



# Evaluation of Public Safety's Support to Avalanche Canada's Long-Term Sustainability and Expansion of Services

Evaluation Report - March 2024



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The purpose of the evaluation was to determine the extent to which Public Safety's provision of grant funding to Avalanche Canada has supported the organization's long-term stability and expansion of services and to assess the degree to which Avalanche Canada has achieved its expected immediate and intermediate outcomes.

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# Background

Avalanche Canada is a not-for-profit non-government organization. It was created in 2004 as a response to the winter of 2004, which saw 29 people killed in avalanches. Avalanches are the deadliest natural hazard in Canada, killing more people annually than all other natural hazards combined. Most of these fatal avalanche accidents occur in British Columbia. For example, between January 1, 2011 and April 30, 2022, there were 77 avalanche-related deaths in British Columbia, representing an average of 7 deaths each year.

Avalanche Canada is dedicated to improving avalanche awareness and safety. The organization provides avalanche forecasts, develops and delivers training programs and supports research on avalanche safety. The organization's mandate is to serve as Canada's national public avalanche safety organization by:

- Coordinating public avalanche safety programming;
- Providing public avalanche safety warnings;
- Delivering public avalanche awareness and education;
- Providing avalanche training for non-professional winter recreation;
- Serving as the point of contact for public, private and government avalanche information; and,
- Encouraging avalanche research.



While Avalanche Canada is a non-governmental organization, in many other countries, avalanche prevention activities are a public service falling under the governments' responsibility. For example, in countries such as Norway, Sweden or Switzerland, public avalanche safety programs are funded by government. To support Avalanche Canada's long-term sustainability and expansion of services, the Government of Canada announced

a one-time endowment of \$25M in the 2018 Fall Economic Statement. The endowment was allocated by Public Safety Canada through an up-front grant agreement in 2019-20 with the Avalanche Canada Foundation. The grant is managed and administrated by the Foundation for the benefit of Avalanche Canada. The Avalanche Canada Foundation is a federally registered charitable organization that supports the work of Avalanche Canada by managing the funds obtained from donations, sponsorships and fundraising events, which constitute Avalanche Canada's main sources of revenue.

The overall objective of the grant was to provide Avalanche Canada with the capacity and resources required to fulfil its mandate, including ensuring that it is national in scope and provides services to all areas at high-risk for avalanches across Canada. Key outcomes included the provision of warning services in both official languages, and increasing public awareness of the risks posed by avalanches together with key safety measures.

# Evaluation Purpose and Methodology

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The purpose of the evaluation was to determine the extent to which Public Safety’s provision of grant funding to Avalanche Canada has supported the organization’s long-term stability and expansion of services and to assess the degree to which Avalanche Canada has achieved its expected immediate and intermediate outcomes. The evaluation covered the period from 2019-20 to 2023-24 and was conducted in accordance with the Treasury Board Policy on Results and the Directive on Results.

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## Interviews

Seven key informant interviews were conducted with individuals from Public Safety, Avalanche Canada, Avalanche Canada Foundation, Avalanche Quebec, and the representative of another Government of Canada endowment grant program.

## Program Document Review

Government and program documentation, including documentation and reports from Avalanche Canada were reviewed, as well as publicly available documents for four Government of Canada endowment grants.

## Survey

An online survey with organizations that provide Avalanche Canada training and/or use the warning and forecast tools and resources was conducted. Survey results reflect responses from 33 organizations, a 40% response rate.

## Limitations

The limited number of interviews does not allow using specific information separately. Avalanche Canada reporting for 2023-24 was not available at the time of the evaluation.

# Effectiveness

## Achieving required capacity



**Finding:** Public Safety’s support has allowed Avalanche Canada to make progress in acquiring the required capacity to fulfill its mandate.

To fulfill its mandate, Avalanche Canada's Business Plan had a twofold objective: stabilize existing programs and address persistent understaffing, and, expand services in all high-risk areas, including Quebec, Newfoundland and Labrador, British Columbia, Alberta and Yukon. Activities in eastern Canada (e.g. Quebec and Newfoundland and Labrador) are carried out by Avalanche Quebec, an intermediary not-for-profit organization.

The endowment grant enabled an increase of employees in both the head office and field teams. The number of staff almost doubled from 2018-19 to 2021-22. Avalanche Canada went from roughly 30 staff, including only three full-time, in 2018-19, to close to 60 staff by 2021-22. This allowed for increased capacity in forecasting, warning services, field teams, finance and communications. As stated in the 2022-23 Annual Report, Avalanche Canada

achieved the objective of maintaining staffing to a level adequate to support current products and services. Avalanche Quebec capacity also increased.



This increased capacity has allowed Avalanche Canada to respond to a rise in the practice of winter sports in recent years and put in place most of the activities as planned. Furthermore, the endowment grant funding allowed for longer-term planning and increased staff retention. This retention is important as the sector is characterized by high competition for few specialized resources in avalanche forecasts. Avalanche Quebec faces challenges related to the availability of qualified avalanche forecasters as the training and certification required for this position is only offered in Western Canada. In addition, based on the standards of the membership in the Canadian

Avalanche Association, the organization that trains and represents professional avalanche workers, requires work experience in Western Canada.

The endowment grant allowed Avalanche Canada to make numerous improvements to existing services, such as the Mountain Information Network that provides real-time, location-specific reports on snow,

ice, avalanche and weather conditions, the website and IT infrastructure. In addition, new operational capital equipment was acquired for expansion of head office and field operations at Avalanche Canada and Avalanche Quebec. This included snowmobiles, office equipment, personal protections, and weather stations.



## Providing bilingual services and resources

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**Finding:** Avalanche Canada made progress in providing their services and resources in both official languages. However, social media postings remain unilingual.

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One of Avalanche Canada's objectives was to make information and resources readily available in both official languages. Since 2019-20, Avalanche Canada has made available forecasts, training handbooks, annual reports and all media releases in both French and English. The e-newsletter, Aspect, is delivered monthly throughout the winter season in both official languages to its over 7,700 subscribers. As well, the majority of the Avalanche Canada website content and the new interactive online avalanche tutorial, Avy Savvy, are available in both languages. The AvID forecasting software automatically translates all standard information. In addition to accessibility in both languages, in 2023, the Avalanche Canada website became fully accessible to visually impaired people.

However, not all of the surveyed organizations were aware of the bilingual nature of Avalanche Canada products. While slightly more than half of the organizations knew that the warning and forecast tools and resources are offered in both languages, 30% thought that these services were offered in English only.

While resources may be available in both languages, the majority of training provided by the surveyed organizations was delivered in English. Only 11% of organizations provided training in both French and English. This may have been due to the fact that none of the respondents were located in bilingual or francophone jurisdictions.

Social media postings remain unilingual (English only for Avalanche Canada and French only for Avalanche Quebec), and include forecast and outreach messages. This was seen as a result of challenges related to finding bilingual staff in Western Canada and the high costs for translations.

## Increased awareness

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**Finding:** Avalanche Canada’s training courses, outreach activities, warning and forecast tools as well as resources have contributed to increased awareness of the risks posed by avalanches and of the safety measures in place in high-risk areas among a diverse audience.

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Avalanche Canada has developed several training courses that are delivered by service providers, including: Avalanche Skills Training 1, Avalanche Skills Training 2, Companion Rescue Skills and Managing Avalanche Terrain. Trainers are required to be members of the Canadian Avalanche Association, and provided with curriculum guidelines.

In 2020-21, there was an increased participation in winter backcountry recreation that led to an increase in demand for public avalanche training, with over 15,000 people attending courses. In 2021-22, a total of 12,342 people took a course through the Avalanche Canada Training program. The same year, Avalanche Canada hosted 15 webinars with over 2,100 attendees. In addition, the recordings of these webinars were viewed close to 6,000 times.

Among the 33 respondents to the survey conducted as part of this evaluation, 85% were Avalanche Canada training providers. In the case of one organization, on average, more than 500 people attend the training each year, and for 8 organizations, the average participation was between 100 and 500 people.

The survey provided information on the main groups that are reached through Avalanche Canada training, including residents of non-mountainous regions in Canada (50%); youth (50%); new Canadians – immigrants with little experience in winter and/or mountainous terrain (39%); snowshoers (29%) and snowmobilers (29%).

All of the Avalanche Canada training providers that participated in the online survey agreed that the training increased the participants' awareness of avalanches and their potential risk.

More than half of those offering Avalanche Canada training strongly agreed (57%) or agreed (39%) that the training and outreach activities are easily available to the public. In addition, all respondents agreed that Avalanche Canada training contributes to reducing injuries and fatalities caused by avalanches. There were some suggestions made on possible improvements to the courses, including reducing the length of the training, improving the course outlines for instructors, and integrating the training into school curriculums.

To increase awareness of the risks posed by avalanches and of the safety measures in place in high-risk areas among a diverse audience, Avalanche Canada has built a social media and web presence to further their outreach activities. In 2021-22, there were 12 million website page views, and 608,000 unique users. Avalanche Canada has a significant number of followers on their social media. In 2021-22, Avalanche Canada reported 43,000 followers on Instagram – up 22.5% from previous year; more than 27,000 followers on Facebook – up 10%, and over 9,000 followers on X (formerly known as Twitter) – up 6%. As of November 2023, there was an increase in the number of followers on Facebook (32,000) and Instagram (48,400).



Avalanche Canada uses several warning and forecasting tools and resources that provide backcountry users with information about weather conditions and potential risks in avalanche terrain. All of the surveyed organizations use Avalanche Canada's warning and forecast tools and resources.

The most used are the Mountain Weather Forecast (94%), resources and tools available on Avalanche Canada website (84%) and the Avalanche Canada Mobile App (81%). The Avy Savvy Website is used by 64% of organizations, while 15% use other resources such as the AvCan podcast, weather station data.

Organizations were overall very satisfied with Avalanche Canada's warning and forecasts. All of the respondents were of opinion that Avalanche Canada's warnings and forecasts are delivered in a timely fashion and presented in a standardized format that is easy to understand. In addition, they felt that Avalanche Canada's tools and products help backcountry users plan trips and improve their decision-making in avalanche terrain.



## Becoming a national organization in scope and reach

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**Finding:** Avalanche Canada has established new field teams and made some progress in becoming a national organization in scope and reach.

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Over the past few years, Avalanche Canada has established new field teams to advance the goal of becoming more national in scope. These teams are in the Yukon and North Rockies (as of 2019-20), and Newfoundland and Labrador (as of 2020-21). As well, capacity was increased for the existing team in South Rockies.

However, there is still additional work needed in this area. More than half of the respondents to the online survey (57%) did not feel that all regions in avalanche terrain are equally served by daily avalanche forecasts during the winter season. It was felt that additional field technicians and teams are needed, and that information on remote regions could be improved.



# Efficiency

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**Finding:** While Avalanche Canada has complied to agreed monitoring mechanisms and has the governance mechanism and decision-making processes necessary to ensure appropriate management of the endowment grant, it is unclear whether the funding mechanism was the most appropriate to meet the needs of Avalanche Canada.

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An endowment funding grant is a transfer payment to a recipient where the funding provided is to be invested to produce an ongoing source of income to be used for purposes specified in a funding agreement. It is an appropriate funding mechanism for independent organizations that have both the capacity and expertise to manage the invested funds as well as the requirement to fund long-term initiatives. One of the fundamental principles recommended for this type of funding mechanism is for organizations to invest and preserve the endowment grant (capital) in perpetuity while using only the obtained interest.

In 2018-19, Public Safety provided an endowment funding of \$25M to the Avalanche Canada Foundation, to support Avalanche Canada to achieve the objectives and activities set out in its 2019-2033 Business Plan. As part of the grant agreement, Avalanche Canada Foundation was required to submit an annual corporate plan by July 31st of every year, including a forecast of activities and of the anticipated results, as well as a forecast of revenues and planned use of the funds. In addition, Avalanche Canada Foundation was required to provide the Minister with annual reports by December 31st of each year. Based on the review of the documents, the recipient have met the reporting commitments and requirements of the agreement.

While both organizations operate independently from one another with separate boards of directors, the Vice-President and Executive Director of Avalanche Canada sit as directors on the Avalanche Canada Foundation board to ensure strategic inter-organizational alignment and direction.

The Avalanche Canada Foundation Board established an Investment Committee as required by the Minister of Finance Investment Management Framework for Up-front Funding. The Investment Committee developed, executed and monitored the investment strategy for the investment capital and is responsible for oversight and management of the investable funds of the Avalanche Canada Foundation. The Committee reports to the Board quarterly and over the time period of the evaluation, they met at least semi-annually to review portfolio performance.

To assess the appropriateness of the the endowment grant funding mechanism, a comparative analysis of four Government of Canada endowment grants was undertaken.

The Endowment Incentives component of the Canada Cultural Investment Fund at Canadian Heritage, created in 2001, encourages art organizations to build new revenue streams. It provides matching fund of up to one dollar for every dollar raised from private donors to create endowment funds or to increase existing ones. Since its inception in 2001, the stream has provided a total of \$367 million in matching grants, leveraging private sector donations of \$516 million, for a total of \$883 million invested in 107 public charitable foundations and benefitting the long-term financial health of 307 professional arts organizations across Canada.

The Black-Led Philanthropic Endowment Fund at Employment and Social Development Canada, announced in 2021, began with an up-front multi-year contribution of almost \$200 million. It is administered by the Foundation for Black Communities and seeks to create a sustainable source of funding for Black-led, Black-focused and Black-serving non-profit organizations and registered charities. The first call for proposals under the endowment fund launched in 2023 and invited eligible organizations to apply for funding for projects that aim to combat anti-Black racism and improve social and economic outcomes in Black communities. Nearly \$9 million was available through the call for proposals to support around 100 projects. For at least the next 10 years, the Foundation for Black Communities will pull from income earned on the endowment fund to provide yearly disbursements to Black communities across Canada.

The Green Municipal Fund was created in 2000 by the Government of Canada to enhance Canadians' quality of life by improving air, water, soil quality, and protecting the climate. It is a revolving endowment fund administered by the Federation of Canadian Municipalities that provides municipalities and municipal partners with grants, loans, and loan guarantees to encourage investment in environmental municipal projects. The Government of Canada has endowed the Federation of Canadian Municipalities with a total of \$1.6 billion for this initiative through a series of budget decisions from 2000 to 2019. The Federation is responsible for maintaining a value of just over \$1B for the endowment. Since its inception, the initial endowment has been protected and 1,360 municipal sustainability initiatives have been approved.

The Asia-Pacific Foundation of Canada is an independent, not-for-profit organization established by the Asia-Pacific Foundation of Canada Act in 1985 as a result of the Government of Canada's identified need for stronger relations with the Asia Pacific region. In 2005, the Minister of Foreign Affairs signed a Conditional Grant Agreement with the Foundation. This agreement provided a \$50-million conditional grant for the establishment of an Endowment Fund to ensure predictability of Asia-Pacific Foundation of Canada Canada's finances and to allow for longer-term planning. The endowment fund is deployed in accordance with the operating procedures set out in the government framework governing endowments and has provided the Foundation with a base of funding that paid for operational and some programming costs as well as administering the grants program and secretariat work.

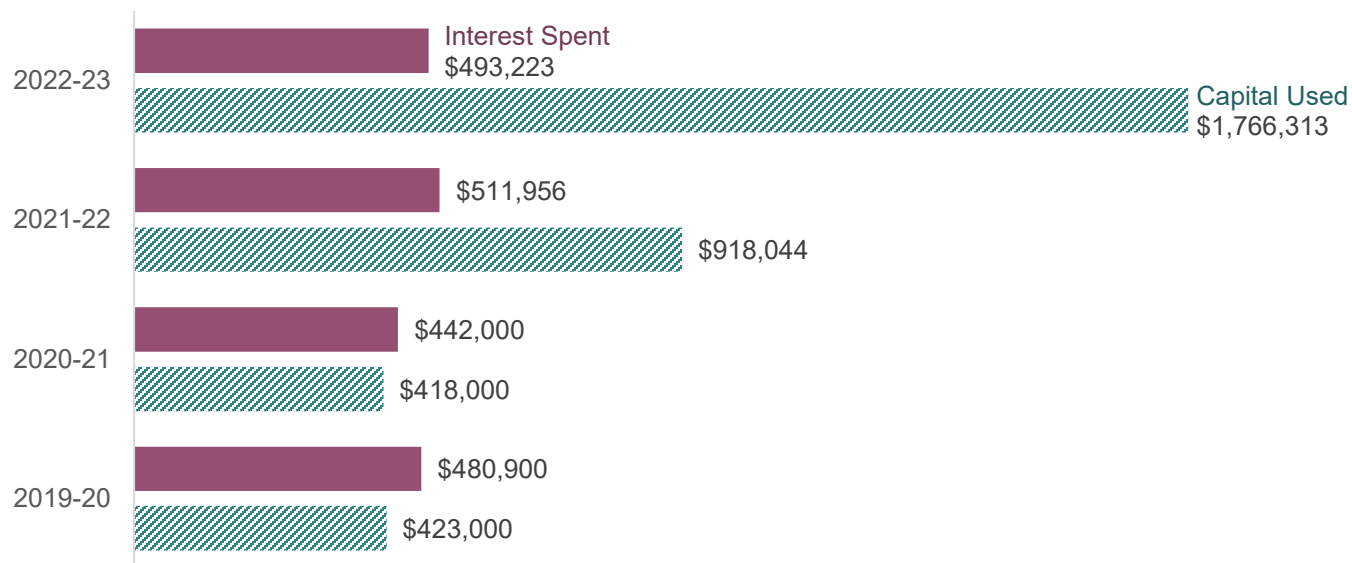
The comparative analysis of endowment funds shows that the programs that have implemented this mechanism in line with its original intent and are achieving the desired results in terms of the sustainability of their activities and the implementation of their business plans. All of the endowment funds examined began with larger investments than the grant provided to Avalanche Canada. As well, the endowment funds do not allow for the use of capital, except as part of the initial set up. These endowment funds have become self-sustaining.

While the appropriate governance and monitoring is in the place for Avalanche Canada, the design and delivery of the endowment funding granted to the Avalanche Canada Foundation was not sufficient to meet the

fundamental principle of investing and preserving the initial capital while using only the return on investment. This was addressed in the funding agreement between Public Safety and Avalanche Canada Foundation. Avalanche Canada can use both the interest generated by the investment of the grant and the capital.

As seen in the graph below the use of capital funds has increased over time, as compared the return on investment generated by the Public Safety funding.

**Figure 1. Amount of interest drawn and capital used from the endowment grant funding by Avalanche Canada between 2019-20 and 2022-23**



Based on projections, the endowment fund managed by the Avalanche Canada Foundation will run out of capital by 2030. There have been financial challenges that were not anticipated as part of the Business Plan developed in late 2018, such as record inflation, supply chain issues, and higher housing prices. All of this has led to a need for higher wages to retain and/or attract employees, and a higher cost for equipment.

Without the endowment grant interest or capital, concerns have been raised about Avalanche Canada's sustainability. While Avalanche Canada also receives funding from other sources including from the provincial governments of British Columbia and Alberta, and sponsorships, in-kind contributions, and self-generated funding these funds are often time-limited. For the year ending June 30, 2022, funding from the endowment investment represented 35% of the annual funding. The termination of the federal funding may lead to a drastic reduction of activities and services or even their end. If activities are reduced or ended, it may take many years to build back the capacity and expertise that has been achieved in recent years.



# Conclusions

Public Safety's financial support to Avalanche Canada has allowed the organization to make progress in achieving expected immediate and intermediate outcomes, including acquiring the required capacity and expanding services to fulfill its mandate; providing bilingual services and resources; increased awareness of the risks posed by avalanches and the safety measures in place in high-risk areas, and becoming a national organization in scope and reach.

Furthermore, Avalanche Canada has complied with agreed monitoring mechanisms and has the governance mechanism and decision-making process to ensure appropriate management of the grant.

However, the design and delivery of the funding granted to Avalanche Canada Foundation does not

support the long-term sustainability of Avalanche Canada. If the Government of Canada wishes to continue supporting Avalanche Canada and their work as a national resource for avalanche safety, they should examine alternative funding options.

