SEARCH AND RESCUE TIMEFRAMES

Non-Technical Report

PROBLEM STATEMENT

Through analyzing this dataset for Search and Rescue missions, what are the key factors that indicate the timeframe to locate and rescue victims both in wilderness and non-wilderness environments?

DATASET

- Mountain Rescue Association
- Timeframes up to 7 days
- Only SAR missions involving at least 1 live victim
- 10,000+ datapoints

STATES

California & Colorado

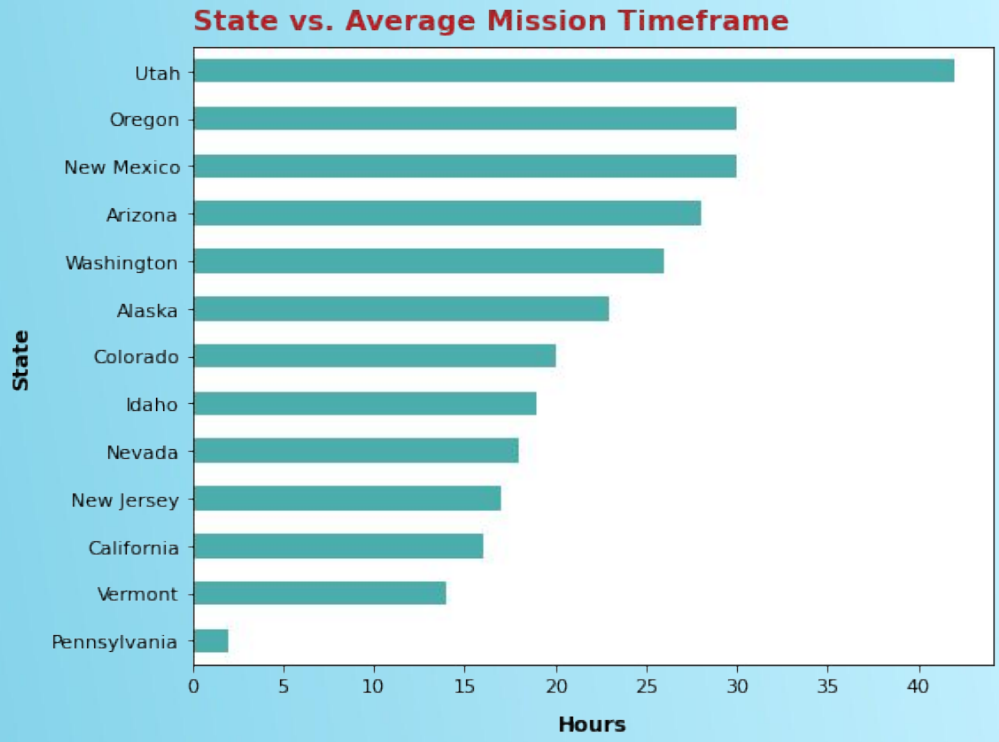
- 60% of dataset
- Avg 16 & 20 hours

Utah, Oregon, New Mexico

- Together 10% dataset
- Highest averages 30+

Recommendation

- Study the CA & CO SAR programs
- Do they benefit from more government funding?
- SAR collaboration program to share knowledge



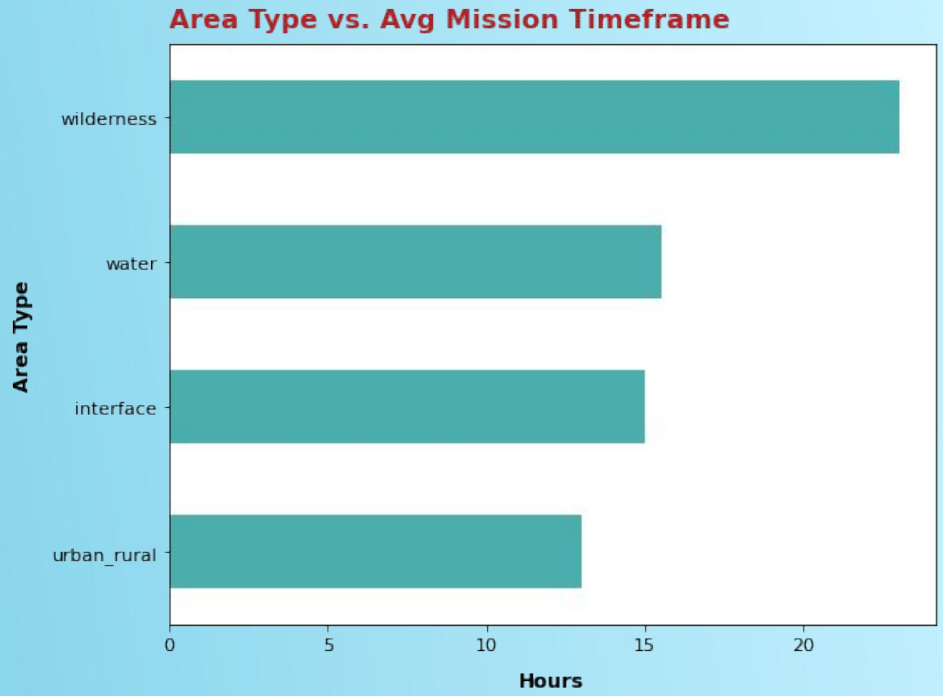
AREA TYPE

- Wilderness 75% of dataset
- On avg. 8 hours longer than other Areas

Recommendation

Implement a public education campaign

- SAR what-to-do and preparedness pamphlets
- Make pamphlets available at trailheads with maps

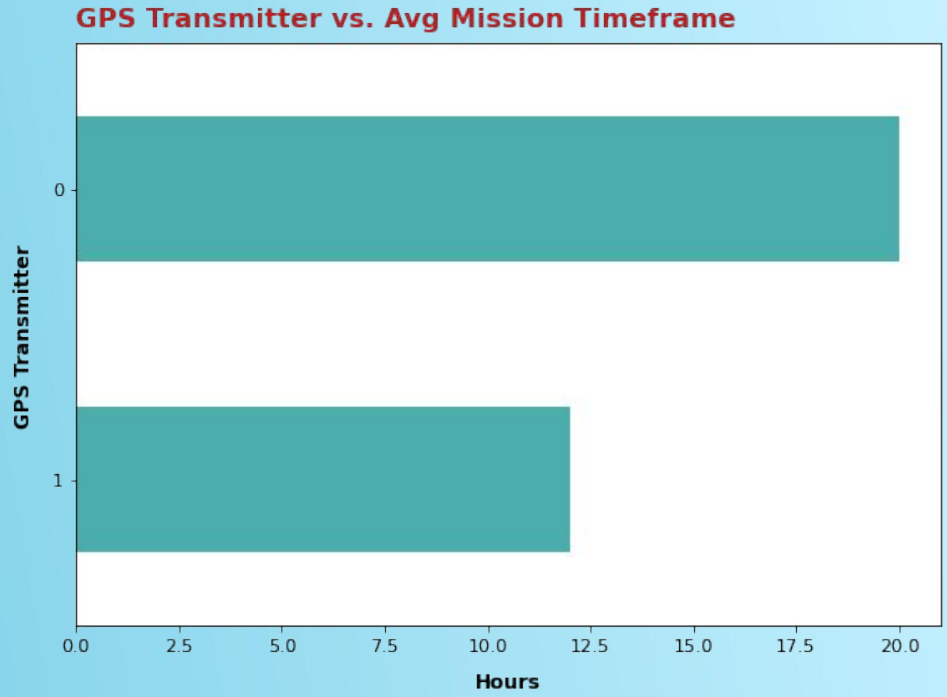


GPS TRANSMITTERS

- With GPS on average half the timeframe
- Comprise a small portion of the dataset but have a clear effect on the timeframe

Recommendation

- Educate adventure seekers the value of having a personal locator beacon
- Garmin InReach



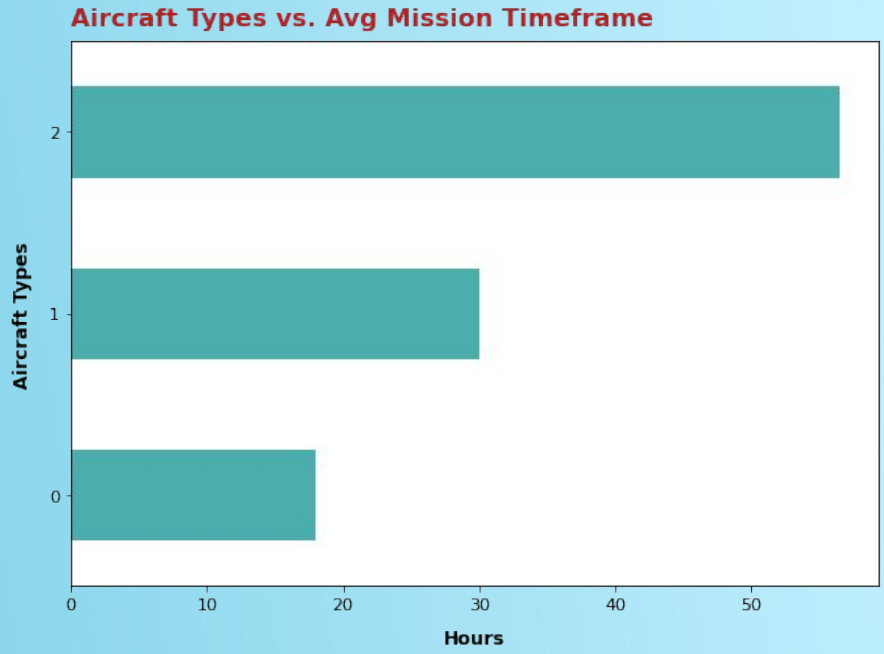
AIRCRAFT TYPES

- Types increase with Timeframe
- Timeframes likely reduced with more aircrafts
- UAVs are surprisingly not often used

Recommendation

Research potential benefits of UAVs

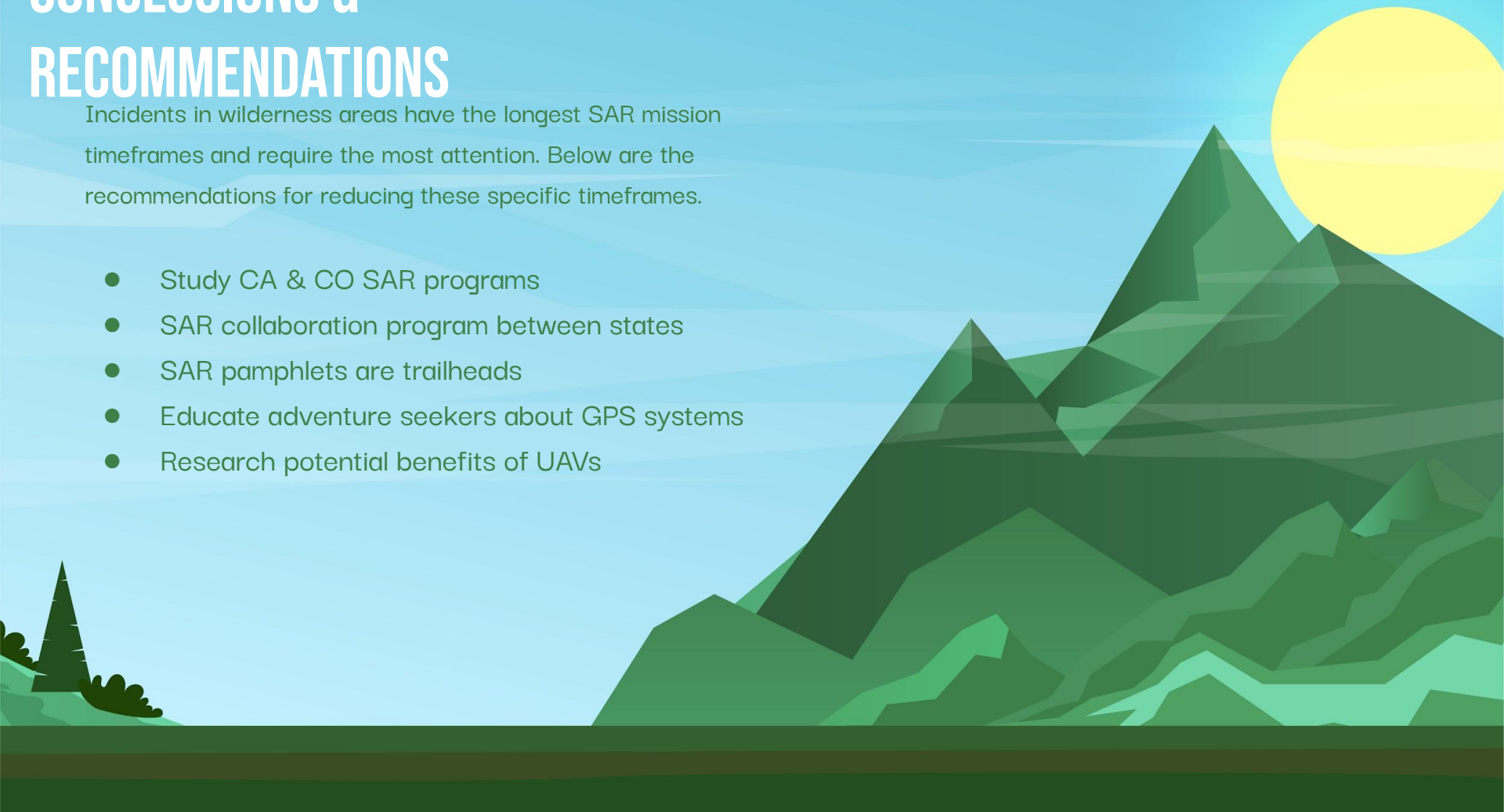
- Low-cost
- Programmable search patterns
- Infrared Cameras for nighttime searches
- Can interact & communicate with victims



CONCLUSIONS & RECOMMENDATIONS

Incidents in wilderness areas have the longest SAR mission timeframes and require the most attention. Below are the recommendations for reducing these specific timeframes.

- Study CA & CO SAR programs
- SAR collaboration program between states
- SAR pamphlets are trailheads
- Educate adventure seekers about GPS systems
- Research potential benefits of UAVs




THANKS!
QUESTIONS
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