning to grow these competencies as the safety system and our clients' safety needs change over time.</p>	<p>Design a safety officer development program including core and technology-specific competencies in three technologies.</p> <p>Develop and complete learning needs assessments and development plans for current safety officers in two technologies.</p>
<p>Improve our incident investigation process with new tools for collecting incident data and for reporting incident findings.</p>	<p>Safety officers are able to capture standardized incident information directly into their iPad application.</p>
<p>Deliver on budget.</p>	<p>Contribution Margin is 37.5% (after deferral)</p> <p>Overhead Ratio is 37.5% (after deferral)</p>
<p>Better manage Accounts Receivable.</p>	<p>Accounts Receivable (A/R) aging % under 90 days is no less than 70%</p>

financial outlook

Forward-looking statement

2017's budget is balanced, and our operating reserve will meet the target level of 15% of annual operating costs.

The budget is based on the actual financial performance in recent years and projected market conditions. 2017 revenues include previously announced fee increases, while holding the volumes of operating and installation permits 1% higher than our Q3 2016 forecast. We project other revenue growth in 2017 totalling \$2.55M coming from three primary sources: \$1.0M from our continued efforts to identify unpermitted work and equipment, \$1.2M from non-regulatory contracts, and \$350K from client education. As in prior years, we will manage our expenditures to ensure that we maximize our return on capital and operating spending, and adjust them to revenues should actual figures fall below budget.

2018 and 2019 forecasts are based on our best information as of October 2016. Our assumption is that our revenue and expenses will have similar profiles to 2017. All forward-looking statements within this report should be understood to involve risks and uncertainties that could cause actual financial or operating results to differ significantly.

2016-2019 Projections (\$'000s)	Updated Q3	Budget	Estimate	Estimate
Revenue Category	2016F	2017	2018	2019
Services and related fees	54,857	57,705	59,989	62,555
New business initiatives	1,889	2,550	2,752	2,752
Investment and other income	964	648	608	608
Total Revenue	57,710	60,903	63,349	65,915
Expenses				
Salaries and benefits	36,850	41,318	42,387	43,713
Amortization of capital assets	3,650	4,159	4,248	4,302
Building occupancy	2,803	2,946	2,984	3,023
Audit, legal and insurance	665	705	715	723
Contract services	1,309	1,619	1,905	1,990
Travel	1,358	1,389	1,793	1,817
Office and business	2,059	2,541	2,623	2,659
Telecommunications	593	493	803	814
Information systems	1,410	1,890	1,721	2,654
Training	821	822	1,393	1,411
Vehicles	715	914	927	938
Corporate governance	391	455	460	467
Postage and courier	220	266	269	272
Outreach and awareness	449	625	710	720
Materials and supplies	169	206	208	211
Bad debts	229	229	201	201
Total Expenses	53,599	60,903	63,349	65,915
Excess / (Deficiency) of revenue over expenses	4,111	0	0	0

glossary

Alternative Safety Approach (ASA)

A performance-based approach to achieving compliance with the *Safety Standards Act*, which allows owners or operators of regulated product or equipment to meet safety objectives in ways other than those prescribed by the regulations.

as-found hazard

A condition found by safety officers during physical assessments, investigations, or audits of regulated work, product, equipment, or safety systems where intrinsic hazards are not suitably controlled.

assessment

An evaluation or review of information relating to regulated work, product or equipment. Key BC Safety Authority activities in assessment are:

- gathering of information through inspections or physical assessments (of reported hazards and work performed by contractors or homeowners);
- gathering of evidence through incident investigations;
- gathering of evidence through audits or documentation evaluations (of safety management plans for example);
- reviews of requests for permission (such as permit or ASA applications);
- reviews of declarations and reports from duty holders (includes incident reports);
- reviews of qualifications for licensing or certification; and
- reviews of product or equipment and designs when approving these for use in BC.

asset owner

A person or company that owns or leases regulated products or equipment.

audit

An independent, systematic review supported by objective evidence that is focused on a system or process.

certificate of qualification

A certificate issued by BC Safety Authority to an individual who provides evidence of his/her knowledge and ability to do regulated work in a manner that meets the requirements under the *Safety Standards Act* and allows an individual to perform regulated work in British Columbia within the scope of the certificate.

field safety representative (FSR)

An individual who holds a certificate of qualification verifying that they have satisfied regulatory requirements for demonstrating competency in the interpretation and application of regulations and codes. The certificate is required to carry out the duties described in regulation. These duties include obligations to assess compliance of regulated work and operation of equipment; certification also entitles them, on behalf of a contractor or operating permit holder, to make declarations that regulated work complies with the *Safety Standards Act* and regulations.

installation permit

A written permission required to install or alter regulated product or equipment. Depending on the work being performed, an installation permit may be issued to a licensed contractor, a person who holds an operating permit, an owner of a regulated product or equipment, or a homeowner who performs regulated work as permitted under the regulations.

licence

A permission issued by a BC Safety Authority provincial safety manager that entitles a person to engage in regulated work. A licence is subject to terms and conditions specified by a provincial safety manager and to any requirements associated with a contractor's licence that are contained in the regulations. A licence is normally associated with a specific person and is not specific to a particular site or location.

operating permit

A permission issued by BC Safety Authority that allows the operation and maintenance of a regulated product or equipment. An operating permit may be issued to the owner of a regulated product or building where the product or equipment is to be operated.

Resource Allocation Program (RAP)

A rating program which uses risk-informed criteria to establish work priorities and the allocation of resources. RAP uses current and historical data which is based on the scope and stage of work being performed, equipment environment; and safety history.

unpermitted work

Regulated work that has been done without the required permissions in place.



British Columbia Safety Authority

Corporate Office
505 – 6th Street, Suite 200
New Westminster, BC V3L 0E1
Toll Free 1.866.566.7233
www.safetyauthority.ca
contact@safetyauthority.ca

RPT-5135-00