The Railway Safety Program at BC Safety Authority (BCSA) regulates railways that operate solely within British Columbia and have a Minister’s Certificate issued by the BC Ministry of Transportation and Infrastructure. Provincial Railways are subject to the British Columbia Railway Act, Railway Safety Act and adopted Federal railway safety legislation. In the Railway Safety Program, we regulate five classes of railways: common carrier, heritage, commuter, industrial and just recently added, industrial sidings and spurs.

ACCIDENTS AND INCIDENTS

Railway accidents and incidents are reported in accordance with adopted federal regulations. Figure 6-1 summarizes the accidents and incidents reported to BCSA involving railway equipment. Typically, these accidents and incidents are low speed and low risk. Many of the accidents can be attributed to human error and violations to rules and procedures. The Railway Safety Program annually focuses its assessments and audits on employee training and the requirements for railway operators to perform proficiency testing of their railway employees.

INJURIES

Provincial railways are required to report injuries resulting from railway operations to BCSA. This includes injuries to workers performing train operations or injuries to the public on railway property as a result of train operations.

Figure 6-1: Railway Accidents and Incidents 2011-2015 [Note 1]

Note 1: Accidents and Incidents occurring on railway property, that are not directly related to a railway’s compliance to legislation and performance, are excluded.
ASSESSMENTS AND AUDITS
OF REGULATED WORK

Railway safety officers assess and audit all operating railways as part of regular oversight. Assessments may result with non-compliances where the railway is found to not comply with the applicable Acts, regulations, rules and guidelines. Railway operations are also audited against their safety management systems (SMS), which are required for all railways and the Railway Safety Program issues recommendations as a result of these audits.

The Railway Safety Program’s 2015 work plan for assessing railway safety activity was determined and directed by findings revealed in non-compliances from assessments, audits, accidents and incidents that occurred in 2014. The Railway Safety Program continued with its comprehensive risk-based approach to safety with a continued focus on employee training and proficiency testing.
MANAGING RAILWAY SAFETY RISKS

STAKEHOLDER ENGAGEMENT AND TOWN HALL MEETINGS

BCSA’s Railway Safety Program assessed program needs and it was determined that a fee increase was required to ensure sustainability. The risk-based fee model put into place in 2013, which allows railway operators to control a large component of their annual fee, was seen to have been successful in encouraging operators to introduce or refine proactive safety measures for their operations. The model was therefore continued in 2015, and railway operators were consulted on a 10% increase to these fees for both 2016 and 2017. It is anticipated that, in addition to sustaining the railway safety system, the increase will provide a further incentive for operators to reduce their safety risks in the coming years.

Annual town hall meetings are held with stakeholders to discuss industry issues, safety challenges and opportunities. This stakeholder engagement structure is used in railways in lieu of having a Technology Advisory Committee. In 2015, 30 provincial railways attended three railway town hall meetings which were held in Kamloops, Prince George and New Westminster. Discussions at these town halls included a review of annual statistics, industry risk assessment changes following the Lac Mégantic recommendations issued by Transport Canada, and a focused discussion on training and supervision of railway workers.

MEDIA RELATIONS

BCSA took six media relations actions and produced one newsletter in 2015 related to railway safety. A listing of all media relations can be found in Appendix G.
ONLINE EDUCATION

An online forum was utilized to host one of five railway town hall sessions with clients in Q4-2016. The session provided an overview of the state of safety for the railway technology in BC and connected railway clients across BC that may not have been able to travel to one of the live town hall events.

**Table 6-1: Railway Education Events Conducted in 2015**

<table>
<thead>
<tr>
<th>Title / Topic</th>
<th>Qty of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railway town hall online forum (1)</td>
<td>16</td>
</tr>
</tbody>
</table>

ENFORCEMENT

**Figure 6-7: Railways Enforcement**

![Railways Enforcement Chart]

Legend:
- Red: Notice & Orders Issued
- Blue: Notice & Orders Closed
MANAGING RAILWAY SAFETY RISKS

SAFETY MANAGER’S DISCUSSION

Over the last year, BCSA’s Railway Safety Program has continued its efforts to build on its established relationships with stakeholders and provincial railways. These connections with industry are important to all parties as they foster participation and awareness and will continue to provide a high level of confidence in the safety of railway operations in British Columbia.

In 2015, the Railway Safety Program enhanced in its efforts to identify, understand and manage hazardous conditions that may threaten safe railway operations. As the program continues to work towards establishing baselines of safety within our mapping of railway hazards, it will soon be able to utilize a newly-developed database to be rolled out in 2016. With the aid of this new system, the Railway Safety Program looks forward to managing safety data and resources in a cost-effective manner that will support timely trending and analysis of railway safety activity.

The Safety Management Systems (SMS) is the foundation for railway safety in Canada and the Railway Safety Program in BC. With a SMS, railways must define safety targets, risk assess their operation, and comply with all applicable rules, regulations and guidelines. In 2015, Transport Canada was extremely active in developing and modifying regulations, which included the restructuring of the SMS regulation. In response to Transport Canada’s work, BCSA’s Railway Safety Program reviewed and made recommendations to the provincial government on adoption of two important pieces of railway safety legislation.

Since 2004, the Railway Safety Program has more than doubled the size of railways under oversight from 47 to 127 active railways. This growth has challenged and added complexity to how safety services are delivered. Safety oversight is conducted through audits, which enable the effective management of compliance and safety. Targeted risk-based audits have advanced safety knowledge and learning. There are clear examples of improved safety attitudes and performance from railways that have received comprehensive audits and education from railway safety officers. Analysis of compliance behaviour change within railways that have received comprehensive audits shows they experience a marked improvement in safety attitude and a reduction in non-compliance. In 2016, the program will continue to identify railway operations that need help in establishing positive-discipline behaviours that support effective safety management.

The Railway Safety Program continues to approach the training, qualification and supervision of railway workers as one of the most important aspects of railway safety. 2015 data reveals that human factors continue to dominate the cause of accidents and incidents. 2016 efforts will continue to focus on delivering support and education to railways in the area of supervision and proficiency testing of railway workers. The Railway Safety Program is committed to working with consultants and provincial railways to develop a series of educational products to support railways in making choices on who they hire to deliver training and education to railway workers and on how railways employees perform their duties.

Eric Samuelson | Railways Safety Manager