

AVALANCHE FORECAST PLATFORM



Around 25 people die each winter in avalanches in the US. Many more are injured. Most of these accidents occur on land managed by the USDA Forest Service. Avalanche Centers use the National Avalanche Forecast Platform (AFP) to collect and disseminate potentially life-saving avalanche safety information.

What is it?

The AFP is a centralized system for gathering, analyzing, and disseminating avalanche information. Specifically, it provides web applications that allow Avalanche Centers to produce forecasts and warnings, share observations and media, and visualize mountain weather.



What are the goals?

Our goals are to reduce costs, increase consistency, promote collaboration, and centralize data. Participating centers share the financial burden. A shared approach provides greater consistency in the look and feel of avalanche safety products. Collaboration helps build consensus and strengthens training opportunities and peer-to-peer relationships. Finally, collecting national-scale, avalanche-related data offers important opportunities for learning through data analysis.

How does it work?

The AFP consists of web applications used by forecasters and the public. A login-protected, backend workspace allows forecasters to interact with the data—such as creating avalanche forecasts, issuing warnings, or submitting or viewing observations. On the public-facing side, the AFP consists of a suite of Javascript mini-applications that are easily embedded within local websites.





Who uses it operationally?

For the 2023-24 winter, 20 of 24 avalanche centers use the AFP, including 12 of 14 US Forest Service centers. Participating centers range from very small, non-profit operations to larger Forest Service centers.





What does this mean for the public?

The AFP provides consistency in the design and development of avalanche center websites and public safety products. This consistency promotes more efficient education, information sharing, and communication with recreational users.

Winter 2023-24 By the Numbers



USDA FOREST SERVICE NATIONAL AVALANCHE CENTER



Who pays for it?

The AFP is funded through a partnership between the US Forest Service and the American Avalanche Association.



Subscription fees cover overhead costs such as infrastructure, servers, and maintenance. The total annual project budget is approximately \$180,000. This includes staff time, contractors, and service related costs.

How is it managed?

The National Avalanche Center (NAC) manages the AFP in partnership with the American Avalanche Association (A3). The NAC provides a full-time technical project manager. A3 provides business services.

We use contractors to develop, maintain, and support the platform. This team manages a technical support system that addresses emergency and non-critical issues.

What does the future hold?

With the key building blocks in place, future development of the AFP will focus on incremental improvements and sustainability.

The Northwest Avalanche Center (NWAC) is developing and testing the mobile Avy App. This resource will be available to all AFP users in the fall of 2024.

