

# 2022 | ANNUAL REPORT



Promoting avalanche safety throughout Colorado since 1973.





## MISSION



The mission of the CAIC is to provide avalanche information, education, and promote research for the protection of life, property, and the enhancement of the state's economy.



The mission of the Friends of CAIC is to support avalanche forecasting and education throughout Colorado.

# LETTER FROM FRIENDS OF CAIC

## *Dear Friends,*

It is an honor and incredibly humbling to write my 15th annual letter on behalf of the Friends of CAIC. Fifteen years ago, our goal was to help keep the lights on at the Colorado Avalanche Information Center (CAIC). Since then, we have invested over \$2.5M into avalanche safety in Colorado, including \$430,656 this past season. This money has supported CAIC's forecasting operations, developed avalanche safety videos and signage, created outreach for new and existing users, built new web and mobile applications, and helped finance the Know Before You Go avalanche awareness program.

The 2021/2022 season was another year of growth for our organization. As you explore this annual report, you will learn more about our investments, partners, and programs. None of this would have been possible without your shared support of avalanche safety.

As we continue to grow, we will also continue to evolve. We have three specific goals over the next two years. First, we will continue our work toward increasing our direct support to CAIC's forecasting operations. By increasing our contribution, the CAIC will be able to maximize its staffing model, build a robust observer program, and develop new ways for people to engage with the avalanche forecast products.

Through this growth, users of the CAIC's public safety products can expect to see more accurate forecasts for the specific terrain they are traveling in. Second, we will expand and enhance our educational programming, including our Trailhead Outreach Program, avalanche awareness program, and signage program. Third, we will continue to build a reserve fund to support our mission and operations should the Friends of CAIC, or the CAIC, fall on hard financial times. Through your continued support, we can accomplish all three of these goals.

We have accomplished so much over the last fifteen years. I am incredibly thankful for everyone who continues to support our work, and am looking forward to expanding our impact in the years ahead.

**Sincerely,**



A handwritten signature in black ink, appearing to read 'A Carlson'.

**Aaron Carlson**  
**Executive Director**  
**Friends of CAIC**

## LETTER FROM CAIC

The Colorado Avalanche Information Center (CAIC) is a program of the Colorado Department of Natural Resources (DNR). It is a partnership between the DNR, the Colorado Department of Transportation (CDOT), and the Friends of the CAIC (FoCAIC), a 501c3 group. The mission of the Center is to provide avalanche information, education, and promote research for the protection of life, property and the enhancement of the state's economy. This effort began as the Colorado Avalanche Warning Program in 1973 within the United States Forest Service and moved into the State of Colorado in 1983.

The 2021-2022 avalanche year felt like several years packed into one. Snowfall in October followed by a dry fall created a thin and very weak snowpack. This was a tough time to do winter recreation. In many areas it was easier to walk through the snow than to ride on top of it. These conditions lasted well into December, but shortly before the holidays it started snowing again, and once it started it just would not stop. Heavy snow continued into the second week of January and we had the longest string of High avalanche danger and Avalanche Warnings on record. As the dust settled we went into another extended dry period, but this time with a thick and stable snowpack. The forecast map went from red to green and you could travel in places you typically would not think of going in the middle of the winter. Near the end of February someone turned the snow machine back on and we went into another active period that lasted into the end of April.

In the middle of each stretch it was hard to look back and see how we got from the last one to where we were today. Each period was interesting and had its own challenges, but they all felt disconnected.

As the population of our state and the popularity of winter recreation increase, so does the demand for avalanche safety. This underlying and increasing demand amplifies the challenges we face as the avalanche conditions ebb and flow through the winter. By some metrics the 2021-2022 avalanche season was a normal year. We documented 3,283 avalanches, which is not an unusual number. However, there were nearly 900 human-triggered avalanches, 110 reports of people involved in avalanches, and seven people killed. The first report of a person caught in an avalanche was October 1, 2021 and the last fatal accident was June 30, 2022. There can be avalanches in Colorado during any month of the year, but the active part of this year felt very long.



Sincerely,

A handwritten signature in black ink that reads "Ethan Greene".

**Ethan Greene**  
**Director**  
**Colorado Avalanche**  
**Information Center**

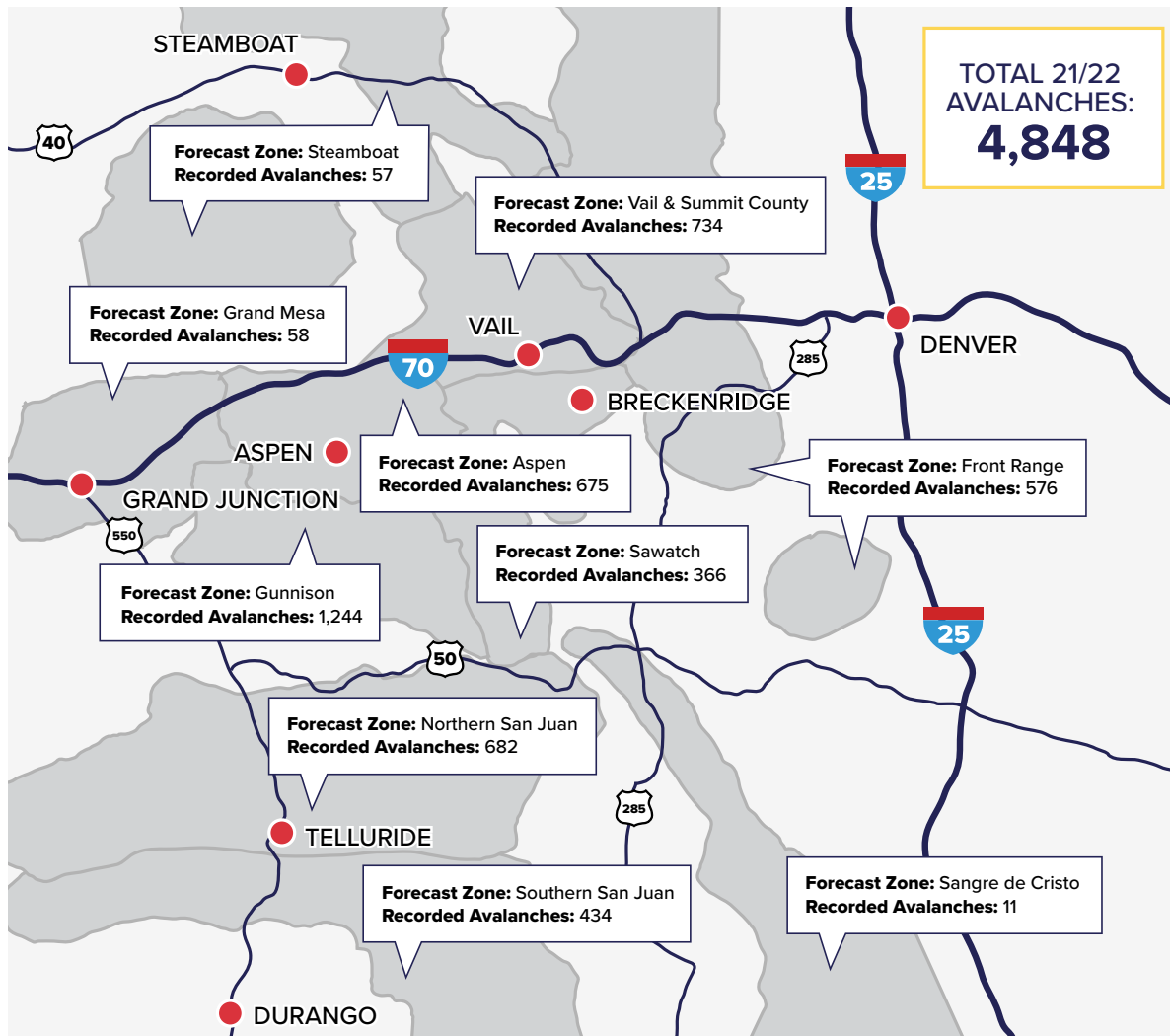
# AVALANCHES & ACCIDENTS *by the numbers*

The CAIC recorded data on more than **3,283** avalanches between October 1, 2021 and June 30, 2022

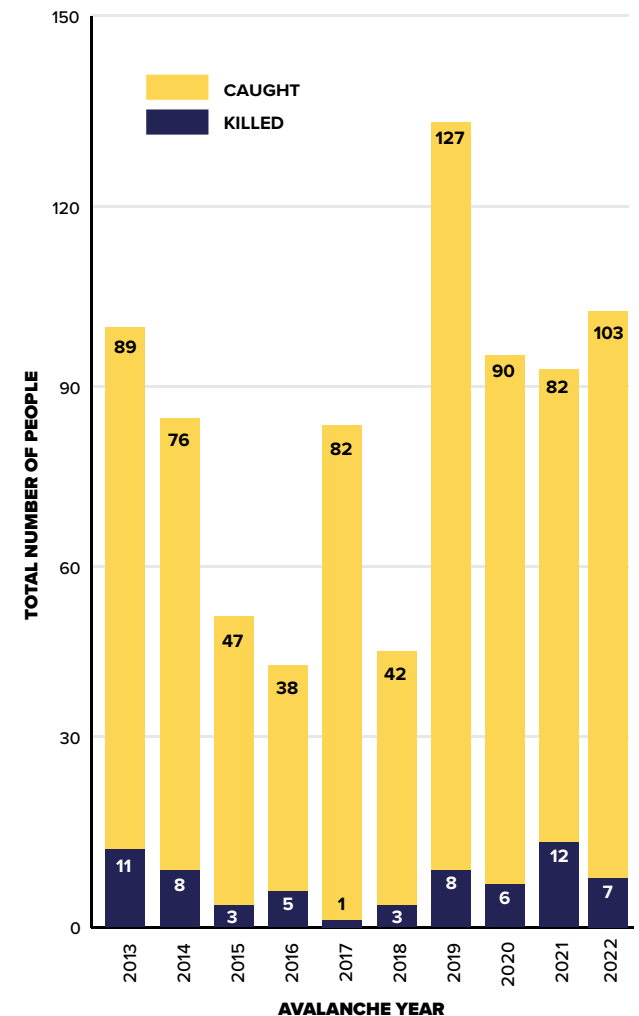
There were **103** people reported caught in avalanches. Of those caught, **7** were killed.

The CAIC published **1,420** forecasts throughout the season – each one of these requires staff time to research, discuss, write, and publish.

## AVALANCHES BY FORECAST ZONE



## PEOPLE CAUGHT & KILLED



# GETTING THE MESSAGE OUT *website, app & social media*



## WEBSITE

 **2,527,632**  
Pageviews

 **388,638**  
Users

## MOBILE APP

 **1,027,218**  
Mobile App Pageviews

 **19,866**  
Users



## SOCIAL MEDIA

 **140K**  
CAIC/Friends of CAIC  
Meta Followers (FB/IG)

 **23.5K**  
Monthly Dump Subscribers

 **50%-60%**  
Email Open Rate

 **2,405**  
Online Media Mentions



## TRADITIONAL MEDIA

 **130**  
CAIC Interviews

 **5 Billion+**  
Total Impressions

# GETTING THE MESSAGE OUT *Circle of Friends*

The 2021-2022 Circle of Friends team lent their voices and influence to support avalanche safety and education in Colorado. Spread out across the state, these individuals helped magnify important messaging during the winter. Hilaree Nelson was tragically killed in Nepal while skiing Manaslu in fall 2021. We are forever grateful for her work on avalanche safety and education.



Ann Driggers  
Ski Ambassador



Carly Finke  
Snowboard Ambassador



Chris Davenport  
Ski Ambassador



Cody Cirillo  
Ski Ambassador



Gregory Hope  
Ski Ambassador



Hilaree Nelson  
Ski Ambassador



Jason Killgore  
Ski Ambassador



Jill Seager  
Ski Ambassador



Kim Onasch  
Snowmobile Ambassador



Lani Bruntz  
Ski Ambassador



Liam Doran  
Ski Ambassador



Matt Entz  
Snowmobile Ambassador



TJ David  
Ski Ambassador

## Circle of Friends Ambassador Followers by Zone:

Aspen .....	116,300
Vail/Summit .....	1,7382
North San Juan .....	76,203
Gunnison .....	3,903
<u>South San Juan .....</u>	<u>32,800</u>
<b>Total .....</b>	<b>246,588</b>



## EXPANDING PROGRAMS *Trailhead Outreach*

Trailhead Outreach Program (TOP) Coordinator Sam Gifford made **79 trailhead visits** and spoke to over **2,300 people** last winter at trailheads across the state. Partially due to this success, Friends of CAIC secured funding from the National Forest Foundation's Ski Conservation Fund for an additional coordinator to be focused on the Dillon Ranger District during the 2022/2023 season.



“The aim of the program is to “make checking the avalanche forecast TOP of mind” for backcountry users of all types and levels across Colorado.”

- Sam Gifford  
Trailhead Outreach Program (TOP) Coordinator





## PARTNER HIGHLIGHT:

*Colorado Mountain School (CMS)*

We are the Colorado Mountain School (CMS) founded in Estes Park, Colorado over 40 years ago. Since then we've built a reputation on tens of thousands of days skiing, climbing, mountaineering, and teaching in our backyard—the spectacular Colorado Rockies—and across the globe in other world-class mountain ranges. Our team is highly trained and

curates internationally respected courses and trips. CMS is Colorado's largest mountain guide company, an accredited guide service of the American Mountain Guides Association.

As we all have experience, the popularity of backcountry travel has exploded over the years and as a result, CMS has become the #1 busiest avalanche education programs in the country through the American Institute for Avalanche Research and Education (AIARE). Because of that, we understand that it is our responsibility to provide decision making tools, information and resources available to our students as well as the greater backcountry community. One of the most valuable and important resources that we can provide them is that of the Colorado Avalanche Information Center (CAIC).

For several years now, we have partnered with the Friends of CAIC to ensure our students get the tools they need to make good decisions in the backcountry and are well aware of the efforts and information provided by the CAIC. Having access to the Avalanche forecast is an integral part of staying safe in the backcountry and we at CMS highly value everything that FoCAIC and the CAIC do. We look forward to another year of partnership where we can work together to ensure Colorado's backcountry travelers have the tools, resources and education they need to stay safe in the backcountry this season!

### **Ignite Your Passion!**

Avalanche Safety Education & Safety Team // Colorado Mountain School





## 2021/2022 STAFF & BOARD

### CAIC STAFF

**Ethan Greene**  
Director

**Brian Lazar**  
Deputy Director/  
Lead Forecaster

**Mike Cooperstein**  
Lead Forecaster

**Rebecca Hodgetts**  
Lead Forecaster

**Spencer Logan**  
Lead Avalanche Scientist

**Austin Divesta**  
Avalanche Forecaster

**Ann Mellick**  
Avalanche Forecaster

**Ben Pritchett**  
Weather and  
Avalanche Forecaster

**Brandon Levy**  
Avalanche Forecaster

**Chris Bilbrey**  
Avalanche Forecaster

**Colin Mitchell**  
Avalanche Forecaster

**Dylan Craaybeek**  
Avalanche Forecaster

**Ian Fowler**  
Weather and  
Avalanche Forecaster

**Jacob Barney**  
Development Manager

**Jason Konigsberg**  
Weather and  
Avalanche Forecaster

**Jeff Davis**  
Avalanche Forecaster

**Jeremy Primmer**  
Avalanche Forecaster

**Jeremy Yanko**  
Avalanche Forecaster

**John Snook**  
Numerical Prediction  
Specialist

**Matt Huber**  
Avalanche Forecaster

**Naomi Hodges**  
Program Assistant

**Ron Simenhois**  
Avalanche Forecaster  
and Data Scientist

**Ryan Becwar**  
Information and  
Technology Coordinator

**Ryan Zarter**  
Avalanche Forecaster

**Will Barrett**  
Avalanche Forecaster

### FRIENDS OF CAIC STAFF

**Aaron Carlson**  
Executive Director

**Brian Rodine**  
Marketing and Events Director,  
Trailhead Program Manager

**Kia Soden**  
Membership and  
Development Coordinator

**Katie Thibideau**  
Development Officer

**Sam Gifford**  
Trailhead Outreach  
Program Coordinator

### FRIENDS OF CAIC BOARD OF DIRECTORS

**Markian Feduschak**  
Board Chair

**Brent Brown**  
Board Vice Chair

**Bill Mueller**  
Board Treasurer

**Heidi Ruckriegle**  
Board Secretary

**Rusty Perry**  
Board Member

**Jonathan Lantz**  
Board Member

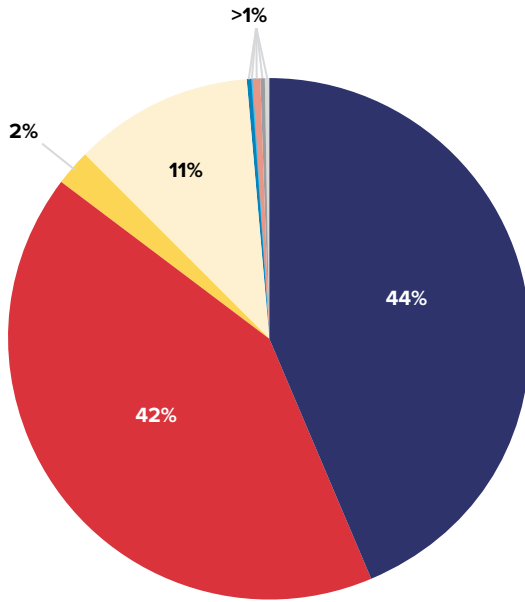
**David Clark**  
Board Member

**Samantha Killgore**  
Board Member

**Ethan Greene**  
Non-Voting CAIC Liaison

**Aaron Carlson**  
Ex-Officio

# FINANCIAL BREAKDOWN CAIC

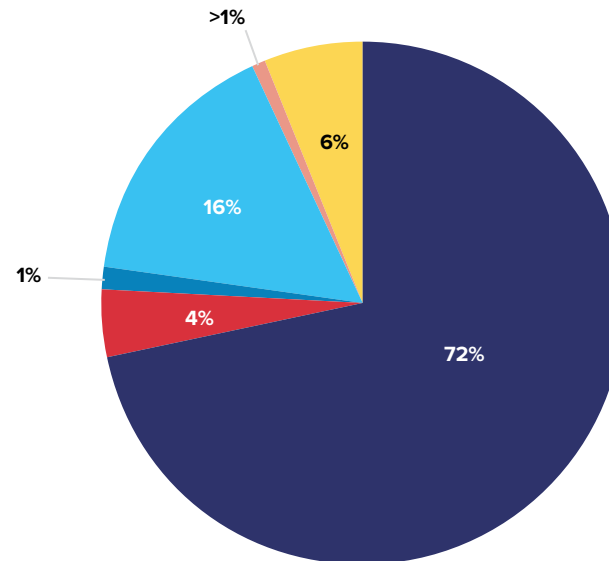


## FY22 CAIC REVENUE

Severance Tax (44%)	\$987,907.00
CDOT Intergovernmental Agreement (42%)	\$936,252.39
USDA Forest Service (2%)	\$50,000.00
Friends of the CAIC (11%)	\$250,000.00
Colorado Ski Country USA (>1%)	\$10,000.00
Other Private Donations (>1%)	\$1,700.00
Interest Income (>1%)	\$12,764.00
Snowmobile Fund (>1%)	\$2,000.00
Education Services (>1%)	\$4,813.50
<b>Total</b>	<b>\$2,255,436.89</b>

## FY22 CAIC EXPENDITURES

Personnel Services (72%)	\$1,777,664.17
Rentals (4%)	\$101,583.86
Utilities (1%)	\$32,968.83
Cost of Goods and Services (16%)	\$394,901.98
Travel Expenses (>1%)	\$18,100.57
Total Admin Costs (6%)	\$147,248.81
<b>Total Expenditures</b>	<b>\$2,472,468.22</b>

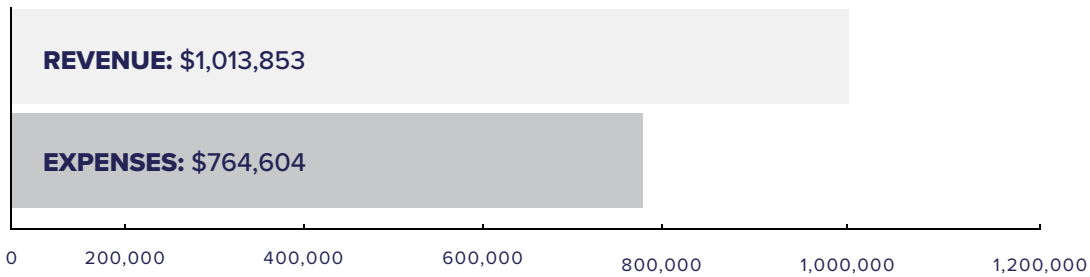


# FINANCIAL BREAKDOWN *Friends of CAIC*

## EXPENSE BREAKDOWN BY CLASS

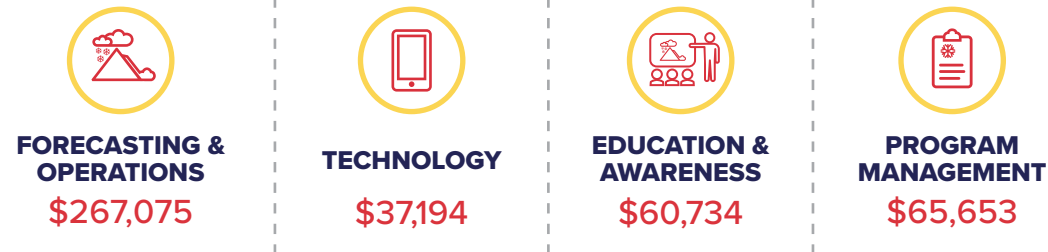


## REVENUE & EXPENSES



## COST BREAKDOWN

The Friends of CAIC invested **\$430,656** into avalanche forecasting and education in Colorado during the 2021/2022 season.



**VALANCHE HAZARD**  
MAY DEPEND ON IT

**CARRY RESCUE GEAR**

- TRANSCIEVER** To quickly locate a buried victim in a wide area
- PROBE** To precisely locate a buried victim
- SHOVEL** To dig them out

**OBVIOUS SIGNS OF INSTABILITY**

**RECENT AVALANCHES** An avalanche may be a sure sign of a dangerous snowpack. Fresh avalanche scars make it possible to see similar terrain features.

**COLLAPSING AND TRACKING** When you feel the snowpack collapse beneath you, it is a clear sign that you can trigger an avalanche. Avoid similar terrain features. These collapses often make a shimmering sound and produce snowing tracks.

**WAYS TO REDUCE YOUR RISK FROM AVALANCHES**

- Obtain the avalanche forecast and avalanche conditions from your guide. Determine what terrain you will avoid on your trip.
- Avoid traveling on or near snow slopes steeper than about 30 degrees if you can avoid steep slopes, tracking or engaging, or any of the old tracks.
- Avoid traveling on open open slopes with loose snow, rocks, debris, or water holes where there is.
- If you choose to enter avalanche terrain, ensure you are prepared to be able to escape the hazard.
- Do not drink or eat in avalanche paths or related areas.

Colorado Avalanche Information Center  
colorado.gov/avalanche

**ARE YOU BEEPING?**

**DO YOU READ TODAY'S FORECAST?**

**ARE YOU CARRYING RESCUE GEAR?**

**CHECK YOUR BEACON SIGNAL:**

- PASS CHECKPOINT ONE PERSON AT A TIME, 10 FOOT INTERVALS BETWEEN EACH OTHER.**
- LOOK AT THE LIGHTS ON THE CHECKER**

**YOU ARE RESPONSIBLE FOR YOUR OWN SAFETY**

**THIS STATION:** Does NOT guarantee proper beacon function. Does NOT test beacon battery life. Is NOT a check in/check out device.

Maintained by: **WESTON**

In Partnership with: **CAIC** Colorado Avalanche Information Center



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Boulder, CO 80305

**Friends of CAIC**  
PO Box 1117  
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**Colorado Avalanche Information Center**



[colorado.gov/avalanche](http://colorado.gov/avalanche)