Us and Them, Examining the Cultural Perceptions of Interagency and Private Wildland Firefighters

A Thesis Presented in Partial Fulfillment of the Requirements for the Degree of Master of Science with a Major in Natural Resources in the College of Graduate Studies University of Idaho by Scott W. Sprague

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This thesis of Scott W. Sprague, submitted for the degree of Master of Science with a Major in Natural Resources and titled "Us and Them, Examining the Cultural Perceptions of Interagency and Private Wildland Firefighters" has been reviewed in final form. Permission, as indicated by the signatures and dates below, is now granted to submit final copies to the College of Graduate Studies for approval.

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Abstract

Wildfires in the western United States have drastically increased in frequency, intensity, emotional and economic cost. As this trend continues, agencies are increasingly reliant on private contractors to supplement suppression resource demand during critical fire seasons. Cooperating private resources provide a surge in equipment and personnel when interagency resources are committed or unavailable for assignment. Using anonymous self-survey methodology through social media, comparative online questionnaires were created to examine interagency personnel (n=655) and private contractors (n=177). Data collected from this study provided an introduction towards understanding the work-relationship. However, this has proven complex as study results concluded: 88 percent of contractors (n=161) and 76 percent of interagency personnel (n=595) believed a negative work culture existed between contractors and interagency personnel. The strain on this relationship has resulted in the development of an organizational rivalry. Rivalries have beneficial qualities leading to increased production, confidence, and inter-crew cohesion. However, when negative, the opposite is true leading to potential impacts of the health and safety of wildland firefighters. In order to better understand this rivalry and resolve potential conflicts, future research with variant methods is required to develop a basis of a constructive dialogue to aid in the resolution of this dynamic.

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Dedication

I would like to dedicate this project to my dear old friend Thomas Zbyszewski, and all those entrapped and affected by the Twisp River Fire; August 19, 2015. A special thanks goes to my mother; Ann Glidden, for her unwavering support and for introducing me to wildland fire. I would also like to thank my mentors: Ross Dunn, Samantha Schinnell, Jonathan Lent, and Bryan Quimby who have always fostered a positive learning environment and been so supportive of my fire career. This study could not have been completed without the participation and support of the wildland fire community, thank you to everyone who participated in my research. This will help all firefighters; current, future, and those from the past to help improve the work place to be more efficient and a safer place.

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1: Understanding the Contributing Factors to Health and Safety of Wildland Firefighters

1.1 Background

'The fires of 1910 prompted a sudden pivot in the land management policy toward fires for the next 100-years' (Hessburg et, al. 2017). 'After burning nearly 3-million acres and killing 76 people; the United States Forest Service became the champion of fire suppression by adopting the 10 AM Policy in 1935. This was an aggressive initial attack strategy mandating the total suppression of all fires by 10 AM the day following the fires report' (Hessburg et, al. 2017; Husari et, al. 1996). For a time, this policy was successful, resulting in a sharp decline of acres burned between the 1930s-1980s (figure 1) where 92-98 percent of wildland fires (WLFs) were being suppressed' (Calkin et, al. 2005). This historical trend of success by the United States Department of Agriculture Forest Service led to a paradigm of wildland fire suppression still in use today.

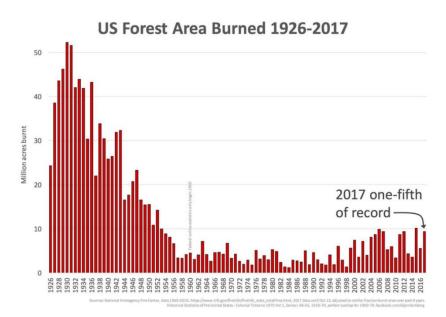


Figure 1.1: Acres Burned in the United States 1926-2017: NIFC 2017

To further exemplify this cultural stance towards fire, Smokey Bear was adopted as the mascot of fire prevention in 1944 (USDA, 2018). Armed with the slogan "Only you can prevent wildfires," Smokey has led the longest standing and most successful advertisement campaign in the history of the United States (US Ad Council, 2019). The image of helpless animals losing their homes to a wildfire captivated the public to fear and further villainize fire, reinforcing the policy of total suppression as a management strategy.

These two approaches created a culture to convince the general public all fires can and should be suppressed and prevented. Creating an expectation to wage war against all fires with people, planes, helicopters, and retardant; leading to increased costs and risk taken in the sky and on the ground (Putnam et, al. 2001).

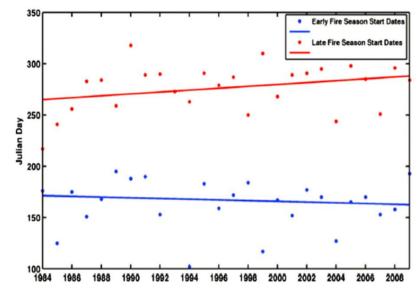


Figure 1.2: Wildfires starting earlier and lasting longer: Klos, 2015

The formula of preventing and suppressing all fires has resulted in serious ecological consequences. While unintended; formerly fire adapted stands of forests have been deprived of their natural fire regime; resulting in overgrown stands, carrying disease, and bug infestations placing large patches of fuel waiting to burn' (Hessburg et, al. 2017). These conditions have led to an increase in the acres burned for a longer period of time. Today, state and federal land management agencies are now fighting fires for an average of 20-30 days longer than the average fire season 20 years ago (Figure 2) (Klos, 2015; Jolly, 2015). With longer seasons, increased frequency of large fires, and dangerous conditions; a significant strain has been placed on the availability and safety of limited fire suppression resources.

As the current trend of fire seasons progresses with greater intensities and a longer duration; wildland firefighters are being exposed to greater risks to personal health and safety at an unprecedented level. This means wildland firefighters face a greater risk of fatigue related injuries from longer working hours, greater stress levels, and exertion with fewer rest periods (Withen; 2017, Collins and Brooks; 2017). Fatigue is defined as *'a sense of tiredness, either mental or physical, brought on by stress (lack of sleep, physical work, nutritional inadequacies, or mental stresses). Fatigue following work or sleep deprivation is a normal state and can be reversed with adequate recovery or rest' (Gaskill, 1980).* It

is common for wildland firefighters to work on an assignment for 14 days, with the potential for an additional extension, but not to exceed 21 days in length. These assignments include work periods of 8-16 hours or longer as needed during initial attack. However, shifts must not exceed 24-hours in duration (US Department of Agriculture; 2018, National Wildfire Coordinating Group; 2018). Following the completion of the 14-day assignment, two days are granted for rest and recovery before returning to work. This mandatory policy is known as the work to rest ratio or a 2:1 ratio, stating firefighters must rest 1 hour per every 2 hours of travel and work (NWCG, 2018). Wildland firefighters typically endure multiple 14-day assignments throughout a fire season in addition to shorter initial attack (IA) assignments, in which local resources may spend up to 48 hours or longer if permitted by supervisors (NWCG, 2018). Crews in higher demand than others such as Type I Interagency Hotshot Crews may see as many as 100 days on fire assignments upwards of 1000 hours of overtime pay during a busy season (US Hotshot Association, 2018).

Engine crews and Type II crews typically have fewer fire assignment days than hotshot crews; yet are being exposed to long work periods during the initial attack phase. Longer fire seasons increase fatigue levels of firefighters; regardless of crew type. With more hours worked and fewer rest periods the potential for fatigue related injuries or deaths dramatically increases. (Aisbett et, al. 2015).

1.2 Private Contractors

According to the National Wildfire Coordination Group: private contractors or cooperators are: 'forprofit businesses in possession of federal or state contracts to provide special equipment, personnel, or resources for fire suppression activities' (NWCG, 2017). 'As the costs of wildfire suppression continue to rise the role of contracted cooperators has become increasingly prominent in providing direct wildfire suppression support to both state and federal agencies' (Stearns et, al. 2015).

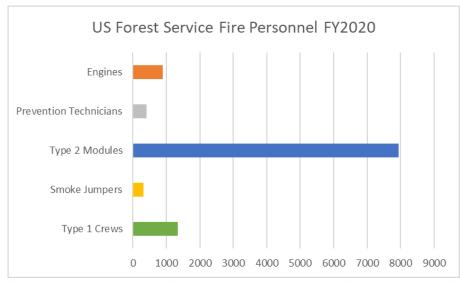


Figure 1.3: USDA Forest Service proposed personnel numbers for FY 2020. Taken from USDA Proposed FY2020-21 Budget

Today, 40 percent of the national resources for the suppression of wildland fires come from the private sector (National Wildfire Suppression Association et, al. 2015). This statistic varies from year to year and is difficult to maintain due to private business owners choosing to annually increase or decrease resources under contract (Figure 1.4). Across the United States 41 Type II crews are in a special status or a Mandatory Availability Period Contract (MAP), which mandate that these resources be active and available when needed (Resource Ordering and Status System, 2018; Stearns et, al. 2015). Contract crews will generally not be paid unless they are utilized, placing the majority of these resources into a "call when needed" status. These resources are valuable in providing a "surge" force of crews, engines, equipment, and support staff to supplement resource needs when government agencies are unable to fulfill demands (Stearns et, al. 2015).



Figure 1.4: Contract Resources by Type and Geographical Area Coordination Center Statistics. Complied through USDA Forest Service ROSS Database.

1.3 Resource Ordering and Procedure

In 2009 the federal government switched to the Virtual Incident Procurement System (VIPR) which was a preseason agreement to help facilitate solicitations and award contracts secured under preseason agreements (Stearns, 2015). These agreements are awarded after the vendor and equipment offered is registered and approved by the government (Sterns, 2015). Once the VIPR agreement is granted the resource is placed into the Resource Ordering and Status System (ROSS), which is the data base system utilized for ordering national suppression resources by individual Geographic Area Coordination Centers (GACCs). These centers then fill the requests of local dispatch centers when a fire incident commander (IC) and or person managing the fire requests additional help for suppression activities. ROSS categorizes resources into specific categories, such as crews, engines, air tankers, and helicopters; which are further divided into sub categories based on resource capabilities and capacities (Stonesifer, 2017). When requested to fill a resource order; two hours are granted for mobilization. This means the resource has accepted the order and within two hours will be expected to have equipment and crew traveling to the location of the incident. Upon arrival the resource will be inspected, checked in, and assigned based on the needs of the incident commander (USDA Acquisition Management et, al. 2015).

Resources are prioritized through local dispatch lists by "best value", which determines the ranking on the Dispatch Priority List (DPL). However, it does not necessarily mean that it is the best equipment offered or the one at the lowest price (Stearns, 2015). Resources requested by an incident commander are given based on the priority or importance of the fire. As resources are allocated between geographical areas during peak wildfire seasons the demand becomes very high. To manage this, the National Wildfire Coordinating Group (NWCG) ranks each geographical area by a Preparedness Level or PL, which is ranked 1-5 based off of the wildfire activity and potential for more fires.

1.4 Resource Categories

1.4.1 Hand Crews

Hand crews are generally 10-20-person fire suppression modules who do not use water to suppress fires. As the name suggests, they use hand tools such as pulaskis, shovels, chainsaws, etc. to deprive fires of fuels. These crews have similarities to a military hierarchy; with a "crew boss" or the qualified leader in charge of the entire group and three to four senior firefighters "squad bosses" beneath the crew boss to oversee smaller sections or "squads" of 4-5 fire fighters. Crews are divided into three categories or "types" in accordance with the Interagency Fire and Aviation Operations Standards (figure 1.3). Type I are the most in demand hand crews also known as "Interagency Hotshot Crews" (IHC), comprised of 20-people representing a safe, professional, mobile and highly skilled hand crew for all phases of fire management and incident operations. IHCs are staffed, conditioned, equipped and qualified to meet a variety of strategic and tactical wildland fire assignments (USDA, 2018). These crews have a majority of their members (80 percent) with at least 1 or more seasons of fire experience, generally making them more experienced and qualified for difficult assignments than other crews. Type II Initial Attack (IA) meet all minimum standards for certification and training but have a lower personnel requirement of experience (60 percent) with at least 1 or more fire seasons. Type II meet all minimum standards for certification and training but have the lowest personnel requirement of experience (20 percent) with at least 1 or more fire seasons (NIFC, 2018). The primary difference between Type II IA/Type II crews and Type I crews is the varying levels of experience. Since Type I crews typically possess greater levels of experience they are used for "hotline work" or direct suppression tactics. Whereas Type II Crews are primarily used to support the Type I crew activities (Pyne et, al. 1996).

1.4.2 Equipment Vendors

Equipment provided for the support of fire operations includes non-aviation assets that fire managers utilize to construct fire lines to deprive the fire of fuel (Stearns, 2015). Equipment ranges from heavy machines such as excavators, bulldozers, and other specialized forestry and logging equipment. Despite water not being the dominant suppression tool; fire engines and water tenders make up the majority of the equipment category as these resources provide specialized support to fire operations with water handling, pumps, and fire hoses (USDA Acquisition Management, 2015).

1.4.3 Support Service Vendors

Support service vendors provide a variety of services such as portable toilets, repair services, mobile kitchens, showers, etc. (Stearns, 2015). These resources are not used for primary fire suppression activities. However, they are vital to the success of fire operations because they support and provide essential services to other resources. The more a fire grows and more resources arrive to help suppress it, the more complex the incident becomes. This may be as simple as food, supply, and equipment supplied by a local district. It may also be as complex as finance and communication teams from a national incident management team (USDA Acquisition Management et, al. 2015).

1.4.4 Aviation Vendors

Aviation vendors provide aerial resources such as helicopters, air tankers, and scoop planes special equipped with water delivery or fire-retardant mechanisms or to help suppress wildland fires from the air (Stearns, 2015). These resources are contracted under exclusive use and call when needed status. However, they are vastly different than contracted resources on the ground due to the heavy regulatory process on federal and state contracted aircraft. These resources require rigorous preseason inspection, annual proficiency examinations, and increased levels of flight experience in wildfire operations (NASF Aviation Standards, 2010). One key difference is the number of hours pilots may fly due to the associated risk of fatigue while flying aircraft. Pilots are not to exceed 8 hours per day and require a mandatory rest period if 36 hours are accumulated in a 6-day period; pilots will not exceed more than 42 hours of flight time in a 6-day period (NASF Aviation Standards, 2010).

1.5 Culture of Wildland Fire

Suppressing wildland fires is an inherently dangerous and difficult profession; often demanding long hours of arduous work in some of the most challenging terrain across the United States (Sharky, 2000). 'Similar to military units in combat war zones; firefighters share a unique bond with one another based on physical, mental, and emotional hardships that configure wildland firefighters in a heroic, masculine ideal; while not all believe this ideal, many professions involving manual labor hold a hypermasculine culture questioning what it means to be 'a man' (Reimer et, al. 2018). The social fabric of wildland fire praises strength and power; resulting in the respect of peers and elevation in status. Culture is often defined as how the world is perceived or believed how things should be; where a group of people share similar perceptions, thoughts, feelings, and behaviors (Shein et, al. 1996). Wildland firefighters promote a unique culture of strong values such as: competition, self-reliance, skill, ambition and competence (Desmond; et, al. 2006, Dotson; et, al. 2016, Reimer; et, al. 2018). These attributes merit culturally important rewards such as: a belt buckle symbolizing time

dedicated to a particular crew. There are rewards meriting a test of worthiness such as: promotion from digging with hand tools to operating a chainsaw or opening positional task books for additional qualifications. Those involved within wildland fire pride themselves with intra-crew acceptance based on the dedication and respect of peers, constructing a social group within the crew that is similar to a tribe or family. Within wildland fire there are many of these tribes which are smaller cohesive units self-divided into the categories of "us" and "them" Type I and Type II Crews, engines and hand crews, federal firefighters and contractors' (Viktora et, al. 2014).

This idea of "us" and "them" is positive because it fosters a competitive nature between crews often leading to increased production. However, it also has the potential to create negative implications in creating social division amongst groups based on perception of one another (Viktora et, al. 2014). 'Like any organization; agencies have their own unique culture, each community of practice has its own distinctive cultural practices and norms. While culture is something to be proud of, it can at times be a hindrance' (USDA et, al. 2017).

1.6 Safety Culture

In 1957 the Ten Standard Firefighting Orders were developed by the USDA Forest Service to increase the safety of wildland firefighting (National Park Service, 2017). In 1991; following the deaths of 6 firefighters on the Dude Fire, Look-Outs, Communication, Escape Routes, and Safety Zones or LCES was coined by Paul Gleason; a survivor of that fire based on the lessons of that day (NWCG et, al. 2017) in order to improve situational awareness on the fireline. In 1994 the Storm King Mountain fire overtook 14 firefighters in Colorado, prompting an organizational commitment towards firefighter safety (NWCG et, al. 2017). In 2001, 4 fatalities in the Thirty Mile Fire prompted new organizational learning reports to prevent future tragedies rather than blame those involved (USDA et, al. 2001). In 2011, the USDA Forest Service reaffirmed its commitment to safety, initiating an agency-wide "safety journey" which aims to minimize risk and make the USFS a zerofatality organization (Tidwell et, al. 2011). However, in 2013; 19 members of the Granite Mountain Interagency Hotshots were overtaken by the Yarnell Hill Fire (Arizona Department of Forestry and Fire Management, 2013). Wildland fire is an inherently dangerous profession averaging 17 firefighter fatalities each year (NIFC, 2017). Despite the commitment to safety, advances in technology, and continuous organizational improvements; fatalities are still occurring each year, demanding review to determine the success of the safety culture within wildland fire.

'Safety culture is a subset of organizational culture which affects members attitudes and behaviors in relation to an organizations ongoing safety performance' (Black et, al. 2013). One attitude literature points towards is a "a can-do mentality" which is believed as 'the most reinforced behavior on the

fireline and likely the leading cause of fatalities' (Putnam, 2000). This attitude is defined as 'a way of dealing with a problem that the individual possesses a strong belief in their ability to achieve success' (Cambridge, 2018). As previously mentioned, 'wildland firefighting is a profession that praises competition, self-reliance, skill, ambition and competence' (Desmond; 2007, Dotson; 2016, Reimer; 2018). These are sometimes positive functions resulting in productivity. However, in some cases the "can do" mentality has the potential to lead to excessively risky situations due to previous experience in a similar situation. This is often referred to as a "go to way of doing things" which has been successful in the past (USDA, 2017). Attitudes are directly influenced by the safety climate of wildland fire; which is defined as the perception of the safety culture within an organization...Perceptions which are influenced by organizational factors and individual factors eventually affect the employee's safety behaviors (Black et, al. 2013). However, a narrow edge exists of motivating people to get the job done and creating an overpowering "can do" attitude preventing a refusal of a dangerous position or encourages them to stick their neck out unnecessarily. Some, point out a "can do" attitude does not have to mean "can do regardless of safety," but rather "can do with attention to safety" (TriData, 1996).

Also influencing safety culture is peer pressure to perform or raise safety concerns. Firefighters do not feel comfortable voicing safety concerns due to fear of personal costs such as teasing, retaliation, and disinterest in safety concerns from their peers or supervisors (Lewis et, al. 2011). Too many firefighters still do not feel comfortable in raising safety issues. Some fear punishment for doing so, especially if a worker refuses an assignment or a crew supervisor won't let his/her crew be used to do something he or she considers too dangerous. Some are concerned about pressures that dissuade complaining and encourages risk taking. (TriData, 1996). Additional research supports this fear within wildland fire culture as seen in a 2017 survey researching health and safety of wildland firefighters; collected by Collins and Brooks. This study reported 45 percent of participants (n=428) felt it was common to feel peer pressure from others to perform (Collins and Brooks et. al., 2017). As previously mentioned, there is a unique bond within fire crews. Similar to military units in combat war zones; fire crews share a unique bond with one another based on physical, mental, and emotional hardships that configure wildland firefighters in a heroic, masculine ideal (Reimer et, al. 2018). Refusal or assignment may lead to rejection by peers or retaliation from supervisors leading some to accept assignments which exceed their comfort levels or experience.

Wildland fire is largely believed to be a team-oriented profession of multiple individual units collectively working together to achieve a common goal. Individuals within a crew desire to fit in with the group and be accepted by their peers. How this acceptance is accomplished varies between

individuals usually through the course of a season individuals' ability, strength, and dedication are put to the test by other members of the crew. Often these individuals are pushed mentally and physically by their peers sometimes resulting in positive motivation. However, this may also lead to negative pressure in uncomfortable situations for fear of rejection. The workplace is a social environment where firefighters read the context of the situation for cues about how potential concerns will be received and base their tactics on these interpretations (Lewis et, al. 2011). The concept of a safety culture and the influence on the culture of wildland fire will be discussed further with the discussion sections.

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2: Self-Survey of Cultural Perceptions of Interagency and Private Wildland Firefighters

Abstract

This study was a web-based self-survey designed to determine the potency of opposing perceptions within the organization of wildland firefighting. Specifically, the study focused on the relationship between interagency and private wildland firefighters. In this section the methodology, measurements, and rationale used to collect statistical data from the two subject groups will be discussed. The intent of this study is to have adequate statistical evidence to establish a dialogue regarding the findings. This dialogue will be the first step of problem identification believed as causal variables of tension between these two groups. This survey was available online from November 14, 2018 - January 14, 2019 (2 months) collecting responses from 832 participants (655 interagency; 177 private contractors). Questions were categorized as closed ended, partially closed ended, ordered categories, completely open-ended, scalar, and closed ended with scalar. The following results were analyzed in order to determine the scale of both groups' perceptions toward one another by looking at questions focused towards understanding 1) perception, 2) culture, 3) peer pressure to perform, 4) fear of repercussion/consequences, 5) understanding of procedures, evaluations, and 6) any remarks or feedback. Using the data collected through this survey a quantifiable justification for further research will be provided to further examine cultural divisions between interagency and private wildland firefighters.

Methods and Materials

2.1 Survey Design:

This survey was designed according to Dillman (2000); using the online self-survey platform Survey Monkey (www.surveymonkey.com). To maintain anonymity and simplify data collection; two online surveys were created for both interagency and private wildland firefighters. Both surveys were similar with the exception of questions 16 and 17 for the interagency survey. These questions were specific to fireline supervision and performance evaluation which typically does not pertain to private contractors without previous experience within a federal or state agency.

Prior to the opening of the survey links; Dr. Randall Brooks and extension professor Chris Schnepf reviewed the survey draft providing critique and ensuring the goals of the study would be met. The Internal Review Board (IRB) of the University of Idaho (no. 17-131) reviewed the questions to also ensure they were appropriate for the research topic and subject groups. Once approved, the survey

was available from November 14, 2018-January 14, 2019 receiving a total of 1005 responses between the two groups. After a series of initial disqualifications, the survey was narrowed to 832 responses. Of these responses 715 were 100 percent complete. This initial disqualification was intentional, in order to remove participants who did not complete the survey in any capacity and/or only completed the demographic section of the survey. Incomplete responses were not disqualified if the respondent provided any level of input after the demographics section of the survey. Additionally, this also included 3 responses from outside of the United States (2, Australia; 1, Canada). These responses were kept due to the conditions of international fire aid and the experience of foreign firefighters with both study groups during resource strained fire seasons. The study was concluded with 832 total participants (n=832; 177 private contractors, 655 interagency) and an 83% completion rate.

This survey was designed to target firefighters and managers with both previous and current fire experience. This was done to provide a large sample of data regarding the knowledge and experience of conflicts between interagency and private wildland firefighters. It was vital to the study to have a large and diverse sample group with varying experience to ensure the data was not skewed due to lack of exposure or experience with the conflict in question. Prior to the release of the survey, the definition of both groups was conceptualized in order to divide participants into either group using the following classifications. The term interagency was defined as a firefighter employed year around or seasonally by a federal or state land management agency. This also included those who were employed by country or municipal structure fire departments which are funded by public tax revenue. The term private contractor was defined as a firefighter employed by a private company or corporation with a contractual agreement with a state or federal government to provide suppression services for profit.

The survey was designed specifically for firefighters in various single resource fire line supervisory positions. These include any single resource qualification per NWCG Standards such as: Engine Bosses, Crew Bosses, Division Supervisors, Task Force Leaders etc. These individuals generally have advanced experience in fire suppression, ensuring their ability to supervise of interagency peers, private contractors, and structure firefighters. Additionally, it was important to examine the perspectives and experiences of less experienced crew members such as FFTI (firefighter 1, squad bosses) and FFTIIs (entry level firefighters) to understand their personal perceptions of the conflicts in question. Adding these individuals provided important insights to understanding if perceptions of these opposing groups is driven by personal experiences or if they are being passed along as cultural norms. This will be discussed in depth in the next sections.

Private contract support service crews such as catering companies, potable water delivery, handwashing stations, and portable bathrooms were also disqualified. Although these groups are considered private contractor resources; the focus of this study was strictly directed toward personnel involved in fire suppression operations. Additionally, aviation vendors were disqualified from this study because of the different regulatory processes on pilots and aircraft as mandated by the Federal Aviation Administration (FAA).

2.2 Implementation

The survey was administered anonymously through social media platforms to various firefighters from multiple state and federal land management agencies as well as those from private contracting companies across the United States. Using social media platforms such as Facebook, large groups of firefighters with affiliations to both the interagency and private sectors were accessed. Using facebook, access was granted to closed social media groups (figure. 4). These closed groups ensured participating members were directly involved within wildland fire; providing a relatively controlled subject group. Both social media postings and member acceptance within these groups were screened and filtered by page administrators prior to acceptance to the group. Providing a sample group mostly of combined current and former interagency and private contractor employees; all of which were affiliated with wildland fire in a current or previous capacity.

The survey links were posted to each page once per week and left for members to participate anonymously and or share with their co-workers. Additionally, organizations such as the National Wildfire Suppression Association and Wildland Fire Lessons Learned Center sent the corresponding survey links to their connected affiliates through private e-mail and shared on their social media accounts. The survey was also distributed by regional contract officers across multiple GACCs to other affiliates through private e-mail. Allowing agency personnel to send the survey through email allowed greater access to agency and private employees also protecting their identity because correspondence individually sent did not require a response or participation in the survey. We cannot determine the success or scale of the distribution techniques individually due to the anonymous nature of the self-survey. However, due to the large response volume we believe the distribution methods were successful.

Table 2.1: Social Media Groups Utilized Within the Study

Facebook Group Page	Number of Members
Wildland Firefighters	27,658
Wildland Firefighters: Past, Present, Future	2,406
Federal Land Management Employees for	1,538
Positive Work Environments	
Contract Wildland Firefighters	208
Fire Dozers and Heavy Equipment	3,762
The Wildland Firefighter	9,816
Wildland Contract Engines	2,394
Montana Wildland Firefighters	305

Figure 2.1 Copy of IQCS Red Card

Haz Typ	Qualifica	ation	Lvi	Exp Date	
WF	CRWB	Crew Boss, Single Resource	NAT	08/04/21	
WF	STCR	Strike Team Leader Crew	NAT	07/06/23	
WF	THSP	Technical Specialist	NAT	09/19/22	
WF	CREP	Crew Representative	NAT	05/01/23	
WF	ICT4	Incident Commander Type 4	NAT	09/12/22	
WF	TFLD	Task Force Leader	NAT	05/24/23	
WF	FIRB	Firing Boss, Single Resource	NAT	05/25/21	
WF	ENGB	Engine Boss, Single Resource	NAT	09/12/22	
WF	FFT1	Firefighter Type 1	NAT	06/28/22	
WF	FFT2	Firefighter Type 2	NAT	09/16/22	
WF	ICT5	Incident Commander Type 5	NAT	06/29/20	
WF	STEN	Strike Team Leader Engine	NAT	07/06/23	
WF	HECM	Helicopter Crew Member	NAT	07/16/20	
WF	FAL2	Intermediate Faller	NAT	02/24/19	
WF	ENOP	Engine Operator	NAT	-07/13/21	
WF	ABRO	Aircraft Base Radio Operator	NAT	09/05/19	
Həz	Trainee	Qualification	Lvi	Exp	
Тур				Date	
WF	HEQB	Heavy Equipment Boss, Single	NAT		
WF	DIVS	Division Group Supervisor	NAT	05/01/21	
WF	AOBS	Aerial Observer	ST	09/25/20	
Skilis:	ΑΤΛΟ	Def Drvr HIOP			

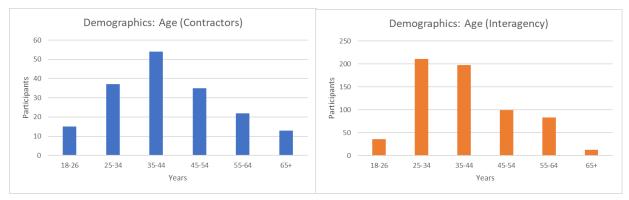
Figure 2.1: An example of a redcard with multiple qualifications. In this case FFT2, FFT1, ICT5 are prerequisite qualifications that are not in use.

The first six questions of this survey were demographic related questions in order to understand who the participants were and their level of experience as a wildland firefighter. The leading age groups among interagency respondents was 25-44 years (n=408; 62%), the leading age groups for private contractors was also 25-44 years (n=91; 53%). Gender classification showed interagency participants (n=508; 78%) of participants were male and (n=156; 88%) of contractor participants were male; both vastly outnumbering female interagency participants (n=133; 20%) and female contractor participants (n=21; 12%). These figures are an accurate representation of the profession as wildland firefighting is a typically male dominated profession. Question 3 asked participants their highest level of education which was broken in to categories of a High School Diploma, Associates or partial completion of a degree, Trade or Technical School, a Bachelor Degree, and Masters or Doctoral Programs. Interagency respondents responded (n=521; 80%) with completion of some college or completion of a 4-year degree). Similarly, private contractor respondents responded the highest (n=121; 69%) with the completion of some college or completion of a 4-year degree. Respondents represented all 9 Geographic Coordination Areas of the United States in question 4, the highest for private contractors being Region 6 (n=78; 44%) as well as for interagency (n=121; 19%). This is an accurate representation as the majority of private contracted resources derive from the Pacific Northwest (Oregon and Washington). Interagency respondents chose to not disclose or stated not applicable (n=157; 24%) meaning these respondents could be from any state or federal agency from across the United States.

Questions 5 and 6 overlap; Incident Certification and Qualification allow multiple qualifications for an individual's red card. Quantifying the participants qualifications proved difficult as a participant could have multiple qualifications at the same time. It was determined to not include single resource qualifications which were no longer valid or those used as certain prerequisite positions. The study only included current qualified or trainee positions as identified in question 5 (figure 5). The intent of was to determine the position and experience each participant held. For example, it is safe to assume a qualified division supervisor (DIVS) and Incident Commander Type III (ICT3) have more experience in supervision than a squad boss (FFTI) and Incident Commander Type V (ICT5).

The intent of question 7 was to determine the variety of experience each participant possessed. This question provided a special demographic showing whether participants from either group had experience working in different groups such as structure/municipal fire departments or different state organizations. This would potentially impact their perception and experience with opposing groups if they held prior experience with either group.

2.4 Methods: Demographics Section



Demographics of Interagency and Private Wildland Firefighters

Figure 6/7: Demographics of Contractor and Interagency Participants

Gender

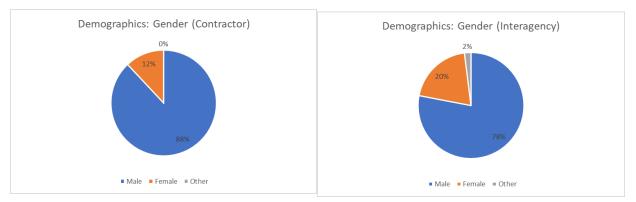
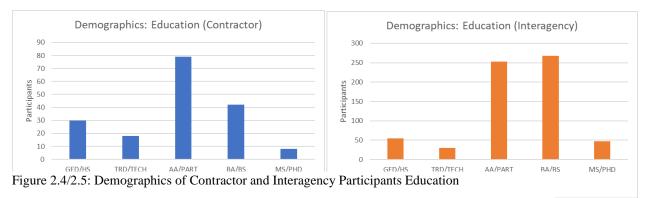


Figure 2.2/2.3: Demographics of Contractor and Interagency Participants Gender

Education



Question 4: What district, forest, state, or company do you work for?

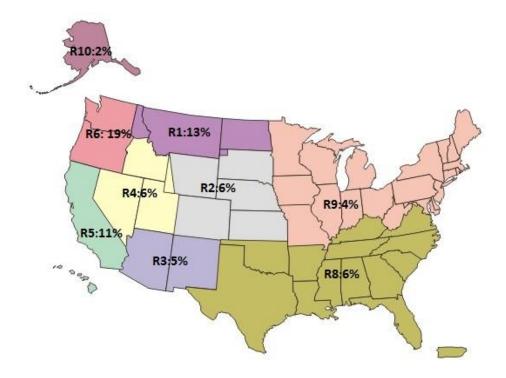


Figure 2.6: Map of Interagency Location Demographics

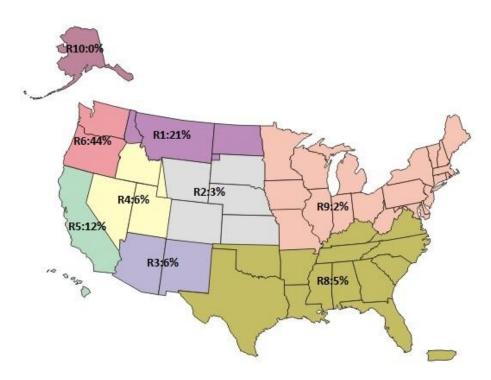


Figure 2.7: Map of Private Contractor Location Demographics

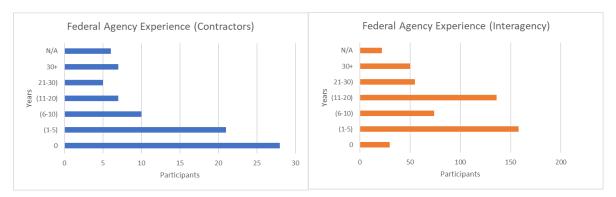
Interagency		Contractor	
FFT2	79	FFT2	20
FFT1	133	FFT1	48
ENGB/CRWB	291	ENGB/CRWB	101
HEQB	70	HEQB	9
FIRB/RXB	134	HEQO	5
FELB	4	FIRB/RXB	7
HECM	67	HECM	3
STEN/STEQ/STCR	54	FELB	1
TFLD	72	STEN/STEQ/STCR	22
DIVS	66	TFLD	9
SOF	14	DIVS	8
FALA	17	OPSC	4
FALB	114	SOF	3
FALC	37	FBAN	1
FOBS	9	LOGSC	1
FEMO	19	MEDL	2
PIOF	4	FALA	8
INVF	7	FALB	35
HMGB	32	FALC	9
COMT	13	ICT5	21
OPSC	14	ICT4	19
ICT5	77	ICT3	8
ICT4	90	ICT2	2
ICT3	53	ICT1	1
ICT2	7		I
ICT1	3		
EDSP	5		
ABRO	4		
SITL	6		
HIOP	4		
ATGS	9		

 Table 2.2: Interagency and Private Contractor Incident Qualification and Certification System

Qualification	Definition	Qualification	Definition
FFT2	Firefighter Type 2	FALA	Faller Type A
FFT1	Firefighter Type 1	FALB	Faller Type B
ENGB	Engine Boss	FALC	Faller Type C
CRWB	Crew Boss	FOBS	Field Observer
HEQB	Heavy Equipment Boss	FEMO	Fire Effects Monitor
HEQO	Heavy Equipment Operator	PIOF	Public Information Officer
FIRB	Firing Boss	INVF	Wildland Fire Investigator
RXB	Prescribed Fire Boss	HMGB	Helicopter Manager
FELB	Felling Boss	COMT	Incident Communications Technician
HECM	Helicopter Crewmember	OPSC	Operations Section Chief
STEN	Strike Team Leader (Engines)	ICT5	Incident Commander Type 5
	Strike Team Leader		
STEQ	(Equipment)	ICT4	Incident Commander Type 4
STCR	Strike Team Leader (Crews)	ICT3	Incident Commander Type 3
TFLD	Task Force Leader	ICT2	Incident Commander Type 2
DIVS	Division Supervisor	ICT1	Incident Commander Type 1
			Expanded Dispatch Supervisory
SOF	Safety Officer	EDSP	Dispatcher
LOGSC	Logistics Section Chief	ABRO	Aircraft Base Radio Operator
FBAN	Fire Behavior Analyst	SITL	Situation Unit Leader
		ATGS	Air Tactical Group Supervisor

Table 2.3: List of Incident Qualification and Certification Acronyms

Question 6: How many seasons have you been a wildland firefighter in any of these groups?



Federal Agency

Figure 2.8/2.9: Demographics: Contractor and Interagency Experience Within a Federal Agency

AD (Administratively Determined Employee)

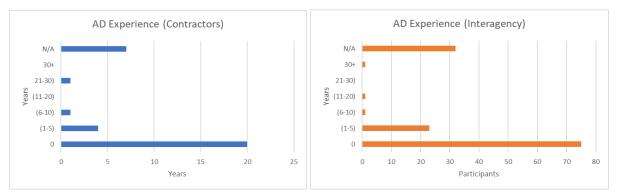


Figure 2.10/2.11: Demographics: Contractor and Interagency Experience as AD Employees

Municipal FD

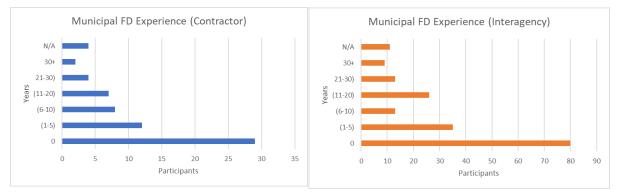
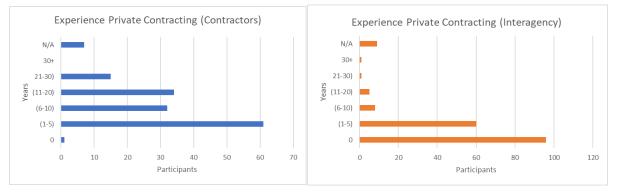


Figure 2.12/2.13: Demographics: Contractor and Interagency Experience with Municipal FDs



Private Contractors

Figure 2.14/2.15: Demographics: Contractor and Interagency Experience Private Contracting

State Agency

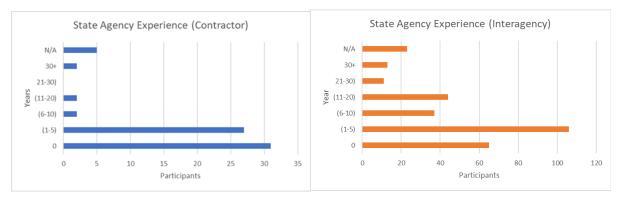


Figure 2.16/2.17: Demographics: Contractor and Interagency Experience with a State Agency

Volunteer

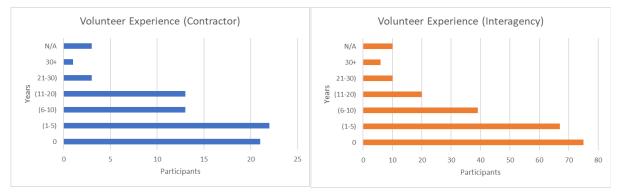


Figure 2.18/2.19: Demographics: Contractor and Interagency Experience as a Volunteer Firefighter

Results

2.5 Survey Results

Question 7: Self-Study Rating: Self-Reflective Perceptions of Responding Groups

Question 7 was a section of various self-rating questions based on personal perception of their affiliated group. These questions were asked in order to allow participants to reflect upon their group's level of inclusiveness, training, belief of teamwork, and accountability.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly
					Agree
The company/agency in which I work for	2.86%	2.29%	12%	44.57%	38.29%
does a good job integrating employees into					
the fire service.					
	2.50%	10.14%	16.85%	52.89%	17.63%
The company/agency in which I work for	1.71%	0%	9.71%	34.86%	53.71%
does a good job of accepting people with					
different cultures, backgrounds, ethnicities,					
religions, etc.					
	2.65%	10.28%	14.64%	50.78%	21.65%
The company/agency in which I work for	1.14%	2.86%	9.71%	28.54%	57.71%
does a good job ensuring that safety is our					
top priority.					
	2.80%	6.07%	13.86%	48.91%	28.35%
The company/agency in which I work for	2.86%	10.29%	18.86%	36%	32%
does a good job of providing opportunities					
for better assignments.					
	4.21%	14.49%	28.19%	41.28%	11.84%
The company/agency in which I work for	3.98%	7.95%	15.91%	33.52%	38.64%
does a good job of providing training					
opportunities.					
	3.75%	11.25%	17.66%	46.88%	20.47%
I believe that crew cohesion is vital to the	0%	0%	0.57%	11.93%	77.71%
success of fire operations.					
	0.47%	0.47%	1.87%	20.44%	76.76%
I believe that cooperation between all	0.57%	0.57%	0.57%	11.93%	86.36%
resources is vital to the success of fire					
operations.					
	0.62%	0.62%	2.96%	24.45%	71.34%
I believe the company /agency in which I	4.57%	7.43%	21.71%	40.57%	25.71%
work for ensures that physical fitness is a					
priority for the demands of my job.					
	4.36%	14.02%	18.54%	44.86%	18.22%
I believe that the company/agency in which	1.70%	2.27%	13.64%	40.34%	42.05%
I work for holds its' employees accountable					
for their actions.					
	1.08%	0.46%	0.93%	30.25%	67.28%

Table 2.4: Self-Study Rating: Self-Reflective Perceptions of Responding Groups (Contractor top;Interagency Bold **Bottom).

I am satisfied with the workplace standards	3.41%	5.11%	11.93%	36.36%	43.18%
that I am held to by the company/agency in					
which I work for.					

Question 8: Self-Study Rating: Opposite Perception (Contractor top; Interagency Bold **Bottom)

Question 8 was another section of self-rating questions based on perceptions of private contractors. These questions were asked in order to understand the perceptions interagency employees held towards private contractors as well as show the perception private contractors believed regarding their interagency counterparts.

Table 2.5: Opposing Perceptions of Private Contract Firefighters (Contractor top; Interagency Bold ***Bottom)*

	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
I believe the agencies adequately	15.91%	28.98%	26.70%	22.16%	6.25%
incorporate private contractors into					
their operations.					
	4.62%	13.71%	33.90%	41.76%	6.01%
I believe the agencies accept all	16.38%	28.25%	23.73%	27.12%	4.52%
private contractors regardless of their					
background, race, religion, etc.					
	4.01%	10.79%	26.50%	41.60%	17.10%
I believe private contractors/agencies	3.39%	8.47%	25.99%	48.59%	13.56%
promote a different work culture					
than the agency/company in which I					
work for.					
	1.69%	5.85%	24.77%	48.62%	19.08%
I believe private contractors should	2.82%	4.52%	8.47%	32.20%	51.98%
be given the same opportunities as					
those from the agency.					
	13.19%	31.13%	28.37%	21.93%	5.37%
I believe private contractors are	2.26%	11.86%	22.60%	35.03%	28.25%
adequately trained and certified.					
	17.15%	37.37%	30.78%	12.40%	2.30%
I believe private contractors are	0.56%	5.65%	16.95%	35.59%	41.24%
physically capable of keeping up					
with the demands of job.					
	12.12%	26.69%	36.20%	22.55%	2.45%

I believe private contractors make	0.56%	10.17%	14.12%	41.24%	33.90%
safety their top priority.					
	11.98%	31.03%	36.56%	17.36%	3.07%
I believe private contractors properly	1.70%	10.23%	16.48%	39.20%	32.39%
assess risk and adequately raise					
safety concerns before accepting					
assignments.					
	10.62%	29.85%	38.00%	19.23%	2.31%
I believe private contractors	4.52%	19.77%	19.21%	31.64%	24.86%
adequately voice their concerns in					
After Action Reviews					
	7.22%	26.57%	44.70%	19.66%	1.84%
I believe private contractors should	0.56%	0%	6.21%	28.25%	64.97%
be held accountable for their actions.					
	1.07%	0.15%	1.99%	37.27%	59.51%
I believe private contractors are	1.13%	1.69%	7.91%	25.42%	63.84%
capable of doing the same quality of					
work as the agencies.					
	12.25%	26.03%	21.29%	27.11%	13.32%
I believe private contractors are held	11.30%	20.34%	19.21%	24.86%	24.29%
at a lower standard than the agencies.					
	2.30%	12.86%	22.51%	48.70%	13.63%
I believe private contractors should	0.56%	1.13%	7.34%	26.55%	64.41%
be held to the same standards as the					
agencies.					
	1.07%	4.45%	9.36%	39.42%	45.71%

Question 9 asked "Do you believe private contractors/agency firefighters have a certain "brand"? *Meaning: they are all relatively the same and have similar attitudes*?" This was a closed ended question with an explanation input designed to understand how each group perceived each other by first understanding if they believed there was "a brand" or general attitude all contractors or all agency employees had. Results showed a difference of opinion; almost half of contractors believing interagency employees held a similar brand or attitude. The opposite occurred where the majority of interagency employees did not believe all contractors were the same.

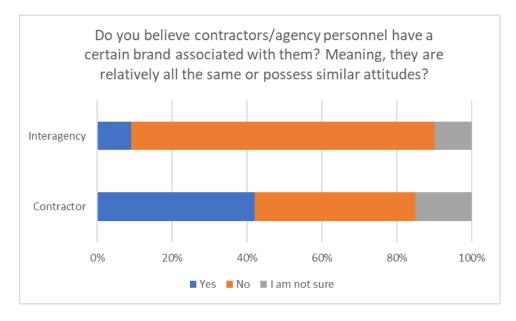


Figure 2.20: Interagency and Private Contractor Perception of Opposing Brands

Question 10 was a semi-closed ended question asking "*If there is an opportunity available do you as a supervisor (do you believe the supervisor) should provide special training opportunities or assignments to private contractors?*" This question asked participants from both groups if they believed supervisors should give opportunities to contractors if available. The majority of contractors felt supervisors should provide them with these opportunities; whereas the majority of interagency respondents stated this did not apply to them.

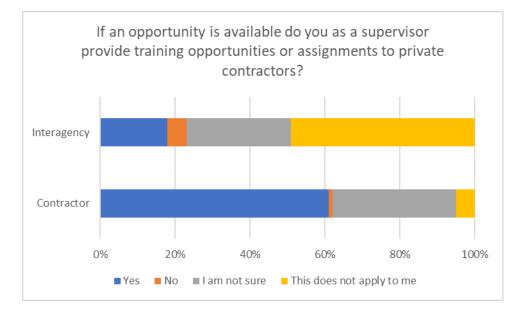
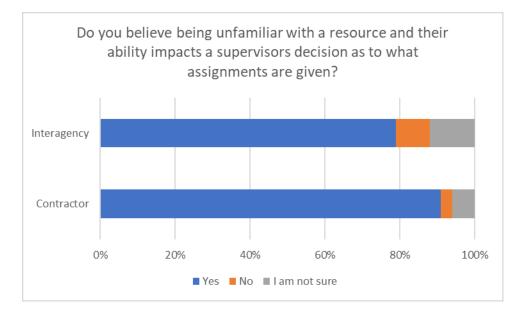


Figure 2.21: Interagency and Private Contractor Opposing Perception of Supervisory Duties and Responsibilities

Question 11 was a closed ended question asking both groups "Do you believe being unfamiliar with resource abilities (qualifications, fitness, general knowledge, and character) influences the work they will be assigned?" This question was used in order to understand if the lack of familiarity or cohesion with the abilities of a resource impacted a supervisor's distribution of assignments to resources. The majority of both groups believed unfamiliarity did impact these decisions.





Question 12: Do you believe a "can do" mentality exists?

Question 12 was a closed ended question which asked "*Do you believe a "can do" mentality exists?*" which was a closed ended question with an explanation input designed to understand if both groups believed a "can do" mentality existed which led people to take excessive risk. The majority of both groups believed this mentality was existent in wildland fire.

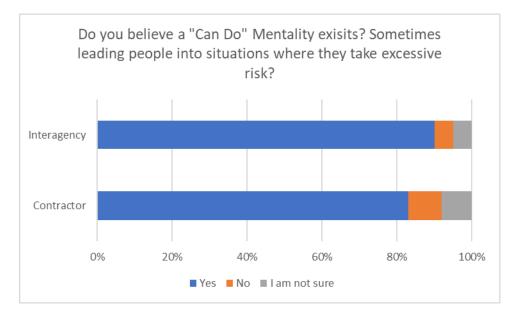


Figure 2.23: Interagency and Private Contractor Opposing Perception of a "Can Do Mentality"

Question 13 was another closed ended question asking both groups "*Do you believe there is a negative work culture between Contractors and Agency Firefighters*?" This question specifically looks to identify if there is negative culture between these two groups. The majority of both groups stated a negative work culture did exist.

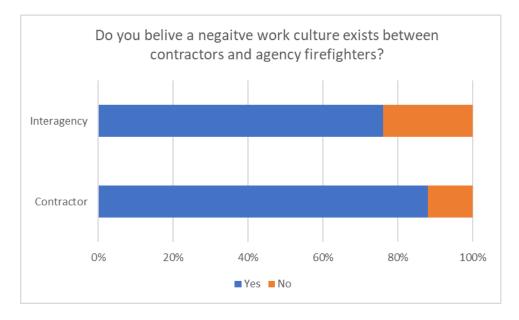


Figure 2.24: Interagency and Private Contractor Opposing Perception of a Negative Work Culture

Question 14 was a close ended question first stating, "It is often believed culture is resistant to change" then asking "Do you believe state and federal agencies need to adjust their stance towards

contractors? "This was specifically asking both groups if they believed state and federal agencies should adjust their cultural stance towards private contractors.

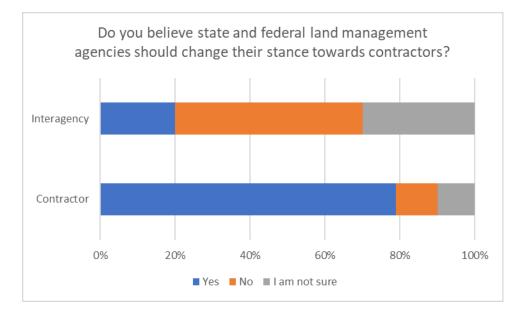


Figure 2.25: Interagency and Private Contractor Opposing Perception of Agency Cultural Stance

Question 15 asked both groups the question "Do you believe that the Fire Services commitment to a safety culture is positive or negative?" This was asked in an open-ended question with individual responses in order to understand the personal perception individuals from both groups held towards the concept of a "safety culture." Responses varied:

- "To me the commitment to a safety culture is positive in the respect that we have less people giving the "back in my day" speech. Even those who have worked their way into C&G or IC positions understand safety is a priority and stress it regularly."-Interagency Respondent
- *"It is positive as long as it doesn't hinder getting the job done" –*Contractor Respondent
- *"Negative, it is being used for people to refuse unwanted assignments."* –Interagency Respondent
- *"Very positive, safety is the important part of our job. Property can be replaced but we can't replace the lives of firefighters."* –Contractor Respondent

"I think it is positive for the most part. However, it can be taken too far. Most of this job is not black and white and we cannot come up with an answer to be safe all of the time." – Interagency Respondent

Question 16: Interagency only** "*Have you ever been in a supervisory role over multiple resources from different groups such as private contractors, agency, and or structure firefighters?*" This question was a closed ended question only targeting interagency participants. This was not included with the private contractors as they generally do not have fire line supervision positions without prior experience with an agency. The majority of respondents stated they had held a supervisory role over these resources.

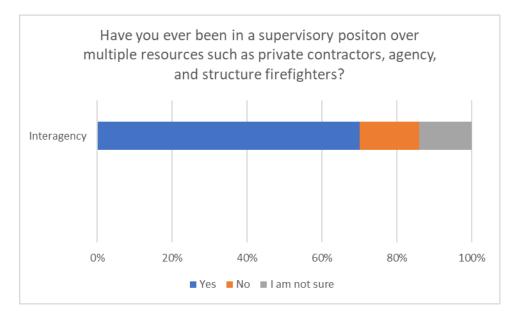


Figure 2.26: Interagency Supervisory Demographic

Question 17 was a closed ended question targeting interagency fireline supervisors, asking *"Have you ever given a performance evaluation?"* This was not included with the private contractors similarly to question 16 because they generally do not have experience in supervisory positions without prior experience with an agency.

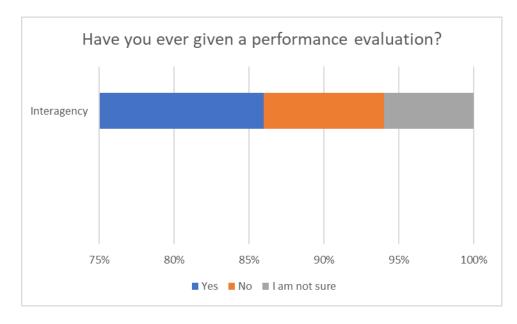


Figure 2.27: Interagency Performance Evaluation Demographic

Question 18 was a closed ended question asking both groups "*Are you familiar with the performance evaluation process and how it impacts the placement of private contractors in the Dispatch Priority List?*" This question was used to understand if both groups understood the impacts of the performance evaluation system for contract resources. The majority of both groups signaled knowledge of this impact.

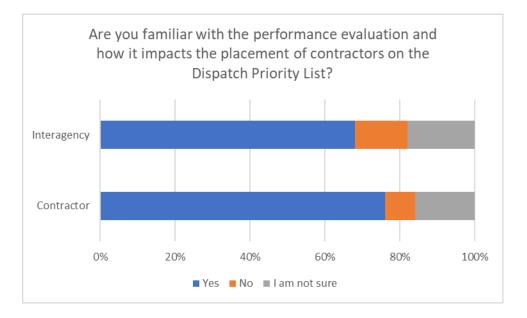


Figure 2.27: Interagency and Private Contractor Understanding of Dispatch Priority List

Question 19 was a self-ranking closed ended question asking "*Do you believe the performance evaluation is adequate and fair?*" This question was a measurement to understand if respondents felt the performance measures were an adequate assessment of performance for contract and interagency resources. The majority of both groups believed the current form of evaluation is adequate and or fair.

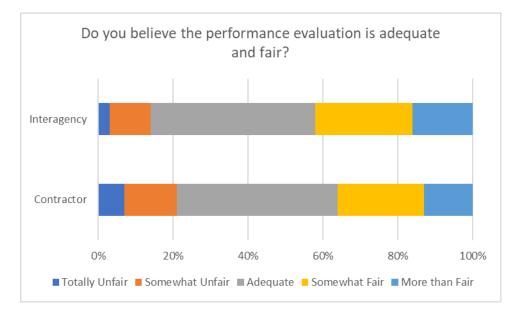


Figure 2.28: Interagency and Private Contractor Opposing Perception of Performance Evaluation

Question 20 was a closed ended question asking respondents of both groups "*Do you believe that more emphasis should be placed on the performance evaluation process in order to increase performance standards*?" This question was a follow-up to question 19 to indicate if participants felt the need to increase performance standards by emphasizing a more stringent performance evaluation. The majority of both groups agreed to the need of a more emphasized performance evaluation.

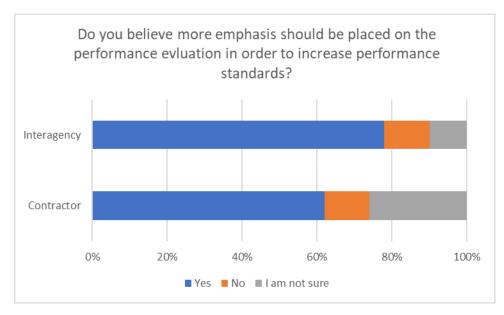


Figure 2.29: Interagency and Private Contractor Opposing Perceptions of Increased Performance Standards

Question 21 was a closed ended question asking both groups "Do you believe the performance evaluation process should be more comprehensive to hold individuals and organizations accountable?" This question was used as another indicator to understand if participants felt the need to increase performance standards to hold individuals more accountable.

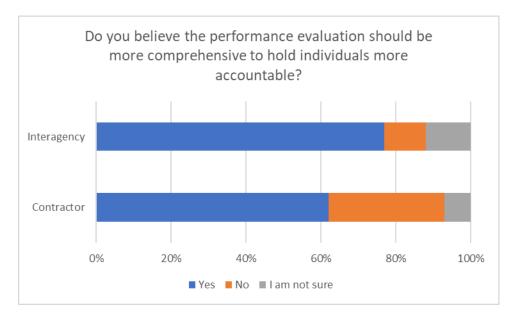
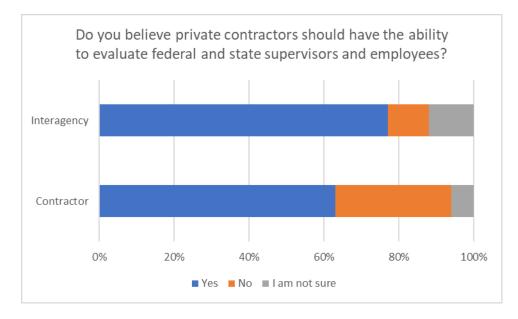


Figure 2.30: Interagency and Private Contractor Opposing Perceptions of a Comprehensive Performance Evaluation System

Question 22 was a closed ended question asking both groups "*Do you believe that private contractors should have the ability to evaluate federal and state supervisors and employees*?" This question is another indicator to whether participants felt utilizing a dual evaluation system could help solve issues amongst the two groups. The majority of both groups agreed that private contractors and interagency supervisors should have the ability to evaluate each other.





Question 23 was a self-rating section of questions specifically looking at fear, consequence, and repercussion issues. These questions were a self-evaluation questions with the intent to determine the relevance of each issue. (Interagency Top: Contractor Bottom).

Disagree Neutral Strongly Strongly Agree Disagree Agree 33.69% 17.65% 20.32% 5.88% As an agency/contractor 22.46% employee I fear financial consequences if an assignment is turned down 5.84% 11.69% 20.78% 38.31% 23.38% 19.29% 39.82% 18.21% 18.93% 3.75% As an agency/contractor employee I fear pressure from overhead to do assignments I may not be comfortable doing 14.94% 27.92% 31.17% 18.83% 7.14% 24.60% 38.50% 18.00% 13.01% 5.88% As an agency/contractor employee I fear retaliation from my supervisor if an assignment is turned down 17.65% 24.18% 26.80% 18.30% 13.07% 38.57% 19.29% 15.54% 4.64% As an agency/contractor 21.96% employee I fear demobilization if an assignment is turned down 5.19% 14.29% 12.99% 39.61% 27.92% 15.54% As an agency/contractor 21.96% 38.57% 19.29% 4.64% employee I fear a poor performance evaluation if an assignment is turned down 4.55% 10.39% 14.29% 42.86% 27.92% 16.13% 31.00% 21.68% 25.68% 5.56% As an agency/contractor employee I fear not being given the opportunity for better assignments or training if an assignment is turned down 7.19% 12.42% 20.92% 38.56% 20.92% 21.86% 38.89% 24.91% 11.65% 2.69% As an agency/contractor employee I feel pressure from my supervisor or module leader to perform tasks that I may feel uncomfortable doing 20.92% 26.80% 35.95% 12.42% 15.03%

Table 2.6: Self-Study Rating: Perceptions of Fear, Consequence, and Repercussion (Interagency Top**Bold, Contractor Bottom

As an agency/ contractor	5.20%	9.14%	13.08%	41.40%	31.18%
employee I feel the need to prove					
myself worthy to my crew,					
friends, family, or co-workers.					
	12.14%	15.69%	18.95%	37.91%	15.03%

Question 24: Comments and Feedback

Question utilized with the intent to allow participants to provide any feedback regarding the survey. Additionally, any specific information that pertained to their fire experience with the conflict in question.

Question 25: Personal Information for results

Question utilized with the intent to allow participants to leave their personal contact information if they wished to see the results and conclusions of the study at a later date.

2.6 Descriptive Statistics of Demographics

Table 2.7: Descriptive Statistics of Interagency and Contractor Age Demographics

	Category	Min	Max	Mean	Median	Std. Error	Std. Dev
Interagency	Age	18	74	40.54	48.9	0.48	12.39
Contractor		18	74	42.52	42.52	1.005	13.34

						Std.	Std.
Descriptor	Category	Min	Max	Mean	Median	Error	Dev.
	<u>Federal Agency</u>						
Interagency		0	40	12.09	8.83	0.46	10.76
Contractor		0	40	8.27	2.71	1.21	11
	<u>AD</u>						
Interagency		0	40	0.96	3.48	0.34	4.03
Contractor		0	30	1.37	3.44	0.8	4.63
	<u>Municipal FD</u>						
Interagency		0	40	5.78	12	1.09	8.95
Contractor		0	40	6.75	11.68	0.65	9.01
	<u>Private</u> <u>Contractor</u>						
Interagency		0	40	2.12	7	0.33	4.52
Contractor		0	30	8.99	6.75	0.61	7.5
	<u>State Agency</u>						
Interagency		0	40	6.77	3.68	0.5	8.72
Contractor		0	40	2.88	4.83	0.77	6.41
	<u>Volunteer</u>						
Interagency		0	40	6.77	3.68	0.5	8.72
Contractor		0	40	6.36	3.54	0.76	6.65

Table 8: Descriptive Statistics of Interagency and Contractor Experience Demographics

3: Data Analysis and Discussion

Abstract

Wildland fire is a dynamic force and is constantly changing; to combat this, fire managers need to be willing to change as well to adjust to the changing cultural dynamics within wildland fire; the attitudes, values, and beliefs must be re-evaluated at each organizational level. Maintaining the current perceptions of each other as the status quo may lead to alienation of resources denying inclusiveness and communication among resources due to unnecessary fear of consequence or retaliation. This is concerning due to the importance teamwork and communication have towards efficiency and safety within wildland fire operations. The data collected using survey methodology provided an important "first look" at one aspect of this perceptive culture; specifically, examining the division among interagency and private wildland firefighters. This section will discuss and analyze the statistical data collected from the survey and provide initial analysis to be used for further discussion of this issue.

Data Analysis

3.1 Self-Perception: "Us"

Responses to the self-reflective perceptions (question 7) produced strong outputs of 40-80% agreeing or strongly agreeing to self-beliefs and attitudes affiliated with both responding groups. Combining both interagency and private wildland firefighter responses proved group perceptions of personal organizations were strong. For example, both groups believed their organizations do "a good job" accepting people regardless of backgrounds, ethnicities, religions, race, etc. (contractors: n=175; 88.57 percent, interagency: n=642; 72.43 percent). Both groups perceived their organizations of "doing a good job" integrating people into their operations (contractors: n=177; 82.86 percent, interagency: n=641; 70.52 percent). Both groups perceived their organizations as doing a "good job" of training (contractors: n=175; 72.16 percent, interagency: n=640; 67.35 percent), providing opportunities (contractors: 175; 68 percent, interagency: n=642; 53.12 percent), ensuring safety (contractors: n=175; 88.75 percent, interagency: n=642; 77.26 percent), and fitness (contractors: n=175; 66.28 percent, interagency: n=642; 63.08 percent) was a priority. Finally, both groups stated cooperation (contractors: n=175; 89.64 percent, interagency: n=642; 95.79 percent), cohesion (contractors: n=175; 89.64 percent, interagency: n=642; 97.2 percent), and accountability (contractors: n=176; 82.39 percent, interagency: n=648; 97.53 percent) were "vital or important" to the success of fire operations (See table 12 for results).

The organizational safety report conducted by TriData Corporation in 1996 found similar perceptions of interagency firefighters believing their safety record was good, excellence of cooperation, successful integration, good standards of training, etc. (TriData, 1996). Previous sections eluded to the culture of wildland fire and the importance of inter-crew acceptance as a method of respect and dedication. This is an important aspect of wildland fire culture; described as a unique bond with one another based on physical, mental, and emotional hardships that configure wildland firefighters in a heroic, masculine ideal (Reimer et, al. 2018). Collected observations from this study show the majority of respondents having relatively strong self-beliefs regarding personal affiliations to their "tribe," suggesting the first attitude of wildland fire tribal mentality "us" (Viktora, et, al. 2014) is present in the current arena of wildland fire. This attitude varies from micro levels within modules such as crews and engines to macro levels existing within agencies and contractor organizations.

3.2 Perception of Private Contractors: "Them"

The following twelve questions of this section were asked in a self-rating scale which were broken into three sections: Acceptance, Training/Fitness/Safety, and Accountability/Standards. Responses to the opposing perceptions section (Question 8) examined perceptions of private contractors from both responding groups. Observations collected showed significant division between these two groups; interagency perceptions towards private contractors posted outputs of near polar division between the responding groups. In some cases 60-70 percent of interagency respondents held a negative stance towards contractors; while upwards of 60 percent of private contractors held a positive perception of themselves. These findings point towards the second wildland fire tribal mentality attitude of "them." In this particular case, "them" refers to the perception of private contractors by interagency personnel.

3.2.1 Acceptance

When asked if state and federal agencies adequately incorporated private contractors into their operations ± 44.89 percent of contractors (n=176) disagreed or strongly disagreed (See table 13); while 47.77 percent of interagency personnel (n=649) agreed or strongly agreed. When asked if state and federal agencies accepted all private contractors regardless of background, race, religion, etc. 44.63 percent of contractors (n=177) disagreed or strongly disagreed, while 58.70 percent of interagency personnel (n=649) agreed or strongly disagreed, while 58.70 percent of interagency personnel (n=649) agreed or strongly agreed. Reflecting back to the self-perceptions (question 7; table 12) which showed interagency respondents believing their organization did a "good job" integrating people into their operations, (n=642; 72.43 percent) as well as accepting all people regardless or background, race, religion, etc. (n=641; 70.52 percent). However, observations from the first two questions of the opposing perceptions section (question 8; table 13) suggest while

interagency personnel believe their organization does a good job accepting and including others; nearly half of private contractors disagree with their interagency counterparts.

3.2.2 Training, Fitness, Safety

When asked if private contractors should be given the same opportunities as agency personnel: \pm 84.18 percent; (n=177) of contractors agreed or strongly agreed, while 44.32 percent; (n=652) of interagency personnel disagreed or strongly disagreed; (See table 13). When asked if private contractors were properly trained and certified: 63.28 percent; (n=177) of private contractors agreed or strongly agreed, while 54.52 percent; (n=653) of interagency personnel disagreed or strongly disagreed. When asked if private contractors were physically capable of meeting the demands of their job: 76.73 percent; (n=177) of contractors agreed or strongly agreed, while 38.81 percent; (n=652) of interagency personnel disagreed or strongly disagreed. When asked if private contractors prioritized safety: 75.14 percent; (n=177) of contractors agreed or strongly agreed, while 43.01 percent; (n=651) of interagency personnel disagreed or strongly disagreed. When asked if private contractors properly assessed risk and raised safety concerns before accepting an assignment: 71.59 percent; (n=176) of contractors agreed or strongly agreed, while 40.47 percent; (n=650) of interagency personnel disagreed or strongly disagreed. When asked if private contractors adequately raised safety concerns in After Action Reviews: 56.5 percent; (n=177) of contractors agreed or strongly agreed, while 33.79 percent; (n=651) of interagency personnel disagreed or strongly disagreed. Examining the observations gathered in the mid-section of the opposing perception sections (question 8; table 13) proves a significant division exists between interagency and private wildland firefighters in the areas of training, safety, and physical fitness. Interagency personnel hold a negative perception of private contractors in almost every area while contractors generally feel they do a good job in these areas.

3.2.3 Accountability and Standards

When asked if private contractors should be held accountable for their actions both groups agreed or strongly agreed (contractors: n=177; 93.22 percent, interagency: n=652; 96.78 percent). Both groups agreed and strongly agreed private contractors should be held to the same standards as interagency personnel (contractors: n=177; 90.96 percent, interagency: n=652; 85.13 percent). Both groups agreed and strongly agreed private contractors were held to a lower standard than interagency personnel (contractors: n=177; 49.15, interagency: n=653; 62.33 percent). The one question where a split occurred among interagency respondents was whether private contractors were capable of producing the same quality of work as agency personnel. 86.26 percent (n=177) contractors agreed or strongly agreed or strongly agreed (n=653). These observations show both sample groups believe private

contractors should be held more accountable to higher standards than they currently are and equal to their agency counterparts rather than being held to lower standards.

3.3 Acknowledgment of a Negative Work Culture

Culture is perceived differently by each individual based on attitudes, values, and beliefs. (Question 13; figure 13) asked "*Do you believe there is a negative work culture between Contractors and Agency Firefighters?*" Responses prompted a significant response from both groups and resulted in the confirmation of an existing negative work culture between these two groups. (Contractors: n=161; 87.58 percent, interagency: n=595; 76.13 percent) additionally, question 14 showed despite the acknowledgement of a negative work culture; responses signified another disagreement between the two groups where 78.53 percent (n=163) of contractors believed state and federal agencies should adjust their stance towards contractors in order to solve the negative work culture. 51.32 percent (n=604) of interagency personnel believed state and federal should not have to adjust their stance towards contractors in order to solve the negative. One question pertaining to this section within the opposing perceptions section (question 8; table 13) asked if agencies and contractors promoted different work cultures both responding groups agreed or strongly agreed to the perception of different cultures being promoted by either group (contractors: n=177; 62.15 percent, interagency: n=650; 67.70 percent).

3.4 Fear of Consequence and Repercussion

(Question 23; table 14) was a self-rating reflection section focusing on the issues of fear, consequence, and repercussion. When respondents were asked if they feared financial consequences if assignments were turned down: 61.69 percent; (n=154) of contractors agreed or strongly agreed, while 56.15 percent (n=561) of interagency personnel disagreed or strongly disagreed. When asked if respondents feared pressure from overhead to do assignments, they felt uncomfortable doing both groups disagreed: (contractors: n=153; 42.86 percent, interagency: n=560; 59.11 percent). When asked if respondents feared retaliation from their supervisor if an assignment was turned down: (contractors: n=153; 41.83 percent, interagency: n=561; 63.10 percent) disagreed or strongly disagreed. When asked if they feared demobilization if an assignment was turned down: 67.53 percent (n=154) of contractors agreed or strongly agreed, while 60.53 percent (n=560) of interagency personnel disagreed or strongly disagreed. When asked if they feared down 59.48 percent (n=154) of contractors agreed or strongly agreed, while 59.48 percent (n=558) of interagency personnel disagreed or strongly agreed, while 59.48 percent (n=558) of interagency personnel disagreed or strongly agreed or strongly disagreed or strongly agreed, while 59.48 percent (n=558) of interagency personnel disagreed or strongly disagreed if they felt uncomfortable doing both groups disagreed or strongly disagreed: (contractors: n=153; 47.72

percent, interagency: n=558; 60.79 percent). When asked if they felt the need to prove their worth to their friends, family, co-workers, and crew both groups agreed or strongly agreed: (contractors: n=153; 52.94 percent, interagency: n=558; 72.58 percent).

Discussion

Since the implementation of the standard firefighting orders, watch out situations, and organizational safety journeys; safety on the fireline has generally improved due to increased situational awareness. However, mitigating risk with safety protocols does not abdicate unforeseen errors. Wildland firefighting is an inherently dangerous profession; averaging 17 firefighter fatalities each year (NIFC, 2017). Management needs to redefine "success" and "failure" in firefighting, together with priorities and consequences. Evaluate all messages against agency goals especially the goal of safety first. It is easier to modify behavior than attitudes. Changing attitudes occurs after a 3- to 5-year effort of changed behaviors. Attitudes need to be exemplified in behaviors (Desmond, 2007). Between 1990-2017 482 fatalities were reported, 136 (28 percent) of those were private contractors (NIFC et, al 2017). As suppression resources from the private sector continue to be integrated into interagency managed fire operations, it will be valuable to understand these relationships to adjust behaviors towards successful cooperation between these two groups.

This study found both private and interagency firefighters perceiving differences in various areas such as: safety, training, physical performance, fear, retaliation, as well as their personal perceptions of their affiliated organizations. This is especially concerning due to the potential for these issues to culminate into hostile working relationships between the two groups. The current relationships between interagency and private wildland firefighters may result from existing rivalries. Rivalries have benefits; sometimes promoting increased production and inter-crew cohesion at a micro-level. However, it appears based on the observations gathered from this study to have the opposing impact. Little is known as to the origins of the rivalries in question; however, responses collected pointed to systematic issues of financial compensation, lack of resource standardization, and poor trust of either group due to lack of experience, knowledge, or physical fitness. "Generally, teamwork is perceived the highest with resources working close in proximity on the fireline. However, this does not hold up with private contractors. Statistical data from McDonald and Shadow shows interagency employees rated contractors the lowest (20 percent: good or very good) in terms of quality of cooperation and teamwork (McDonald and Shadow et, al. 2002).

Both (TriData, 1996, McDonald and Shadow, 2002) point to significant distrust of private contracted resources by interagency personnel. Distrust and lack of cohesion can lead to catastrophic consequences during fire operations. During the 2001 Thirty Mile Fire 20 firefighters and 2 civilians

were entrapped due to lack of decisiveness, unfamiliarity with crewmembers, and poor communication resulting in 4 fatalities (USDA et, al. 2002). McDonald and Shardow (2002) specifically focused on "trust" as a variable between these two groups. This study however, does not specifically account for this variable. This study does point toward similar perceptions of private contractors by interagency personnel; suggesting a similar interpretation to McDonald and Shadow is valid within the parameters of this study.

The development of a rivalry between private and interagency wildland firefighters has the potential to lead to catastrophic consequences. In 2018 the Mendocino Complex fire was the largest fire in California state history, burning 459,123 acres. During this fire, six firefighters received burns and other injuries after being entrapped. The partnering lesson analysis report published jointly by the USDA Forest Service, California Department of Forestry and Fire Protection, and Los Angeles Fire Department analyzed 21 "common factors" of firefighter entrapments. Specifically, the existence of an interagency rivalry, organizational structure, refusal of assignment, span of control, personnel shortages, etc. (USDA; California Department of Forestry and Fire Protection; Los Angeles Fire Department et, al. 2018). This report would suggest systematic rivalries already exist within the ranks of state and federal agencies. Allowing similar rivalries to infect cooperators and other partnerships may result in similar outcomes if not addressed.

Observations gathered in the cultural perceptions of private and interagency firefighters study suggests significant flaws exist within the cultural framework of wildland fire. Culturally, wildland fire is a profession of earned respect and developed aptitude where trust is earned through time and dedication. These relationships are most strong within micro-units such as engines or crews as employee retention develops into reoccurring cohesion and familiarity; resulting in strong levels of teamwork and production. (Dotson et, al. 2016; Reimer et, al. 2015). While these are generally positive outcomes; individual units maintain a sense of familiarity with "their own" sometimes leading to rejection of those perceived not "one of them" (Viktora et, al. 2014). Denial or rejection of private contractors due to lack of familiarity, adequate knowledge of background, experience, or qualifications suggests a significant distrust towards these groups among interagency firefighters. McDonald and Shadow depict significant organizational weaknesses of great concern, especially with the increased use of contract resources. Poor trust, cohesion, cooperation, integration will have serious implications for line performance and safety (McDonald and Shadow et, al. 2002).

Observations of fear, retaliation, and repercussion gathered from the perceptions of interagency and private wildland firefighters study were especially concerning as the data collected supports negative working relationships. Private contractor respondents believed their concerns were not validated by

interagency supervisors. However, most interagency personnel surveyed felt the opposite; believing they were very receptive to the concerns of private contractors and validated safety concerns if properly voiced. As a result, private contractors perceived the refusal or questioning of an assignment would lead to less desirable assignment or in extreme cases demobilization resulting in financial consequences as punishment from interagency supervisors. Some outlying opinions of interagency personnel suggest the refusal of an assignment or raising safety concerns was due to the lack of motivation by private contractors. In a 2008 study of Incident Management Team (IMT) perceptions some interviewees believed 'Contract crews were poorly trained, unqualified, and unmotivated...Due to the lack of agency administrators training and experience requirements that apply to government employees are reduced, nonexistent, or not enforced for contractors who do similar work' (Tompson et, al. 2008). This has resulted in a negative perception from interagency personnel towards contractors who believe contract resources need more oversight because they 'are more likely to cause supervision, behavioral, and safety problems' (Tompson et, al. 2008).

Conclusion

The conclusion of this study quantifiably validated the existence of developing rivalries between private contracted and interagency firefighters. These rivalries have developed due to the opposing perceptions of one another resulting in cultural flaws and deficiencies. Although limited; we gained insights of perceptions and conflicts between interagency and private wildland firefighters. A key limitation to this study was the use of social survey methodology; while social surveys provide access to a large sample group they do not always provide in-depth knowledge as to 'how' and 'why' people act the way they do. However, the gathered observations were verified by adequate sample sizes between both sample groups which accurately represented the greater population of wildland firefighters. These social-surveys provided a participatory platform to respond and quantify perceptions associated with the hypothesized problem of a poor working relationship between interagency and private wildland firefighters. Another key limitation of this study was the word selection of certain questions; some questions appeared to lead respondents toward one answer or another without providing additional options for response. This study provided key-informative data demonstrating the need for further research. With the problem identified; it will be necessary to continue to press the issue by exploring these perceptions in-depth to alleviate future conflicts between these two groups. However, the next steps will require a different social-science methodology such as individual focus groups and subject matter expert interviews. Continuation with these platforms will be important in further understanding and identification of how and why these problems exist; which may lead to more permanent solutions in the future.

Appendix A Copy of Interagency Survey

Copy of Interagency Survey

Demographics

- 1. What is your age?
 - o 18-24
 - o 25-34
 - o 35-44
 - o 45-54
 - o 55-64
 - o 65+

2. What is your gender?

- o Female
- o Male
- o Other
- I choose not to disclose this information
- 3. What is your highest level of education

- o GED or High School Diploma
- Trade School or Technical College
- Some College or Associates Degree
- o Completion of a Bachelor's Degree
- Advanced Degree (M.S, PhD.)

4. What district, forest, state do you currently work for? If you choose to not disclose this information, please type N/A.

5. What are your qualifications? Examples: FFT2, FFT1, ICT3, ENGB, HEQB, FALLER B.

6. Approximately how many seasons have you been a wildland firefighter in any or all of these groups? Please state which group you are a current employee of with a (c).

- Federal Agency: BLM, USFS, USFWS, NPS, BIA
- State Agencies: DNR, Dept. of Forestry, State Fish and Wildlife, etc.
- Volunteer or Rural Protection Groups
- Private Contractors
- Municipal Structure Departments
- I am an AD or currently not involved within wildland firefighting in any capacity

Perceptions

7. Please rate the following questions based on your own experience.

Strongly Disagree Disagree Neutral Agree Strongly Agree

- The agency in which I work for does a good job of integrating employees into the fire service.
- The agency in which I work for does a good job of accepting people with different cultures, backgrounds, ethnicities, religions, etc.
- The agency in which I work for does a good job of ensuring that safety is our top priority.
- The agency in which I work for does a good job of providing opportunities for better assignments.
- The agency in which I work for does a good job of providing training opportunities
- I believe crew cohesion is vital to the success of fire operations
- I believe interagency cooperation is vital to the success of fire operations
- I believe the agency in which I work for ensures that physical fitness is a priority for the demands of my job

- I am satisfied with the work standards that I am held to by the agency in which I work for.
- 8. Please rate the following questions based on your own experience.

Strongly Disagree Disagree Neutral Agree Strongly Agree

- I believe the agency in which I work for adequately incorporates private contractors into our operations.
- I believe the agency in which I work for accepts all private contractors regardless of their background, race, religion, etc.
- I believe private contractors promote a different work culture than the agency in which I work for.
- I believe private contractors should be given the same opportunities as those from the agency in which I work for.
- I believe private contractors are adequately trained and certified
- I believe private contractors are physically capable of keeping up with the demands of the job
- I believe private contractors make safety as their top priority

- I believe private contractors properly assess risk and adequately raise safety concerns before accepting assignments.
- I believe private contractors adequately voice their concerns in After Action Reviews.
- I believe private contractors should be held accountable for their actions
- I believe private contractors are capable of doing the same quality of work as the agency in which I work for.
- I believe private contractors are held at a lower standard than the agency in which I work for.
- I believe private contractors should be held to the same standards as the agency in which I work for.

9. Do you believe private contractors have a certain "brand"? Meaning: they are all relatively the same and have similar attitudes? Please explain.

- Yes, all contractors are the same.
- No, not all contractors are the same.
- $\circ \quad I \text{ am not sure}$

Please Explain

10. If there is an opportunity available do you as a supervisor provide special training opportunities or assignments to private contractors?

- Yes, I always give opportunities to contractors if they are available
- Sometimes I give opportunities to contractors if they are available
- o No, I do not give opportunities to contractors even if they are available
- This does not apply to me

11. As a supervisor when giving assignments to resources, do you believe that "being unfamiliar" with that resources abilities (qualifications, fitness, general knowledge, character) influences what kind of work they will be assigned? Please explain.

- Yes, being unfamiliar with a resource influences the work they are assigned
- o No, being unfamiliar with a resource does not influence the work they are assigned
- I am not sure

Please Explain

Culture

12. Do you believe there is "Can do" mentality that sometimes leads people into situations where they take excessive risk?

- Yes, this "Can do" mentality exists and sometimes leads to people taking excessive risk
- o No, this "Can do" mentality does not exist
- I am not sure

Please Explain

13. Do you believe there is a negative work culture between Contractors and Agency firefighters?

- o Yes
- o No

Please Explain

14. It is often believed that culture is not receptive to change, do you believe that the agency in which you work for needs to change its' stance towards private contractors? Please Explain.

- Yes, the agency in which I work for needs to change its' stance toward private contractors
- No, the agency in which I work for does not need to change its' stance toward private contractors
- o I am not sure

Please Explain

15. Do you believe that the Fire Service's commitment to a "safety culture" is positive or negative? Please Explain.

Performance

16. Have you ever been in a supervisory role over multiple resources from different groups such as private contractors, agency, and or structure firefighters?

- o Yes
- o No
- This does not apply to me

17. Have you ever given a performance evaluation?

- o Yes
- o No
- This does not apply to me

18. Are you familiar with the performance evaluation process and how it impacts the placement of private contractors in the Dispatch Priority List?

o Yes

- o No
- $\circ \quad I \text{ do not know} \\$
- This does not apply to me

19. Do you believe that the performance evaluation is adequate and fair? Please rate below.

Totally Unfair Somewhat Unfair Adequate Somewhat fair More than fair

20. Do you believe more emphasis should be placed on the performance evaluation process in order to increase performance standards? Please Explain.

- o Yes
- o No

Please Explain

21. Do you believe the performance evaluation process should be more comprehensive to hold individuals and organizations accountable?

- o Yes
- o No
- o I do not know/ This does not apply to me

22. Do you believe private contractors should have the ability to evaluate federal and state supervisors and employees?

- o Yes
- o No
- I am not sure/ This does not apply to me.

23. Please rate the following based on your own experience.

I strongly disagree I disagree Neutral I agree I strongly agree

- As a federal or state resource I fear financial consequences if an assignment is turned down.
- As a federal or state resource I fear pressure from overhead to do assignments that I may not be comfortable doing.
- As a federal or state resource I fear retaliation from my supervisor if an assignment is turned down.
- As a federal or state resource I fear demobilization if an assignment is turned down.
- As a federal or state resource I fear a poor performance evaluation if an assignment is turned down.
- As a federal or state resource I fear not being given the opportunity for better assignments or training if an assignment is turned down.
- As a federal or state resource I feel pressure from my captain, crew boss, or leader to perform tasks that I may feel uncomfortable doing.
- As a federal or state resource I feel that I must prove myself worthy to my crew, friends, family, or coworkers.

Remarks

24. Do you have any comments? Or perhaps a story that pertains to one of the questions? Please Share!

25. Would you like to see the results of this survey? Please provide your information below and I will send you the results.

Name

Email Address

Phone Number

Appendix B Copy of Private Contractor Survey

Copy of Contractor Survey

Demographics

- 1. What is your age?
 - o 18-24
 - o 25-34
 - o 35-44
 - o 45-54
 - o 55-64
 - o 65+

2. What is your gender?

- o Female
- o Male
- o Other
- o I choose not to disclose this information
- 3. What is your highest level of education?
 - GED or High School Diploma
 - Trade School or Technical College

- o Some College or Associates Degree
- o Completion of a Bachelors Degree
- Advanced Degree (M.S, PhD.)
- 4. What state is your company located in?

5. What are your qualifications? Examples: FFT2, FFT1, ICT3, ENGB, HEQB, FALLER B.

6. Approximately how many seasons have you been a wildland firefighter in any or all of these groups? Please state which group you are a current employee of with a (c).

- Federal Agency: BLM, USFS, USFWS, NPS, BIA
- State Agencies: DNR, Dept. of Forestry, State Fish and Wildlife, etc.
- Volunteer or Rural Protection Groups
- o Private Contractors
- o Municipal Structure Departments
- o I am an AD or currently not involved within wildland firefighting in any capacity

Perceptions

7. Please rate the following questions based on your own experience.

- The company in which I work for does a good job of integrating employees into the fire service.
- The company in which I work for does a good job of accepting people with different cultures, backgrounds, ethnicities, religions, etc.
- The company in which I work for does a good job of ensuring that safety is our top priority.
- The company in which I work for does a good job of providing opportunities for better assignments.
- The company in which I work for does a good job of providing training opportunities
- I believe crew cohesion is vital to the success of fire operations.
- I believe that cooperation between all firefighting resources is vital to the success of fire operations
- I believe the company in which I work for ensures that physical fitness is a priority for the demands of my job

- I believe that the company in which I work for holds its' employees accountable for their actions
- I am satisfied with the work place standards that I am held to by the company in which I work for.
- 8. Please rate the following questions based on your own experience.

Strongly Disagree Disagree Neutral Agree Strongly Agree

- I believe the federal and state agencies adequately incorporate private contractors into their operations.
- I believe the federal and state agencies accept all private contractors regardless of their background, race, religion, etc.
- I believe the federal and state agencies promote different work cultures than private contractors do.
- I believe private contractors should be given the same opportunities as those from the federal and state agencies.
- I believe private contractors are adequately trained and certified
- I believe private contractors are physically capable of keeping up with the demands of the job

- I believe private contractors make safety as their top priority
- I believe private contractors properly assess risk and adequately raise safety concerns before accepting assignments.
- I believe private contractors adequately voice their concerns in After Action Reviews.
- I believe private contractors should be held accountable for their actions
- I believe private contractors are capable of doing the same quality of work as federal and state agencies.
- I believe private contractors are held at a lower standard than the federal and state agencies.
- I believe private contractors should be held to the same standards as the federal and state agencies.

9. Do you feel that the state and federal agencies have a certain "brand" associated with them? Meaning, they are relatively all the same and all have similar attitudes? Please explain.

- Yes, state and federal agencies have a certain brand associated with them.
- o No, not all state and federal agencies have a certain brand associate with them.
- I am not sure
 - Please Explain

10. If there is an opportunity available do you feel that the supervisor has a responsibility to provide contractors with training opportunities or special assignments?

- Yes, they should always give opportunities to contractors if they are available.
- o Sometimes they should give opportunities to contractors if they are available
- o No, they should not give opportunities to contractors even if they are available
- This does not apply to me

11. Do you believe that being unfamiliar with resources and their ability impacts a supervisors decision as to what assignments are given? Please Explain.

- Yes, being unfamiliar with resources impacts what assignments are given
- o No, being unfamiliar with resources has no impact on what assignments are given
- I am not sure.

Please Explain

Culture

12. Do you believe there is a "Can do" mentality that sometimes leads people into situations where they take excessive risk? Please Explain.

- Yes, a "Can do" mentality exists that sometimes leads to excessive risk
- o No, a "Can do" mentality does not exist and does not lead to excessive risk
- I am not sure

Please Explain

- 13. Do you believe there is a negative work culture between Contractors and Agency firefighters?
 - o Yes
 - o No

Please Explain

14. It is often believed that culture is not receptive to change, do you believe that the federal and state agencies need to adjust their stance toward private contractors? Please Explain.

- Yes, state and federal agencies need to adjust their stance toward private contractors
- o No, state and federal agencies do not need to adjust their stance toward private contractors
- I am not sure

Please Explain

15. Do you believe the fire service's commitment to a "safety culture" is positive of negative? Please Explain.

Performance

16. Do you believe private contractors should have the ability to evaluate federal and state line supervisors and employees?

- o Yes
- o No
- I am not sure/this does not apply to me

17. Do you believe more emphasis should be placed on the performance evaluation process in order to increase performance standards? Please Explain.

- o Yes
- Not sure
- o No

Please Explain

18. Do you believe the performance evaluation should be more comprehensive in order to make individuals or organizations more accountable?

- Yes, I believe that the performance evaluation system should be more comprehensive and thorough.
- No I believe that the current performance evaluation system is fine and should not be any more comprehensive.
- I believe that the current performance evaluation is adequate, but that we should add some minor improvements.

19. Do you believe that the performance evaluation is adequate and fair?

Totally Unfair	Somewhat Unfair	Adequate	Somewhat Fair	More than Fair
Totally Offan	Somewhat Oman	Aucquate	Some what Fall	More man Fan

20. Are you familiar with the performance evaluation process and how it impacts the placement of private contractors in the Dispatch Priority List?

- o Yes
- \circ No
- o I do not know
- This does not apply to me

21. Please rate the following based on your own experience.

I strongly disagree I disagree Neutral I agree I strongly agree

• As a private contracting resource, I fear financial consequences if an assignment is turned down.

- As a private contracting resource, I fear demobilization if an assignment is turned down.
- As a private contracting resource, I fear retaliation from my supervisor if an assignment is turned down.
- As a private contracting resource, I fear not being given opportunities for better assignments or training if an assignment is turned down.
- As a private contracting resource, I fear being given a poor performance evaluation if an assignment is turned down.
- As a private contracting resource, I feel pressure from my company owner to perform tasks that I may not be comfortable doing.
- As a private contracting resource, I feel pressure from my overhead to perform tasks that I may not be comfortable doing.
- As a private contracting resource, I fear pressure from my module leader to perform tasks that I may feel uncomfortable doing.
- As a private contracting resource, I feel the need to prove myself to my crew, co-workers, friends, and family.

Remarks

22. Do you have any comments? Or perhaps a story that pertains to one of the questions? Please Share!

23. Would you like to see the results of this survey? Please provide your information below and I will send you the results.

Name

Email Address

Phone Number