

KEEP PHOENIX TRAILS OPEN

MEETING BETWEEN PARKS & RECREATION DEPARTMENT, PHOENIX FIRE DEPARTMENT AND KEEP PHOENIX TRAILS OPEN COALITION

protecting the trails we love through smart solutions and community action

Meeting Objectives

- **Understand** the goals of the Parks Board and the Phoenix Fire Department regarding the trail closures.
- **Share** our insights based on the analysis of public rescue and visitor data.
- **Collaborate** on alternative solutions to improve trail safety and reduce the number of rescues.
- **Address** concerns about inconsistencies and unintended consequences of trail closures.



The coalition to Keep Phoenix Trails Open represents park & trail users across different outdoor recreation communities - and is growing as awareness of the issue is increasing.



Our mission is to keep our beautiful Phoenix Desert Parks trail system accessible to current / future residents and visitors and to promote safe and responsible desert trail usage.

INSIGHTS FROM THE DATA



Key Data Insights

Mountain Rescues are not getting more common and stay extremely rare:

- 2024 Mountain rescue numbers are at a low level compared to 10 year history.
- The likelihood of requiring a mountain rescue has stayed stable at low levels - at 1 out of every 15,000 visits.

Mountain Rescues are a very small portion of Phoenix FD incident workload:

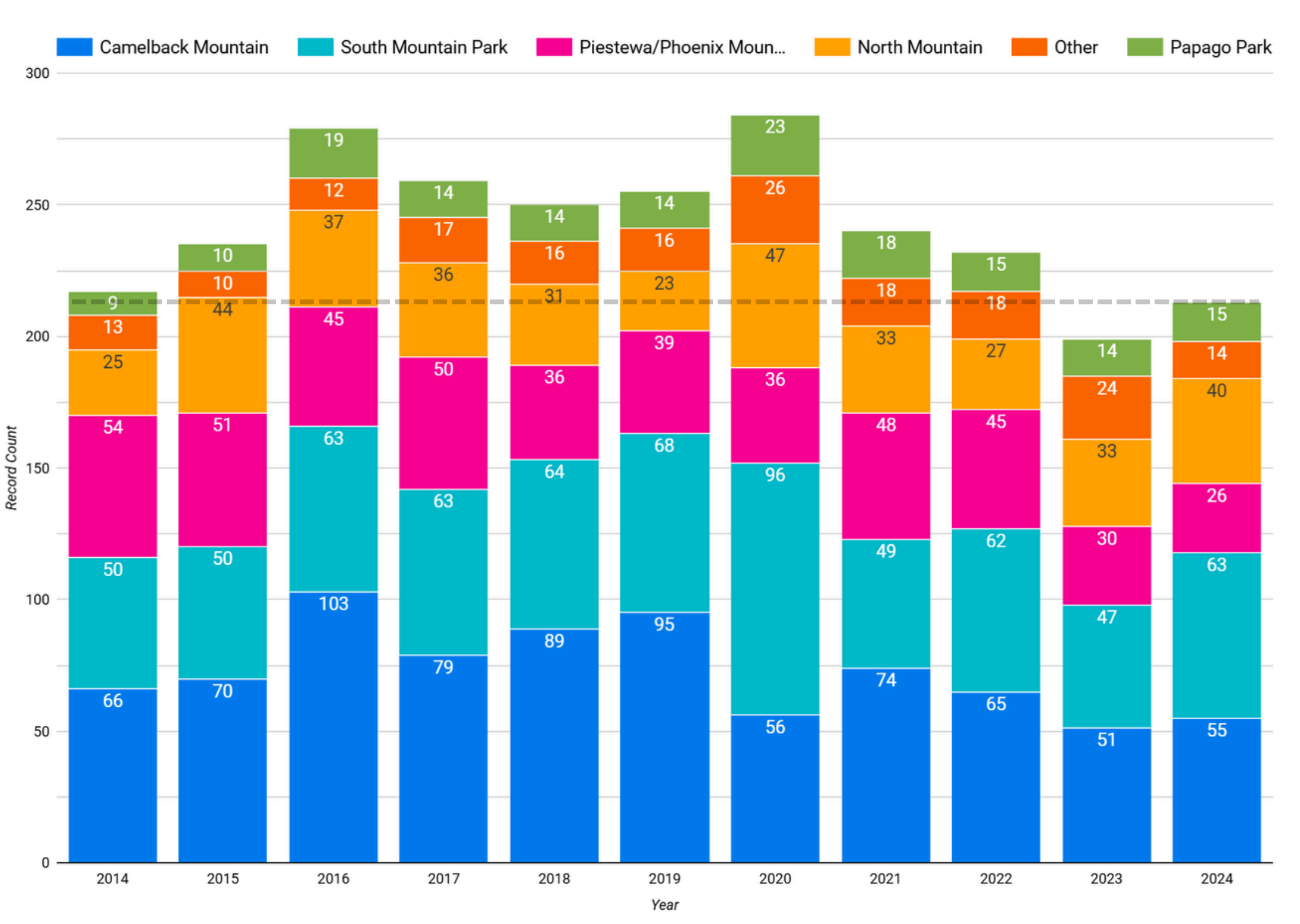
- The Phoenix Fire Department spent 342 hours on Mountain Rescues in 2024 - lower than 9 out of 10 years prior to 2024 - out of 87,000 incident hours.
- Mountain rescues made up 0.09% of the total 233K incidents of the Phoenix Fire Department in 2024.

There is no direct correlation between the number of rescues and temperature.

- The number of mountain rescues does not increase when the temperatures increase.
- Due to the higher visitor volume in cooler months, the highest rescue volume is during October to April.



2024 Mountain rescue numbers are at a low level compared to 10 year history.



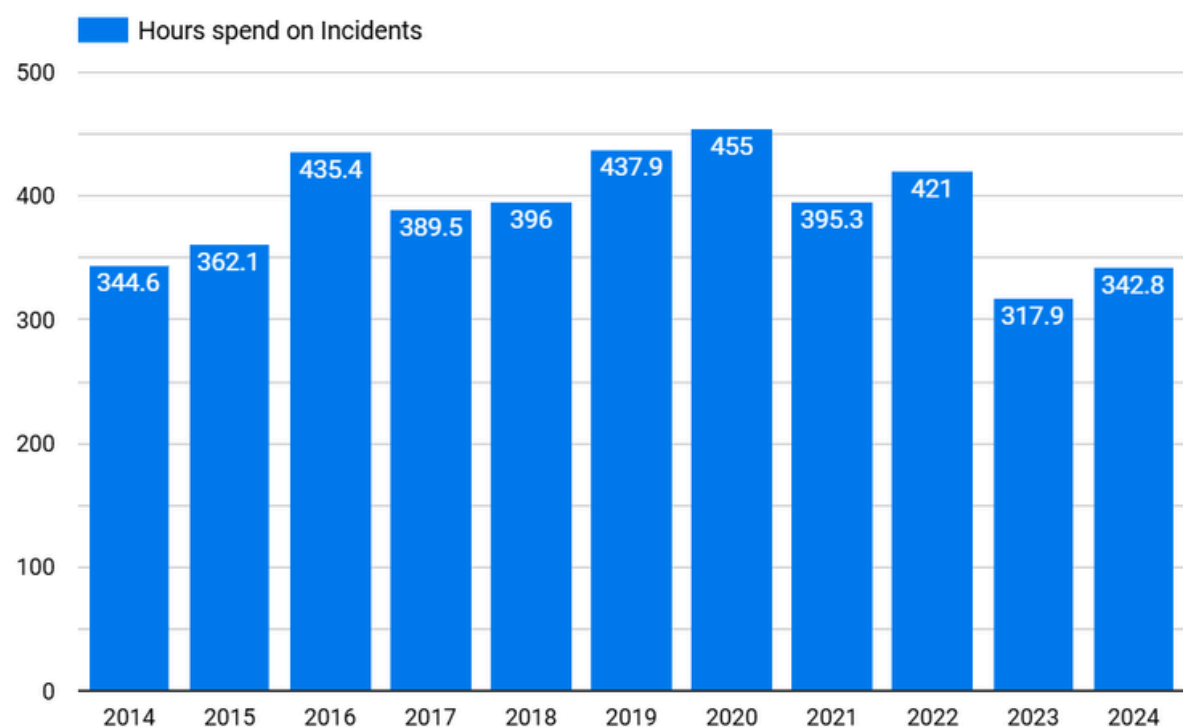
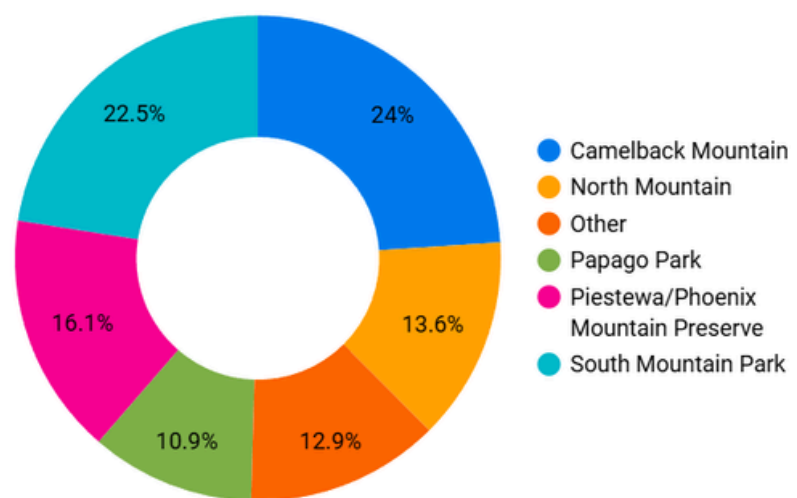
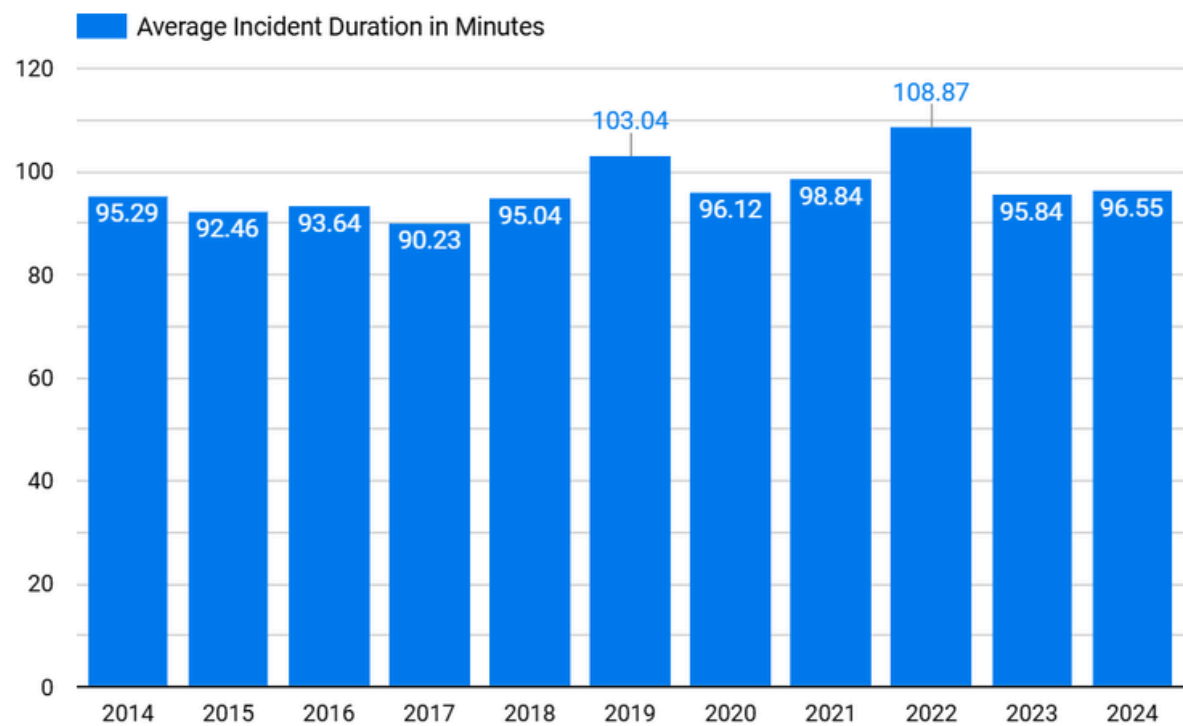
The likelihood of requiring a mountain rescue has stayed stable at very low levels

Year	Rescues	Visitors	Rescue %
2021	235	3,467,374	0.007%
2022	232	3,056,332	0.008%
2023	199	2,947,789	0.007%
2024	213	3,000,000	0.007%
Total 2021 - 2024	879	12,471,495	0.007%

0.007% is a similar likelihood of someone in the USA getting hit by lightning in their lifetimes.



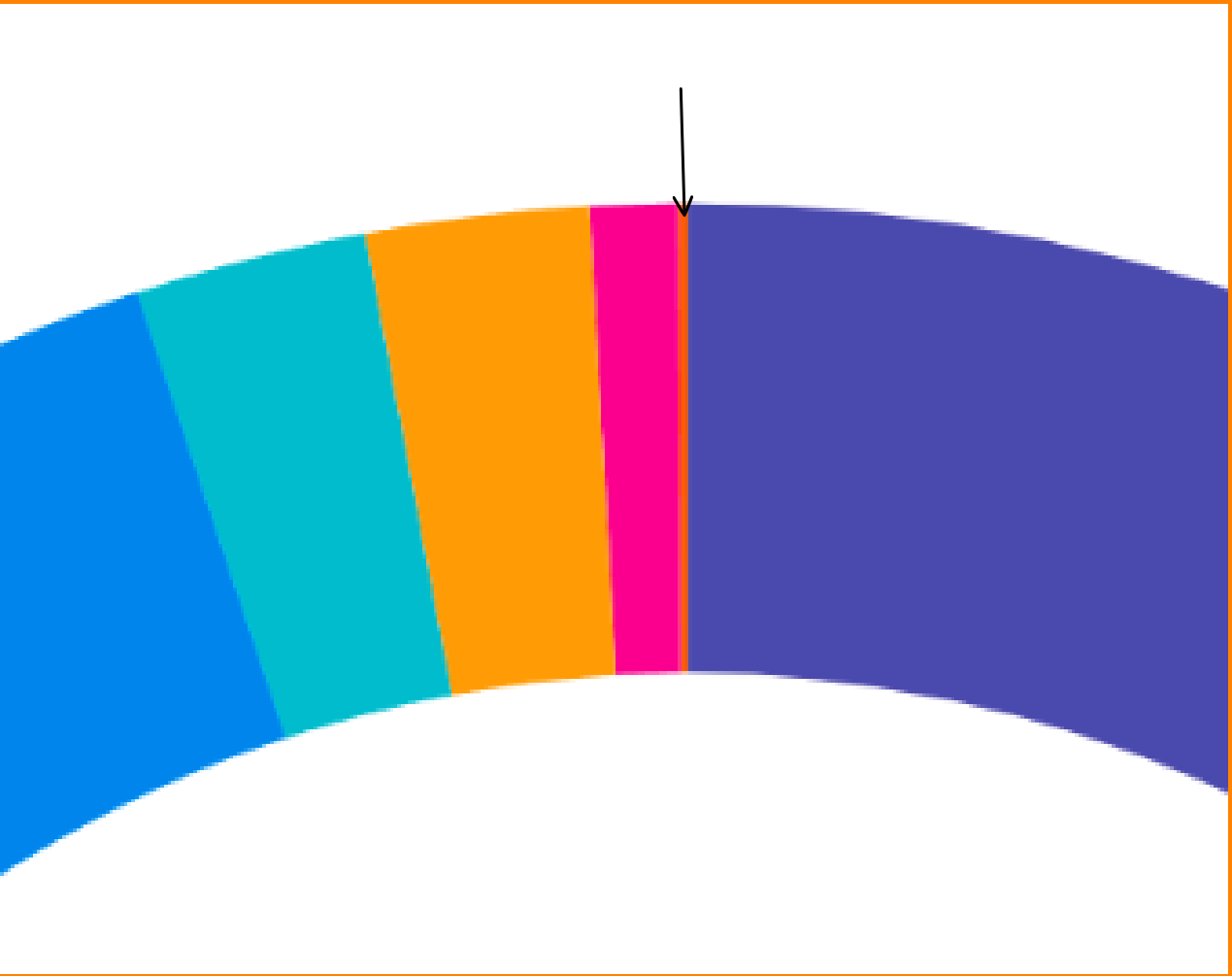
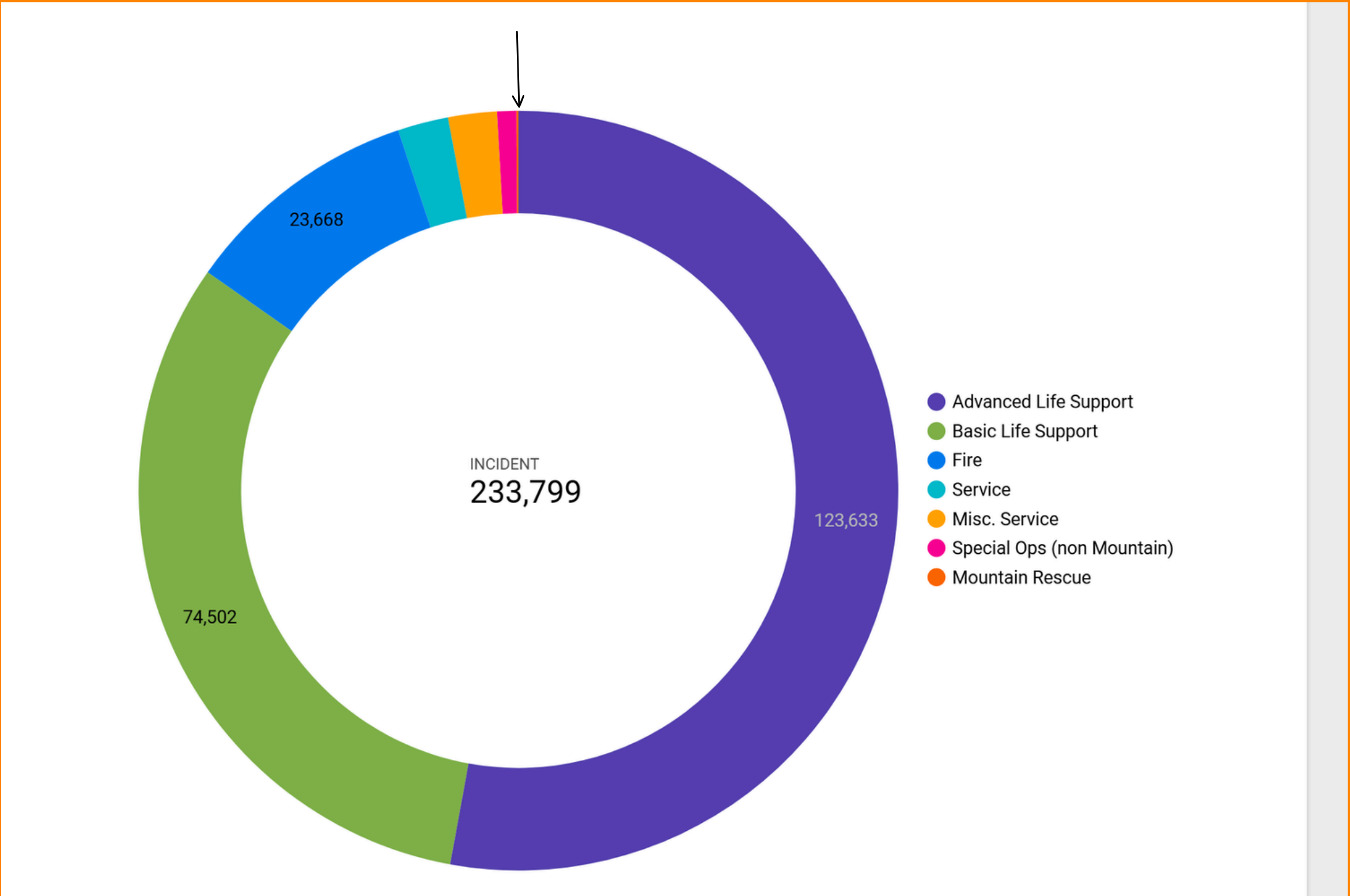
The time spent on mountain rescues is at the lowest level in years.



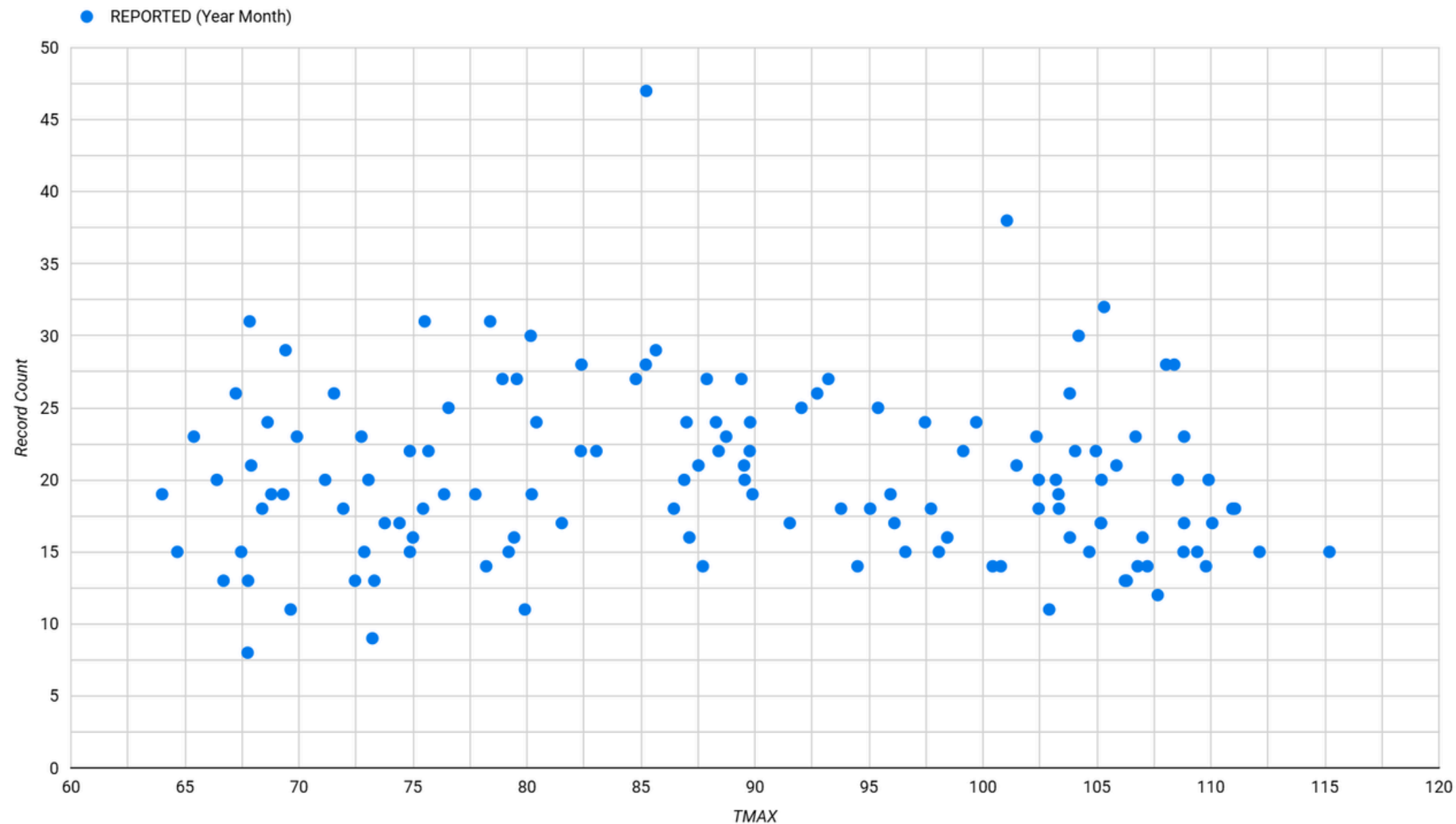
- 2024 Mountain rescue numbers are at a low level compared to 10 year history.
- Publicly available data shows the start and end date of the call, but it does not provide information on the amount of resources allocated to the incident.



Mountain rescues make up 0.09% of the total 234K incidents in 2024.

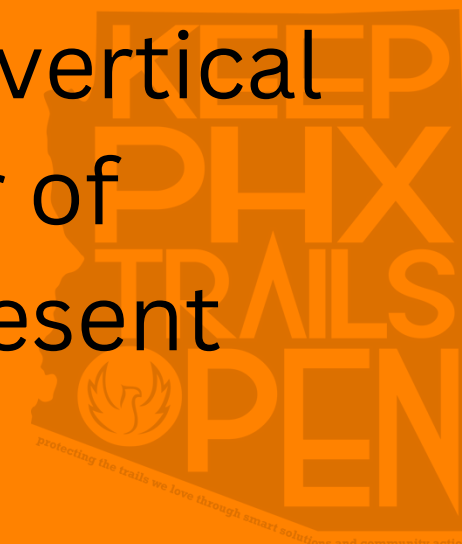


The number of mountain rescues does not increase when the temperatures increase.



There is no correlation between temperature and number of rescues.

On the horizontal axis, we show avg max temperature in a month, on the vertical axis the number of rescues. Dots represent months.



The highest rescue volume is during October to April.

	MONTH	YEAR	Record Coun...
1.	March	2017	47
2.	May	2020	38
3.	September	2020	32
4.	March	2018	31
5.	January	2021	31
6.	March	2020	31
7.	November	2016	30
8.	July	2021	30
9.	March	2015	29
10.	January	2020	29

Out of the top 10 busiest rescue months in the last 10 years, **8** took place in cooler months: March, January, November. Notably **none** happened in the last 4 years.



**Access the 2014 - 2024 dataset in
Looker Studio.**

CLICK HERE



Final Conclusions from the Data:

1. 2024 rescues were at a low level compared to a 10 year history. Lower than 10 of the last 11 years. South Mountain rescues were equal to or lower in 2024 than 6 of the last 11 years.
2. Public safety - the likelihood a visitor to any of the Phoenix mountain Parks is equal to the chances of being struck by lightning in someone's lifetime, 1 out of every 15,000 visits or .007%.
3. Mountain rescues utilize a very small portion of Phoenix Fire's workload. 2024 was lower than 9 of the last 10 years. Rescues make up only .09% of Phoenix Fire's calls for service.
4. There is NO DIRECT CORRELATION BETWEEN RESCUES AND TEMPERATURE. Absolute number of rescues do not increase when the temperatures increases.
5. Rescues have gone down over the last 4 years more from a drastic decrease in trail visitors, not from temperatures. Visitors have decreased from a high in 2020 of 3,7 milion to ~3.0 million in 2024.

Data from 2024 does in no way support a reason for trail closures



ALTERNATIVES TO CLOSURES



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Alternatives to Trail Closures

Enhanced Visitor Safety Resources and Education

- **Comprehensive Trail Safety App:** Develop a new app or expand the existing myPHX311 app, launched by the City of Phoenix, to integrate trail safety features. This expanded app could include weather advisories, route information, hydration reminders, preparation checklists, and optional location-sharing services. By building on myPHX311, which already allows residents to request services and report issues, the city could provide hikers with real-time safety information and emergency features, all within a familiar platform that's already in residents' hands.
- **Weather and Risk Notifications:** Use app push notifications or text alerts to warn users of extreme heat or adverse conditions in real time, allowing for informed choices without enforcing closures.
- **Heat Safety Tips and Preparedness Resources:** Include educational materials within the app or on digital displays at trailheads, covering best practices for hydration, sun protection, and heat acclimatization.
- **Better Signage:** Add QR codes at trailheads and on all trail markers that point hikers in the correct direction, with maps, mileage, emergency contact information, and essential safety tips.



Alternatives to Trail Closures (cont.)

Enhanced Visitor Safety Resources and Education (Continued)

- **Increased Educational Outreach for Tourists:** Conduct aggressive educational campaigns targeted at out-of-state visitors who may be unprepared for desert conditions. Using hotels, travel websites, and social media, we can reach tourists before they arrive at the trailhead, ensuring they understand the risks and are better prepared.
- **Increase Volunteers:** Organize larger volunteer programs at high-use trailheads to welcome people, provide water, and offer cooling advice, similar to existing programs like the Superstition Search and Rescue Community Emergency Response Team and McDowell Sonoran Conservancy Stewardship Organization.

Hydration and Cooling Stations

- **Strategic Placement of Water Drops and Supplies:** Install water drops and essential supplies along popular trails to provide hikers with water refills, cooling options, and basic first aid supplies.
- **Shaded Rest Stops:** Place shaded areas along popular trails to reduce heat stress and provide breaks for visitors on hotter days.



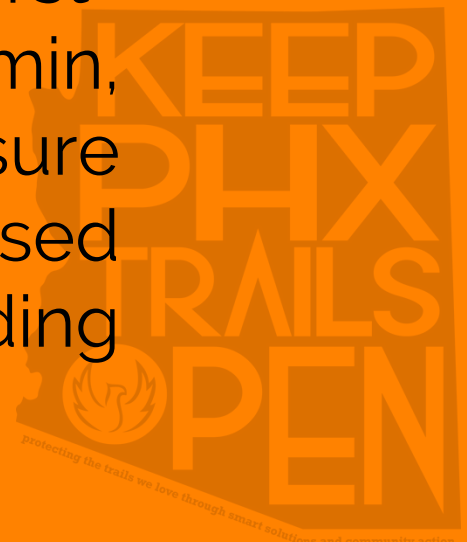
Alternatives to Trail Closures (cont.)

Near Term Solutions

- **Expansion of Phoenix Fire Department's Drone Program:** Expand the drone program for rapid location of individuals in distress, especially during extreme heat. Drones equipped with thermal imaging and GPS could quickly scan trails and ensure emergency resources are used efficiently.
- **Dedicated Technical Rescue Team (TRT) at Fire Station #74:** Add a specialized TRT team stationed at Fire Station #74 near South Mountain, focused on mountain and heat-related rescues to improve emergency response times.
- **Increase Number of Rangers:** Hire more rangers that can be present at trailheads when needed, asking hikers if they are prepared, providing hike alternatives, etc.

Long-Term Solutions

Public-Private Partnerships: Partner with local tech companies and developers to create a first-class city parks and rec safety application, using proven technology from apps like Life360, Garmin, and Apple's location services. This app would allow hikers to opt-in for real-time tracking to ensure accurate location data and improve emergency response times. Integrating with widely used platforms like Strava Beacon, Life360, and Garmin inReach would enhance functionality, providing real-time tracking, usage data collection, and optimized resource allocation.



Alternatives to Trail Closures (cont.)

Long Term Solutions (Continued)

- **TRT Training Facility at Fire Station #74:** Establish a specialized training facility for mountain and technical rescues, setting Phoenix as a national leader in desert rescue operations. This facility could provide training for rescue professionals from across the U.S. and the world.
- **Trailhead Digital Displays:** Install digital screens at every trailhead to show real-time conditions, advisories, current temperature, and estimated visitor counts. These displays would keep hikers informed, enhance safety, and allow for adaptive decision-making based on real-time data.

Data-Driven Decision Making and Future Planning

Real-Time Usage Data: Use data from apps and digital tracking to monitor trail use, track peak times, and optimize resource allocation. By gathering real-time usage data, the City of Phoenix can make informed, data-driven decisions to better manage trail resources, improve safety measures, and adapt to visitor patterns over time.





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