



FIRE 20/20™

Multicultural Health and Safety Research Project Final Report

Understanding Leads to Safety

Developed by FIRE 20/20™ in conjunction with:

Seattle Fire Department

Austin Fire Department and Austin-Travis County Emergency Medical Service

Milwaukee Fire Department

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Section 1 | Introduction

In April 2006, the Department of Homeland Security awarded FIRE 20/20 a Fire Prevention and Safety Research Grant to study the growing safety risks for fire/EMS personnel and civilians in multicultural communities. As part of the Multicultural Health and Safety Research Project (MHSRP) grant, FIRE 20/20 conducted the first "Diversity By Rank" Survey of 108 U.S. Metro Fire Departments.

Sixteen Metro fire departments expressed interest in participating in the research. The FIRE 20/20 research team developed a set of project site selection criteria and selected Seattle, Austin, and Milwaukee to participate in the case study.

Calgary, Alberta served as an independently funded pilot study site during July and August 2006. This provided researchers an opportunity to test and refine the data collection methodology and instrumentation.

The research team collected data from the three case study sites between September 2006 and February 2007. The six-month period following was devoted to data analysis and report writing. The resulting final report contains eight sections plus appendices, which are provided in electronic format on CD.

Section 2 contains an Executive Summary.

Section 3 offers a review of the relevant literature. MHSRP-related topics include: Firefighter Deaths and Injuries; Fire Department Culture; Cultural Competence in Relation to Safety and Service Delivery; Community Policing: Increasing Citizen and Police Officer Safety; and Representative Bureaucracy via Active and Passive Representation. The Literature Review section also contains a list of references.

Section 4 is entitled Background, Significance and Questions. The focus is on brief background information about the fire service and the significance of this research. The research hypothesis and five research questions conclude this section.

Data collection and analysis procedures along with study assumptions and limitations appear in Section 5, Methodology. This section also contains a key to abbreviations and acronyms and a definition of terms with specific meanings related to the fire service and this report.

Section 6 presents the research findings, including the case studies for Seattle, Austin and Milwaukee that address the first four of the five research questions. Research question #5 and the Diversity By Rank Survey are presented in a separate subsection. Section 6 also contains: Promising Practices discovered during the study at each of the project sites; and the Community Bridge Building Model, a detailed description of the multicultural community focus group process employed by the research team.

Multicultural Capacity, Communications, Customer Service, Fire Service Culture, Community Relations and Leadership are themes that had the most impact on first responder and multicultural community member safety. Section 7 includes a discussion of each theme and relevant action recommendations and recommendations for further study.

Section 8 contains a brief conclusion.

Appendix A contains all of the data collection instrumentation, including focus group facilitation guides, focus group and interview consent forms, post-focus group surveys, and the online survey for firefighters and paramedics.

Appendix B contains brief biographies of the FIRE 20/20 research team members.

Appendix C contains the raw data generated by the MHSRP in electronic form.

Section 2 | Executive Summary

In April 2006, the Department of Homeland Security awarded FIRE 20/20 a Fire Prevention and Safety Research Grant to study the growing safety risks for fire/EMS personnel and civilians in multicultural communities. As part of the Multicultural Health and Safety Research Project (MHSRP) grant, FIRE 20/20 conducted the first “Diversity by Rank” Survey with 108 U.S. Metro Fire Departments.

For the purposes of this research study, FIRE 20/20 defined the Multicultural Community as a reflection of the people in our world today and the range of variations including: age, race, ethnic background, gender, people with special needs, socio-economic status, sexual orientation, sexual identity, religion and country of origin.

Sixteen Metro Fire departments expressed a desire to participate in the MHSRP. The three case study sites selected were Seattle, Austin and Milwaukee. Calgary, Alberta served as an independently funded pilot, where the research team developed and tested the research methodology and data collection instruments.

The research hypothesis was: The “hero” culture of the fire service, as identified by the agenda of the Fallen Firefighters Symposium, increases the risk of injury and loss of life of both firefighters and community members when working within multicultural communities.

The MHSRP team attempted to answer the following five questions:

1. How do firefighters perceive the effectiveness of their emergency and non-emergency service delivery in multicultural communities?
2. How do people in multicultural communities perceive firefighters’ emergency and non-emergency service delivery?
3. How does the fire service “hero” culture increase or decrease the risk of injury and loss of life for firefighters and community members when serving multicultural communities?
4. What health and safety risks to firefighters and community members could be reduced if firefighters had greater multicultural awareness and better reflected the community?
5. What is the current multicultural make-up of firefighters in metro regions of the United States?

The research hypothesis called for a probability sampling procedure based on demographic data relating to firefighter and civilian injuries and loss of life in multicultural communities. FIRE 20/20 had identified the National Fire Incident Reporting System (NFIRS) as the source of that data.

Early in the project, the research team learned that although NFIRS provided fields for demographic data, those fields were not required. As a result, no reliable demographic injury or loss of life data was available.

In an effort to identify specific incidents, as well as gather qualitative data to answer the research questions, FIRE 20/20 conducted 62 focus groups in the three project cities. These included both fire personnel (N=197) and multicultural community members (N=580). The research team also collected data through 124 fire personnel and multicultural community interviews and more than 1,400 written and online surveys. The research team gathered more than 40 hours of video interviews from fire personnel and multicultural community members selected from the focus groups.

The research team conducted a descriptive and an inferential analysis of the data. This enabled the review and analysis of qualitative and quantitative data from each of the three cities individually and collectively.

This written report presents research findings in a case study format, organized by the first four research questions for each city. Six themes emerged from the data that were vitally related to the health and safety of fire/EMS providers and multicultural community members: Multicultural Capacity, Communications, Fire Service Culture, Leadership, Customer Service and Community Relations. These six themes addressed more than 80% of the findings.

Some key findings stood out:

- Both multicultural community members and first responders at all study sites rated Fire/EMS service very high.
- Online survey results showed a majority of first responders reported communication and cultural issues did not affect service delivery. However, a number of both firefighter and multicultural focus group and interview participants reported that communication and cultural issues delayed service and potentially put first responders and civilians at greater risk.

- The majority of first responders reported that they provide excellent or good Fire Prevention and Safety Education Services in Multicultural Communities. They also reported, however, that customers misuse their services and lack basic fire prevention and safety knowledge. The vast majority of multicultural focus group members expressed that they were unaware of the array of fire/EMS services and especially lacked fire prevention and public safety information.
- Multicultural community leaders expressed a strong desire to collaborate with their fire department to assist with language and cultural translation, multicultural training, prevention and safety education, and recruitment efforts. Some community focus group members said that in their culture it was inappropriate for them to take the initiative to reach out to authority figures. They preferred the fire department reach out to them, leader-to-leader.
- The majority of online respondents rated “hiring a competent, gender and culturally diverse workforce that is representative of our community” as a medium or low priority. However, a number of first responders representing both genders and multiple races stated clearly that a diverse crew positively enhanced safe and effective service. An overwhelming majority of community focus group members reacted favorably to the hiring of members of their specific cultural community by the Fire/EMS agency.
- Although somewhat evenly split, first responders tended to believe that the “Can Do” attitude increased safety for multicultural customers and decreased safety for firefighters/paramedics.

The Discussion section of the report proposes a number of recommendations presented by theme for the participating fire departments and the fire service in general. Three key recommendations include:

- **Require the completion of demographic data for NFIRS.** If the fire service is committed to reducing firefighter and civilian injuries and loss of life in multicultural communities, both understanding the value of demographic data and taking the time and initiative to collect, analyze and use this valuable source of information is necessary.
- **Build partnerships with multicultural communities.** The focus group process built relationships and opened lines of communication for the participating fire departments and their multicultural communities. Community members provided specific recommendations about how their fire departments

could work more safely, effectively and respectfully with their communities. The FIRE 20/20 research team recommends the continuation of these kinds of dialogues on a regular basis. As a result, this will increase the impact and reach of prevention and recruitment efforts, and reduce safety risks for both first responders and civilians. For departments that want to replicate the focus group process, a systematic outline called Community Bridge Building appears in the Findings section of this report.

- ***Move to a “safety and prevention culture.”*** NFFF has identified that the fire culture must change from a “response culture” to a “safety culture.” Based on the data collected in this study, the move to a “safety culture” is an important first step, but it leaves customers out of the equation. The FIRE 20/20 research team advocates that the culture shift be toward “safety *and* prevention.” Including “prevention” mobilizes customers as partners and increases fire service efforts to reduce emergency incidents from the start.

In conclusion, the findings and discussions generated in the MHSRP provide career, combination and volunteer departments with practical insights and strategies along with a set of recommendations to increase the degree of safety and effectiveness of service provided in their multicultural communities.

Section 3 | Literature Review

3.1 Introduction

The total population of the United States in the mid-to late-1960s was 200 million: 84% white, 11% Black, 4% Hispanic and 1% Asian/Pacific Islander. In 2006, the population reached 300 million: 67% white, 13% Black, 15% Hispanic and 5% Asian/Pacific Islander. The percentage breakdown of the 100 million person increase is as follows: 36% Hispanic, 34% white, 16% Black, and 13% Asian/Pacific Islander. (Pew Hispanic Center, 2006)

“An analysis of Census Bureau data shows that the nation's foreign-born or immigrant population (legal and illegal) reached a new record of more than 35 million in March of 2005. The data also indicate that the first half of this decade has been the highest five-year period of immigration in American history.” (Center for Immigration Studies, 2005)

The demographics of the United States are constantly evolving and the need for cultural diversity throughout the service industry is becoming increasingly evident. Diversity fosters multicultural understanding in the provision of local public services. Studies suggest that the degree to which service members reflect the populations they serve (i.e., representation) is directly associated with safer working environments and improved outcomes in the delivery of community services. The fire service organization is no exception, with its members providing services to an array of individuals from various cultural, ethnic, social and religious backgrounds.

Local government officials define service delivery patterns in terms of the quality of services rendered and the level of responsiveness shown to various population subgroups. In addition, representative bureaucracy serves as an essential hallmark of a democratic society, because this kind of system is a reflection of the constituents served. In terms of fire service delivery, it is important to address the individual needs of the population served.

The purpose of this literature review is to facilitate a greater understanding and appreciation of firefighter and citizen safety. This insight needs to be viewed in the context of fire department culture, diversity, representative-ness and community relationships.

Firefighter behaviors and attitudes affect not only the fire service industry, but they also have a direct bearing on the quality of services provided to citizens. This literature review examines fire department culture, firefighter injuries and deaths, cultural competence and policing/community relations and how each plays a critical role in the provision of safe and effective fire and rescue services. It also provides a theoretical framework of representative bureaucracy through active and passive representation in the service industry.

3.2 Firefighter Deaths and Injuries

Heroism and courage are foundational elements in the fire service culture of serving and protecting community members. Inevitably, the job demands risk-taking behaviors to save lives. That comes at a hefty price, sometimes in the form of a serious injury or even the loss of life.

In 2005, there were 1,602,000 fires that resulted in 87 firefighter deaths, 80,100 reported firefighter injuries, 3,675 reported community member fire-related deaths, and 17,925 reported community member fire-related injuries (National Fire Protection Agency, 2006). For every community member who was injured, there were nearly 4.5 reported firefighter injuries.

It is tempting to attribute this disparity to firefighters' jeopardizing their own safety to rescue community members—a line-of-duty peril that is generally regarded as heroism. Even more so, those in the fire service view loss of life as an honorable, sacrificial consequence of the job. However, the majority of firefighter deaths do not occur during risk-taking events. In fact, a lack of physical fitness, contributing to heart attacks, is responsible for about one in four firefighter fatalities that occur during emergency responses (National Fallen Firefighters' Foundation-FF Life Safety Initiative-1). The vast majority of these deaths are preventable.

Many fire departments have begun to address the issue of preventable firefighter injuries and deaths by creating measures to correct unsafe practices that unnecessarily place firefighters and community members at risk. This section will examine those dynamics and identify the measures taken to reduce firefighter injuries and deaths. It will also provide an overview of recommendations set forth by various stakeholders.

Amid gear and apparatus improvements, along with increased prevention efforts, the number of deaths nationally within the fire service has remained steady, at about 100 per year. This development is attributed to factors that include impulsive behaviors, fire service culture, and lack of accountability. Fire department composition has a tremendous impact on how firefighters function within and outside the department. Men comprise about 98% of career firefighter positions and 95% of volunteer firefighter positions (CDC, 2006 and WFS, 2005)¹. Consequently, male gender roles are continuously expressed and reinforced in this sector.

Tony Kern, a nationally recognized fire service leader, and others have identified six attitudes that hinder effective operations: anti-authority, invulnerability, machismo, resignation, pressing, and “air show syndrome” (IAFC-Crew Resource Management, 2003).

An anti-authority attitude refers to the refusal to adhere to directives administered by an authoritative figure (IAFC-Crew Resource Management, 2003). In other words, fire service members with this outlook do not like “to be told what to do” (IAFC-Crew Resource Management, 2003). For example, a veteran fire service member ignores orders by a newly appointed fire chief to obey the speed limits and wear a seatbelt while responding to an emergency. Or he may shrug off directives by superior staff to use standard methods to knock down a fire. To extinguish fires and save lives, it is imperative that all members within an emergency response group cooperate with their officers. By contrast, deviation in orders from just one individual may place other team members at great peril and ultimately undermine the group’s effectiveness.

The second factor, invulnerability, involves invincibility or the notion that no harm can come to the individual involved in rescue operations (IAFC-Crew Resource Management, 2003). Firefighters with this mentality tend to engage in unnecessary risks. If they survive, they tend to justify their actions as being the “right thing to do” and not as a stroke of luck (IAFC-Crew Resource Management, 2003). Previous studies have found that men in dangerous jobs frequently act invincible to impress fellow colleagues and supervisors (Gilbert, 2006). Yet, this outlook often leads to more accidents and an overall decrease in productivity (Gilbert, 2006). The third factor, impulsivity, which is inextricably linked to invulnerability, refers to partaking in spontaneous behavior without first taking into consideration the risks involved (IAFC-Crew Resource Management, 2003). One example would be emergency personnel responding to a

¹ This data is an approximate figure as the Metro District Fire Department Gender and Ethnicity Findings has updated these figures from 2006. These updated figures are reported in the Research Question #5 Findings section of the report.

residential fire and rushing into a burning home without assessing the severity of the blaze, stability of the building structure, or the surrounding environment. Individuals that thrive on impulse tend to act first and reflect later, without regard to pragmatic forethought or strategic planning (IAFC-Crew Resource Management, 2003). Many firefighters have needlessly lost their lives as a result. Given this sobering reality, there is an inherent need to modify the traditional paradigm of responding to fires with an emphasis on assessment first and response second (IAFC-Crew Resource Management, 2003).

The fourth, and arguably the most common attitude responsible for fire ground injuries, is machismo. Since its inception, the fire service tradition of “I can do anything you can do, better” has been one of the field’s most distinguishing characteristics (IAFC-Crew Resource Management, 2003). It also has gender implications, for it is inherently associated with masculine identity. In addition, in male-dominated professions men are inclined to seek others’ respect by appearing invulnerable and defending their masculinity (Gilbert, 2006). However, such actions can be costly and discourage fire service efforts to promote safety, efficiency and effectiveness (Gilbert, 2006).

Pressing, the fifth factor, refers to hastily responding to emergencies in order to attend to lesser priorities (IAFC-Crew Resource Management, 2003). It is not uncommon for firefighters to rush through traffic and quickly address emergency calls so that they may return to the fire station to have dinner before it gets cold. Clearly, this ultimately leads to careless mistakes, serious injury and death.

The sixth attitude prevalent throughout the fire service organization is “air show syndrome,” which is characterized by foolhardy behavior (IAFC-Crew Resource Management). Firefighters displaying this attitude tend to “push the envelope” each time they have survived a near-miss, especially when being watched by others.

Clearly, modifying the aforementioned organizational cultural attitudes, each with their corresponding behaviors, will significantly reduce preventable firefighter and civilian deaths and injuries. Thus, it is vital to implement effective intervention methods to alter the noted perceptions that prevail within the fire service organization.

The first and perhaps most critical step in attitude change can occur through open discussions of underlying assumptions, values and beliefs that are linked to the issue of safety (Pessemier, 2006). Furthermore, stressing the value of informed and practical decisions, in the midst of

potentially risky behavior, can heighten fire department safety. Positive change will not occur overnight, as some fire service personnel may resist intervention (Pessemier, 2006). However, it is important to continue such efforts in order to enhance safety among firefighters and quality service to the community.

3.3 Fire Department Culture

When constructing a cultural image of the fire service organization, several themes consistently emerge: strength, bravery, risk-taking and heroism. Such concepts are not unsubstantiated as firefighters are often placed in dangerous situations where they are expected to save the lives of others. Moreover, the fire service holds the belief that “acceptable losses are a tragic, but inevitable part of the job of being America’s heroes” (NFFF Firefighter Life Safety Initiative-1, 2007). Ironically, however, the majority of firefighter deaths do not occur during risk-taking events. In fact, statistics show that one-quarter of fatalities that occur during an emergency response take place while responding to calls and from heart attacks (NFFF Firefighter Life Safety Initiative-1). Tragically, the lack of seat belt use has contributed to a substantial number of firefighter deaths.

Firefighting is a unique culture with heroism serving as its foundation (Smith, 2000). Attributes such as courage and self-sacrifice in hazardous conditions distinguish firefighters from most other occupations (NFFF Firefighter Life Safety Initiative-1). Risk-taking and aggressive behavior are often viewed as the norm, with firefighters frequently heralded as heroes and praised for their efforts. Traditional values and characteristics include aggressiveness, dedication, camaraderie and familial ties (Smith, 2000).

In addition, fire department families display a number of dysfunctional traits that are present throughout the fire service, including managerial neglect or indifference, inclusiveness, inappropriate workplace behavior, lack of policies or failure to reinforce existing policies, nepotism, and managerial failure to address actions/situations that may compromise the safety of other workers (Smith, 2000). Such legacies are passed down to the next generation of rookie firefighters and have become so ingrained within firefighter culture that safety measures are often eschewed and regarded as contradictory to established norms (Smith, 2000). This gap has hampered efforts to reduce the number of preventable firefighter deaths, where a growing number of firefighters succumb in the line of duty and thousands more are

seriously injured every year (NFFF Firefighter Life Safety Initiative-1). It also reinforces the need for fire organizations to modify their culture and priorities.

When examining the issue of reducing firefighter and community member fire-related deaths and injuries, it is important to examine the dynamics of fire department culture, particularly its organizational culture. According to Edgar H. Schein, organizational culture can be defined as “a pattern of shared behaviors based on assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way you perceive, think, and feel, in relation to those problems” (Schein, 2004). Individuals function within the context of the culture to which they belong; this construct ultimately influences their perception of safety issues (Pessemier, 2006).

Moreover, experts have identified three basic levels of organizational culture: behaviors, assumptions and beliefs, and values (Schein, 2004). Although there is no exact definition of organizational culture, experts agree that it is a reflection of the assumptions and beliefs, values, and behaviors shared by its members (Pessemier, 2006). In addition, individuals belonging to a given organizational culture tend to function in a manner that is conducive to that particular construct, which subsequently influences the attitudes and behaviors of those individuals in relation to safety issues (Pessemier, 2006).

The fire service is unique in that it possesses its own multidimensional organizational culture. Safety is a high priority for fire organizations with values, behaviors, and assumptions and beliefs serving as crucial elements in determining the outcomes to emergency response (National Fallen Firefighters’ Foundation- FF Life Safety Initiative-1). However, in order to successfully implement fire safety practices, initiatives must be taken to align cultural practices with safety priorities (Pessemier, 2006; NFFF- Firefighter Life Safety Initiative-1).

In the fire service, the perception of risk is directly proportional to the level of safety: the higher the level of risk taken by the firefighter to rescue civilians, the greater the chance of safe outcomes for those who might otherwise succumb in a fire (Pessemier, 2006). Teetering on the edge of safety creates conflict between two competing goals. The first is the provision of effective service delivery, e.g., rescuing citizens in a fire; the second is to provide for a high level of firefighter safety (Pessemier, 2006). Moreover, operational safety is inevitably a tradeoff between an appropriate and suitable level of danger undertaken by firefighters to

extinguish fires or protect community members and the degree of safety required to prevent firefighters from perishing themselves (Pessemier, 2006).

Educating fire service personnel about appropriate fire safety measures as well as standard operating procedures are proven effective methods to implement such initiatives. Few will argue that risk-taking is an inevitable behavioral practice for firefighters. However, risk-taking must be a part of firefighters making an educated risk analysis (Manning, 2000). For example, without regimented driving policies to reduce the number of fatal vehicular accidents while responding to emergencies, the fire service will continue to perpetuate a culture that condones human losses as being a “part of the fire service—just the way it is, always has been, and always will be” (Manning, 2000). Members of the fire service should be held accountable for their actions (Manning, 2000). In addition, an increased level of responsibility should be incorporated into the organizational fabric with an emphasis on the individual to “do what is right for the organization” (Manning, 2000).

Efforts are currently underway to modify cultural practices within the fire department. For example, one firefighter life safety initiative calls for greater emphasis on integrating “risk management with incident management at all levels, including strategic, tactical, and planning responsibilities” (16 Firefighter Life Safety Initiatives). Another recommends that grant programs mandate safe practices as an eligibility requirement (16 Firefighter Life Safety Initiatives). Overall, the culture must be mindful of the well-being and safety of the organization as a whole so that each individual member can be served (Manning, 2000). Moreover, a culture of safety denotes the combination of sensible codes of conduct, practicality, smart thinking and the provision of resources required to develop and maintain an aggressive yet safe fire department (Manning, 2000). Thus, if the fire service fails to make a concerted effort to address the laxities imbedded in its culture, the organization will be destined to repeat the same errors that have needlessly cost the lives of firefighters and community members.

The following section will discuss the dynamics of cultural competence and the ways in which it impacts firefighter safety and the delivery of service to community members.

3.4 Cultural Competence in Relation to Safety and Service Delivery

The demographics of the United States are constantly evolving, with minorities and women becoming the dominant groups within the workforce. Moreover, fire departments in large and medium-sized cities are experiencing an increased level of multi-cultural interaction and communications while providing services to their citizens (Rawles, 2006). Consequently, the fire service needs to reflect this dynamic change. In order to appropriately engage in such interaction, fire service personnel need to begin addressing multicultural attitudes, communication skills, behavior, and knowledge—the driving forces of cultural competency (Rawles, 2006). Additionally, in order to completely understand the context of cultural competence with respect to fire safety and service delivery, it is important to explore the demographics of the fire service organization as it relates to the communities served and the limitations in achieving these goals.

The average U.S. fire department contains 84 percent Caucasians, 11.8 percent African Americans, 3.9 percent Hispanics, and less than 1 percent Asians, Native Americans, and Pacific Islanders (Rawles, 2006). This disparate composition is attributed largely to two factors: regimenting and traditionalism (Crawford, 2004), which will be addressed later.

Many activities, perspectives, communications and behaviors vary from one cultural group to the next. In addition, the degree of firefighters' cultural competence—or their ability to relate with sensitivity and understanding to those of other cultural backgrounds—greatly influences how high-quality services are delivered. In short, appreciating such differences with heightened cultural awareness and sensitivity will greatly increase firefighters' overall effectiveness in serving their communities.

According to Communities Can, a program of the Georgetown University Center for Child and Human Development, cultural competence is defined as “changing what we know, what we think, and most importantly, how we do things to serve and support (the people) in our communities from all cultural backgrounds.” It is a permanent and effective method of altering the way community issues are addressed (Norris, 2003). Key elements of cultural competency include cultural sensitivity, awareness, and knowledge as well as the development of cross-cultural relationships (Luhtanen, 2005). Cultural competency must incorporate a willingness to listen, learn and respect the cultural influences that shape the behaviors, social norms and values of other ethnic groups (Norris, 2003). In order to improve cultural competency, the fire

service must make strides to achieve cultural diversity within its organization (internally) and among community members (externally).

According to Brian Crawford, Assistant Fire Chief of the Shreveport (Louisiana) Fire Department, regimenting is used to describe an informal hiring process by which members of the fire service make relatives and/or friends privy to employment opportunities within certain fire departments prior to the general public (Crawford, 2004). It also entails the provision of information or other opportunities to those with direct or indirect contacts to the fire service that may not be made widely available or accessible to external groups. Examples include providing testing information, study guides for entry-level exams, and guidance on physical ability testing to individuals that have such connections (Crawford, 2004).

However, regimenting hurts those without fire department contacts, i.e. women and minority groups, and perpetuates ethnic and gender inequity within the fire service organization. Traditional business hiring practices often involve a process of referral by current employees to fill vacancies within a given department; the fire service organization is no exception (Crawford, 2004). As a result, these processes often preclude the development of multicultural capacity, a diverse fire department and one that is representative of the population it serves. It also impedes the cultural evolution of fire department members and continues a legacy of prejudices and discriminatory practices from one fire generation to the next (Crawford, 2004).

As mentioned, traditionalism is the other barrier to cultural diversity. Traditionalism refers to an organization's unyielding desire to retain past practices without regard to organizational evolution (Crawford, 2004). Traditionalism within the fire service also undermines efforts toward cultural change and entails the refusal to acknowledge its faults, including discriminatory hiring practices (Crawford, 2004). As a result, such limitations can foster prejudice within the fire service organization and hinder departments' ability to recruit and retain a high-quality workforce. (Rawles, 2006)

The next section highlights building community relationships to enhance the safety of emergency services personnel. While the following synopsis is law enforcement-related, rather than fire service-related, the principles are readily transferable.

3.5 Community Policing: Increasing Citizen and Police Officer Safety

Crime occurs everyday in every part of the country. Crime depresses the economy and diminishes a community's vitality. In the early 1990s, New York City experienced this when the murder rate soared to more than 2,000 murders per year (Horowitz, 2003). Businesses closed and fear engulfed the city (Horowitz, 2003). Community members' trust in the police system waned while unsolved crime increased. New York City's plight echoed throughout cities across the United States.

In order to curtail the surge in criminal activity, community members, law enforcement and public officials have implemented various measures. One particular approach, community policing, was created to proactively incorporate police officers as members of the community. Though there are several different definitions of community policing, perhaps the most widely accepted version is the one developed by the Office of Community Oriented Policing Services (COPS), which describes community policing as "a policing philosophy that promotes and supports organizational strategies to address the causes and reduce the fear of crime and social disorder through problem-solving tactics and police-community partnerships" (DOJ, 2003). The rationale behind this model is to foster increased levels of trust and reliance between police officers and community members to ultimately improve community quality of life (Community Oriented Policing, 2007). Moreover, community policing utilizes partnerships, organizational strategies and problem-solving techniques to reduce crime and encourages officers to walk throughout neighborhoods instead of driving through them in police cars (Polzin, 1997).

Traditionally, policing was conducted in an unscientific and reactive manner, with little regard for proactive policing (Beito, 1999). Today, however, the policing paradigm has shifted to include essential elements such as assessment of the community's needs as well as methods to translate these needs into deliverable goals for targeted areas (Beito, 1999).

Sir Robert Peel is often credited as the father of modern policing for developing ethical standards for police officers, most notably "the police are the public and the public are the police." Other guiding principles developed by Peel that serve as the foundation for contemporary policing include (British Police Administration, 1965):

- The basic mission of the police is to prevent crime and disorder

- The ability of the police to perform their duties is dependent upon public approval of police actions.
- Police must secure the willing cooperation of the public in voluntary observance of the law to be able to secure and maintain the respect of the public.
- The degree of public cooperation that can be secured diminishes proportionately to the necessity of the use of physical force.
- Police seek and preserve public favor not by catering to public opinion but by constantly demonstrating absolute impartial service to the law.
- Police use physical force to the extent necessary to secure observance of the law or to restore order only when the exercise of persuasion, advice and warning is found to be insufficient.
- Police, at all times, should maintain a relationship with the public that gives reality to the historic tradition that the police are the public and the public are the police; the police being only members of the public who are paid to give full-time attention to duties which are incumbent on every citizen in the interests of community welfare and existence.
- Police should always direct their action strictly towards their functions and never appear to usurp the powers of the judiciary.
- The test of police efficiency is the absence of crime and disorder, not the visible evidence of police action in dealing with it.

This framework is incorporated in the current paradigm of policing along with core organizational, tactical, and external elements set forth by COPS. Some elements include decentralized decision-making, fixed geographic accountability, utilization of volunteer resources, enforcement of laws, problem-solving, public involvement in community partnerships, and government and other agency partnerships (DOJ-COPS, 2003).

In spite of the policing framework created by Peel, crime—particularly the homicide rate—continued to increase throughout various cities in the U.S., particularly in the 1990s. Experts found that policing strategies implemented in the past may not be effectual in today's society (Gaffigan, 1994). The work performed by law enforcement personnel was regarded as largely ineffectual as they apprehended a small percentage of individuals while crime statistics continued to rise (Dussault, 2000).

To combat the precipitous increase in criminal activity, Jack Maple, a former transit police officer, created a seminal strategy referred to as CompStat to target crime-infested areas in New York City. CompStat uses computer-generated crime statistics and electronic mapping to target high-crime areas (Horowitz, 2003). Regular meetings at headquarters are then held by law officers to review the information collected. These officers are called on to devise strategies to reduce and prevent crime in the areas for which they are responsible. The primary component of CompStat is accountability. Precinct commanders and other high-ranking law officers are held responsible for any activity that occurs within designated areas and face dire consequences if they come unprepared or fail to provide appropriate intervention methods to reduce the level of crime occurring within that particular precinct (Horowitz, 2003). Partly as a result of Maple's initiative, New York City's crime rate declined by approximately 70% during a recent 10-year span (Horowitz, 2003).

In general, the present community-policing model balances reactive responses to calls with proactive problem-solving methods revolving around the source of crime and social disarray (COPS, 2003). As noted, the overarching goal of community policing is to reduce the level of crime and disorder by thorough examination of the characteristics of problems that plague neighborhoods and subsequently applying appropriate problem-solving methods (Gaffigan, 1994). At the heart of community policing is the modification of values to acclimate police officers to a society that is constantly evolving, with trust serving as the underlying value (Gaffigan, 1994). In addition to linking the elements of community partnerships and problem solving, a foundation of trust provides a unique opportunity for law enforcement personnel to develop a formidable relationship with community members (Gaffigan, 1994). Police officers are also encouraged to display compassion and empathy toward community members (Beito, 1999).

The community policing model has wide-ranging implications for the fire service. For example, as with the first Peelian principle, the fire service's core mission should be preventing fire deaths, injuries and property damage. Furthermore, the community policing philosophy can be adopted by the fire service in advocating organizational strategies to reduce the number of fires and injuries through problem-solving techniques and effective firefighter-community partnerships. The qualities of compassion and empathy, emphasized throughout the community-policing model, should also be embraced by firefighters to increase cultural competency and awareness among fire departments and citizens.

3.6 Representative Bureaucracy via Active and Passive Representation

In 1944, J. Donald Kingsley coined the term “representative bureaucracy” in his book by the same title. Studying the British Civil Service, he argued, “bureaucracies, to be democratic, must be representative of the groups they serve” (Kingsley, 1944). Since the publication of Kingsley’s seminal book, “representative bureaucracy has become a major concern in the study and practice of public administration and administrative policy making” (Dolan and Rosenbloom, 2003). A bureaucracy, or a legislative body, is representative to the extent that the social origins of the representatives mirror the social origins of the represented (Meier, Stewart, and England, 1989; Mosher, 1968). Thus, population subgroups such as women, minorities, ethnic groups, and the disabled should be represented in the national, state, or city bureaucracies roughly in proportion to their percentage of those respective populations.

The discussion thus far has been placed within the confines of normative theory, or what ought to be. Kingsley (1944), Krislov (1974), Mosher (1968) and others advocate the need for representative bureaucracy. A democratic society allows its constituents the opportunity to communicate ideas, needs and expectations. Moreover, population subgroups within a given society may vary according to gender, ethnicity, religion, race and social class. This inevitably leads to differences in socialization patterns, values, preferences and mores. Theoretically, if a bureaucracy mirrors the social origins of its population, these groups’ interests will be part of the governmental process, thus enhancing democracy in the administrative state. This form of “passive representation” (Mosher, 1968), “descriptive representation,” (Pitkin, 1967) or “symbolic representation” (Krislov, 1967) is often seen as an end in itself. Within this model, whether or not democracy has been achieved can be measured solely by the degree in which representatives share the same demographic characteristics as the population that they represent.

Mosher (1968) and Pitkin (1967) identify another form of representative bureaucracy that provides a closer, more dynamic personal nexus between individual representatives (a city worker) and their constituents (a citizen)—active representation.

As Meier, Stewart and England (1989) remind us: “Passive representation can be defended in and of itself in terms of equity and equal access to positions of influence. Political positions and occupation of them should be equitably distributed among races and ethnic groups.”

Hanna Pitkin (1967), however, argues that passive representation, while important, is not enough and that representation should focus on the individual “acting in the interests of the represented.”

If active representation refers to acting in the policy interests of the represented, how can passive and active representation be linked? In other words, how can officials, both elected and those serving in city jobs that belong to various social groups, act in the policy interests of those they represent? Academic research suggests two models—the electoral linkage and the socialization linkage.

The electoral model suggests that a minority mayor, for example, wishing to get elected or re-elected, will pursue policies that benefit not only the city collectively, but also will be particularly concerned about addressing the needs of constituencies that can help him or her get re-elected. Given the often-polarizing nature of city elections when minority candidates run for office (Sharp, 2003), the minority mayor places minority issues high on the agenda. The minority mayor uses his or her power to act in the interests of the represented, the minority constituents. In doing so, the mayor has engaged in active representation.

For example, in a number of case studies regarding the impact of the election of African American mayors, those mayors exhibit active representation by often pursuing policies that benefit African American constituents (Campbell and Feagin, 1975; Levine, 1974; Nelson, 1972; Nelson and Meranto, 1976; Poinsett, 1970; Stone, 1971). In a classic comparative, empirical study focusing on the election of an African American mayor and the impact on African American employment levels in 43 U.S. cities, Peter Eisinger (1982) found:

The presence of a black mayor has a modest incremental effect on levels of black employment and on affirmative action effort, enabling us ultimately to conclude that a small but discernable portion of black employment is a product of black political authority. This is particularly the case in the area of hiring of civil service administrative officials and professionals. We may speculate that the penetration by blacks of these job categories in all likelihood will not only enhance black influence in bureaucratic policymaking but will also contribute to the formation of a black bureaucratic middle class. Both possibilities warrant future investigation.

Although the electoral model shows direct impacts of social groups pursuing active representation for those they represent, the focus here is on city workers, bureaucrats and

non-elected officials. Fortunately, the socialization model allows for an examination of active representation for city workers.

The socialization model is linked directly to the representative bureaucracy concept discussed previously. A representative bureaucracy that mirrors the social origins of the population should be representative of the population's socialization experiences. This representative bureaucracy should have similar political attitudes, wants, preferences, desires, and should therefore make policy decisions similar to those that the populace would make if it were to participate in all decisions (Meier, Stewart, and England, 1989).

Active representation is achieved through the very presence of a diversity of social groups participating in the service delivery process. These groups bring with them to work each day their ethnicity, their status as a minority, their gender, their religious beliefs and their socialization patterns. In short, they bring to work gender and multicultural understanding. Not only do they bring their social backgrounds with them to work, many local government workers serve as what Michael Lipsky (1980) calls "street-level" bureaucrats. Social workers, teachers, police officers, firefighters, and ambulance personnel deliver personal services and relate directly with those they serve. Moreover, in delivering services they have discretion in implementing those decisions made by political elites (Meier 2000; see Morgan, England, and Pelissero, 2007). For example, teachers decide on the daily lesson; firefighters decide the nature of a particular fire condition and how to fight it; paramedics decide on a course of medical action based on what the patient, bystanders, or circumstances communicate to them; the patrol officer decides to give a ticket or a warning. It is through this discretionary power that members of different social groups can be particularly effective in demonstrating active representation.

Findings from a study examining gender-based policies and active representation can highlight the impact of active representation among state government administrators. Mary Hale and Frances Branch (1992) studied the policy preferences on workplace reform among men and women human resource administrators in five states (Alabama, Arizona, Texas, Utah, and Wisconsin). These administrators occupied policy positions to make and enforce human resource management policies. Questions in the study attempted to identify gender-based differences in support for representative bureaucracy and the means to implement it, such as affirmative action and strict prohibitions against workplace discrimination.

Hale and Branch also collected data relating to differences in attitudes concerning support for policies that advance child care, pay equity, job sharing, and flexible work schedules. The authors found significant attitudinal differences between the genders: women were more likely to support representative bureaucracy and affirmative action policies, and by a significant margin women favored the human resource management reforms. Hale and Branch conclude that there is a link between gender and policy preferences, with women having the potential to serve as active representatives and shape workplace policies.

There are three caveats about the socialization model of active representation. First, according to classic bureaucratic theory, bureaucrats are neutral, apolitical “cogs” in the industrial and/or governmental apparatus (Weber 1958). They are policy implementers, not policy makers or political actors. This view of bureaucrats has been thoroughly discounted both on normative and empirical grounds (see Waldo, 1977; Krislov, 1974).

Second, socialization is a lifelong process; it does not end when someone enters the work force after high school, vocational training or college with their descriptive characteristics. In fact, the bureaucracy itself and various occupations socialize job entrants into the “culture” of bureaucracy and specific trades, occupations, and professions. Operating within the confines of a hierarchical, rule-bound, specialized organization (bureaucracy), specific professions may overwhelm pre-existing attitudes, values, preferences, socialization patterns, and so forth. (Meier and Nigro, 1976).

Finally, a large number of studies focusing on urban service delivery patterns suggest that community services are distributed according to “decision rules” formulated by the bureaucracy. These decision rules are apolitical and tend to emphasize professional norms, standard operating procedures, and need (see Morgan, England, and Pelissero, 2007). Thus, the notion of members of various social groups acting in the interests of others in the community from the same social group, a more political server-constituent relationship, is called into question. However, as Frank Thompson (1976) suggests, as organizations become more diverse and representative of the larger communities they serve, organizational cultures may change. Also, a large and significant body of literature, some of which has been outlined above, finds strong support for both the electoral and socialization models of active participation.

One of the most comprehensive sets of these studies focused on the impact of minority teachers on minority students in U.S. public schools. In three separate book-length studies,

the impact of second-generation discrimination on African American (Meier, Stewart and England, 1989), Hispanic (Meier and Stewart, 1991), and Native American (Wright, Hirlinger, and England, 1998) students was significantly reduced by the presence of minority teachers in the school districts. For example, in schools with greater numbers of minority teachers (street-level bureaucrats), fewer African American students were disproportionately assigned to educable or trainable mentally retarded classes, more African American students were assigned to gifted classes, fewer African American students were suspended or expelled from school, and fewer African American students dropped out of school.

These in-school policy measures (tracking and ability grouping, expulsions, suspensions, and drop-out rates) represent forms of second-generation school discrimination, a way in which desegregated schools are re-segregated. In these studies, minority teachers became advocates not just for students; they became active representatives for students of their own race. To the minority students, minority teachers from their own ethnic background were role models. Many of the schools included in the study were large, inner-city schools. The presence of minority teachers showed the students that there was hope; they, too, could attain a middle-class job and lifestyle, just like their teachers had done.

The minority teachers also understood and could relate to growing up as an African American, Hispanic or Native American student, often in predominantly white schools. The Wright et al. study of Native American students also used case studies of several districts to better understand the relationship between Native American teachers and counselors with Native American students. Not only did these minority teachers and counselors serve as active representatives for Native American students, interviews showed that they also served as advocates for other minority students as well. Finally, the study by Meier et al. (1989) found support for the political model of active representation discussed above. Specifically, the research found the presence of African American school board members led to the hiring of more African American administrators (superintendents, principals, etc.), and districts that had more African American administrators hired more African American teachers.

Thus far, we have outlined a theoretical framework for understanding the importance of a representative bureaucracy to the delivery of community services. The presence of women, ethnic, minority and other social groups diversifies the workforce, serving as a representation of the general population. In a democracy, such diversity brings into the workplace a plethora of ideas based on the larger values, biases, preferences, tastes, socialization patterns, beliefs and ideologies of the general populace. Civil servants act in the interests of citizens by not

only providing high-quality and efficient services, but also representing the profusion of perspectives flowing from their multicultural environment. In short, they link passive and active representation. This view of service delivery is not just a theoretical model. As the literature review above shows, numerous studies posit a strong, vibrant link between passive and active representation.

To our knowledge, no academic study has attempted to link passive and active representation for the U.S. fire service, thus the rationale and importance of the present research. Research of fire injury rates by Shai (2006) does show that “older housing (prior to 1940), low income, the prevalence of vacant housing, and the ability to speak English have significant independent effects on fire injuries in Philadelphia.” These findings point even more to the importance of the present research, as U.S. minorities tend to be in lower-income and non-English speaking groups.

If a specific fire department is not representative of the general community—and most are not—then two questions remain: What can be done to ensure that current organization members possess multicultural understanding? And what can be done to ensure they understand and represent the community’s diversity of interests?

In order to enhance representative-ness and increase multicultural understanding of their workforce, other professions (e.g., police) have successfully used recruitment and retention programs geared toward underrepresented groups in their organization.

Also, in transition periods, organizations can engage in extensive educational efforts to better understand the diverse communities they serve. At stake is the health and safety of firefighters that serve the public every day. These fire service personnel are technically trained in fire suppression and delivering emergency medical services. However, this technical training and education is seriously compromised if they do not truly understand those they serve.

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Section 4 | Background Significance and Questions

The history of firefighting in the United States can be traced back to a mid-seventeenth century fire in Boston. Volunteer and career firefighters began to appear in the colonies later that century. In 1692, an act was passed in Massachusetts encouraging the use of brick and stone in the construction of buildings because those materials were far less susceptible than wood to ignition, thus recognizing the importance of both fire prevention and fire protection.

Over the intervening decades, fire departments have grown to cover nearly everywhere in this vast nation from the largest cities to the smallest towns. During this process, a number of behaviors and customs have evolved into a set of firefighter traditions. Courage, heroism and educated risk-taking are the defining characteristics of this institution that distinguishes it from most other non-military occupations.¹ Analogous to this set of traditions has been the growth of a culture associated with the fire service.

Culture is based on shared assumptions, beliefs, values, and norms as a way of establishing common meaning among the members of the organization. Culture also serves to establish, regulate and reinforce the structure, processes and practices that occur within the organization. This results in standardized patterns of behavior. Shared meanings have the affect of strengthening each member's beliefs in their own social constructions.²

While firefighting maintains its heroic traditions and continues as one of the most respected careers in this nation, the persistence of the rate of firefighter deaths, (over 100 line-of-duty firefighter deaths per year for the last 10 years, according to US Fire Administration data), despite all the improvements in gear and apparatus and increased efforts in prevention, has generated increasing concern regarding firefighter culture and safety.

During the 2004 Firefighter Life Safety Summit in Tampa, Florida, fire service leaders identified various initiatives that were eventually consolidated by the National Fallen Firefighters Foundation (NFFF) into the 16 Firefighter Life Safety Initiatives. The initiative that rose to the top of the list directly addresses the need for "a cultural change within the fire service relating to safety, incorporating leadership, management, supervision, accountability,

¹ Manning, Bill, Creating the "New" Fire Service Safety Culture: A Perspective, Part 1. www.EveryoneGoesHome.com National Fallen Firefighters Foundation, (2004)

² Pessemier, William, Developing a Safety Culture in the Fire Service, IAFC (2006)

and personal responsibility”.³ NFFF’s Initiative #1 advocates change on all levels in fire departments and encourages reflection on how the fire culture affects safety. Pessemier adds that the fire service culture in its current form can become an obstacle “...for safety when members of the organization begin to unquestioningly believe their own messages about their current thinking about safety and the effectiveness of safety practices.”

Working with the NFFF 16 Firefighter Life Safety Initiatives has brought the need to reframe the fire service culture to the forefront, especially in terms of a commitment to safety.

At the same time, the greater community in which firefighters carry out their mission is evolving. In 1900, 1 in 8 Americans were non-White; in 2002, 1 in 4 Americans were a race other than White.⁴ The turn of the century Census also found that 18% of respondents spoke a language other than English at home.⁵ Thus, any cultural change strategy initiated within the fire service must take into consideration the broader environment—communities of all sizes that are becoming increasingly multicultural in composition.

In line with the concern with safety as expressed in the NFFF 16 Firefighter Life Safety Initiatives, FIRE 20/20 chose to examine Initiative #1 in the context of the increasing multiculturalism within our country. The Multicultural Health and Safety Research Project (MHSRP) is a one-year study funded by the Department of Homeland Security’s Assistance to Fire Grants program. The specific issue the MHSRP research team chose to examine was the impact of the fire service culture on the safety of firefighters and multicultural community members. Case studies in three metropolitan cities, all with multicultural populations, served as the basis for testing the research hypothesis that the ‘hero’ culture of the fire service increases the risk of injury and loss of life of both firefighters and community members when working within multicultural communities.

In order help test the hypothesis, the MHSRP research team identified five key research questions to be answered by the findings:

³ National Fallen Firefighters Foundation (2007). Firefighters Life Safety Initiatives: Initiative 1. Emmitsburg, MD: National Fallen Firefighters Foundation.

⁴ U.S. Census Bureau. (2002, November). Demographic Trends in the 20th Century. Retrieved from <http://www.census.gov/prod/2002pubs/censr-4.pdf>

⁵ U.S. Census Bureau. (2003, October). Language Use and English-Speaking Ability: 2000. Retrieved from <http://www.census.gov/prod/2003pubs/c2kbr-29.pdf>

1. How do firefighters perceive the effectiveness of their emergency and non-emergency service delivery in multicultural communities?
2. How do people in multicultural communities perceive firefighters' emergency and non-emergency service delivery?
3. How does the fire service "hero" culture increase or decrease the risk of injury and loss of life for firefighters and community members when serving multicultural communities?
4. What health and safety risks to firefighters and community members could be reduced if firefighters had greater multicultural awareness and better reflected the community?
5. What is the current multicultural make-up of firefighters in metro regions of the United States?

Section 5 | Methodology

5.1 Data Collection

5.1.1 Case Study

In April 2006, the FIRE 20/20 research team began the Multicultural Health and Safety Research Project (MHSRP). Researchers divided the project into two parts due to the nature of the data required to answer the five research questions identified in the previous section. The major portion of the study, based on case studies within three metropolitan-size fire departments, examined the health and safety risks to firefighters and multicultural citizens associated with delivering fire and emergency medical services in diverse communities. The primary objective of these case studies was to answer the first four research questions. The final research question involved gathering firefighter demographic data from Metro Fire Departments across the USA.

Fire departments in sixteen cities applied to participate in the case study portion of this project. Researchers selected the following project sites based on those fire departments meeting a predetermined set of criteria: Seattle, WA; Austin, TX; and Milwaukee, WI.

The research team used a variety of data collection methods for the MHSRP: fire department and community focus groups, a written post-focus group survey, meetings and interviews with various fire department personnel and community members and an online written survey. Researchers also reviewed relevant studies, reports and fire department incident data.

The research team conducted an independently funded pilot study with the Calgary Fire Department in Alberta, Canada to test the data collection methodology and instrumentation. As a result of this study, researchers modified and strengthened the research procedures and refined the data collection instruments. The following research methodology reflects the modifications made after the Calgary pilot.

The research team defined the term “multicultural” very broadly for the purposes of this study: to describe the range of qualities of the world’s populace today, such as age, race, ethnic background, country of origin, gender, sexual orientation, sexual identity, people with special needs, religion, and socio-economic status.

5.1.2 Diversity By Rank Survey, Research Question #5

National general demographic information about the ethnic or gender make-up of U.S. fire department personnel did not exist. A number of organizations have attempted to collect this data, but with little success. Women in the Fire Service (WFS) had the most complete database, but only for women in the fire service.

In May 2005, FIRE 20/20 created and field-tested a paper-based survey in response to the need for gathering diversity data by department. Following a pilot test of the survey, FIRE 20/20 expanded the study to include race and gender by rank. When the opportunity arose for submission of a Fire Prevention and Safety Research and Development Grant, FIRE 20/20 folded this effort into the application as Research Question #5.

After receiving a grant in April 2006, FIRE 20/20 requested assistance and endorsement from the Metro Chief's Board at their 2006 Conference in May to collect firefighter diversity data by rank from Metro Departments. The Metro Chief's Board, representing the largest metropolitan fire departments belonging to the International Association of Fire Chiefs (IAFC) Metro section, gave unanimous support to the project.

5.1.3 Site Selection Criteria

The research team evaluated applicants and selected project sites for inclusion in the study based on the following specific criteria:

1. An expressed interest by the fire chief to participate in the MHSRP
2. Varied geographical regions
3. Metro area populations with a diversity of cultures
4. Diversity of metro fire chiefs

After researchers made tentative project site selections, representatives from FIRE 20/20 contacted each potential fire chief to ascertain the level of interest and assess the capability of the on-site leaders to meet a secondary list of criteria. After the Calgary pilot study, researchers revised and expanded this secondary list:

1. Provisions/agreements by the mayor and/or city manager
2. Provisions/agreements by the fire department chief

3. Agreement by the local International Association of Firefighters' Union to participate in the project
4. A relatively stable union/fire management relationship
5. Assurance that the MHSRP will not impact or be impacted by union/fire management negotiations
6. Agreement by fire department and city to provide current organizational charts with reporting structure, names, titles, and contact information
7. A clear understanding among the mayor, city manager (if applicable), and fire chief that the research results will be published and individual participant confidentiality will be maintained to the extent that is possible in an open and free democracy
8. Identification and commitment of multicultural community groups and organizations
9. Mutual aid agreements with surrounding fire departments
10. Willingness to enter into a change effort as a result of the research

The research team met with the fire department and union leadership from the Seattle, Austin and Milwaukee Fire Departments to secure signed memorandums of understanding related to project participation. Terms of this commitment for the respective project sites included:

- a. Holding a command staff orientation meeting
- b. Selecting a fire department project manager to help coordinate the project
- c. Sending a fire department designate (e.g., Public Information Officer) to attend each of the community focus groups and provide a welcoming introduction, a closing thank-you and to informally interact with focus group participants following each focus group session
- d. Selecting a Project Resource Team (PRT) including representatives from Human Resources, Public Information/Public Relations Office, Public Education Office, Fire Prevention, Operations (EMS and Fire), Civilian Administration and the Union(s) to meet formally and individually with researchers to identify and secure the following:
 - o Date and location of data to be collected and analyzed about fire, emergency medical services, other emergency calls, inspections, community outreach and other relevant data
 - o Geographical areas where fire deaths and injuries occurred
 - o Types of incidents where firefighters were injured or killed
 - o Contact with racial, religious and gender groups in the department (e.g., Caucasian, African American, Hispanic/Latino, Native American, Asian, Women, Gay/Lesbian)
 - o Contact with the union(s)

- Contacts with racial, religious, and gender groups in the community
- Fire department staff scheduling
- Locations for fire group meetings and focus groups
- Agreement for the use of the necessary consent forms for focus group participants and interviewees
- Providing logistics for conducting on-site research and meetings
- Providing firefighter and EMS personnel to participate in each of the fire department focus groups

5.1.4 Fire Department/EMS Focus Groups

The chief of each department was responsible for selecting a fire department project manager to act as the liaison between the FIRE 20/20 researchers and the fire department. The fire department project manager, with approval from the fire chief, was responsible for selecting the fire focus group participants. The research team scheduled five to seven focus groups in each participating city department with up to 15 participants. The focus groups represented the following areas of the fire department:

1. Fire Operations—firefighters
2. EMS Operations—paramedics, EMTs
3. Fire Administration—training, human resources, finance, information services
4. Fire Prevention/Pub-Ed—public safety educators, inspectors, arson investigators
5. Civilian Personnel—secretaries, janitors
6. African American, Asian, Gay, Hispanic, Lesbian, Women or any other multicultural organization/group of firefighters
7. Dispatchers—uniformed/civilian

Table 5.1 identifies the actual numbers of focus group participants and interviewees for each of the project sites. In all cases, these figures represented roughly 5–8% of the fire service personnel or fire and EMS personnel in Seattle, Austin and Milwaukee.

TABLE 5.1: Number of Fire Department Focus Groups and Interviews						
	Seattle		Austin		Milwaukee	
	<i>#Groups</i>	<i>#People</i>	<i>#Groups</i>	<i>#People</i>	<i>#Groups</i>	<i>#People</i>
Focus Group Participants	6	73	8	65	6	59
Fire Department Interviews	Seattle = 27		Austin = 41		Milwaukee = 9	

5.1.5 Fire Department and EMS Questions

Researchers employed the basic questions listed below to collect data from fire department and EMS personnel who participated in focus groups. The same questions were asked in the post-focus group written survey and of those interviewed. In each case, focus group facilitators asked optional drill-down questions in order to encourage more participation or generate more details. Some of these drill-down questions were also available in the written and online surveys. The complete set of instruments for fire department and EMS participants, including a Focus Group Facilitation Guide, is located in Appendix A.

1. What specific challenges have you experienced delivering fire and emergency medical services in multicultural communities?
2. How well does the Fire Department deliver fire and emergency medical services to multicultural communities?
3. How does the Fire Department "Can Do" or "Do Whatever It Takes" attitude affect the safety of firefighters and paramedics?
4. How does the Fire Department "Can Do" or "Do Whatever It Takes" attitude affect the safety of multicultural community members?
5. Does anyone recall an incident that resulted in the injury or death of a firefighter or a community member?
6. What can the Fire Department do to ensure the safety of firefighters, paramedics and the public when delivering services to multicultural communities?
7. Is there anything else you would like to tell us?

At the end of each focus group, the facilitator distributed copies of a written survey to each participant and provided instructions regarding how to fill it out. Every attempt was made by the researchers to encourage all participants to complete their written survey and to gather the completed surveys before participants departed. Despite those efforts, some participants simply refused to complete the survey or to return it to the facilitator.

Table 5.2 contains the total number of returned completed surveys from the focus groups in each project site.

TABLE 5.2: Number of Fire Department Surveys			
Group	Seattle	Austin	Milwaukee
Surveys	83	65	54
Interviewee Surveys	7	0	0

5.1.6 Community Focus Groups

Researchers used a snowball sampling strategy—a non-random technique effective in identifying difficult to reach populations—to locate multicultural community members willing to serve as members of focus groups. The researchers contacted and received recommendations from the following community resources in order to begin the process:

- Chief Fire Officers
- City Human Resource Director
- Cultural Competency Committee
- Fire and Police Commission
- Fire Project Resource Teams
- Local community and neighborhood organizations
- Local immigrant/refugee organizations

Using information from these sources, the research team identified fire stations with the greatest number of incidents and additional stations with vulnerable populations. Researchers used incident data files to categorize the causes of fires and also to identify civilian, firefighter/paramedic injuries. This provided information regarding the neighborhoods with the highest fire incident rates. City data then helped to identify the variety of residents living in those areas by ethnic background, age and other characteristics. Researchers identified the following groups of citizens as priorities for inclusion in the community focus groups at all three project sites:

- College students
- Elders
- Lesbian, gay, bisexual and transgender (GLBT) residents
- Low income and homeless
- Recent immigrant and refugee residents

- Residents of ethnic communities
- Residents who were not likely to call 9-1-1
- Residents with limited English-speaking skills
- Residents with special needs, i.e., sight and hearing challenged
- Troubled youth or gang members
- Youth

FIRE 20/20 contracted with a local community partner from each of the project sites to provide assistance to the research team. Along with the community partner, researchers contacted the identified community leaders to generate a list of resident stakeholders living in the neighborhoods surrounding the identified fire stations. In cooperation with those leaders, researchers recruited focus group participants and obtained meeting spaces.

The research team provided informational flyers to the community leaders and neighborhood groups and leaders for posting and distribution in English, Spanish and other languages relevant to the project site cities.

The community partner continued to aid the project by distributing informational flyers, contacting, and working with local leaders and groups. The major objective was to ensure an optimum number of participants in each community focus group. Participants and leaders received reminders and incentives were provided to each participating community focus group member in the form of food or a gift card.

Table 5.3 identifies the actual numbers of focus group participants and interviewees for each of the project sites. The ethnic origins of all of the focus group participants are shown in Table 5.4. In all cases, these figures represented a broad cross-section of the multicultural community in Seattle, Austin and Milwaukee.

TABLE 5.3: Number of Community Focus Group Participants and Interviewees						
	Seattle		Austin		Milwaukee	
	<i>#Groups</i>	<i>#People</i>	<i>#Groups</i>	<i>#People</i>	<i>#Groups</i>	<i>#People</i>
Focus Groups	16	247	14	119	13	163
Interviews	0	34	0	13	0	0
Total	16	281	14	132	13	163

TABLE 5.4: List of Communities Represented in Focus Groups	
<i>Ethnicity</i>	
African	Congolese, Ethiopian, Eritrean, Oromo, Somali, Tigrinya
African American	
Arab	Lebanese, Palestinian
Asians	Cambodian, Chinese, East Indian, Filipino, Hmong, Japanese, Lao, Malaysian, Pakistani, Taiwanese, Thai, Vietnamese
Caribbean	Jamaican
Hispanic/Latino	
Eastern European	Ukrainian
Western European	English, French, German, Irish, Scottish
Northern European	
Circassian	
Native American/Alaskan Native	
Pacific Islander	Hawaiian
<i>Religious Groups</i>	
Muslim	Various ethnicities
Orthodox Jews	Various ethnicities
<i>Sexual Orientation or Gender Identity</i>	
Lesbian, Gay, Bisexual and Transgender (LGBT)	Various ethnicities
Special Needs	
Blind	Various ethnicities
Deaf/Hard of Hearing	Various ethnicities
<i>Socioeconomic and Linguistic</i>	
Homeless/Transitional Housing	Various ethnicities
Limited English proficiency/English as a Second Language (ESL)	Various ethnicities
Low-income	Various ethnicities
<i>Age</i>	
Seniors	Various ethnicities
Students	Fire academy, high school, college - various ethnicities

5.1.7 Community Questions

Researchers used the basic questions listed below to collect data from the multicultural community members who participated in focus groups. Researchers also asked the same questions of those interviewed. When necessary, language translators were employed to assist participants who had difficulties with English.

The post-focus group survey contained the same questions, offered in English, Spanish, Chinese and Hmong. Translators were available to assist those who spoke another language to complete their surveys.

In the focus groups, facilitators asked optional drill-down questions in order to encourage more participation or generate more details. Translators assisted with that process. Many of the drill-down questions were also available in the survey, and where necessary, translators were available to assist participants. The complete set of instruments for multicultural community participants, including a Focus Group Facilitation Guide, is located in Appendix A.

1. Have you ever had contact with the Fire Department or Ambulance Service (EMS Department) before today? Is there any reason someone might not call the fire department?
2. Does anyone remember a fire, an accident or other emergency where someone you know, someone in your community, or a firefighter was injured or died?
3. How well does the Fire Department deliver services to your community?
4. How well does the Ambulance Service (EMS Department) deliver services to your community?
5. Would you like to have a family member or friend get a job working on a fire truck or in an ambulance?
6. What would you like to teach or tell the Fire Department and Ambulance Services about your community?
7. Is there anything else you would like to tell us?

At the end of each focus group, the facilitator distributed copies of a written survey to each participant and provided instructions regarding how to fill it out. Every attempt was made by the researchers to encourage all participants to complete their written survey and to gather the completed surveys before participants departed. Most participants were cooperative, but sometimes one translator was not enough to assist a participant who did not speak English, Spanish, Chinese or Hmong to complete the survey. Therefore, some surveys were not returned from some of the multicultural community focus groups.

The researchers caution that the suggestions from community members represent their personal opinions and should not be construed to apply to all members of their race, religion, gender or socio-economic group.

Table 5.5 contains the total number of returned completed surveys from the focus groups in each project site.

TABLE 5.5: Returned Community Focus Groups and Interviewee Surveys			
	Seattle	Austin	Milwaukee
Focus Group Surveys	189	111	136
Interviewees	7	0	0
Total	196	111	136

5.1.8 Diversity By Rank Data Collection Procedures

Researchers conducted the ‘Diversity by Rank’ online survey with U.S. metro departments beginning in November 2006. One hundred of the 108 respondents were members of the Metro Section of the International Association of Fire Chiefs. The remaining eight were non-member large city departments. The research team employed an online survey tool called, Zoomerang.com. IAFC also uses this tool for their online surveys.

The Metro Chief’s section secretary, the executive director of NFFF and the executive director of the IAFC jointly signed a letter to all metro section chiefs inviting survey participation. All metro chiefs received this communiqué via e-mail in November 2006. Thirty percent of the potential departments responded within two weeks. Returns reached the 75% mark in mid-December following a second message.

The MHSRP project director followed up with the fire departments that had not responded in mid-January with a message and a telephone call to the respective fire chiefs. On February 2, 2007, the project director closed the Zoomerang.com survey with 108 metro departments reporting. The return rate for this survey was 98.2%.

5.1.9 Ancillary Research Procedures

Conducting of Focus Groups and Interviews

The research team conducted the focus groups, interviews, and meetings in accordance with generally accepted research principles and practices. Researchers did not report the results individually, but collectively, so responses and answers would remain anonymous.

Participation in fire and community focus groups was voluntary. Researchers informed the participants that they could leave at any time and, if they requested, their information would not be used. They were also assured that their information would be confidential and would not be disclosed, without their permission, in anything other than group data. Researchers obtained written consent forms from adults and parental consent forms for participants who were under 18 years of age.

Fire department personnel provided a brief five-minute introduction for each community focus group and then left the room. They returned at the end of the focus group session to answer questions.

Recording of Focus Groups and Interviews

The researchers digitally recorded all focus groups and interviews and used these recordings to assist in the writing of the focus group summaries. Researchers informed all participants that recordings were being made and would only be used by the research team, and that participant identities would remain anonymous.

Using Field Notes

The research team used field notes as a field documentation method to include an account of what was actually done during the planning and organizing phase for focus groups, and conducting the event and post-focus group activities (documentation of data collection processes). These notes included testimonials, stories, useful illustrations, documented interactions with multicultural community members where no consent forms were signed, intuitive hunches, questions, observations, non-standard data collection activities, failures, strategies to avoid failure, and ideas for future research.

Conducting Video Interviews

The research team and lead researcher in each project site selected 10-15 interviewees and focus group participants for the purpose of videotaping compelling stories related to citizen and firefighter safety. Researchers shared background information with the videographers to assist with the development of specific questions to use during the interview and taping process. The videographers spoke directly with the lead researcher and/or the MHSRP project director before the filming in order to obtain relevant background information to assist the

video company in conducting an informed interview. All individuals completed appropriate consent forms.

Video interviews lasted approximately 45-60 minutes each. Videographers designed a special set, used in all three cities, to protect the identity of interviewees. Videographers filmed each interviewee from the shoulders up to protect their department identity. FIRE 20/20 has edited and included segments of the videos with this report to provide a more personal reflection of the data.

5.1.10 Online Fire and EMS Department Survey

The research team began the process of developing the Online Fire and EMS Department Survey by reviewing all of the qualitative and quantitative data gathered from each of the project sites. The data followed a number of themes and after a preliminary analysis; a list of ten themes emerged that contained a vast majority of the data. Table 5.6 identifies those themes with definitions and relevant issues:

TABLE 5.6: Data Themes		
Data Themes	Definitions	Relevant Issues
Public Education	Related to the capacity and the willingness of the Fire/EMS agency to deliver fire and injury prevention education to multicultural communities.	Educational materials, information about what the Fire Department and EMS does; when to use 911; fire and safety knowledge; first aid classes
Multicultural Capacity	Data theme related to the degree of proficiency and ease with which Fire/EMS personnel respectfully deliver services to multicultural community members, as well as their willingness to learn about different community cultures. This includes knowledge of cultural practices, values, rituals, differences in expressing emotions, community priorities, etc.	Cultural misunderstandings and differences; knowledge of cultural practices, norms, and values; cultural death rituals; expressing emotions; comfort in dealing with people of different cultures
Communications	A data theme related to the accurate exchange of information (verbal, non-verbal and written) to, from and within the Fire/EMS agency.	Language barriers; onsite communication with clients; internal communications (i.e. within department), public information
Leadership Issues	Data theme related to taking actions that ensure the health and safety of civilians and first responders, planning strategically, allocating resources and managing the overall direction of the Fire/EMS agency.	Proactive planning; systems for effective operations; human resources; morale; resources to perform effectively; recruiting and hiring practices
Customer Service	A data theme related to the satisfaction with the capability of and quality of safe and effective services provided by fire and emergency medical service departments to all communities.	Customer service skills; task effectiveness and efficiency; use of soft skills, technical skills.
Fire/EMS Training	Related to the effectiveness of all types of internal training provided to Fire/EMS personnel.	Tactical training; language training; customer service training (e.g., training on crowd control).
Fire Service Culture	A data theme related to the norms of the fire service that involve firefighters' beliefs, values and behaviors such as a sense of belonging, teamwork, attitude, safety camaraderie, heroism, and tradition.	"Hero Culture"; inclusiveness; practical jokes; tolerances of differences within service; testing one another; paramilitary organization; emphasis on teamwork.
Community Relations	A data theme related to the ability of Fire/EMS to build and maintain quality, ongoing relationships with all aspects of their multicultural community.	Relationships with professional and community associations; trust among community; firefighter image among community; perceived relationships.

TABLE 5.6: Data Themes (Continued)

Data Themes	Definitions	Relevant Issues
Interagency Communications and Operations	Related to the effectiveness of Fire, EMS, Police, or other agencies and/or systems to communicate and work together in emergency and/or non-emergency situations.	Police securing the site; FD checking for vitals before EMS arrives; working cooperatively with EMS and PD on the way to an emergency and onsite.
External Safety factors	Related specifically to the increased level of risk to Fire/EMS personnel when responding to, mitigating of, and returning from emergencies.	Traffic and unsafe driving; crowd control in intense situations; dealing with domestic violence situations; firearms onsite; violent clients.

Researchers used the themes and data gathered from the focus groups and interviews to develop an online survey for all fire and EMS personnel. Several firefighters pre-tested the survey and researchers made alterations based on that feedback.

The fire chief, EMS chief and presidents of the local unions sent out a joint memo to all personnel in each of the project sites inviting them to fill out the online survey. An online link was provided in the memo, directing fire and EMS personnel to the department’s intranet which linked to Zoomerang.com—a confidential survey website that contained the online survey. Firefighters, paramedics, officers and fire department civilians had an opportunity to respond to the online survey for 12 days. A copy of the online survey appears in Appendix A.

Table 5.7 indicates the high return rate for the three project sites. The overall rate for all sites was just over 20%.

TABLE 5.7: Online Survey Respondents

Group	Seattle	Austin	Milwaukee
Firefighter <i>(Primary Responsibility)</i>	128	215	150
Non-emergency Staff <i>(Fire Department)</i>	13	33	26
Paramedic <i>(EMS/Medic)</i>	7	136	24
Non-emergency Staff <i>(EMS/Medic)</i>	0	5	2
Total	148	389	202
Return Rate	12.44%	28.65%	20.41%

5.2 Methodology Assumptions and Limitations

5.2.1 Data Collection

The following set of assumptions employed allowed the research team to collect data from the selection project sites:

1. The incident report tracking system for all selected project sites would contain demographic data regarding ethnicity and gender for injuries and deaths of firefighters and multicultural community members.
2. The incident report tracking system for all selected project sites would be accessible electronically.
3. The Fire Chief at each selected project site would select a representative group of firefighters to participate in focus groups.
4. The online survey conducted for all first responders within all selected project sites would be the most representative sample from the local fire and EMS departments.
5. The phrases “Can Do” and “Do Whatever It Takes” were used as synonyms for the “Hero” culture attitude of the fire service, which is typically associated with firefighters taking risks to get the job done no matter what the cost.

The research team identified the following environmental and process limitations that were evident during the data collection process:

1. No demographic data regarding ethnicity and gender for injuries and deaths of firefighters and multicultural community members were available from the incident report data tracing system for any of the selected sites.
2. Not all of the incident report data tracking systems for each project site were accessible electronically.
3. The use of a snowball sampling process precludes obtaining a representative sample of multicultural community members.
4. The selection process employed to obtain multicultural community focus group members could not assure that participants had first-hand contact with the local fire department.
5. Focus groups were conducted in English and the abilities/skills of the focus group interpreters may have affected the data collected.
6. Written surveys were not effective data collection tools in some of the focus groups where participants could not read English or were not literate in their own language.

7. The use of the Census Bureau's broad racial/ethnic categories was perceived as limiting to immigrant participants unaccustomed to those particular categories.

5.3 Data Analysis

The research team used a basic three-step process for data analysis in this project. These steps included preparing (cleaning) and organizing the data, describing the data and testing the hypothesis. However, due to the lack of reliable demographic data regarding first responder and multicultural community member injuries and loss of life, the researchers were unable to test the MHSRP hypothesis.

5.3.1 Data Preparation

Data preparation included the logging in of written survey data and data entry into a database. A single team member conducted nearly all of the data entry for both the qualitative and quantitative data contained in the written surveys. These written surveys included data from community focus groups and fire and EMS focus groups. No spelling or grammar corrections or alterations were made to the written and open-ended question survey data during data entry. However, researchers edited out names and identifying times for confidentiality purposes.

5.3.2 Focus Group Written Survey Data

The very nature of written surveys presented data accuracy challenges. Researchers often needed to review and decipher difficult to read handwritten responses. There were instances when additional unsolicited information was included in the responses. In those cases, researchers evaluated the data for relevancy and logged it into the appropriate data point. Researchers also entered incomplete answers into the database.

5.3.3 Focus Group Write-Up Data

In addition to the written focus group surveys, researchers used recordings and field notes to gather qualitative data from focus group participants. The research team then reviewed and "themed" the qualitative responses using the ten data themes above (see Table 4.5) to provide a means for evaluation of the open-ended survey responses. This thematic approach

facilitated data grouping and quantification and served as the basis for question development for the online survey.

5.3.4 Online Survey Data

Upon review of the completed online survey data, the data team identified a few questions that had created confusion, were poorly worded with double negatives or resulted in inadvertent reversals of the Likert scale. These questions were set aside from the research because the reliability of the answers was in question.

Researchers asked additional open-ended qualitative questions during this survey; however, thematic analysis of this data was not conducted due to time and resource constraints.

The volume of data collected in the drill down questions presented a challenge when attempting to locate the most relevant responses associated with a specific research question. Many of the survey questions could be associated with several of the themes and research questions. Team members devised a data funnel to process the data into a collection of responses most closely aligned with the themes as well as with specific research questions.

5.3.5 Descriptive Analysis

Researchers collected the online survey data simultaneously in all three cities and each set of data is maintained separately. This allowed evaluation of the data in each city both individually and collectively.

The data funnel, described earlier, processed the response data in a manner that focused responses from several perspectives on a specific research question and awarded a rating scale to identify relevant data. Using this data funnel, researchers were able to present the findings with the most relevant data first.

The data team provided simple summaries of the data and the measures. Together with simple graphics analysis, they formed the basis of the quantitative analysis of the survey data. Data tables in this report include the computed mean scores, which are provided to accurately compare the response data. These descriptive statistics simply describe what is—what the data shows—and have been incorporated into the findings section in the form of tables and charts.

The raw data collected is contained in Appendix C.

5.3.6 Inferential Analysis

Researchers combined the quantitative and qualitative data, along with their experiences in each city, providing the basis for the findings and recommendations.

The original assumption that incident data would provide demographic association to those suffering injury or loss of life rapidly became a limitation when the absence of demographic data became apparent. This limitation caused the team to design a new approach to the research by including additional questions for the focus groups in an attempt to draw out and identify information about incidents that could be recalled where injury or death occurred.

The resulting written survey results for these questions proved unreliable. However, the resulting dialogue with both the community members and the fire and EMS service members provided additional qualitative data. This data has been presented in part with quotes and stories taken from video interviews, focus group discussions, and online and written surveys. The video interviews have been edited for length; the online and written surveys are reported verbatim.

The inferential analysis of this data provides a unique opportunity to combine information from all the data sources into a much clearer picture than pure statistical analysis would provide. Examples of this analysis are generally thematically organized in the Findings section and the appendices.

5.4 Abbreviations Key

9-1-1	Emergency dispatch phone number
9-11	September 11, 2001 attack
ACS	American Community Survey (by US Census Bureau)
APD	Austin Police Department
AFD	Austin Fire Department
ALS	Advanced life support (paramedic service level where they can administer drugs, start IVs, etc.)
ASL	American Sign Language
A/TCEMS	Austin-Travis County Emergency Medical Services (separate city department from AFD)
BIT	Fire Department Bureau of Instruction and Training
BLS	Basic life support (EMT service level which is similar to basic first aid)
CDC	Center for Disease Control
CFG	Community Focus Group
COPS	Community Oriented Policing Services
CPAT	Candidate Physical Ability Test
CPR	Cardiac Pulmonary Resuscitation
DHS	Department of Homeland Security

DJ-COPS	Department of Justice Office of Community Oriented Policing Services
EEOC	Equal Employment Opportunity Commission
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
ESD	Educational Safety Division
FD	Fire Department
FD/EMS	Fire Department/Emergency Medical Services
FDFG	Fire Department Focus Group
FF	Firefighter
FG	Focus Group
FMO	Fire Marshal's Office
FPSRDG	Fire Prevention and Safety Research and Development Grant
FTO	Field Training Officer
LGBT	Lesbian, Gay, Bisexual Transgender
IABPFF	International Association of Black Professional Firefighters
IAFC	International Association of Fire Chiefs
IDEC	International District Emergency Center

IV	Intravenous
LGBT	Lesbian Gay Bisexual and Transgender
HR	Human Resources (HRD is Human Resources Department)
IAFC	International Association of Fire Chiefs
LODD	Line of Duty Deaths
MFD	Milwaukee Fire Department
MHSRP	Multicultural Health and Safety Research Project
NAHF	National Association of Hispanic Firefighters
NFA	National Fire Academy (under DHS umbrella)
NFFF	National Fallen Firefighters Foundation
OPS	Operations Department within the Fire Department
PD	Police Department
Pub/Ed	Public Education Department
PSRC	Puget Sound Regional Center
PRT	Project Resource Team
SCBA	Self Contained Breathing Apparatus (air pack)
SFD	Seattle Fire Department
SOG	Standard Operating Guidelines

SOP	Standard Operating Procedures
USFA	United States Fire Administration
UT	University of Texas
WFS	Women In The Fire Service

5.5 Definition of Terms

Air Show Syndrome

A prevalent attitude characterized by foolhardy behavior. The attitude displayed by firefighters is the tendency to “push the envelope” each time they have survived a near-miss, especially when being watched by others.

Anti-authority Attitude

Term used to refer to the refusal to adhere to directives administered by an authority figure. In other words, fire service members with this outlook do not like “to be told what to do”.

Beta Test

A beta test refers to the test or pilot of the research instruments followed by refinement for implementation in the three participating USA cities. In this study, the beta test site was the Calgary Fire Department and the Calgary Emergency Medical Services Department.

Bilingual

The ability to speak two languages.

“Can Do” or “Do Whatever It Takes” Attitude

In this project, researchers used the phrases “Can Do” or “Do Whatever It Takes” as synonyms for what NFFF described as the hero culture of the fire service. The researchers acknowledge that firefighters must have confidence that they can do the job safely and effectively. However, in this report, researchers use “Can Do” to reflect on the aspect of the hero culture that has been typically associated with firefighters taking unsafe risks to get the job done.

Civilians

Refers to people in a community serviced by a fire department who are not members of the fire department.

Come Out

A term referring to anyone who publicly discloses something about themselves. The term is usually used referring to gay or lesbian people who publicly disclose or “come out” about their sexual orientation.

Communications

A data theme related to the accurate exchange of information (verbal, non-verbal and written) to, from and within the Fire/EMS agency.

Community Liaison

A person designated by a fire department as a point of contact for a community focus group. Similarly, a community might provide a fire department with a community liaison from their community.

Community Partner

A community partner refers to a person hired in each of the three cities that coordinated community focus groups and opened doors for the FIRE 2^{0/20} research team and fire department to community leaders and community organizations.

Community Policing or COPS (Community Oriented Policing Services)

An organizational strategy or approach that was developed by police departments to incorporate police officers as members of the community in order to curtail criminal activity, foster increased levels of trust and reliance between police officers and community members, and ultimately to improve community safety and quality of life. Example of this approach include community and police partners and encouraging officers to walk throughout neighborhoods instead of driving through them in police cars.

Community Relations

A data theme defined as Fire/EMS' ability to build and maintain quality, ongoing relationships with all aspects of their multicultural community.

CompStat

A seminal strategy to target crime-infested areas in New York City that entails the utilization of computer generated crime statistics and electronic mapping to target areas where criminal activity occurs.¹

¹ Horowitz, C. (April 7, 2003). "Policing 1993." New York Magazine. Available online: http://nymag.com/nymetro/news/anniversary/35th/n_8551

Coining

Coining, or *cao gio* (*pronounced phonetically gow yaw*), is an alternative form of medicine most commonly practiced in Southeast Asia. The practice of coining involves rubbing heated oil on the skin, most commonly the chest, back, or shoulders, and then vigorously rubbing a coin over the area in a linear fashion until a red mark is seen. Advocates use this method to treat a variety of minor ailments including fever, chills, headache, colds, and cough.

Consent (or Release) Forms

Written forms used by researchers to obtain documented consent to participate in a focus group and/or consent to allow use of their picture or video interview.

Constituents

Refers to people serviced by a fire department.

Cops

Term used to refer to police officers.

Cubs

A term used to refer to new fire department recruits. Other terms used include: probes or probies, cubs, or rookies.

Cultural Competence

Cultural competence is defined as a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations.

Operationally defined, cultural competence is the integration and transformation of knowledge about individuals and groups of people into specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase the quality of services; thereby producing better [health] outcomes.

Key elements of cultural competency include cultural sensitivity, awareness, and knowledge as well as the development of cross-cultural relationships. Cultural competency must incorporate a willingness to listen, learn, and respect the cultural influences that shape the behaviors, social norms, and values of other ethnic groups.

Culture

The integrated patterns of human behavior that include thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups.

Culture is based on shared assumptions, beliefs, values, and norms as a way of establishing common meaning among members of an organization. Culture also serves to establish, regulate, and reinforce the structure, processes and practices that occur within an organization. This results in standardized patterns of behavior. Shared meanings have the affect of strengthening each member's beliefs in their own social constructions.

Customer Service

A data theme related to the satisfaction with the capability of and quality of safe and effective services provided by fire and emergency medical service departments to all communities.

Data Analysis

The basic three-step process used by the research team in this project including preparing and organizing the data, describing the data, and testing the hypothesis and models.

Data Funnel

FIRE 20/20's electronic EXCEL program developed to prioritize data to best answer the research questions.

Data Preparation

A step in the data analysis process where written survey, focus group and interview data and field notes were entered into the research data base.

Data Source

The collection of field notes, focus group notes, research interviews, or survey data that define and store the data for FIRE 20/20's multicultural health and safety research study.

Data Themes

The research team reviewed and “themed” the qualitative responses using ten data themes (Communications, Community Relations, Customer Service, External Safety Factors, Fire and EMS training, Fire Service Culture, Interagency Communications Operations, Leadership Issues, Multicultural Capacity, and Public Education). This thematic approach allowed facilitated data grouping and quantification and served as the basis for question development for the online survey and the discussion section of the final report. These ten data themes are defined individually in this glossary.

Data Validation

The process of testing the accuracy of data.

Descriptive Quantitative Analysis

Simple summaries of the numerical data including frequency responses, percentages and mean scores for each of the survey questions.

Dispatch

The communications center that receives 9-1-1 calls for emergency response and coordinates the response. In some cities, dispatch is also referred to as the “Alarm Center” or “Call Center.” Operationally Dispatch may be integrated in and/or serve fire, emergency medical and police.

Diversity

Diversity is a term used to describe the range of qualities of the world’s populace today, such as age, race, and ethnic background, country of origin, gender, sexual orientation, sexual identity, religion, and people with special needs, religion and socio-economic status. Another synonymous phrase used in this report is multicultural.

Drill-Down Questions

Refers to the sub-questions under a main research questions designed to encourage and generate more specific data and details.

Equity Ratio

The equity ratio is used as an easily interpreted way to measure the extent to which various social categories are represented in an organization. Academic studies frequently create an equity ratio by dividing the percentage of the group in the civil service by the percentage of that group in the nation, state or city. A score of 1 means “perfect” proportional representation, a score less than 1 shows under-representation (called underutilization in employment studies), and a score greater than one shows that the social group is over-represented given its percentage in the general population.

External Safety Factors

A data theme related specifically to the increased level of risk to Fire/EMS personnel when responding to, mitigating, and/or returning from emergencies.

Field Notes or Field Documentation

An account of actual activities during the planning and implementation phase for focus groups, interviews, and post-focus group activities. These notes include testimonials, stories, useful illustrations, documented interactions with multicultural community members where no consent forms were signed, intuitive hunches, questions, observations, non-standard data collection activities, failures, strategies to avoid failure, and ideas for future research.

Fire/EMS Training

A data theme related to the effectiveness of all types of internal training provided to Fire/EMS personnel.

Fire Service Culture

A data theme related to the norms of the fire service that involve firefighters’ beliefs, values and behaviors such as a sense of belonging, teamwork, attitude, safety camaraderie, heroism, and tradition.

Freelancing

Operating independently without being part of the overall strategic plan of managing an incident

Hazing

A type of harassment or abuse imposed by team members, usually associated with requiring a new team member to “pay their dues,” and pass informal and often non-job related tests in order to become an accepted member of the team.

Hero or “Can Do” Culture

The “hero” culture is the traditional fire service attitude toward providing emergency services regardless of the risk or danger presented to the emergency service provider. In this study, the phrases, “Can Do” and “Do Whatever It Takes” have been used synonymously with “hero” culture.

Inferential Analysis

The combination of quantitative and qualitative data along with the researcher’s experience.

Interagency Communications and Operations

Data theme related to the effectiveness of Fire, EMS, Police, or other agencies and/or systems to communicate and work together in emergency and/or non-emergency situations.

Impulsivity

A term that refers to partaking in spontaneous behavior without first taking into consideration the risks involved. An example includes firefighters rushing into a burning home without adequately assessing the severity of the blaze or the stability of the building’s structure.

Invulnerability

The notion of invincibility or that no harm can come to an individual. Related to firefighters, the term refers to a mentality to engage in taking unnecessary risks. If they survive, they tend to justify their actions as being “the right thing to do” and not as a stroke of luck.

Language Line

Refers to a telephone service providing translation services to emergency first responders.

Leadership

Data theme related to taking actions that ensure the health and safety of civilians and first responders, planning strategically, allocating resources and managing the overall direction of the Fire/EMS agency.

Machismo

A term used to refer to prominently exhibited or excessive masculinity. As an attitude, machismo ranges from a personal sense of virility to a more extreme masculism. In many cultures, machismo is acceptable and even expected. In fire cultures this term refers to the notion that "I can do anything better than you can."

Mean

The value obtained by calculating the sum of a set of quantities and then dividing that sum by the number of quantities in the set. Also called *average*.

Median

The median refers to the mid-point of a group of numbers; ½ of the data points are above the median and ½ are below.

Mentor

A wise and trusted counselor or teacher, an influential senior sponsor or supporter. In the fire culture it is often a more senior, experienced firefighter provides guidance to a younger firefighter.

Mentee

A person who is guided or counseled by a mentor.

Multicultural

Multicultural is a term used to describe the range of qualities of the world's populace today, such as age, race, ethnic background, country of origin, gender, sexual orientation, sexual identity, religion, people with special needs, religion and socio-economic status. Another synonymous phrase used in this report is diversity.

Multicultural Capacity

Data theme related to the degree of proficiency and ease with which Fire/EMS personnel respectfully deliver services to multicultural community members, as well as their willingness to learn about different community cultures. This includes knowledge of cultural practices, values, rituals, differences in expressing emotions, community priorities, etc.

Near-miss Event

A near-miss event is defined as an unintentional unsafe occurrence that could have resulted in an injury, fatality, or property damage. Only a fortunate break in the chain of events prevented an injury, fatality or damage.

Normative Theory

Normative or prescriptive theory explains how things ought to be (people ought to be honest, etc.), whereas descriptive theory explains how things are (e.g., this paper is white; most Americans eat meat; etc.).

Online Survey Data

A data source referring to the web-based, on-line survey conducted in the beta-test site and the three participating fire departments. Researchers used Zoomerang as their online survey instrument.

Organizational Culture

Term related to a pattern of shared behaviors based on assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way you perceive, think, and feel, in relation to those problems.

Probes or Probies

A term used to refer to new fire department recruits who are on probation. Other terms used include rookies or cubs.

Promising Practice

A practice or program of a fire department that surfaced in this research study that shows promise to be a best practice for potential replication by other fire departments.

Public Education

Data theme related to the capacity and the willingness of the Fire/EMS agency to deliver fire and injury prevention education to multicultural communities.

Quantitative Methods

Quantitative methods are research methods dealing with numbers and anything that is measurable. They are therefore to be distinguished from qualitative methods. Counting and measuring are common forms of quantitative methods. The result of this type of research is a number, or a series of numbers and these are often presented in tables, graphs or other statistical forms.

Qualitative Methods

Qualitative methods are research methods that involve an in-depth understanding of human behavior and the motivation that governs human behavior. Unlike quantitative research, qualitative research relies on the reasons behind various aspects of behavior. In this research study, qualitative methods used included stories and documentation of perspectives and cultural practices. While quantitative data is measurable, qualitative data cannot be put into graphical, mathematical, or statistical representation.

Representative Bureaucracy

A term coined by J. Donald Kingsley in his book, *Representative Bureaucracy* (1944) to describe the extent in which a bureaucracy or a legislative body is representative of the social origins of the population served by the organization. This means that the subgroups (women, minorities and ethnic groups) are represented in the national, state, or local bureaucracies roughly in proportion to their percentage of the population in the nation, state, or locality. Representative bureaucracy refers to both Passive Representation (mirrors the numbers; are representative) and Active Representation (acts on behalf of people in their subgroup).

Rookies

A term applied to a new fire department recruit. Other terms used include; "probes" or "probies" or "cubs."

Snowball Sampling Strategy

A non-random research technique used to identify and to locate multicultural community members willing to serve as members of focus groups. The technique is especially effective in connecting with difficult to reach populations.

Traditionalism

A term that refers to an organization's unyielding desire to retain past practices without regard to organizational evolution. Traditionalism within the fire service also undermines the willingness for cultural change and entails the refusal to acknowledge its faults

Zoomerang.com Survey

The web-based survey instrument used by FIRE 20/20 for the online surveys.

Section 6 | Findings

6.1 Introduction

One of the primary objectives of the Multicultural Health and Safety Research Project (MHSRP) was to collect data to respond to the five research questions listed below:

1. How do firefighters perceive the effectiveness of their emergency and non-emergency service delivery in multicultural communities?
2. How do people in multicultural communities perceive firefighters' emergency and non-emergency service delivery?
3. How does the fire service "hero" culture increase or decrease the risk of injury and loss of life for firefighters and community members when serving multicultural communities?
4. What health and safety risks to firefighters and community members could be reduced if firefighters had greater multicultural awareness and better reflected the community?
5. What is the current multicultural make-up of firefighters in metro regions of the United States?

The Findings section addresses each of the first four research questions and is presented in a case study format for each of the three project sites; Seattle, Austin and Milwaukee. Each case study presents quantitative data in table form¹ with calculated means² and qualitative data in the text with related quotes and stories.

Research question #5 findings for the Diversity by Rank survey are presented in two ways: a) overview tables of all 108 Metro Fire Departments that reported and b) tables that separate the findings into the 7 IAFC Divisions.

During the course of the study, the researchers discovered a number of innovative projects within the study sites that addressed some of the research questions. The Promising Practices subsection provides a description of one project from each of the participating departments.

¹ Due to the rounding of percentages to whole numbers, some tables may contain numerical figures that do not equal 100%.

² Note on calculating means in the Findings tables: The value (mean) is obtained by calculating the sum a set of frequencies, such as Strongly Agree, Agree, Disagree and Strongly Disagree, and dividing that sum by the total number of frequencies in the set. The numerical constants appear beneath each table in this section.

Finally, the FIRE 20/20 research team developed a community organizing model that successfully generated community focus groups, built relationships between the fire departments and many of their multicultural communities and provided critical data for this study. The last segment of the Findings section contains a detailed description of the Community Bridge Building Model.

6.2 Seattle Fire Department

6.2.1 Overview of the Seattle Fire Department

The Seattle Fire Department (SFD) provides fire suppression, emergency medical, public safety and emergency services to a culturally diverse and vibrant population of 563,400 citizens (approximately 1.5 million during the day) within the 83.9 square miles of the City of Seattle.

Emergency response apparatuses are strategically placed at 34 fire stations (including Medic One Headquarters) and include 33 engines, 11 ladder trucks, 4 Advanced Life Support (ALS) Medic Units, 7 air trucks, 2 fireboats and 2 hose wagons. SFD provides Basic Life Support (BLS), Advanced Life Support (ALS) transport services and emergency medical services.

SFD is responsible for emergency medical services, fire suppression, mitigation of disasters, and rescue activities. Specialized units within the Operations Division include the Hazardous Materials (Haz-Mat) Response Team, Dive Team, Confined Space Rescue, Heavy Rescue and Marine Emergency Response Team.

The Seattle Fire Department currently has 1,030 uniformed personnel and 79 non-uniformed (civilian) employees, with an on-duty strength of 207. The 1,030 uniformed personnel include 81 paramedics and 36 Department Chiefs. All personnel are certified Emergency Medical Technicians (EMTs).

During 2006, the Seattle Fire Department dispatched and responded to 80,523 emergency incidents: 63,806 (79%) medical (43,476 BLS and 20,330 ALS), and 16,717 (21%) fire. For 2006, the average response time (dispatch to arrival on emergency scene) for First In, Code Red was 3.65 minutes for Basic Life Support, 3.69 minutes for Advanced Life Support and 4.31 minutes for fire, rescue, and Haz-Mat.¹

City of Seattle Demographics

Seattle is a large seaport city in the northwestern United States with 193 miles of waterfront (including 53 miles of tidal water). Seattle is known for the growing diversity of its population:

¹ SFD statistics provided by the Seattle Fire Department.

- 18% of Seattle's adult residents (nearly 1 in 5) are foreign born²
- 22% of Seattle's population speaks a language other than English at home³
- Students in the Seattle Public School District speak more than 129 languages.⁴
- Since 2000, the foreign born population has more than doubled in King County to an estimated 330,000 persons in 2005.⁵

A long-term study by Puget Sound Regional Center (PRSC) forecasts an increasingly multicultural population:

- Seattle's population will grow to 586,365 by 2010 and to 631,724 by 2020.⁶
- The region's foreign-born population grew by 89% during the 1990s, compared to 19% for the general population, with over two-thirds of the growth occurring in King County. There is evidence that these growth trends are continuing.⁷

² "2005 American Community Survey Data Profile Highlights" US Census Bureau, Census 2000. www.factfinder.census.gov.

³ "2005 American Community Survey Data Profile Highlights" US Census Bureau, Census 2000. www.factfinder.census.gov.

⁴ Bilingual Student Services. www.seattleschools.org. 6 Oct. 2006
<http://www.seattleschools.org/area/bilingual/index.dxml>.

⁵ "Budget Office Highlights – 2006 Annual Growth Report." www.kingcounty.gov. 27 Nov. 2006
<http://www.metrokc.gov/budget/agr/agr06/06AGRCh1all.pdf>.

⁶ "Puget Sound Regional Center Residential Forecasts (Seattle area)."
<http://www.psrc.org/data/dem/index.htm> . 26 Oct. 2006.
http://www.psrc.org/data/forecasts/2006_small_area_forecasts.xls.

⁷ Puget Sound Trends. "Trends in Household Size." No.D11. May 2006.
http://www.psrc.org/publications/pubs/trends/d11may06.pdf#xml=http://search.atomz.com/search/pdfhelper.tk?sp_o=1,100000,0

The figures in Table 6.2.1 provide a comparison of the Seattle Fire Department⁸ ethnic and gender demographics with those of the overall Seattle population.⁹

TABLE 6.2.1: City of Seattle and Seattle Fire Department Demographics		
Demographics	City of Seattle	Seattle Fire Department
Ethnicity		
White	70.1%	76.0%
Black or African American	8.4%	9.0%
Hispanic or Latino (of any race)	5.3%	5.0%
American Indian and Alaska Native	1.0%	2.0%
Asian	13.1%	8.0%
Native Hawaiian and Other Pacific Islander	0.5%	0.0%
Some Other Race	2.4%	0.0%
Two or More Races	4.5%	0.0%
Total	105.3%*	100%
Gender		
Male	49.9%	91.0%
Female	50.1%	9.0%
Total	100%	100%

*Totals may equal more than 100% because individuals may have reported more than one race.

Fatality, Injury and Patient Statistics

In 2005¹, Seattle responded to 81,133 emergency responses including a total of 1,744 structural fires, seven civilian deaths, 25 civilian injuries, and estimated property damage of nearly \$10.8 million. There were 2,796 other fires in 2005 (highway vehicles, outside brush, outside structures of value, e.g., dumpsters) resulting in nine civilian deaths, 32 civilian injuries, and estimated property damage of about \$12.35 million.

⁸ SFD statistics provided by the Seattle Fire Department.

⁹ "Table DP-1. Profile of General Demographic Characteristics: 2000." US Census Bureau, Census 2000. www.Seattle.gov. <http://www.ofm.wa.gov/census2000/profiles/place/1605363000.pdf>

Other emergency responses in 2005 included: 62,071 rescue and emergency medical responses, 90 mutual aid assistance responses, 113 hazardous materials (spills and leaks), 502 hazardous materials (wires and bombs), and 13,062 other rescue responses (animals, lookouts, etc.). Seattle has not had a firefighter LODD death since 1995. Firefighter injury totals include 323 in 2001, 451 in 2002, 489 in 2003, 438 in 2004 and 420 in 2005. In addition, 29 firefighters were exposed to infectious diseases (hepatitis, HIV, and meningitis).

RESEARCH QUESTIONS

Research Question #1

How do firefighters perceive the effectiveness of their emergency and non-emergency service delivery in multicultural communities?

Research Question #2

How do people in the multicultural communities perceive firefighters' emergency and non-emergency service delivery?

Since these two questions concern the perceptions of both firefighters and multicultural community members regarding the quality of services provided, both sets of findings are presented below. Quantitative findings from the Seattle Fire Department (SFD) were derived from the online survey (N=148). Focus groups and interviews held with SFD personnel and post-focus group surveys generated the qualitative data. The quantitative findings from Seattle multicultural community members were taken from the post-focus group surveys, and interviews at the Martin Luther King Festival (N=223). Community focus groups, post-focus group survey open-ended questions and interviews produced the qualitative data.

The information presented in Table 6.2.2 is a side-by-side narrative summary of the findings from SFD and the multicultural community participants pertaining to four major themes: Customer Service, Communications, Multicultural Capacity and Public Education. Researchers compiled these findings from all the sources listed above.

Below are the specific findings from firefighters and community focus groups organized by the four major themes presented in Table 6.2.3: Customer Service, Communications, Multicultural Capacity and Public Education.

TABLE 6.2.2: SFD Summary of Key Findings in Four Themes

Major Themes	SFD Findings	Community Findings
Customer Service	<p>Most SFD online survey participants rated their fire services <i>Excellent</i> (64%) or <i>Good</i> (29%). They also rated their emergency medical services as <i>Excellent</i> (63%) or <i>Good</i> (30%).</p>	<p>Community participants rated SFD's fire services <i>Excellent</i> (76%) or <i>Good</i> (18%). They also rated SFD's emergency medical services as <i>Excellent</i> (68%) or <i>Good</i> (26%).</p> <p>Feelings of not being a priority or considered of lesser value, being judged and being blamed for the situation were common themes that emerged from negative interactions experienced by a few members in four focus groups.</p>
Communications	<p>SFD identified language barriers as a major challenge. There were mixed reactions about the language line (delays finding interpreters, prioritization of SFD calls resulting in a delay in service while the line takes another call). Some participants expressed it would be easier for immigrants to learn English than for SFD to learn all of the languages spoken in the community.</p>	<p>Community focus groups identified the following major concerns regarding barriers to communication: lack of interpreters for their specific dialect, lack of availability of materials and TV advertisements in their own language, and lack of American Sign Language interpreters.</p>
Multicultural Capacity	<p>Mixed - Many SFD personnel experienced cultural misunderstandings when serving multicultural communities. Most survey respondents indicated it did not delay service. There were divergent views on whether SFD or the communities needed cultural training. Some SFD personnel identified cultural issues of which they needed to be aware of, such as: gender issues, death rituals, religious beliefs and customs, birthing practices, modesty issues, and non-traditional medicine.</p>	<p>Community members stated that cultural misunderstandings do occur during emergencies. Many requested that SFD respect their traditions and customs, interact with them in non-emergency situations for mutual learning, and be sensitive and patient—"we are trying to learn your language and your ways." Some expressed fear of people in uniforms and an aversion to calling 9-1-1.</p>
Public Education	<p>SFD participants emphasized that the multicultural communities lack knowledge of SFD services and basic fire and safety issues. Most participants reported having responded to calls in which customers misused their services. SFD was filling a gap in the medical system.</p>	<p>Many multicultural community participants admitted that they did not know what services SFD provided or understand fire prevention and fire safety issues. They expressed that they would like greater access to public education and educational materials in their languages. They would like SFD to proactively educate their communities on fire and life safety and they would be willing to help make this happen (gather the community and provide interpreters).</p>

6.2.2 Customer Service

Both SFD online survey respondents and multicultural community participants ranked fire services as *Excellent* as indicated by the figures in Table 6.2.3. Firefighter’s ratings have a mean of 3.55 and the multicultural community scores have a mean of 3.68.

TABLE 6.2.3: SFD Ranking of Fire Service Delivery to Multicultural Communities						
SFD Perspective: Online Question 5: How does SFD deliver fire services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	94	43	10	1	N=148	3.55
Percentage	64%	29%	7%	1%		
Community Perspective: Community Focus Group Question 15: How does SFD deliver fire services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	102	24	8	1	N=135	3.68
Percentage	76%	18%	6%	1%		

The scale for computing the mean is as follows: Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

The figures presented in Table 6.2.4 focus on the delivery of emergency medical services in multicultural communities and, as previously noted, the rankings were in the excellent range for both groups. Online survey respondents stated that they provided *Excellent* or *Good* emergency medical services with a mean of 3.56. The multicultural community participants ranked SFD’s emergency medical services as *Excellent* or *Good* with a mean of 3.60.

TABLE 6.2.4: SFD Ranking of Emergency Medical Service Delivery to Multicultural Community						
SFD Perspective/Online Question 8: How does SFD deliver emergency medical services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	93	45	10	0	N=148	3.56
Percentage	63%	30%	7%	0%		
Community Perspective/Community Focus Group Question 17: How does SFD deliver emergency medical services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	123	47	8	3	N=181	3.60
Percentage	68%	26%	4%	2%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

The focus groups and surveys provided possible explanations as to why SFD and the multicultural communities rated SFD excellent in fire service and emergency medical service delivery. All four SFD Operations focus groups elaborated on the strengths of firefighters; they considered them problem-solvers, persistent, effective and courteous. Medic One interviewees indicated that their international reputation, rigorous training and good people skills contributed to excellent service. Some representative quotes from the online survey include:

“We deliver outstanding service always.”

“I feel we are always able to find some means to figure out their emergency and help solve it or get them to a hospital for their injury or illness.”

“Compared to other cities our size with our level of diversity, I think we do more than an adequate job. There is always room for improvement, however!”

“I believe it is our job to resolve problems to the best possible outcome regardless of cultural or outside factors.”

Every community focus group praised the speed and efficiency of SFD in delivering their fire services. In their surveys, many participants described firefighters as “helpful,” “polite,” “professional” and “informative.” A number of focus group members indicated that their experiences with SFD related to medical response, not fire suppression. As a result, a greater number of participants rated SFD’s emergency medical service delivery (N=181) than fire service delivery (N=135).

Some members of four of the 16 community focus groups had negative experiences with SFD in fire or emergency medical situations and attributed their dissatisfaction to lack of communication or a lack of respect. This information came from the following focus groups: African American, deaf, LGBT and low-income. Below is one of the stories related to disrespect shared by a community focus group participant:

“We had a cooking fire in our home in [low-income] transitional housing. SFD came and put out the fire. The first words they said to me were that it was my fault. They were condescending and blaming. Then they searched my house for other potential sources of fire and they said they were also looking for drugs. I didn’t understand why they were looking for drugs. That’s not their job! Before it was over I was completely in tears. This really hurt me and they didn’t seem to care. It was a horrible experience and I won’t call them again! I don’t want to be belittled!”

The figures presented in Table 6.2.5 indicate that a majority of SFD online participants believed that firefighters treat community members respectfully. The mean is 3.27, showing that respondents favored the position of *Agree*.

TABLE 6.2.5: SFD Treating Community Members with Respect							
Online Statement 6B: Firefighters treat all customers with respect.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	61	64	18	2	3	N= 148	3.27
Percentage	41%	43%	12%	1%	2%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

It is worth noting that 12% of the firefighter respondents selected *Disagree* when asked about firefighters treating all customers with respect. Some firefighters in the focus groups shared the same observation, although they emphasized that these instances were rare:

“I think occasionally some constituents are misunderstood or marginalized. I do not think this is the rule. Most firefighters are here to serve the public. This includes all people regardless of their ethnic or socio-economic background.”

“Much depends on the attitude we portray. Some of us seem to look down on people we serve or we will be nice to them in person and then badmouth them or make fun of them back on the truck.”

In the SFD interviews and focus groups, examples of disrespect shared by personnel predominantly related to situations involving “drunks”, “homeless people”, “mentally ill” and “low-income” community members. Meanwhile, these community focus groups voiced some common themes: they felt judged, that they were not a priority, and that they were blamed for the situation.

6.2.3 Communication

Forty-three percent of SFD online survey respondents reported that they had experienced communication barriers *All the Time* (5%) or *Frequently* (38%) while delivering services. Despite these communication problems, the figures in the second part of Table 6.2.6 show that respondents were *Infrequently* forced to delay services to customers (mean: 1.97).

TABLE 6.2.6: SFD Experiences with Communication Barriers							
Online Statement 3C: I am faced with providing services to people with whom communication is a problem.							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	7	56	83	2	0	N=148	2.46
Percentage	5%	38%	56%	1%	0%		
Online Statement 3E: I am forced to delay services to a customer due to communication barriers.							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	1	17	106	23	1	N=148	1.97
Percentage	1%	11%	72%	16%	1%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

In all of the SFD focus groups and interviews, participants identified language barriers as the primary challenge they faced when providing services to multicultural communities. All of the community focus groups with only non-native English speakers (11 out of 16 groups) also indicated that language was an issue when receiving fire and emergency medical services. Communication barriers were the most common response to the question, “Why would someone from your community not call 9-1-1 during an emergency situation?” Below are two comments from community focus group participants:

“We grow up and there are many communication barriers in our history and we know that SFD is not ready with interpreters for us, so we are afraid to call. We may risk our own safety by not calling because of the communication barrier.”

“Communication is a huge barrier for the deaf community with the hearing world. Fire, Police, Medics, do give good help but it can be a frustrating process where everyone is under a time pressure and we are all having a hard time communicating. What really makes us comfortable is having a deaf interpreter there. One idea we had was each firefighter should have a card saying in writing ‘are you ok?’ or ‘Fire—you need to get out of the building’. Or maybe they could learn the sign for ‘fire’ and ‘come this way’. It is the effort that counts if there is no deaf interpreter around.”

Each of the native English-speaking focus groups discussed different barriers to communication with SFD, including communication styles (such as direct versus indirect, volume and verbal intensity), using different methods of communication, and communication etiquette. For example, in some communities (notably African American) it is considered appropriate to seek out the oldest female in the family to explain what is going on and request her assistance in managing the emergency. In other communities, notably Muslim and Middle Eastern, it is considered appropriate to seek out the oldest male in the family.

In focus groups, some SFD personnel indicated that in order to overcome on-site communication barriers, they have tried a telephone translation service, commonly referred to as the “Language Line.” The figures presented in Table 6.2.7 indicate that nearly 3 in 10 reported never having used the Language Line and that over one-half reported using the line *Infrequently*. The mean in Table 6.2.7 is 1.86, which falls within the *Infrequently* category.

TABLE 6.2.7: SFD Use of the "Language Line"

Online Statement 3I: I use the “language line” for translation purposes.

	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	1	18	84	40	5	N=148	1.86
Percentage	1%	12%	57%	27%	3%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Participants in the SFD focus groups and interviews shared that they have tried other methods to facilitate communication, including:

- Using a bilingual family member (such as a child) or neighbor for translation
- Trying to speak some words of Spanish (when dealing with Spanish speakers) to start communication

- Calling restaurants that cook the food native to the customer's country for access to bilingual speakers
- Using hands, gestures, and facial expressions to communicate basic emotions or actions

A number of SFD personnel, however, expressed in the focus groups and online survey that overcoming communication barriers was the responsibility of the members of multicultural communities. The comments below are representative of this sentiment:

"If Congress would make English the official language of the US and require that immigrants could speak it before they obtain citizenship, it would alleviate many problems."

"People should learn English when they come to the USA."

6.2.4 Multicultural Capacity

Multicultural capacity refers to the degree of proficiency and ease with which Fire/EMS personnel respectfully deliver emergency and non-emergency services to multicultural community members, as well as their willingness to learn about different community cultures. This includes knowledge of cultural practices, values, rituals, differences in expressing emotions and differences in community priorities.

In addition to language barriers, SFD personnel often encountered cultural issues when delivering services in multicultural communities. The figures presented in the first part of Table 6.2.8 indicate a majority of the respondents (57% *Agree* or *Strongly Agree*) met with cultural misunderstandings while serving diverse community members. The “Can Do” attitude¹⁰ of firefighters may contribute to these misunderstandings. The figures presented in part two of Table 6.2.8 indicate that when asked whether a “Can Do” attitude may cause firefighters to miss important cultural cues during emergencies, SFD responses were only slightly more inclined toward *Disagree* (mean: 2.40).

TABLE 6.2.8: SFD Encounters with Cultural Misunderstandings							
Online Statement 6H: Firefighters encounter cultural misunderstandings with diverse community members.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	7	77	40	11	13	N=148	2.59
Percentage	5%	52%	27%	7%	9%		
Online Statement 15C: A “Can Do” attitude may cause us to miss important cultural issues during emergency events.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	2	64	53	15	14	N=148	2.40
Percentage	1%	43%	36%	10%	9%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

In the focus groups, SFD personnel identified six major cultural issues that raised the potential for cultural misunderstandings: 1) gender issues, 2) child birthing practices, 3) death and mourning rituals, 4) cultural cooking methods and use of fire, 5) cleanliness and modesty issues, and 6) the practice of folk or non-traditional medical practices (such as coining).

¹⁰ In this project, researchers used the phrases “Can Do” or “Do Whatever It Takes” as synonyms for what NFFF described as the hero culture of the fire service. The researchers acknowledge that firefighters must have confidence that they can do the job safely and effectively. However, in this report, researchers use “Can Do” to reflect on the aspect of the hero culture that has been typically associated with firefighters taking unsafe risks to get the job done.

The community focus groups concurred that firefighters overlook or are unaware of important customs and cultural etiquette when they deliver fire and emergency medical services. Every community focus group also identified important cultural issues to which they wanted SFD to be sensitive to and learn more about.

Many community focus group members also expressed feeling intimidated by firefighters, primarily because of the way some rushed in to solve problems without being sensitive to the overall situation. Community members noted that this was more common in medical situations than in firefighting situations.

In the focus groups and in the online survey, SFD personnel had mixed reactions about whether or not firefighters should receive training or learn about the various cultures they serve. There were three specific categories of reactions:

- Those who believed that multicultural communities, not SFD, need training on culture (specifically American culture)
- Those who supported the idea of learning about other cultures, especially if the training focused on practical methods that increased their capacity to deal with various groups - training would include a cultural as well as a tactical assessment in emergency events
- Those who did not see learning about other cultures as a high priority

6.2.5 Public Education

As mentioned above, a majority of the SFD and community participants believed that SFD provides *Excellent* fire and emergency medical services. However, SFD online survey respondents appeared less confident about the quality of their non-emergency services. The figures presented in Table 6.2.9 indicate that respondents generally agreed that they provided *Good* fire prevention and safety education services (mean: 2.66). However, 11% of the respondents indicated that they provided *Poor* services and 28% (almost 3 in 10) of respondents believe that services were *Adequate*.

TABLE 6.2.9: SFD Quality of Fire Prevention and Safety Education Services						
Online Question 11: Overall, how well do we provide fire prevention and safety education services in multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	25	64	42	17	N=148	2.66
Percentage	17%	43%	28%	11%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

The figures presented in Table 6.2.10 show similar sentiment about the effectiveness of public education materials within the multicultural communities. The mean of 2.34 demonstrates moderate disagreement with the statement, "Our public education materials are effective with members of multicultural communities." Note that more than one-third of the respondents selected *Don't Know*.

TABLE 6.2.10: SFD Effectiveness of Public Education Materials							
Online Statement 12E: Our public education materials are effective with members of multicultural communities.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	7	30	50	11	50	N=148	2.34
Percentage	5%	20%	34%	7%	34%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

All five SFD focus groups and every SFD interview discussed the issue of public education. Some participants stated that SFD’s public education department was under-funded and focused too heavily on educating school children. Focus group participants also emphasized a need for more proactive public education planning and planning for programs with multicultural communities. Some fire inspection personnel expressed the importance of forming partnerships with business associations, but acknowledged a lack of time due to a backlog of inspections.

SFD personnel expressed they have encountered the effects of less-than-optimal public education when they deliver services. The figures presented in Table 6.2.11 indicate that a majority of SFD online respondents encountered customers with a lack of basic fire prevention and safety knowledge. The mean of 2.68 denotes general first responder support for the *Agree* category.

TABLE 6.2.11: SFD Extent of Community Prevention Knowledge							
Online Statement 12A: The customers I meet in emergency situations lack basic knowledge about fire prevention and safety.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	10	76	42	5	15	N=148	2.68
Percentage	7%	51%	28%	3%	10%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Both SFD and community focus groups identified one major event as a tragic illustration of the community’s lack of basic knowledge about fire prevention and safety: the toll of carbon monoxide poisoning deaths and injuries in the winter of 2006-07. Eight people were killed and more than 200 people were hospitalized in Seattle from carbon monoxide poisoning.² All nine immigrant or refugee focus groups said their communities did not understand the dangers posed by carbon monoxide. One of the key issues was that houses in the USA are built tighter than in residents’ native countries, so carbon monoxide was unable to escape. Some representative quotes and stories are below:

“Countries where we come from are hot and our houses are leaky and let lots of air in. We are not used to the tight houses here in the USA. We need to learn about this.”

"When there were weather problems in Seattle, I had no lights at my house so my wife was using charcoal inside the house. My wife and daughter felt drowsy and someone called 911. They got there before I got home. The Fire Department came within 2 minutes and took my family to Virginia Mason hospital. They also made my house safe—they opened all the windows and took out the charcoal. This was at my house two weeks ago. The fire station was close to my house. I am very appreciative of the fire department."

"Our community has to know about the fire department more. They don't come contact directly the communities. Our community established like 1994, nobody is coming and talk to us. They don't know what carbon monoxide is. People are dying of that. There is no information. We don't have access for computer. We don't have access for Internet. We don't have access for other means of communication. So I heard that people are going to door, they knock and they say don't use charcoal. Don't use charcoal. And other than that, if they print it in our language and distribute it, that would be easier. That's what I feel."

In addition, SFD's public education efforts affected the types of service requested by customers. In the SFD focus groups, participants shared a major concern that the community misused SFD services. They explained that misuse of 9-1-1 included "baby aid calls" and requests for non-emergency hospital transport because of gaps in the health care system.

"Sometimes we feel like we are operating a social services agency—a kind of medical services for those that don't fit anywhere else."

"We get lots of "Baby Aid" calls from other cultures—they call just because a baby won't stop crying. These calls are a waste of our time and taxpayers' money and in reality are putting the public at risk because it takes us out of service for other calls."

"When they [the homeless] call we are stuck with two options: leave them on the street or transport to the hospital. To protect ourselves, we transport them, but that takes us out of service for other, more urgent emergencies."

"Most problems originate with bureaucratic and social negligence - lack of comprehensive mental health plan."

Some firefighters thought that their responsibility to the community included aid of any type. Yet, while SFD respondents commonly indicated that they wanted to help their communities, they expressed serious concerns that less important calls took them out of service for major emergencies. The figures presented in Table 6.2.12 support this sentiment. A majority of respondents stated that they have had experiences where customers “misused” SFD services. Sixty percent reported that services were misused *All the Time* or *Frequently*. The mean is 2.69, indicating that responses clustered around *Frequently*.

TABLE 6.2.12: SFD Community Misuse of Services							
Online Statement 3A: I respond to incidents where customers misuse our services.							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	16	72	52	4	4	N=148	2.69
Percentage	11%	49%	35%	3%	3%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Many community participants admitted that they did not know—and said they wanted to learn—which emergencies warranted calling 9-1-1. All 16 community focus groups also voiced a need for more public education efforts in their communities. Every focus group in which English was not the native language also indicated a need for public education materials in their own language or the languages spoken by others in their communities. These languages included: Arabic, Amharic, Cantonese, French, Ilocano, Mandarin, Oromo, Somali, Spanish, Tagalog, Tigrinya and Wolof. The deaf participants also had suggestions for how SFD could make public education materials more “deaf-friendly”:

- Make “deaf-friendly posters” with a visual style of communicating (fewer words)
- Develop a system that is more accessible to a deaf person. An “e-9-1-1” system is preferable (text/e-mail) to TTY system
- Note TTY # on material, let us know that we are included

6.2.6 Summary of Findings, Questions #1-2

The findings gathered from these research questions revealed that firefighters and paramedics were generally aware of and understood multicultural issues that impacted their safety, created communication problems and cultural miscommunications, impinged and delayed service delivery and reduced their ability to deliver the highest quality services safely and effectively. These findings provided insight as to how firefighters and paramedics viewed their service to multicultural communities and how the communities viewed SFD's emergency and non-emergency service delivery. Four key themes emerged regarding the safe and effective delivery of both emergency and non-emergency services in multicultural communities: customer service, communications, multicultural capacity and public education.

Both firefighters/paramedics and community members gave strong ratings to SFD's service. A small number of community members who have had negative experiences generally attributed their dissatisfaction to a lack of communication or a lack of respect. These stories came from a small number of members in the African American, deaf, low-income and LGBT focus groups.

Both SFD and the multicultural community identified communication challenges—primarily language issues—as the largest problem they faced. SFD used the Language Line, but many firefighters expressed dissatisfaction and related that it caused frustration and delays in service. A number of firefighters perceived the problem as the community members', and held an expectation that they learn to speak English. Community members likewise expressed frustration with communications. They recommended more translators or multilingual people within SFD.

Over eighty percent of firefighters/paramedics reported that they treat all customers with respect. More than 50% of SFD respondents said they have experienced cultural misunderstandings. However, in focus groups and open-ended questions, many of the firefighters expressed that cultural issues were secondary to saving lives and property. Community members noted that firefighters sometimes overlook or are unaware of important customs and cultural etiquette. This was more significant in the delivery of emergency and non-emergency medical services rather than fire-related services.

Both SFD and multicultural community focus group participants agreed there is a greater need for public education and prevention programs targeted at Seattle's multicultural communities. SFD identified resource challenges. Members in the community focus groups said they were

willing to help with translation, provide meeting space, distribute information and organize meetings.

Research Question #3

How does the fire service “hero” culture increase or decrease the risk of injury and loss of life for firefighters and community members when serving multicultural communities?

The research team originally planned to examine fire incident reports to collect data to answer research question #3. However, onsite investigation established that this data was unavailable in a form that allowed a substantive response to that question. Although the fire department reporting system provided the demographic data points, it did not consistently contain demographic information (i.e., race, gender and age) of first responders or community members involved in injuries and Line of Duty Deaths (LODD). Thus, the research team was unable to identify the ethnic background of people in fire department incident reports.

Researchers attempted to identify specific incident data with open-ended questions in the community post-focus group survey. However, the information collected failed to yield conclusive data to definitively answer this question. In most cases, incident particulars (date, time, location, etc.) supplied by community members lacked the detail and/or accuracy necessary to be able to match it with incident records in the fire department reporting system.

The findings depicted below—the “Can Do” attitude, firefighter risk-taking behaviors, reporting of injuries, and fire department leadership—relate in various ways to the health and safety of firefighters and multicultural community members.

6.2.7 The Effect of “Can Do” Attitude on Safety

In this project, researchers used the phrases “Can Do” or “Do Whatever It Takes” as synonyms for what NFFF³ described as the hero culture of the fire service. The researchers acknowledge that firefighters must have confidence that they can do the job safely and effectively. However, in this report, researchers use “Can Do” to reflect on the aspect of the hero culture that has been typically associated with firefighters taking unsafe risks to get the job done. The reasons often stated for this type of behavior were that it fulfilled the expectations of the public and that firefighters, in fact, have come to expect it of themselves.

The figures presented in Table 6.2.13 indicate that the majority of Seattle firefighters who responded to the online survey (N=148) reported that the “Can Do” attitude of firefighters decreased safety for firefighters and paramedics when they were providing services in multicultural communities. The mean for this online survey question falls just below the midpoint of 2.5, thus clustering the responses in the *Decreases Safety* category. A large portion of the respondents—just over one-third—selected the *Does Not Affect Safety* response.

TABLE 6.2.13: SFD Effect of a "Can Do" Attitude on Firefighter and Paramedic Safety

Online Question 14: How does the Fire Department “Can Do” or “Do Whatever It Takes” attitude affect the safety of firefighters and paramedics delivering service in multicultural communities?

	Significantly Increases Safety	Increases Safety	Decreases Safety	Significantly Decreases Safety	Does not Affect Safety	Total	Mean
Frequency	10	22	59	7	50	N=148	2.36
Percentage	7%	15%	40%	5%	34%		

Significantly increases safety = 4 points Increases safety = 3 points Decreases safety = 2 points Significantly decreases = 1 point Does not affect safety = 0 points

In contrast, when members of the multicultural community were the subjects of the safety question, rather than Fire and EMS personnel, the figures presented in Table 6.2.14 show firefighters generally reported that the “Can Do” attitude increased safety for multicultural community members. A mean of 2.99 denotes a strong sense that firefighters believed the public benefits from firefighters’ “Can Do” mindset. Slightly less than one-third of the respondents indicated this attitude did not affect safety one way or the other.

TABLE 6.2.14: SFD Effect of a "Can Do" Attitude on Multicultural Community Member Safety

Online Question 17: How does the Fire Department “Can Do” or “Do Whatever It Takes” attitude affect the safety of multicultural community members?

	Significantly Increases Safety	Increases Safety	Decreases Safety	Significantly Decreases Safety	Does not Affect Safety	Total	Mean
Frequency	22	58	19	2	47	N=148	2.99
Percentage	15%	39%	13%	1%	32%		

Significantly increases safety = 4 points Increases safety = 3 points Decreases safety = 2 points Significantly decreases = 1 point Does not affect safety = 0 points

These findings indicate that online survey respondents generally believed a “Can Do” attitude was beneficial to members of multicultural communities, but was somewhat more detrimental to the firefighters and paramedics who served them.

The comments, stories and responses of the participants from the five Seattle Fire Department (SFD) focus groups supported the findings from the online survey. Many respondents expressed support of the “Can Do” orientation:

“This is an outcome-based organization—process based in the real. We will get outcomes one way or another!”

“We are Firefighters and a 'Can Do' attitude is what makes us good at our job. Does that 'offend' certain diverse groups out there? Does our belief that we will accomplish our mission to save somebody's child/husband/sister or friend rub some diverse communities the wrong way? Might these same folks be offended if our 'Can Do' attitude propels us to extinguish that structure fire a little sooner, a little better than last time? Well, that might just be too bad, because that terrible, intrusive 'Can Do' attitude is part of OUR CULTURE. It's part of how and why we race to your particular disaster and are motivated to mitigate it in a professional and knowledgeable way, any day of the week, any time of the day. It doesn't matter who you are, what you do, how you live your life, we will be there, ready to go, professional and capable. If you prefer a diminished service from the fire department, then by all means find a way to kill the 'Can Do' attitude.”

“Aggressive behavior by SFD personnel is the most effective way to be professional by getting the job done perfectly and quickly and safe. If I waver in my job and am 'leaning backwards' then I endanger my life, my crew's, and my patient's.”

Some firefighters in the focus groups also believed that the “Can Do” attitude provided advantages for the recipients of their services, including Seattle’s multicultural communities:

“Yes, the public benefits. That's what they expect of us.”

"I believe our willingness to put ourselves at risk increases the safety of the community we serve."

Some participants expressed how the "Can Do" mindset decreased safety:

"'Can do' affects safety and not always in a positive way. It can get us into trouble. Sometimes we do need to step back and assess what we are doing before just charging in."

"Yes it affects safety and we need to step back and resort to a risk vs. benefit analysis."

"The attitude can get us into a situation where we can't help and instead exacerbate a situation and injure someone or ourselves physically or emotionally."

Some participants expressed that the "Can Do" perspective did not affect safety:

"The only safety risk that citizens have are created by their own behavior and actions. Firefighters mitigate the situations that the citizens have created themselves. Firefighters never put citizens at further risk. This is an absurd question."

"Safety always comes first before 'Can Do' attitude toward action. We are always concerned about everyone coming home from an event."

"I disagree that we 'do whatever it takes'. I'm going to see my kids at the end of the shift. The 'can do' attitude means we solve problems quickly and safely."

6.2.8 Risk-Taking Behavior

The figures presented in Table 6.2.15 reveal that respondents predominantly disagreed with the statement, "I expect other firefighters and paramedics to do whatever it takes, no matter what the risks." Seventy-five percent of the respondents selected *Disagree* (57%) or *Strongly Disagree* (18%). The mean falls just above the *Disagree* choice with a value of 2.08.

TABLE 6.2.15: SFD Expectation that Firefighters and Paramedics will do "Whatever it Takes"							
Online Statement 15A: I expect other firefighters/paramedics to do whatever it takes, no matter what the risks.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	4	31	85	27	1	N=148	2.08
Percentage	3%	21%	57%	18%	1%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

While the findings in Table 6.2.15 addressed the "expectation" that firefighters will do whatever it takes, the figures presented in Table 6.2.16 focused on the "perceived occurrence" of doing whatever it takes. A large portion of the respondents agreed (12% *Strongly Agree*, 72% *Agree*) with the statement that firefighters sometimes go beyond their limitations. The mean is almost 3.0, falling solidly into the *Agree* category.

TABLE 6.2.16: SFD Firefighters sometimes going beyond their Limitations							
Online Statement 15D: Sometimes firefighters go beyond their limitations.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	18	106	17	1	6	N=148	2.99
Percentage	12%	72%	11%	1%	4%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

It is interesting to note that although firefighters reported that they did not expect other firefighters and paramedics to do whatever it takes no matter the risk, the majority agreed that firefighters were willing to sometimes go beyond their own limitations. This was supported by focus group participant responses and online survey data. Below are a few representative comments:

“Oh yeah! We have all seen it and we have all done it!”

“Maybe we have too much of a desire to be a hero.”

“When the adrenaline gets high such as in a stabbing or a gunshot wound, we express ourselves aggressively. I don’t know that we can do anything about this when our adrenaline is running high, but we can do better in less critical situations.”

“Firefighting is a risky profession. We are well aware that we could die on the job. Stuff happens.”

The figures presented in Table 6.2.17 show that 77% of SFD respondents *Strongly Agree* (8%) or *Agree* (69%) that their emphasis on safety training reduced high-risk behaviors. Table 6.2.18 figures indicate that 91% of the respondents *Strongly Agree* (36%) or *Agree* (55%) with the risk vs. reward assessment statement, regarding its importance to the crew.

TABLE 6.2.17: SFD Safety Emphasis Reducing High-Risk Behaviors							
Online Statement 15E: Our emphasis on safety in training has reduced high-risk behaviors.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don’t Know	Total	Mean
Frequency	12	102	22	5	7	N=148	2.86
Percentage	8%	69%	15%	3%	5%		

TABLE 6.2.18: SFD Importance of Risk vs. Reward Assessment							
Online Statement 15F: The risk vs. reward assessment of a situation is important among my crew.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don’t Know	Total	Mean
Frequency	54	81	5	1	7	N=148	3.33
Percentage	36%	55%	3%	1%	5%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don’t Know = 0 points

Based on the responses to both statements (Table 6.2.17 and Table 6.2.18), firefighters appeared to be aware of their safety training’s encouragement of risk analysis before placing

anyone in a high-risk or unsafe situation. At the same time, however, a number of firefighters acknowledged that they went beyond their limitations and engaged in unsafe actions.

As one firefighter stated, “We are called to get a job done. Our customers make the call, and my crew does our best to leave the situation better than it was when we arrived.”

A culture is formed and sustained based on the beliefs that support a mindset or image of the members who belong to it.¹¹ As mentioned in SFD focus groups, the fire culture rewarded risk-taking and exceeding limitations “through recognition, verbal prompting, and candidate promotion.”

6.2.9 Reporting Injuries

Table 6.2.19 shows only 11% of the respondents observed firefighters reporting their injuries *All of the Time*. The vast majority (82%) observed firefighters *Frequently* (43%) to *Infrequently* (39%) reporting injuries.

TABLE 6.2.19: SFD Observation of Firefighters Reporting their Injuries							
Online Statement 19C: Accurately reporting all injuries (including minor injuries).							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	17	64	57	3	7	N=148	2.67
Percentage	11%	43%	39%	2%	5%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

The Seattle Fire Department requires firefighters to report all injuries sustained in the line of duty. However, the findings indicated just over one in ten did so. Meanwhile, more than two in five respondents indicated they *Infrequently* or *Never* observed firefighters reporting injuries.

In some of the SFD focus groups and research interviews, participants expressed why firefighters did not report all injuries:

- Firefighters may not want to be put on light duty
- Reporting could lead to interpretations they are not fit (possible negative impact of the “Can Do” culture)

¹¹ Schein, E. (2004). *Organizational Culture and Leadership*. 3rd Ed.

- Unfamiliarity with the reporting system
- Possible loss of income due to a change in shift assignments

6.2.10 Leadership

The figures presented in Table 6.2.20 show that a large portion of the respondents to the online survey selected *Strongly Agree* (17%) and *Agree* (66%) to the statement, “Effective leadership is the best way to manage unnecessary high-risk behavior among first responders.” The mean of 2.98 fell into the *Agree* category.

TABLE 6.2.20: SFD Effective Leadership is the Best Way to Manage High-Risk Behavior							
Online Statement 15B: Effective leadership is the best way to manage unnecessary high-risk behavior among first responders.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	25	97	18	5	3	N=148	2.98
Percentage	17%	66%	12%	3%	2%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

A majority of online survey respondents *Agreed* that effective leadership was the best way to manage such high-risk behavior. However, focus groups and interviews generated some of the following challenges with leadership:

- **Poor cross-functional communications.** Examples included a lack of consistency in different parts of the city, duplication of efforts, hurt feelings and people feeling left out of the information stream or otherwise “not included.”
- **Little value was placed on data.** This resulted in a lack of credibility of the data and limited the ability to use historical data for preventing injuries and improving safety in the future.
- **Lack of integrated information sharing.** One participant stated, “There is some recognition of the importance of data especially in Dispatch and Fire Prevention, and they keep their own databases, but they don't talk to Operations.”

6.2.11 Summary of Findings, Question #3

While a small number of SFD respondents to the online survey indicated that a “Can Do” attitude decreased the safety of firefighters and paramedics when they were delivering service in multicultural communities, both the quantitative data and the qualitative data reflected mixed opinions on this issue. The online survey results show 43% said the “Can Do” mindset decreased safety, 22% said it increased safety, and 34% believed it had no effect on safety. However, the firefighters tended to agree that the beneficiaries of the “Can Do” attitude were their multicultural customers.

When it came to safety, SFD respondents presented divergent responses. A majority (75%) disagreed with the statement that they expected other first responders to be willing to do whatever it took to get the job done. Despite having this safety-oriented perspective, the respondents were clear that sometimes firefighters went beyond their limits as a part of their job. When it came to respondents observing firefighters reporting all of their injuries, more than 40% selected infrequently or never.

Eighty-three percent of SFD firefighters agreed that effective leadership was important in managing high-risk behavior.

Research Question #4

What health and safety risks to firefighters and community members could be reduced if firefighters had greater multicultural awareness and better reflected the community?

The research team originally planned to examine fire incident reports to determine the degree of correlation between firefighter and community member injuries, loss of life, and multicultural issues. As mentioned above in research question #3, the fire departments in the three selected project sites do not consistently report demographic data in their incident reports. This prevented the research team from identifying and quantifying relevant correlations.

While no quantitative data currently exists that connects firefighter and community safety, multicultural awareness, and department demographics, the research team collected quantitative and anecdotal data that illustrates the unique nature of health and safety risks to firefighters and community members in multicultural settings.

6.2.12 Multicultural Awareness and Safety

While research question #1 examined how SFD personnel perceived their effectiveness in serving multicultural communities, it is worth noting here that both firefighters and emergency medical personnel generally considered themselves to be effectively trained to serve multicultural communities. The figures presented in part one of Table 6.2.21 reveal 57% of SFD online respondents reported, “Firefighters are effectively trained to serve people from all walks of life and diverse cultural backgrounds.” The mean of 2.69 indicates a preference for the *Agree* response. The figures for the corresponding statement regarding emergency medical responders are presented in the second part of Table 6.2.21 and reveal a slightly lower degree of agreement (51% *Strongly Agree* or *Agree* that EMS personnel are properly trained). On the other hand, two in five respondents (38% regarding firefighters and 44% regarding EMS) did not believe that they were effectively trained.

TABLE 6.2.21: SFD Training in Serving Multicultural Communities							
Online Statement 6D: Firefighters are effectively trained to serve people from all walks of life and diverse cultural backgrounds.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	22	62	48	9	7	N=148	2.69
Percentage	15%	42%	32%	6%	5%		
Online Statement 9D: Emergency medical responders are properly trained to assist members of our multicultural communities.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	15	60	59	6	8	N=148	2.60
Percentage	10%	41%	40%	4%	5%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Despite the overall perception of being effectively trained, in focus groups, a series of multicultural issues were brought up that potentially affected firefighter and community safety. The information contained in Table 6.2.22 presents key multicultural issues that SFD and community focus group participants identified as having the potential to increase the health and safety risks for all groups.

TABLE 6.2.22: SFD Issues that Can Increase Risk in Multicultural Communities

Seattle Fire Department	Community
Language barriers may hinder the responder’s ability to gather information to do the job safely or could result in misdiagnosis of the health problem.	Language barriers may hinder a firefighter’s ability to gather enough information to safely and effectively carry out the fire suppression mission to save lives and property.
Cultural norms/traditions that SFD does not know or understand may put responders into a conflict situation (nonphysical and/or physical).	Language barriers may hinder a firefighter’s ability to gather sufficient information to accurately diagnose injuries that can compromise their ability to deliver safe and effective emergency medical service.
Crowd control can be a major issue—especially in a cross-cultural situation—and may place responders at risk if they are unaware of certain cultural norms/traditions.	Stereotypes or apprehension regarding a particular community or its members may cause SFD personnel to miss important information that may result in unsafe conditions for community members.
New immigrants may have communicable diseases about which SFD may be unaware and may not know to ask.	Fear of uniforms or firefighters may cause multicultural community members to avoid calling 9-1-1, which may result in a delay of emergency services that could cost the life of a community member.
Fear of uniforms or firefighters may cause multicultural community members to avoid calling 9-1-1 and such action may contribute to escalating the onsite risk level for firefighters.	Fear of consequences of the Patriot Act leads to fear of authority figures.
The dangers involved in not understanding how to manage people who are mentally ill or abusing drugs and/or alcohol increase if language barriers also exist.	Negative experiences with firefighters and uniformed personnel in their homelands may lead to a dangerous level of fear in an emergency (often in their native countries, when a uniformed person arrived it meant someone was going to be hauled away to die).
Unfamiliar cultural folk medicine practices (e.g., coining) may lead to misdiagnosis or interfere with current medical practices.	Many refugee/immigrants come from hot climates with open houses and do not understand that having a fire inside airtight American homes can result in injury and death from carbon monoxide poisoning.
There is a lack of understanding of life and fire safety standards and regulations here in the USA.	
Different cooking methods and cultural uses of fire (i.e., candle or incense) are fire and life-safety hazards that may cause an incident.	

There were several stories from SFD and community focus groups that demonstrated potential risks related to a lack of multicultural awareness. The two stories below show the importance of understanding differences in gender and customs and how disregarding these issues may put firefighters at risk.

"We were treating the head of a Thai household and he didn't want us there at all. He refused to be treated by a female medic. I ended up wrestling him and finally we were able to get through to him and render aid. I stepped in and my female partner stepped back."

"We went to an East African mosque to put out a fire one evening. They asked us to take off our boots at the door. We explained that we could not do that in a fire situation. They didn't understand and got emotional. Things were close to getting out of hand."

Firefighters and multicultural community members said they might be at increased risk if critical health information is not shared, especially in instances involving communicable diseases:

"Nine or ten years ago, we were [...] responding to a call of a 7-year-old with burns on the arms. Cooking grease spilled on his arm. The family was Ethiopian and a few spoke—members spoke—English. We were there for burns on the arm, which is very straightforward (you treat what you see). I noticed that a number of people in the house were coughing. I went into the kitchen to see the pill bottles on the table (to get a medical history). The bottles were for active tuberculosis medicine! We were all exposed. The family didn't (behave) spitefully. They had called regarding their child's burns and there was no question asked by the dispatch about existing conditions (since the situation was acute, there was no protocol about other illnesses). Medics don't usually ask for medical history for obvious problems."

Some multicultural community members did not want to share critical information or call 9-1-1 because of fear of being judged by people not familiar with their norms and traditions.

One woman living in transitional housing shared a story in which she felt judged and she believed that caused responders to delay care:

The woman suffered chest pains and had called 9-1-1. She had cleaned up her apartment after having had a party the previous evening and one beer can was not thrown in the trash. The woman stated that when the firefighters arrived, they saw the beer can and assumed she was drunk. They never asked her, but

then started looking around the house, even in the daughter's room. She thought they were searching for drugs. When the medics arrived, they immediately took her vitals and transported her to the hospital. The woman remembers hearing the medics shout at the firefighters for not taking her vitals and if they had done so, they would have realized that she was having a heart attack.

6.2.13 SFD Ethnic/Gender Diversity and Safety

The figures in Table 6.2.23 provide a comparison of the Seattle Fire Department¹² ethnic and gender demographics with those of the overall Seattle population.¹³

TABLE 6.2.23: City of Seattle and Seattle Fire Department Demographics		
Demographics	City of Seattle	Seattle Fire Department
Ethnicity		
White	70.1%	76.0%
Black or African American	8.4%	9.0%
Hispanic or Latino (of any race)	5.3%	5.0%
American Indian and Alaska Native	1.0%	2.0%
Asian	13.1%	8.0%
Native Hawaiian and Other Pacific Islander	0.5%	0.0%
Some Other Race	2.4%	0.0%
Two or More Races	4.5%	0.0%
Total	105.3%*	100%
Gender		
Male	49.9%	91.0%
Female	50.1%	9.0%
Total	100%	100%

**Totals may equal more than 100% because individuals may have reported more than one race.*

¹² SFD statistics provided by the Seattle Fire Department.

¹³ "Table DP-1. Profile of General Demographic Characteristics: 2000." US Census Bureau, Census 2000. [www.Seattle.gov](http://www.seattle.gov). <http://www.ofm.wa.gov/census2000/profiles/place/1605363000.pdf>

SFD online survey respondents generally did not place a great deal of importance on hiring a workforce that was representative of the communities they served, according to the figures presented in Table 6.2.24. While the largest number of respondents (37%) selected the *Low Priority* category, the mean for the online survey statement, "Hire a competent, gender and culturally diverse workforce that is representative of our community" is 2.11, indicating responses in the *Medium Priority* category.

TABLE 6.2.24: SFD Hiring a Representative Workforce						
Online Statement 21J: Hire a competent, gender and culturally diverse workforce that is representative of our community.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Frequency	17	38	38	55	N=148	2.11
Percentage	11%	26%	26%	37%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

In the open-ended survey responses and during focus groups, most SFD participants emphasized that recruitment efforts should focus on hiring competent firefighters and that competency not be overlooked for diversity or gender. However, a number of SFD focus group participants of varied races and both genders shared how female and multicultural colleagues brought additional skills and abilities to the job, acted as cultural mediators and potentially prevented physical conflict and firefighter injury. Below are some representative stories:

"We were called to treat a 4- or 5-year-old [African American] kid who had been trashed. The kid's father was beside himself with anxiety and he was threatening to kill all of us. A black medic very quietly walked over beside him and said, "Now, you shut up and let these guys take care of business." The guy calmed right down. That was the closest thing I have ever been to wondering if I would get into a fight."

"An African family, not from the US... I couldn't be sure from where. The woman was pregnant and had lots of kids. Someone else had called 911 and he [the husband] insisted that she do the traditional way of birth, which was squatting. But she was bleeding profusely and she fainted or passes out...He wouldn't let us touch her. Eventually, he did because I pulled another EMT woman in and she took a look at her and told him 'Very bad, very bad!' There was a translator but

he only spoke a little bit of English. Finding a translator caused a delay. The woman lived, but the child died."

"There was a situation where a female assault victim wouldn't talk to the police officers or to us [male paramedics]. We called in a unit with a female paramedic and the police did the same and everything went much better."

Multicultural community focus group participants also saw firefighters from their communities as being potential cultural mediators. During the community focus groups, facilitators asked participants, "Would you like to have a family member or friend get a job on a fire truck or in an ambulance?" The figures presented in Table 6.2.25 revealed that a large majority of participants responded that they would like a relative or friend to work for SFD.

TABLE 6.2.25: Community Perspectives on Being Hired by SFD				
Community Focus Group Survey Question 19: Would you like to have a family member or friend get a job on a fire truck or in an ambulance?				
	Yes	No	Total	Mean
Frequency	152	35	N=187	1.81
Percentage	81%	19%		

Yes = 2 points No = 1 point

One of the top three reasons community focus group participants identified for wanting members of their community to work for SFD was that it would increase their communities' trust of SFD and the department's understanding of their communities:

"Because I could call them and ask them for help."

"Sure it would be nice to see a familiar face in an emergency like that."

"More Muslims and African Americans will be helpful in the community, especially in cultural, religious or ethnic-sensitive situations."

6.2.14 Summary of Findings, Question #4

Although no demographic injury data was available for analysis, both SFD and community focus groups identified concerns and issues that potentially contributed to increased safety risks of both first responders and community members in multicultural communities.

Respondents indicated that language barriers and cultural misunderstandings affected a first responder's ability to gather critical fire incident and emergency medical information. Focus group participants cited situations in which services had been delayed—putting both responders and customers at greater risk. Participants also related near-miss stories that illustrated how different cultures react differently in emergencies. They explained that these reactions could trigger a chain-reaction of miscommunication, reactive decision-making and outcomes in which both responders and community members could be injured.

Both Fire/EMS personnel and community members noted that, in some cultures, fear of uniforms and authority inhibited customers from calling 9-1-1. These respondents agreed that this could cause an emergency to deteriorate, prevent early mitigation and place both firefighters and community members at greater risk.

The multicultural community participants believed having SFD personnel recruited from their communities would provide greater access to SFD services and increase trust between both SFD and the communities.

SFD online survey respondents gave a low to medium priority to hiring a more diverse fire department. Open-ended responses indicated that some respondents viewed competency and diversity as exclusive of one another. However, some participants did share stories in which female and multicultural colleagues helped to prevent potential conflicts and increased safety when serving multicultural community members.

¹ Statistics provided by the Seattle Fire Department.

² In December 2006 and January 2007, the Seattle Times reported at least eight people died in the winter ice storms and 200 people were hospitalized in Seattle from carbon monoxide poisoning (12/06/06, 12/20/06, and 1/24/07). Ninety percent of these families did not speak English.

³ National Fallen Firefighters Memorial Website, "National Fire Service Research Agenda Symposium." National Fallen Firefighters Foundation.

6.3 Austin Fire Department and Austin-Travis County EMS



6.3.1 Overview of the Austin Fire Department and Austin-Travis County EMS

The Austin Fire Department (AFD) provides public safety and emergency services to 709,280 citizens within the 251 square miles of the City of Austin through its Emergency Response and Support Service Divisions.

Emergency response apparatuses are strategically placed at 43 fire stations within six geographic battalions that include 39 engine companies, 10 ladder companies, 3 Quint companies, 3 rescue companies and 4 airport rescue companies. In the City of Austin, AFD provides first responder medical services while the Austin-Travis County Emergency Medical Service (A/TCEMS) provides Basic Life Support and Advanced Life Support transport services.

Emergency Response is comprised of Operations Firefighting, Special Operations (Hazardous Materials and Technical Rescue) and Aircraft Rescue Firefighting Divisions. Support Services encompasses Communications, Fire Prevention, Education Services, Safety, Wellness/Fitness, Community Outreach (Public Education and Recruiting) and Administrative Support.

AFD currently employs 1,053 sworn firefighters and 57 non-sworn civilian employees. Twenty-five sworn firefighters and three civilians are assigned to the Communications Division to answer emergency calls and dispatch emergency resources for AFD and the 12 surrounding rural county emergency departments. During 2006, the Austin Fire Department dispatched and responded to 68,335 emergency incidents: 48,562 (71%) were for medical services and 4,023 (6%) were for firefighting or special rescue services and

15,750 (23%) were service responses. The average unit emergency response time (from dispatch to on-scene) for all incidents was 4.65 minutes.¹

City of Austin Demographics

Austin, a large State Capital in the southwestern United States, is known for its widely diverse population. According to the Austin Convention and Visitors Bureau, the “influences of minority communities permeate all aspects of everyday routines, from music and dining to architecture and art. In addition to the overall ethnic mix of the city, the University of Texas’ nearly 50,000 students hail from all 50 states and 120 foreign countries, thus adding to Austin’s cultural crossroads.”²

According to the 2005 Community Survey from the U.S. Census Bureau,³ the city of Austin had a household population of 678,457. The median age was 31.4 years. 76% of the population was 18 years of age or older and 6.6% percent were 65 years and older. 10.1% reported disability status. 33.2% reported speaking a language other than English at home and 18% of the population is foreign born; students in the Austin Independent School District (AISD) come from homes in which 57 native languages are spoken.⁴

¹ Information provided by Austin County Fire Department

² Information provided by Austin County Fire Department

³ U.S. Census Bureau, 2005 Community Survey for Austin. <<http://www.census.gov>>

⁴ Austin Independent School District Website, Austin Independent School District.
<<http://www.austinsd.org/schools/index.phtml>>

The figures presented in Table 6.3.1 compare the ethnic and gender demographics of the City of Austin⁵ with AFD and the A/TCEMS.⁶

TABLE 6.3.1: City of Austin, Austin Fire Department and Austin-Travis County EMS Demographics

Demographic Category	City of Austin	Austin Fire Department	Austin-Travis County EMS
Ethnicity			
White	52.9%	77.8%	86.6%
Black or African American	9.8%	5.0%	1.5%
Hispanic or Latino (of any race)	30.5%	13.6%	11.2%
American Indian and Alaska Native	0.3%	2.2%	0.0%
Asian	4.7%	0.8%	0.7%
Native Hawaiian and Other Pacific Islander	0.1%	0.3%	0.0%
Some Other Race	0.2%	0.1%	0.0%
Two or More Races	1.5%	0.0%	0.0%
Total	100.0%	100.0%	100.0%
Gender			
Male	51.3%	95.3%	78.7%
Female	48.7%	4.7%	21.3%
Total	100.0%	100.0%	100.0%

Fatality, Injury and Patient Statistics

Austin has 0.8 fire fatalities/100,000 population (over a 10-year span) while the national average is 1.3 fire fatalities/100,000 population (over a 10-year span). Prior to 2001, the department averaged about five fire-related deaths per year. In 2005 and 2006, Austin firefighter injuries totaled 425, according to the Austin Fire Department Data and Research Department. Notably, no Austin firefighters have lost their lives in the line of duty in the last 35 years.⁷

⁵ 2007 Estimated Figures. Ryan Robinson, Austin City Demographer

⁶ U.S. Census Bureau, 2005 Community Survey for Austin. <<http://www.census.gov>>

⁷ Austin Fire Department 2005-2006 Annual Report

Similar to national statistics, the elderly in Austin are more likely to die in fires than other population subgroups. Since 2000, 38% of Austin's fire-related deaths involved those who were over age 50. Of the 40 fire-related deaths since 2000, the individuals involved included one of Asian descent, four Blacks, 11 Hispanics and 24 Whites, according to the Austin Fire Department Planning and Research section.

The Planning and Research section also reported 36,660 patients were seen by Austin Emergency Medical Services from September 2005 to August 2006. These patients had the following demographic percentage breakdown: Caucasian (48%), Hispanic (27%), African American (21%), Asian (2%) and Other (1%).⁸

⁸ Austin Fire Department 2005-2006 Annual Report

RESEARCH QUESTIONS

Research Question #1

How do firefighters perceive the effectiveness of their emergency and non-emergency service delivery in multicultural communities?

Research Question #2

How do people in the multicultural communities perceive firefighters' emergency and non-emergency service delivery?

Since these two questions concern the perceptions of both firefighters and multicultural community members regarding the quality of services provided, both sets of findings are presented below. Quantitative findings were derived from the Austin Fire Department (AFD) and Austin-Travis County Emergency Medical Services Department (A/TCEMS) online survey (N=389). Focus groups and interviews held with AFD and A/TCEMS personnel and post-focus group surveys generated the qualitative data. Although AFD and A/TCEMS are separate organizations, researchers combined results for analytical purposes. The Austin multicultural community members' post-focus group survey (N=111) was the source of the quantitative findings. Community focus groups, post-focus group survey open-ended questions and interviews produced the qualitative data.

The information presented in Table 6.27 is a side-by-side narrative summary of the findings from AFD, A/TCEMS and the multicultural community participants pertaining to four major themes: Customer Service, Communication, Multicultural Capacity and Public Education. Researchers compiled these findings from all the sources listed above.

Major Themes	AFD-A/TCEMS Findings	Community Findings
Customer Service	A majority of AFD and A/TCEMS online survey participants rated fire service delivery as <i>Excellent</i> (54%) or <i>Good</i> (30%). They also rated the delivery of emergency medical services as <i>Excellent</i> (54%) or <i>Good</i> (38%).	A majority of community participants rated fire services provided by AFD as <i>Excellent</i> (66%) or <i>Good</i> (28%). They also rated the A/TCEMS emergency medical services as <i>Excellent</i> (64%) or <i>Good</i> (27%).
Communications	AFD identified language barriers (including accents and colloquialisms) as a major challenge. Many firefighters said they had never used or had negative experiences with the language line. A/TCEMS used the language line more frequently. Many AFD and A/TCEMS personnel stressed the need for greater access to language training (especially in Spanish) while others believed that community members should learn to speak English.	Community focus groups identified that language was a problem. They expressed the need for additional bilingual personnel at AFD, A/TCEMS and 9-1-1 operations for better communication in both emergency and non-emergency situations. Some participants mentioned they were apprehensive about calling 9-1-1 because of fear their language or accent would not be understood.
Multicultural Capacity	Almost 50% of AFD and A/TCEMS online survey respondents indicated that they did not experience cultural misunderstandings when serving multicultural communities. However, AFD and A/TCEMS focus group participants listed several issues they encountered, including lack of trust, misunderstandings regarding cultural medicinal remedies, and lack of knowledge about cultural and religious practices.	Community members reported that cultural misunderstandings occurred during emergencies. Many requested that AFD and A/TCEMS respect their cultural or religious traditions and customs in a patient, sensitive manner in emergency and non-emergency situations. Some focus groups expressed that people in their community wouldn't call 9-1-1 because of cultural issues including: fear of uniforms and authority figures, fear of deportation, fear they would experience cultural shame and embarrassment for causing the emergency, and fear their sexual orientation or gender identity would result in mistreatment.
Public Education	AFD and A/TCEMS participants emphasized that the multicultural communities lacked knowledge of AFD services and basic fire prevention and safety issues. Participants had mixed responses regarding who was responsible for public education. Most participants reported responding to calls in which they believed customers had misused their services.	Many multicultural community participants expressed that they would like greater access to public education and educational materials that were culturally sensitive and in their language. They also suggested classes be located closer to their homes and involve all ages. A number of focus group participants were confused about which services cost money and were concerned about their inability to pay for the services.

6.3.2 Customer Service

The figures presented in Table 6.3.3, show that the majority of AFD respondents, A/TCEMS respondents, and multicultural community participants ranked the fire services delivered by AFD to multicultural community members as excellent or good. The mean of the multicultural community responses is 3.61, which translated to a ranking in the *Excellent Service* category. That is somewhat higher than the mean of 3.36 from the first responders, which falls in the *Good Service* response.

TABLE 6.3.3: AFD and A/TCEMS Ranking of Fire Service Delivery to Multicultural Communities						
AFD and A/TCEMS Perspective: Online Survey Question 5: Overall, how well does the fire department deliver fire services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	208	118	56	6	N=389	3.36
Percentage	54%	30%	24%	2%		
Community Perspective: Community Focus Group Question 15: How does AFD and A/TCEMS deliver fire services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	73	31	6	0	N=110	3.61
Percentage	66%	28%	5%	0%		

The scale for computing the mean is as follows: Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

The figures presented in Table 6.3.4 focus on the ranking of the delivery of emergency medical services in multicultural communities. As with Table 6.3.3, the rankings were high from both the first responders and the multicultural community. Online survey respondents reported that they provide excellent or good emergency medical services resulting in a mean of 3.47. A mean of 3.55, again clustering in the *Excellent Service* category, verifies the very high ranking by the multicultural community members for the emergency medical services they received.

TABLE 6.3.4: AFD and A/TCEMS Ranking of Emergency Medical Service Delivery to Multicultural Community						
AFD and A/TCEMS Perspective/Online Question 8: How does AFD and A/TCEMS deliver emergency medical services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	212	148	28	1	N=389	3.47
Percentage	54%	38%	7%	0%		
Community Perspective/Community Focus Group Question 17: How does AFD and A/TCEMS deliver emergency medical services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	68	29	8	1	N=106	3.55
Percentage	64%	27%	8%	1%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

Many community focus groups praised the speed and efficiency of AFD and A/TCEMS responders. However, some members of the African American focus group expressed dissatisfaction, primarily relating to service delay at Bert’s Barbeque and the Midtown fire.

In community focus group written surveys, participants described firefighters and paramedics as “helpful,” “professional,” “well-trained,” and “respectful.” Only one focus group participant selected *Poor Service* when ranking AFD and A/TCEMS services.

The figures presented in Table 6.3.5 reveal most online survey respondents reported that they either *Strongly Agree* (44%) or *Agree* (36%) with the statement, “Firefighters provide services equally to all communities.”

TABLE 6.3.5: AFD and A/TCEMS Providing Equal Services to Communities							
Online Statement 6A: Firefighters provide services equally to all communities.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	173	140	29	12	35	N=389	3.34
Percentage	44%	36%	7%	3%	9%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

However, some participants in both community and AFD focus groups expressed concern that some areas of the city were receiving better service than others. Anecdotally, these focus group participants indicated that residents on the north and northwest sides received better service than those on the east side of Austin. Firefighter focus group participants gave the following examples: on the north and northwest sides of town, the use of salvage tarps and carpet runners was more prevalent; and on the east side, there were longer wait times for the coroner’s arrival in cases of drowning (which left the body exposed in hot weather).

A number of community focus group participants also reported response disparity with the online survey results. The two most frequently cited examples were the Midtown fire in February 2005, involving a club primarily frequented by African American clientele, and the Bert’s Barbeque fire in January 2007. In the Midtown fire, many focus group participants said that AFD did not respond in a timely manner, had insufficient equipment and were involved in racially derogatory text messaging during the incident. (Note: there were conflicting reports about whether the derogatory comments were from AFD or the Austin Police Department). In the Bert’s Barbeque fire, the dispatchers discounted phone calls from those reporting smoke since barbeque restaurants frequently emit smoke. Thus, AFD delayed their response. A number of fire and EMS focus groups also mentioned that these fires were the ones in which many residents expressed dissatisfaction with the service AFD provided.

6.3.3 Communication

AFD and A/TCEMS focus groups identified language as the main communication barrier. The figures presented in the first part of Table 6.3.6 are the responses to the online survey statement; "I am faced with providing services to people with whom communication is a problem." A mean of 2.52 indicates that respondents slightly favored the *Frequently* category. However, despite these apparent communication problems, the second part of Table 6.3.6 identifies a large majority of AFD and A/TCEMS online survey respondents reported that they are *Infrequently* (64%) or *Never* (18%) forced to delay services to customers because of these communication barriers.

TABLE 6.3.6: AFD and A/TCEMS Experiences with Communication Barriers							
Online Statement 3C: I am faced with providing services to people with whom communication is a problem.							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	31	164	165	25	4	N=389	2.52
Percentage	8%	42%	42%	6%	1%		
Online Statement 3E: I am forced to delay services to a customer due to communication barriers.							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	3	56	249	71	10	N=389	1.98
Percentage	1%	14%	64%	18%	3%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

The highest priority expressed in the AFD and A/TCEMS focus groups was for more Spanish speakers. AFD and A/TCEMS participants in the focus groups and interviews identified language as a larger problem than those in the online survey.

"I'm bilingual and I have interacted with a lot of Spanish-speaking only customers on responses and I know for a fact that it's made a difference...and when that's not available, it creates a problem."

One resource available to firefighters and paramedics to overcome onsite language barriers was a telephone translation service, commonly referred to as the “Language Line.” The figures presented in Table 6.3.7 reveal that more than half of the online survey respondents reported that they have never used the service.

TABLE 6.3.7: AFD and A/TCEMS Use of the "Language Line"

Online Statement 31: I use the “language line” for translation purposes.

	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	7	49	101	201	31	N=389	1.61
Percentage	2%	13%	26%	52%	8%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Anecdotally, some AFD and A/TCEMS focus group participants identified timeliness and lack of relevant medical knowledge as challenges that deter greater use of the “Language Line”:

“I have not used the language line in a long time but the one time I have, there was a level of frustration that was not conducive to timely extraction of information from the patient.”

“The language line would be great if the people on the other end were at least minimally trained in medical terminology. Many times I have tried to use the language line only to have the translator not understand the question—e.g., denoting the quality of pain or other specifics on symptoms to help narrow the differential. They have always been polite and attempt to help as they can.”

Firefighters and paramedics reported using a variety of resources to obtain translation in emergencies. One Spanish-speaking AFD focus group participant said that when he is not on duty, co-workers at emergency scenes phone him to seek translation help.

Another strategy was the use of children as translators (either family members or neighbors). While firefighters expressed satisfaction with this method, some paramedics explained that the need to ask technical medical questions was beyond the understanding and vocabulary of the child. Even more importantly, some community focus group participants objected to having their children used in this fashion.

Several online survey respondents stated they would take language classes, especially Spanish, if the City of Austin subsidized these classes. Some AFD focus group participants reported that AFD provided incentive pay for Spanish, German and American Sign Language proficiency. They said, however, the problem was that bilingual personnel did not want to be assigned, or were not assigned, where their language proficiencies were most needed.

"We need to spread the Hispanic speakers to areas that need them...east side etc...south east...They are paid to work as English second language...we need them more dispersed...especially the Hispanic populated areas...if they do not want to work there or be transferred, then revoke the pay!"

Other AFD and A/TCEMS focus group participants and online survey respondents viewed community members as having the communication problem.

"...we are here to serve the citizens of Austin, no matter who they are. As far as the language barrier goes, if they want to live in the United States, they should learn to speak English, then there wouldn't be no language barrier."

Language barriers were also a major communication concern addressed by community focus groups. One community focus group participant witnessed a truck hitting a woman. She said that when the fire department arrived she had to act as a translator because none of the firefighters could speak Spanish. Community focus group participants indicated that the most common languages needing translation in Austin were Spanish, Chinese, Vietnamese, Korean, Urdu, Bengali, Arabic, Punjabi and Farsi.

Multicultural community focus groups also identified challenges to communicating that went beyond language barriers, including communication styles (such as direct versus indirect, volume and verbal intensity), interpersonal skills demonstrated by emergency personnel, 9-1-1 communication and interagency communications. Prior negative experiences with fire/EMS agencies led to these concerns and dissatisfaction.

Several focus group participants from the business community believed AFD underutilized their resources and that citizen safety was sometimes compromised due to a lack of communication between businesses and AFD during emergency and non-emergency incidents.

One businessperson reported that firefighters tended to close down the scene and shut them out when responding to fires. He said that security, building engineers and property managers have important information (building contents, location of shut-off valves, etc.) that could give firefighters quicker access and help to mitigate the emergency.

Business representatives also expressed concern about the lack of non-emergency exchanges between the business community and AFD specifically relating to the city's rapid growth and its impact on traffic planning and emergency response.

Community focus group participants from businesses and institutions such as St. Edward's University, the Texas School for the Blind and the Texas School for the Deaf all expressed concerns and suggested that AFD develop a system for creating and consistently disseminating information regarding addressing systems, building locations and layouts, procedures, etc.

One of the members of the business focus group gave commendation to a fire lieutenant who contacted downtown office building property managers and engineers to get schematic drawings and put them on the fire trucks. He expressed concern that this information needed to be given to all shifts because sometimes, important information doesn't seem to trickle down.

The college and special-needs focus groups both noted challenges in communicating incident locations.

Firefighters in focus groups and interviews expressed concerns about the lack of verbal communication with dispatch and the volume of written material they received. They reported insufficient time to safely read the written information en route to emergencies and expressed they sometimes missed critical information because they had to page down on the vehicle terminal screens.

Likewise, members of several community focus groups said that dispatchers asked them too many questions, then transferred them to other dispatchers who asked more of the same questions. This practice frustrated community members, especially people for whom English was not their first language. Participants reported this resulted in them hanging-up and not calling 9-1-1 if they had another emergency. They also perceived, from some dispatchers, a lack of responsiveness to their concerns.

A/TCEMS personnel indicated a need for improved operational communications between AFD and A/TCEMS. Participants noted that interactions occurred between management levels, but the after-action debriefing at the command level did not always make it down to the line level. These participants discussed that AFD and A/TCEMS needed to share more information through interaction such as tailboard reviews and post-incident analysis.

A final communication issue identified by AFD, A/TCEMS and community focus group and interview participants was the need to communicate with the customer and/or their family during the emergency event. Focus group participants explained that this is especially important with people who do not speak fluent English, are deaf, blind or belong to groups afflicted with a fear of uniformed people.

An AFD participant reported that on one fire call he heard an upset homeowner telling someone on their cell phone that if they have a small fire, don't call the FD. Obviously, the person was very upset with what the firefighters were doing to his house. Because the fire was in a concealed space, the firefighters had to tear out the walls to get to the fire. The AFD participant acknowledged that one of them should have taken the owner aside and explained what they were doing, but instead they just worked around him.

6.3.4 Multicultural Capacity

Multicultural capacity refers to the degree of proficiency and ease with which Fire/EMS personnel respectfully deliver emergency and non-emergency services to multicultural community members, as well as their willingness to learn about different community cultures. This includes knowledge of cultural practices, values, rituals, differences in expressing emotions, and differences in community priorities.

Online survey results show that AFD and A/TCEMS personnel believed they generally understood the communities they serve and did not encounter cultural misunderstandings with them. The figures presented in the first part of Table 6.3.9 indicate the majority of AFD and A/TCEMS respondents reported disagreement (*Disagree 40%, Strongly Disagree 27%*) with the statement, “With all of the cultures we serve, I get confused about what is appropriate in one culture and not in another.” It should be noted, however, that one in four respondents reported they were confused. Nearly half the respondents also reported disagreement (*Disagree 36%, Strongly Disagree 13%*) with the statement, “Firefighters encounter cultural misunderstandings with diverse community members.” According to the figures presented in the second part of Table 6.3.9, however, one in three reported experiencing cultural misunderstandings.

TABLE 6.3.9: AFD and A/TCEMS Encounters with Cultural Understandings and Misunderstandings							
Online Statement 9E: With all of the cultures we serve, I get confused about what is appropriate in one culture and not in another.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	4	93	156	104	32	N=389	1.89
Percentage	1%	24%	40%	27%	8%		
Online Statement 6H: Firefighters encounter cultural misunderstandings with diverse community members.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	8	122	141	51	67	N=389	2.27
Percentage	2%	31%	36%	13%	17%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Although the online survey results generally indicated few cultural misunderstandings with the community members they serve, the AFD and A/TCEMS focus group and interview participants indicated that cultural issues existed and affected service delivery. Some examples included use of cultural home remedies, cultural norms, religious differences, lack of trust from community members.

AFD and A/TCEMS responses to open-ended survey questions below reflected the range of sentiments.

“Look, this is the United States of America. We have a pretty basic set of cultural values already. Why are we focused so much on pandering to imported cultural values? Learn the language, respect the laws, and assimilate. If the emphasis was placed on the “multicultural community” to embrace these ideals instead of on government and its service providers to continually adapt and invest time & money so that they don't have to, we'd all be better off.”

“When you have firefighters that can speak the language of their customers, that can understand their culture, that can empathize with their situation, that it is going to make for a better working atmosphere for the whole crew.”

Some community focus group participants said they had experienced cultural misunderstandings and felt disrespected or under-valued. These responses primarily came from the senior, African American, homeless and LGBT (lesbian, gay, bisexual, transgender) groups. They pointed out that if demeaned or disrespected, civilians might not provide critical information that could impact their own safety or that of the firefighters.

Community focus group participants shared three examples of situations that might require firefighters to go into a burning building for a rescue or delay emergency response because of cultural issues:

- Elders may keep money and personal belongings hidden in a secret place in their home and not want to leave a burning building until they have claimed their valuables.
- Muslim women may not want to come out of their home until they are properly covered.
- In some cultures, causing a fire is an embarrassment and the people may delay calling 9-1-1 and try to extinguish it themselves, rather than feel humiliated.

A number of community focus group participants noted that some feelings of intimidation were not directly related to AFD or A/TCEMS, but rather to a general fear of uniforms and prior experiences with authority figures, especially the police or the military. The following statement was taken from the transcript of a video interview:

“I had a patient that was from someplace in Mexico who was actually in labor and her husband was with her. We had responded to her house and we took the lady into the ambulance and we asked the gentleman if he wanted to come with

us to the hospital, obviously, 'cause his wife is giving birth. He said no, no, no. I said it's okay. You can come with us if you'd like. You can come with your wife. He said, 'I'm afraid because now you all know where I live and know that I'm not going to be home. So somebody can come and rob me'. And it was the first time I heard that. 'Cause usually in America they instantly trust us, just with our uniform on. But to them, a lot of people in uniform are not to be trusted."

A member of the fire department explained that AFD is trying to be more sensitive to the uniform issue and spoke during a video interview about a department decision when working with Katrina evacuees:

"We as firefighters rotated down to the convention center on four-hour shifts, 24 hours a day for maybe ten days to two weeks. They said don't go in uniform. Wear your T-shirt. Because you don't want these people who have been displaced and have been through so much to feel like there is a police presence or someone watching over them. You want to be there, just providing comfort, so wear a T-shirt. And I thought that was important to recognize that the uniform does carry an authoritarian image to it. And a lot of these cultures that folks are coming from when they immigrate to the United States, they are very distrustful."

6.3.5 Public Education

The figures presented in Table 6.3.10 reveal that the majority of AFD and A/TCEMS online survey respondents rated their fire prevention and safety education services *Excellent* and *Good*. The mean of 3.03 reflects the clustering of responses in *Good Service*.

TABLE 6.3.10: AFD and A/TCEMS Quality of Fire Prevention and Safety Education Services						
Online Question 11: Overall, how well do we provide fire prevention and safety education services in multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	138	148	80	23	N=389	3.03
Percentage	35%	38%	21%	6%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

In contrast, the figures presented in the first part of Table 6.3.11 indicate that first responders reported a general absence of basic fire prevention and safety knowledge in Austin's multicultural communities (mean of 2.66 is in the *Agree* category). Of note, almost one in five respondents reported they did not know the level of customers' knowledge of fire prevention and safety. In the second part of Table 6.3.11, 42% of the respondents identified that multicultural community members are generally unaware of the services provided by AFD and A/TCEMS. Of note, 21% of respondents did not know the extent of the awareness of Fire and EMS services among the multicultural community.

TABLE 6.3.11: AFD and A/TCEMS Extent of Community Prevention Knowledge							
Online Statement 12A: The customers I meet in emergency situations lack basic knowledge about fire prevention and safety.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	28	166	113	11	71	N=389	2.66
Percentage	7%	43%	29%	3%	18%		
Online Statement 12F: Multicultural community members I meet are aware of the services we provide.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	21	121	126	40	81	N=389	2.40
Percentage	5%	31%	32%	10%	21%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Few, if any, of the participants in all of the multicultural community focus groups were able to identify more than two or three of AFD's services and nearly all were surprised at the variety of AFD services that were explained to them at the conclusion of the community focus groups.

Several AFD participants identified University of Texas students as a high-risk group who did not have adequate fire safety knowledge. They said fraternities often had theme parties in which they built (without permits or fire department knowledge) elaborate decorations inside their fraternity houses. An example given was a room-sized volcano with fireworks that had resulted in at least one student death in recent years.

The AFD has responded to educate students with their “burning house” demonstration. A resident advisor who participated in the college student focus group said that it made a large impact on the students and generated discussions about fire prevention and safety and led to a safer dorm environment. Focus group participants from the University wanted the AFD to bring the “burning house” back, but were told by the AFD that it was not possible.

The figures presented in Table 6.3.12 address the perceived effectiveness of the materials used in AFD’s public education program. While the mean of 2.63 indicates an overall agreement with the statement, “Our public education materials are effective with members of the multicultural communities,” it is important to note that 27% of the respondents selected the *Don’t Know* response.

TABLE 6.3.12: AFD and A/TCEMS Effectiveness of Public Education Materials							
Online Statement 12E: Our public education materials are effective with members of our multicultural communities.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don’t Know	Total	Mean
Frequency	32	152	63	37	105	N=389	2.63
Percentage	8%	39%	16%	10%	27%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don’t Know = 0 points

The following comments by emergency service personnel in the online survey covers the range of the written responses:

“AFD and A/TCEMS do a fairly good job with public education with the resources they have. AFD needs more public education staff and needs to have materials in languages besides English and Spanish.”

“Multicultural community members, especially their leaders, also need to be responsible for public education.”

At the time of this research, the A/TCEMS did not have a public education program, but focus group members from Pub/Ed expressed a strong desire for creating such a program. Participants identified diabetes care and management as one area to consider for public education.

A number of community focus groups expressed lack of knowledge about the AFD's fire prevention and safety programs, except for AFD's work in the schools. Many community focus group members talked about the need to reach the elderly. Participants requested that the fire department take a more proactive approach in preventing fires and injuries, with information presented in their language, and in a manner that respected their culture. Several participants requested safety presentations in their neighborhoods in or near their fire station. Many community members preferred smaller programs closer to home over impersonal, large public education events at a more distant location.

Some, community focus groups expressed confusion about which services cost money. They reported that this confusion and lack of knowledge deterred people in their community from calling 9-1-1. This perspective was a common theme among seniors and immigrant groups.

A number of community focus group participants also expressed confusion about the differences between AFD and A/TCEMS. Participants shared that many citizens did not understand why a fire truck came when they called for an ambulance. They were also unaware that all firefighters were EMTs, and encouraged firefighters to announce that they were medically trained when responding to an emergency call.

Community members indicated that they needed fire safety education, especially with regard to cooking and the religious use of candles. The Hispanic focus groups identified this as a high priority.

"I know personally at least five people whose houses have burned down, and they are lucky to get away with their lives. The candle is a big situation for us because of the home alters. And in every case, it was home alters. And it was so wonderful when these women [in the focus group] shared the information about how the church had advised them to do it safely. And see, the [fire] department ought to be doing that."

The Urban Wildland Interface focus group, in particular, stated that there were significant concerns about public education. In addition, participants wondered whether AFD was adequately prepared to handle large fires in their area. One focus group participant worked for the Texas Forest Service and said that a 30-hour Wildland Fire Train-the-Trainer Program was available, but was unaware of any AFD personnel that had taken the course.

The figures presented in Table 6.3.13, reveal that more than two-thirds of the AFD and A/TCEMS online survey respondents selected *Frequently or All the Time* when responding to the statement, "I respond to incidents where customers misuse our services."

TABLE 6.3.13: AFD and A/TCEMS Community Misuse OF AFD and A/TCEMS Services							
Online Statement 3A: I respond to incidents where customers misuse our services.							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	107	156	97	8	21	N=389	2.98
Percentage	28%	40%	25%	2%	5%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Respondents identified the homeless group as one of the groups with the largest incidence of misusing services. The quotes below are examples of the feelings from AFD and A/TCEMS personnel about people misusing fire services:

"People misuse services frequently from all cultures, some knowingly, some for lack of education on the matter, and some because they did not stop and think for a second before they called us."

"I feel people should take more responsibility themselves and stop taking advantage of the 911 system. It is not my fault they cannot speak or understand English. It's not anybody else's fault they don't have insurance and they depend on the 911 system to take care of a headache or a cold. I feel that the public emergency services go way out of the way to help people that don't want to help themselves. I deal with this 9 out of 10 calls . . . so as you can tell, I am tired of it. It does not affect the level of care that we provide but it is still very frustrating, seeing the system get abused."

"Homeless people and drunk/intoxicated people are treated as well as they should be."

The homeless focus group expressed that they would like to collaborate with the AFD and A/TCEMS to find a solution and provide space for fire prevention and CPR training:

"I think that the homeless population would really like to see the fire department become more active and develop some prevention courses at the local shelters. I also think they need to come first to discuss what kind of prevention courses the homeless population feels they need. Don't arbitrarily just come and teach a course that is of no use or no interest to our population."

6.3.6 Summary of Findings, Questions #1-2

Four key themes emerged from the findings on safe and effective delivery of both emergency and non-emergency services in multicultural communities: Customer Service, Communications, Multicultural Capacity and Public Education.

The highest priority challenge identified by both first responder and community focus groups was the language barrier and the related need for more translation services, primarily more Spanish-speaking firefighters and paramedics working in the Spanish-speaking neighborhoods. AFD and A/TCEMS had access to a Language Line, but AFD underutilized it, and in fact, many firefighters reported they were unaware of its existence.

Over half of the online survey respondents said they experienced communication problems frequently or all the time. However, a very large majority of the online respondents said it seldom—if ever—delayed service delivery. Many first responder focus group and interview participants disagreed and acknowledged that delays occurred. AFD and A/TCEMS reported on occasion using children as translators or calling off-duty firefighters for assistance when translation was necessary. Some community members opposed the use of children as translators. Some firefighters perceived the language barrier as belonging to community members and held an expectation that customers should speak English.

Most firefighters/paramedics reported that they treat all customers with respect. One-third of AFD and A/TCEMS online respondents said they had experienced cultural misunderstandings with diverse community members. However, many firefighters expressed that cultural issues were secondary to saving lives and property. Twenty-five percent of the respondents said that they became confused about what is appropriate in one culture and not in another. In the focus groups, AFD participants stated that cultural issues such as home remedies, cultural norms and practices, and lack of trust did influence their ability to provide safe and effective services.

Community members said firefighters sometimes overlooked or were unaware of important customs and cultural etiquette. This was more significant in the delivery of emergency medical services and non-emergency services, rather than during a fire. Community members also said it was very important to develop and build non-emergency relationships with AFD and A/TCEMS.

Both AFD and multicultural community focus group participants agreed there was a greater need for public education and prevention programs targeted at Austin's multicultural communities. Many members of the community simply did not know what services AFD and A/TCEMS provided and if there was any cost associated with those services.

Research Question #3

How does the fire service “hero” culture increase or decrease the risk of injury and loss of life for firefighters and community members when serving multicultural communities?

The research team originally planned to examine fire incident reports to collect data to answer research question #3. However, onsite investigation established that this data was unavailable in a form that allowed a substantive response to that question. Although the fire department reporting system provided the demographic data points, it did not consistently contain demographic information (i.e., race, gender and age) of first responders or community members involved in injuries and Line of Duty Deaths (LODD). The research team was unable to identify the ethnic background of people in all fire department incident reports.

Researchers attempted to identify specific incident data with open-ended questions in the community post-focus group survey. However, the information collected also failed to yield conclusive data to definitively answer this question. In most cases, incident particulars (date, time, location, etc.) supplied by community members lacked the detail and/or accuracy necessary to match it with records contained in the Fire Department Reporting System.

The findings depicted below—the “Can Do” attitude, firefighter risk-taking behaviors, reporting of injuries, and fire department leadership—relate in various ways to the health and safety of firefighters and multicultural community members.

6.3.7 The Effect of “Can Do” Attitude on Safety in Multicultural Communities

In this project, researchers used the phrases “Can Do” or “Do Whatever It Takes” as synonyms for what NFFF⁹ described as the hero culture of the fire service. The researchers acknowledge that firefighters must have confidence that they can do the job safely and effectively. However, in this report, researchers use “Can Do” to reflect on the aspect of the hero culture that has been typically associated with firefighters taking unsafe risks to get the job done. The reasons often stated for this type of behavior were that it fulfills the expectations of the public and that firefighters, in fact, have come to expect it of themselves.

⁹ National Fallen Firefighters Memorial Website, “National Fire Service Research Agenda Symposium.” National Fallen Firefighters Foundation. <http://www.firehero.org/s567/images/nist_final_symposium_report.pdf> June 1st-3rd, 2005

The figures presented in Table 6.3.14 about the affect of the "Can Do" attitude on firefighter and paramedic safety reveal a mean of 2.47 indicating that responses from the firefighters and paramedics were nearly split between the *Increases Safety* and *Decreases Safety* choices, but slightly favored the *Decreases Safety* category. In addition, one-third of the respondents selected the *Does Not Affect Safety* response.

TABLE 6.3.14: AFD and A/TCEMS Effect of a "Can Do" Attitude on Firefighter and Paramedic Safety							
Online Question 14: How does the Fire Department "Can Do" or "Do Whatever It Takes" attitude affect the safety of firefighters and paramedics delivering service in multicultural communities?							
	Significantly Increases Safety	Increases Safety	Decreases Safety	Significantly Decreases Safety	Does not Affect Safety	Total	Mean
Frequency	26	88	127	19	129	N=389	2.47
Percentage	7%	23%	33%	5%	33%		

Significantly Increases Safety = 4 points Increases Safety = 3 points Decreases Safety = 2 points Significantly Decreases = 1 point Does Not Affect Safety = 0 points

The two stories below from AFD focus group participants were examples of near-misses that resulted from unsafe "Can Do" attitude in action:

One firefighter reported that last year her engine crew responded to a call at a residence where an all-day gas leak had filled the house. Rather than wait for the officer to make an assessment, a crewmember, took in a deep breath, ran into the residence and flung open the windows. The officer was unaware of the action until after the firefighter emerged. The firefighter realized a near-miss had occurred, and how, without a SCBA or a hose line for backup, a needless death could have been the outcome. At the time, however, it seemed like the best solution.

"It's going in on those calls where the infant is not breathing and wrapping your mouth around them because you don't want to waste your time in getting the appropriate equipment because it's a baby. Then we find out the baby has pertussis, have to prophylax you for pertussis because you didn't use the right things in making contact with the baby."

In contrast, when the question asked how does the “Can Do” attitude impact the safety of members of the multicultural community, figures in Table 6.3.15 show that 44% of the responders reported that it *Increases Safety*. Thirty-seven percent of the respondents indicated that this mindset *Does Not Affect Safety*.

TABLE 6.3.15: AFD and A/TCEMS Effect of a "Can Do" Attitude on Firefighter and Paramedic Multicultural Community Member Safety

Online Question 17: How does the Fire Department “Can Do” or “Do Whatever It Takes” attitude affect the safety of multicultural community members?

	Significantly Increases Safety	Increases Safety	Decreases Safety	Significantly Decreases Safety	Does not Affect Safety	Total	Mean
Frequency	42	127	69	7	144	N=389	2.83
Percentage	11%	33%	18%	2%	37%		

Significantly Increases Safety = 4 points Increases Safety = 3 points Decreases Safety = 2 points Significantly Decreases = 1 point Does Not Affect Safety = 0 points

The following comment from an Austin firefighter exemplifies these findings:

One firefighter who performed a rescue explained that, “When it comes to life, to somebody else’s life, the way I look at it, there is no question. That’s my job. And for a lot of people, the firefighter is their last hope. And if I’m standing outside and I say I think somebody’s in there, and it looks too dangerous, I’m not going in, well then who is left. I mean, isn’t that what you’re supposed to do? ...What went through my mind was my kids. Not that I was going to die and lose them, but the fact that I would have to go home and my youngest would say, ‘Dad, weren’t you at, couldn’t you have saved him?’ ... ‘Why didn’t you go in? Isn’t that what you’re supposed to do?’ I thought, ‘Well, that’s what I’m here for. If we don’t make it out, at least I tried.’”

6.3.8 Risk-Taking Behavior

The figures presented in Table 6.3.16 focus on the perceived occurrence of “doing whatever it takes” and sometimes going beyond one’s limitations. More than 60% of the respondents *Agree* (8% *Strongly Agree*, 55% *Agree*) with the statement that firefighters sometimes go beyond their limitations.

TABLE 6.3.16: AFD and A/TCEMS Firefighters Sometimes Going Beyond Their Limitations

Online Statement 15D: Sometimes firefighters go beyond their limitations.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	33	213	84	14	45	N=389	2.77
Percentage	8%	55%	22%	4%	12%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

In contrast, the figures presented in Table 6.3.17 reveal that online survey respondents predominantly expressed disagreement with the statement, “I expect other firefighters and paramedics to do whatever it takes, no matter what the risks.” Seventy-five percent of the respondents selected *Disagree* (56%) or *Strongly Disagree* (19%).

TABLE 6.3.17: AFD and A/TCEMS Expectation that Firefighters and Paramedics will do "Whatever it Takes"

Online Statement 15A: I expect other firefighters/paramedics to do whatever it takes, no matter what the risks.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	17	73	216	74	9	N=389	2.09
Percentage	4%	19%	56%	19%	2%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Comments from firefighters and paramedics in focus groups and interviews further illustrate the findings related to risk-taking:

A/TCEMS personnel indicated that they respond not only to AFD, but also to other fire departments in the county. One paramedic said that they responded to a fire call to set up the rehab sector for a local volunteer fire department call. The medic said they had to set up rehab in the fire hot zone in order to get firefighters to come to them to get checked out. The paramedic said that the firefighters thought they were "Superman" and could go right back in to the fire even if the paramedics told them their vital signs indicated they needed a longer rest period. The EMS personnel said that they were set up so close to the scene they got burn holes in their shirts.

"It's no doubt that we go in and we save lives. We still have to be safe doing it. When you go beyond with the policies and the rules and regs are, personally I don't think you're a hero. The person who goes in and gets you is the hero in that case. We had an incident where someone was in the building and they got burned. He was being heroic, but he went in by himself, which is something we never do. And thank God that a person who heard him, his screams, went in through a window on his own. Pulled him out on his own. And also in doing so, he was burned...So the first person went in unknowing that there was someone in the house, in the apartment. He [firefighter who rescued the firefighter] went in knowing that there was someone screaming for help and that is where the difference, the change comes...if we are truly a safety-driven department, we need to make sure that things like that does not happen. We make sure that we don't go in those buildings and put not only us but the civilians who we are attempting to save in harm's way."

"But there's a real dichotomy, a real separation from what we're being taught and what was done in the field. We learned fire science. There was no application to fire science in what we did really—a direct link. We learned ventilation but we didn't do ventilation when we got in the field. So there was this big separation....And so I got out and basically what we did was we hunkered down, stumbled around in the dark in a hazards atmosphere and tried to find the fire and put it out....And I operated like that for a long time and I gotta tell you, when you're a young guy it's kind of fun. You haven't been hurt yet so, and this is one of the things I think that's really important safety misnomer—is that because I haven't got hurt, that means it's safe?"

The figures presented in Table 6.3.18 reveal that 10% of respondents reported observing new firefighters taking unnecessary risks to prove themselves (*All the Time*, 2%) or (*Frequently*, 8%). Forty-three percent selected the *Infrequently* response and 26% chose that they *Never* observed new firefighters taking unnecessary risks to prove themselves. Of note, 20% of the firefighters and paramedics responded in the *Not Applicable* category. The mean of 1.84 denotes a cluster of responses occurred in the *Infrequently* category.

TABLE 6.3.18: AFD and A/TCEMS Observations of New Firefighters Taking Unnecessary Risks							
Online Statement 19F: New firefighters taking unnecessary risk to prove themselves worthy to their crew.							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	9	33	168	102	77	N=389	1.84
Percentage	2%	8%	43%	26%	20%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

In contrast, stories in some of the firefighter focus groups and interviews related accounts in which new recruits and young firefighters (primarily women and minorities) felt they received additional scrutiny, and were expected to prove themselves worthy. A common sentiment was that the need to prove oneself stemmed from a combination of pressure from other firefighters, as well as internal cultural pressure to prove oneself.

A female firefighter explained, “I felt like whatever station I went to, whether it was my permanent assignment or I traveled to a station for the shift, I felt like I had to prove [myself].” She went on to say that she would pick up the heavy tools to prove that she could, or carry ladders by herself that normally more than one person would carry.

6.3.9 Reporting Injuries

AFD encourages all personnel to report all injuries sustained in the line of duty. The figures presented in Table 6.3.19 reveals that only 16% of respondents said that they observed that firefighters accurately reported injuries *All the Time* and 44% reported *Frequently*. Thirty-four percent reported they observed firefighters reporting *Infrequently* (31%) or *Never* (3%). A mean of 2.76 falls within the *Frequently* category.

TABLE 6.3.19: AFD and A/TCEMS Observation of Firefighters Reporting their Injuries							
Online Statement 19C: Accurately reporting all injuries (including minor injuries).							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	61	170	122	13	23	N= 389	2.76
Percentage	16%	44%	31%	3%	6%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

The following focus group comments from AFD personnel describe some of the reasons for not reporting injuries:

“You’re not going to get information about injuries. Firefighters don’t discuss injuries outside the station.”

One senior firefighter said, “You can be a wimp, but don’t let anyone see it... cry when you get in your car...bleed at work, cry at home.”

One staff member related an instance where an officer thought that he had hepatitis C for two years, but couldn’t share it with co-workers for fear of being stereotyped.

6.3.10 Leadership

The figures presented in Table 6.3.20 identify that 87% percent of the online survey respondents selected *Strongly Agree* (31%) and *Agree* (56%) to the statement, “Effective leadership is the best way to manage high-risk behaviors among first responders.

TABLE 6.3.20: AFD and A/TCEMS Effective Leadership is the Best Way to Manage High-Risk Behavior							
Online Statement 15B: Effective leadership is the best way to manage unnecessary high-risk behavior among first responders.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	122	218	28	8	13	N=389	3.21
Percentage	31%	56%	7%	2%	3%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Numerous focus group participants mentioned AFD’s organizational culture shift, led by their Education Services Division, toward a more safety-conscious workplace. The renewed emphasis came a number of years ago after two firefighters and an officer were hurt in an apartment fire, one critically.

“When I became lieutenant, I realized, ‘You know what, it’s not just me anymore.’ It’s what I teach these guys and the way I present myself and the way I conduct myself can mean whether these guys are safe, whether they come home, whether they’re severely injured. So it was really a real epiphany for me. And that’s when I started taking training seriously, which I think really is the key to safety. It’s good training that relates to the actual practices you’re going to do in the field.”

6.3.11 Summary of Findings, Question #3

Respondents were divided almost equally regarding the “Can Do” attitude: 37% reported that approach decreased safety of firefighters and paramedics, 30% reported it increased safety and 33% reported it did not affect safety. In contrast, a majority of the respondents believed that the multicultural community members were definitely beneficiaries of a “Can Do” mindset.

With questions about risk-taking behavior, firefighters and paramedics also presented divergent opinions. A small majority of respondents indicated that firefighters did go beyond their limitations. In contrast, a large majority of respondents reported that they did not expect other emergency responders to do whatever it took no matter what the risk. Respondents’ observations of new firefighters taking unnecessary risks to prove themselves worthy to their crew were low. However, qualitative data from focus groups and interviews revealed that some women and minorities felt pressured to prove themselves.

Only 16% of the respondents reported that they observed firefighters accurately reporting their injuries all the time. Although the mean indicated that firefighters observed their peers frequently reporting their injuries, focus group, interview and open-ended survey comments identified that there was a fire culture stigma to reporting injuries and showing any weakness.

An overwhelming majority of the respondents saw effective leadership as the best method to manage any type of high-risk behavior on the part of first responders. The leadership of AFD has undertaken a long-term organizational culture shift toward placing safety as the top priority. The effort led by the Educational Services Division has made some changes in the training methods used for fire suppression based on careful review of field observations.

Research Question #4

What health and safety risks to firefighters and community members could be reduced if firefighters had greater multicultural awareness and better reflected the community?

The research team originally planned to examine fire incident reports to determine the degree of correlation between firefighter and community member injuries, loss of life, and multicultural issues. As mentioned above in research question #3, the fire departments in the three selected project sites did not consistently report demographic data in their incident reports. This prevented the research team from identifying and quantifying relevant correlations.

While no quantitative data existed that connected firefighter and community safety, multicultural awareness, and department demographics, the research team collected quantitative and anecdotal data that illustrated the unique nature of health and safety risks to firefighters and community members in multicultural settings.

6.3.12 Multicultural Awareness and Safety

The figures presented in the first part of Table 6.3.21 produced a mean of 2.93 from the online survey responses to the statement, “Firefighters are effectively trained to serve people from all walks of life and diverse cultural backgrounds,” indicating a strong preference for the *Agree* category. The mean for the corresponding statement regarding emergency medical responder training was also 2.93, according to the figures presented in the second part of Table 6.3.21.

TABLE 6.3.21: AFD and A/TCEMS Training in Serving Multicultural Communities							
Online Statement 6D: Firefighters are effectively trained to serve people from all walks of life and diverse cultural backgrounds.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	94	160	71	23	41	N=389	2.93
Percentage	24%	41%	18%	6%	11%		
Online Statement 9D: Emergency medical responders are properly trained to assist members of our multicultural communities.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	84	177	75	17	36	N=389	2.93
Percentage	22%	46%	19%	4%	9%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Despite this perception of being effectively trained, AFD and A/TCEMS focus group and interview participants discussed a number of multicultural issues that potentially affected firefighter and community safety. These are listed in Table 6.3.22.

TABLE 6.3.22: AFD and A/TCEMS Issues that Can Increase Risk in Multicultural Communities	
AFD and A/TCEMS	Community
Language barriers may hinder responders' ability to gather information to effectively and safely fulfill their mission to suppress fires and save lives and property.	Language barriers may hinder firefighters' and paramedics' ability to gather sufficient information to safely and effectively carry out the fire suppression and emergency medical mission to save lives and property.
Unknown cultural norms and traditions may put AFD and A/TCEMS responders into conflict situations (nonphysical and/or physical) and/or hinder their ability to gather critical data to safely and effectively serve their customers.	Stereotypes or apprehension regarding a particular community or its members may cause AFD or A/TCEMS personnel to miss important information that may result in unsafe conditions for community members.
Fear of uniforms may cause multicultural community members to avoid calling 9-1-1, and/or provide incomplete or inaccurate information. Such actions may contribute to escalating the level of on-site risk for firefighters.	Fear of uniforms or authority figures may cause multicultural community members to avoid calling 9-1-1 or give incomplete information that could delay emergency service delivery and increase risk to the health and safety of community members.
	There was a fear that AFD attitudes toward some community groups would affect the quality of service or the way they would be treated if hired, especially in the African-American, Hispanic and LGBT communities.

Several stories from AFD and A/TCEMS demonstrated potential risks related to a lack of multicultural awareness within AFD and A/TCEMS:

One firefighter doing code enforcement told a story about being accused of harassing the gay community when they shut a bar down. While he was there, he said a bottle came out of the crowd and hit him.

One African American firefighter said that “three, four years ago...right down the street... there’s an apartment—it was a family that the police knew well, so we always had to wait [for police] to go in. Even when the police were there, they [other firefighters] felt that they had to put me up front and the people there picked up on it [and said] ‘How come they don’t come in—What do they think we’re gonna do to them? They act like they’re scared or something.’ The people were not bad people.”

Another African American firefighter said, “Some of our white brothers are afraid to just go out there or they don’t feel like they can relate as well as an African American to African American.”

One fire officer said that up until one year ago they used to go into the homeless camps without the police, but since they found out that one of the homeless members was wanted for a quadruple homicide in California, they wait for PD to accompany them. The officer said that it was challenging “balancing humanity with safety” because they were often called to put out fires that were used for warming in the winter.

6.3.13 Ethnic and Gender Diversity and Safety

The figures presented in Table 6.3.23 indicate the diversity of AFD¹⁰ as compared to the demographics of the City of Austin.¹¹

Demographic Category	City of Austin	Austin Fire Department	Austin-Travis County EMS
Ethnicity			
White	52.9%	77.8%	86.6%
Black or African American	9.8%	5.0%	1.5%
Hispanic or Latino (of any race)	30.5%	13.6%	11.2%
American Indian and Alaska Native	0.3%	2.2%	0.0%
Asian	4.7%	0.8%	0.7%
Native Hawaiian and Other Pacific Islander	0.1%	0.3%	0.0%
Some Other Race	0.2%	0.1%	0.0%
Two or More Races	1.5%	0.0%	0.0%
Total	100.0%	100.0%	100.0%
Gender			
Male	51.3%	95.3%	78.7%
Female	48.7%	4.7%	21.3%
Total	100.0%	100.0%	100.0%

¹⁰ 2007 Estimated Figures. Ryan Robinson, Austin City Demographer

¹¹ U.S. Census Bureau, 2005 Community Survey for Austin. <<http://www.census.gov>>

The figures presented in Table 6.3.24 reveal that there was a mixture of responses to the statement, "Hire a competent, gender and culturally diverse workforce that is representative of our community. The mean of 2.16 represents a response clustering in the *Medium Priority* choice.

TABLE 6.3.24: AFD and A/TCEMS Hiring a Representative Workforce						
Online Statement 21J: Hire a competent, gender and culturally diverse workforce that is representative of our community.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Frequency	50	104	93	142	N=389	2.16
Percentage	13%	27%	24%	37%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

In the open-ended survey responses and during focus groups, most AFD and A/TCEMS participants emphasized that recruitment effort should focus on hiring competent firefighters and that competency not be overlooked for diversity or gender.

"I don't believe that the cultural diversity of the workforce, i.e. the emergency providers, is remotely as relevant as improving the cultural awareness of the current and future workforce."

"There is no valid reason to have a department that mirrors our population exactly. I feel that recruiting should make great efforts to include all groups and genders of our society, but hire the folks that show up to take the test and those who are competent. Candidates take all the tests and are then ranked. They should be hired in that order, regardless of gender, race, religion, etc. Anything less is discrimination and is actually lowering the quality of services provided to Mr. and Mrs. Austin."

A number of minorities, women and some Caucasian male firefighters expressed concerns that the fire department culture was not one that welcomed diversity, and in fact, discouraged it. Below are a few examples of the many comments:

One firefighter said they had been in a good hiring class that had diversity training the 2nd day and had great instructors at the Academy, but said that then “we were thrown to the wolves.” The recruit told a senior FF at their first fire station that he was offended by the use of the N-word. His response was, “You’re not black.” The recruit also said co-workers would say things like, “This is the place where the fags live. Make sure you double glove.” In retaliation for the recruit telling the firefighter not to use offensive language, the recruit was “immediately blackballed” and the senior firefighter started rumors about the recruit and said, “I have the ability to ruin my career...you’re just a problem; you could lose your job.”

One senior firefighter said that there’s a lot of hatred in the daily fire station language and that racial slurs are common, especially for Muslims, gays and illegal immigrants. The firefighter doesn’t say anything because to rebut them “...it’s not worth the fight—they wouldn’t listen. You’d be arguing 80% of the time. It’s the fire culture not to say anything in these situations. You’ll be ridiculed, singled out.”

One firefighter said, “It’s dangerous for a gay [male] to come out. [They] wouldn’t hurt [a] woman, but a guy would get hurt.” The firefighter went on to say that a co-worker used to brag about beating up gay men. As recently as two months ago this happened and the other guys at the station were laughing about it.

Members of the AFD, A/TCEMS and community focus groups relayed stories that demonstrated having a more diverse workforce could have an impact on safety, improve community relations and lessen tension when firefighters who reflected the community were present on emergency scenes.

Community focus group participants said that “lady responders” would be more effective with many Muslim women. They said this is not only for Muslims but also for Eastern cultures. “We often feel better with people of our own gender.”

In an interview, one AFD member indicated that their crew had responded to a medical emergency and this firefighter initiated treatment while the others gathered information. Upon learning that the patient was transgender, the firefighter said that she shielded the patient from any further contact with the male firefighters for fear the they would treat the patient with less respect if they knew.

One firefighter relayed a story about how being Hispanic and speaking Spanish made it easier to deal with a belligerent family who insisted on shooting off fireworks in their East Austin neighborhood.

An African American senior firefighter told a story about responding to an incident where a two-year old black girl had had a seizure. “When we got there, she wouldn’t let any one of the other crewmembers touch her. I actually had to carry her to the ambulance and ride with her to the hospital. I was the only one she would let do anything with her.”

Table 6.3.25 identifies that members of Austin’s multicultural community were interested in having people from their community become AFD firefighters and A/TCEMS paramedics and were willing to support AFD and A/TCEMS with recruiting qualified, inclusive, safe and competent personnel in their communities. Seventy-nine percent of the community focus group members who responded to the post-focus group written survey responded *Yes* to the question, “Would you like to have a family member or friend get a job on a fire truck or in an ambulance.”

TABLE 6.3.25: Community Perspectives on Being Hired by AFD AND A/TCEMS				
Community Focus Group Survey Question 19: Would you like to have a family member or friend get a job on a fire truck or in an ambulance?				
	Yes	No	Total	Mean
Frequency	81	22	N= 103	1.79
Percentage	79%	21%		

Yes = 2 points No = 1 point

6.3.14 Summary of Findings, Question #4

Online survey respondents expressed clear agreement that both firefighters and paramedics within AFD and A/TCEMS were well trained to serve the multicultural communities in their city. However, despite this level of training, a number of firefighters, paramedics and community members listed situations where AFD, A/TCEMS and multicultural community members experienced great risk.

Community members told stories about firefighters being helpful and kind, yet there were also some stories in which AFD disrespected multicultural community values and customs, which resulted in some animosity.

AFD and A/TCEMS personnel supported the hiring of competent recruits, but many expressed that competency should not be overlooked in favor of gender or diversity. A number of focus group and interview participants shared experiences where women and multicultural colleagues were particularly effective during emergencies, especially when gender or race was an issue.

A majority of multicultural community focus groups expressed that it was important that the fire department reflect the diversity of the community they served. Seventy-nine percent of the participants who responded to the post-community focus group written survey reported that they would like to see a member of their community working for AFD or A/TCEMS and would assist with recruitment in their respective community.

6.4 Milwaukee Fire Department



6.4.1 Overview of the Milwaukee Fire Department

The Milwaukee Fire Department (MFD) provides public safety and emergency services to 585,000 citizens in the 96 square miles of Milwaukee and West Milwaukee through its Firefighting and Support Divisions. Emergency resources are organized throughout the community among 36 firehouses in 5 geographic battalions. These resources include 37 engine companies, 16 ladder companies and 12 paramedic units. The 12 paramedic units provide advanced life support treatment (ALS) and transport. Four (4) private ambulance companies provide basic life support (BLS) transport services, with the fire department responding initially to the majority of BLS emergency calls as well.¹

Four (4) bureaus make up the Support Division: Administration, Construction and Maintenance, Instruction and Training and Special Operations. The Special Operations Bureau manages Emergency Medical Services as well as the Hazardous Materials, Dive Rescue, and Heavy Urban Rescue Teams.

MFD currently employs 970 sworn and 70 civilian members, 21 of whom are civilian dispatchers working in the Technical Services/Communications Section. In 2006, MFD responded to 66,364 calls for service, including 51,862 emergency medical service calls (78.1%) and 14,502 calls for fire suppression or specialized rescue services (21.9%). Among all service calls, MFD responded to 90.8% within 5 minutes. In addition, the department dispatched 28,104 calls to the 4 private BLS transport providers.²

¹ Information provided by Milwaukee Fire Department

² Information provided by Milwaukee Fire Department

City of Milwaukee Demographics

Milwaukee, Wisconsin is a large manufacturing city on Lake Michigan. According to a 2001 report by the University of Wisconsin,³ Milwaukee County had the second largest minority population in Wisconsin. In the city of Milwaukee, non-whites grew from 36.6% of the populace in 1990 to 50% in 2000. During that time, the African American population also increased by 25%. The Hispanic and Latino population is the fastest-growing population in Wisconsin, with the largest concentration in Milwaukee. The largest concentration of people of Asian descent in Wisconsin is also located in Milwaukee. As stated in a 2005 Hmong Cultural and Resource Center Report,⁴ Wisconsin has the third-highest population of Hmong residents in the United States, with the Milwaukee-Racine area listed fourth among metropolitan areas with a sizeable Hmong population.

2005 census estimates⁵ list the population of Milwaukee as 556,948 (not including those living in institutions, college dormitories, and other group quarters). Of that number, 9.3% were over the age of 65; 16.4% reported disability status; 9.5% of the overall population was foreign-born; and 18.5% of the residents over the age of five reported speaking a language other than English at home. The number of languages spoken by children within the Milwaukee Public Schools⁶ was 35. In addition, 21.3% are families below poverty level and 24.9% are individuals below poverty level—figures approximately double that of the general United States population.

³ "Wisconsin's Racial and Ethnic Diversity." University of Wisconsin Extension and Applied Population Laboratory, June 2001

⁴ "The State of Hmong American Studies." Hmong Cultural Resource Center, St. Paul, MN. <<http://hmongstudies.com/HNDPresentation2005.pdf>> April 9th, 2005

⁵ U.S. Census Bureau, 2005 American Community Survey (ACS) – Data Profile Highlights. <<http://www.census.gov/acs>>

⁶ Milwaukee Public Schools, ESIS Technology Program Home Language Survey. 2006

The figures presented in Table 6.4.1 compare the ethnic and gender demographics of the City of Milwaukee⁷ with the MFD⁸.

TABLE 6.4.1: City of Milwaukee and Milwaukee Department Demographics		
Demographic Category	City of Milwaukee	Milwaukee Fire Department
Ethnicity		
White	44.7%	77.5%
Black or African American	40.2%	13.5%
Hispanic or Latino (of any race)	14.5%	6.5%
American Indian and Alaska Native	0.7%	2.0%
Asian	3.6%	0.5%
Native Hawaiian and Other Pacific Islander	0.0%	0.0%
Some Other Race	8.7%	0.0%
Two or More Races	2.1%	0.0%
Total	114.5%*	100%
Gender		
Male	48.1%	95.5%
Female	51.9%	4.5%
Total	100%	100%

*Totals may equal more than 100% because some individuals may have reported more than one race.

Fatality, Injury and Patient Statistics

The Wisconsin State Firefighters Memorial reports that Wisconsin averages between 3 and 4 firefighter deaths every year, as part of the national annual average of 100, over the past 20 years.⁹ According to Milwaukee fire officials, 360 MFD firefighters were injured in 2005 and 345 were injured in 2006. There were 16 civilian fatalities in 2005 and 12 civilian fatalities in 2006.

⁷ U.S. Census Bureau, 2005 American Community Survey (ACS). <<http://www.census.gov/acs>>

⁸ Information by the Milwaukee Fire Department

⁹ National Fallen Firefighters Memorial Website, National Fallen Firefighters Foundation. <<http://www.firehero.org>>

Similar to national statistics, the elderly in Milwaukee are significantly more likely to die in fires than other population subgroups. "In 2001, elderly residents accounted for 63% of all fire fatalities in the City of Milwaukee."¹⁰ Specific Milwaukee zip codes in multicultural areas have a higher incidence of child burn rates and 62% of the burns requiring a hospital stay happened in the child's home.

¹⁰Smerz, Andrew J. "Fire and Life Safety Education for the Elderly." Applied Research Project.

RESEARCH QUESTIONS

Research Question #1

How do firefighters perceive the effectiveness of their emergency and non-emergency service delivery in multicultural communities?

Research Question #2

How do people in the multicultural communities perceive firefighters' emergency and non-emergency service delivery?

Since research questions #1 and #2 are about the perceptions of both firefighters and multicultural community members regarding the quality of services, both sets of findings are presented below. Quantitative findings for the Milwaukee Fire Department (MFD) were derived from the online survey (N=202). Focus groups and interviews held with MFD personnel and post-focus group surveys generated both qualitative and quantitative data respectively. The quantitative findings from Milwaukee multicultural community members were taken from the post-focus group survey (N=136). Community focus groups, post-focus group survey open-ended questions and interviews produced the qualitative data.

The information presented in Table 6.4.2 is a side-by-side narrative summary of the findings from MFD and the multicultural community participants pertaining to five major themes, Customer Service, Communications, Interagency Communications and Operations, Multicultural Capacity and Public Education. Researchers compiled these findings from all the sources listed above.

Table 6.4.2: MFD Summary of Key Findings in Four Themes

Major Themes	MFD Findings	Community Findings
Customer Service	Most community participants rated MFD’s fire services <i>Excellent</i> (55%) or <i>Good</i> (32%). They also rated MFD’s emergency medical services as <i>Excellent</i> (41%) or <i>Good</i> (43%). Some reported that services were not provided equally to all parts of the city. Citizens frequently reported delays in the arrival of private ambulances, as well as a lower quality of service than MFD ambulances.	Most community participants rated MFD’s fire services <i>Excellent</i> (55%) or <i>Good</i> (32%). They also rated MFD’s emergency medical services as <i>Excellent</i> (41%) or <i>Good</i> (43%). Some reported that services were not provided equally to all parts of the city. Citizens frequently reported delays in the arrival of private ambulances, as well as a lower quality of service than MFD ambulances.
Communications	MFD identified language barriers as a challenge. They recognized that using children as translators was not always effective. Some firefighters expressed interest in learning phrases in different languages. Few firefighters reported using the language line for assistance. Firefighters saw a need to improve interpersonal communication skills among some of their colleagues.	Community members saw language as a barrier to effective services and a deterrent to calling 9-1-1 (including people with special needs, i.e., speech impediments or hearing impairments).
Multicultural Capacity	Firefighters stated that they generally do not encounter cultural misunderstandings among diverse community members. In focus groups, however, several members identified cultural issues such as: fear of uniforms, gender identity confusion and racial and ethnic and religious customs that could lead to misunderstandings. Some firefighters indicated more diversity in MFD would help with community relations and cited incidents when it had lessened tension and/or violence.	Community members said that cultural issues affected MFD service, and therefore, their safety. They thought cultural capacity training was needed and indicated their willingness to help MFD learn about their customs. Many expressed a fear of uniforms and/or the authority they represented. Other concerns included: their language or accent would not be understood; they would get in trouble for causing an emergency; they would receive discriminatory treatment or be embarrassed; their sexual orientation and gender identity would result in mistreatment; they might get deported; and they would be unable to pay for services. Several community groups requested that MFD do more to increase the diversity within the department. They believed this would create better working relationships and facilitate communication if they could see someone who looked like them or could speak their language.
Public Education	MFD personnel rated their delivery of fire prevention and safety education services highly, yet they encountered many multicultural community members who lacked basic safety knowledge and frequently encountered what they consider misuse of 9-1-1 when calls were not emergencies. Paramedic personnel indicated that the healthcare system was broken and more health care education was needed for lower-income community members to reduce ambulance use for preventable illnesses and injuries.	Community members expressed a need for greater public education with programs held closer to where they lived and culturally sensitive materials presented in their languages. Some suggested train-the-trainer efforts for immigrants so that residents familiar with the language and customs could present the fire and injury prevention education.

6.4.2 Customer Service

The figures presented in Table 6.4.3 indicate that the majority of MFD and multicultural community participants ranked MFD’s fire services as *Excellent* or *Good*. MFD respondents rated their fire service delivery in multicultural communities higher (mean: 3.72) than the multicultural community focus group members rated them (mean: 3.41).

TABLE 6.4.3: MFD Ranking of Fire Service Delivery to Multicultural Communities						
MFD Perspective: Online Survey Question 5: Overall, how well does the fire department deliver fire services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	150	48	3	1	N=202	3.72
Percentage	74%	24%	1%	0%		
Community Perspective: Community Focus Group Question 15: How does MFD deliver fire services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	48	28	10	1	N=87	3.41
Percentage	55%	32%	11%	1%		

The scale for computing the mean is as follows: Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

The figures presented in Table 6.4.4 focus on the delivery of emergency medical services in multicultural communities. As with Table 6.4.3, the rankings were high for both groups. The mean of 3.67 for the MFD online survey respondents placed the response cluster in the *Excellent Service* category, while the multicultural community members' mean of 3.20 indicated a *Good Service* response.

TABLE 6.4.4: MFD Ranking of Emergency Medical Service Delivery to Multicultural Community						
MFD Perspective/Online Question 8: How does MFD deliver emergency medical services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	145	49	7	1	N=202	3.67
Percentage	72%	24%	3%	0%		
Community Perspective/Community Focus Group Question 17: How does MFD deliver emergency medical services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	53	56	15	6	N=130	3.20
Percentage	41%	43%	12%	5%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

Most community focus group participants praised the speed and efficiency of MFD responders. Open-ended survey responses described firefighters and paramedics as "quick," "courteous," "professional," "friendly" and "understanding."

A large majority of MFD fire and emergency medical personnel reported they deliver services equally in all communities, according to the figures presented in Table 6.4.5. Ninety percent of MFD online survey respondents either *Strongly Agree* (51%) or *Agree* (39%) with the statement, “Firefighters provide services equally to all communities.”

TABLE 6.4.5: MFD Providing Equal Services to Communities

Online Statement 6A: Firefighters provide services equally to all communities.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	102	79	14	4	3	N=202	3.40
Percentage	50%	39%	7%	2%	1%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

The following comments from MFD participants illustrate their perceptions:

“Firefighters serve all customers with professionalism no matter what culture we are dealing with.”

“I believe that the department provides the best services to any portion of the city. The thought pattern that we would provide less service because of the race/color/ creed of the citizens we serve is foolish.”

To the contrary, some members of MFD focus groups had a different perception:

“We have seen firefighters that go to the inner city where there’s...low income and when they have to fight a fire, there’s...no holding back in breaking windows and throwing stuff out the window. And then if we are in a much better part of the city, they’re very restrained. Maybe we don’t need to break that window. Be careful with that carpet, and stuff like that....When you see that, that bothers you a little bit. Because you believe that the professionalism of a firefighter should be the same at all times.”

One MFD focus group participant said that some firefighters disrespect the homes of lower socio-economic community members by setting certain items such as EMS bags on the sofa or table, and that in the upper socio-economic

communities this does not happen because they would not want to scratch the furniture.

"I've been on [calls] where people think they're not getting the proper service. And I don't think that's an ethnic thing. Sometimes it's the tone that we use to talk to people."

One minority firefighter said that when he worked at a fire station in a white community, he was told to check smoke detectors on all EMS calls. But, when he worked at a station that was not in a white community, he was told by the [white] fire officer not to check smoke detectors. He counted 17 times that he was told not to check any detectors and he never observed anyone go against the officer's orders, with the exception of himself.

Although ratings were good from the community focus groups, members of the LGBT, African American and Hispanic focus groups expressed concerns:

LGBT members discussed subtleties of discrimination. They said that during domestic violence calls, responders treated them well verbally but they sensed disrespect in their body language. They also said they are not referred to the same domestic violence resources as are heterosexual victims.

A member of the African American community focus group told a story about the fire alarm going off late at night in the wintertime. Everyone evacuated. 9-1-1 was called and the FD never came. Residents were outside for 40 minutes. The participant said that in black neighborhoods, MFD does not show up.

6.4.3 Communication

The figures presented in Table 6.4.6 reveal that the majority of MFD online survey respondents reported that they *Infrequently* (mean: 2.36) experienced communication barriers while delivering services in multicultural communities and *Infrequently* (mean: 1.95) delayed services due to those barriers. It should be noted that more than one-third of the respondents (34%) said they experienced communication problems *All the Time* (4%) or *Frequently* (30%).

TABLE 6.4.6: MFD Experiences with Communication Barriers							
Online Statement 3C: I am faced with providing services to people with whom communication is a problem.							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	8	61	126	5	2	N=202	2.36
Percentage	4%	30%	62%	2%	1%		
Online Statement 3E: I am forced to delay services to a customer due to communication barriers.							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	4	15	142	33	8	N=202	1.95
Percentage	2%	7%	70%	16%	4%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

The following quotes from MFD demonstrate the divergent opinions about the obstacles related to different languages:

“Speaking the language I think is overrated. This is, after all, America. If anyone should be speaking the language, it should be them.”

“I’ve been in the house where grandma is having chest pain and she doesn’t speak English. And I come in and I can break at that moment an English barrier. And I say, ‘Yeah, people might agree or disagree that people should speak English or whatever.’ I said at that time, we don’t care. At that time, when I walked in, the guys are like, oh, relief! Now we can translate. We can break the communication barrier and go to treat the patient. It is a big advantage.”

6.4.4 Language Barriers

Contrary to the online survey, nearly all of the MFD focus groups mentioned language barriers (including accents and colloquialisms) as a challenge to providing services in multicultural communities. While a number of participants brought up situations with Spanish speakers, many firefighters identified other languages they encountered on-scene, including Hmong, Polish, German, Russian, Serbian, Lao and Somali. The most common translation resource firefighters reported using was bilingual relatives or neighbors, often children. This translation source was limiting because children typically lacked medical or fire terminology. Many firefighters recognized that using children was less effective, due to both limited medical knowledge and in many cultures, their status within their household. Some MFD focus group participants and online survey respondents indicated that they would be willing to attend language classes, especially in Spanish or Hmong.

Impromptu translators provided a number of challenges to paramedics that negatively affected patient care:

A Hmong woman almost died because the person translating would not translate symptoms. The firefighter said it's like they're saying, 'Give me somebody I can trust.' In one situation, the person was actually saying in Hmong that they thought they were going to die, but the person translating just said to take her to the hospital. This is critical information, because someone who says they feel like they are dying often is and this will often determine the action paramedics take.

On one EMS call, a Venezuelan heart patient's child said she has these symptoms all the time. Though one of the EMS personnel spoke Spanish, there was too much slang, which made it difficult to understand. The patient looked very serious, but the child who was translating said she wasn't. By the time she arrived at the hospital, she was in cardiac arrest.

One resource in place to overcome onsite language barriers is a telephone translation service, commonly referred to as the 'Language Line.' However, more than 68% of the MFD online survey respondents reported that they never used the service. The figures presented in Table 6.4.7 reveal a mean of 1.19 (*Never* category) in response to the statement "I use the 'Language Line' for translation purposes." Only 15% of the respondents reported ever using it.

TABLE 6.4.7: MFD Use of the "Language Line"

Online Statement 3I: I use the "language line" for translation purposes.

	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	0	1	30	138	33	N=202	1.19
Percentage	0%	0%	15%	68%	16%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Community focus group participants identified language and speech barriers among their top concerns and suggested those barriers were one reason for not calling 9-1-1:

One Hispanic participant said her 88-year-old great-aunt calls her instead of 9-1-1 because in the past it took too long to get a Spanish-speaking person on the phone.

A Hmong focus group participant said, "We were ill prepared for coming to this country. So English, it's a big issue."

Another participant said that it's not appropriate to ask children to take the burden of translating because kids cannot explain everything clearly.

One participant said that if a person had difficulty communicating or had a speech impediment, often the dispatcher would assume the person was drunk, and not take the call seriously.

6.4.5 Interpersonal Communication Challenges

Both firefighter and community member focus groups cited the need for MFD personnel to improve their interpersonal communication skills. Some firefighters speaking in focus groups admitted that they often do not take the time to explain to homeowners, especially non-

English speaking homeowners, the reasons for doing additional damage to their home as they are fighting the fire.

One firefighter described the department's technical skills versus their 'bedside manner':

"The service is outstanding but presentation sucks."

A firefighter was doing an assessment of a patient who was having medical difficulties and the patient's son wanted to know why MFD was not doing more. The firefighter's officer told the patient's son to shut up. As a result, MPD had to be called to restrain the son.

One MFD focus group participant said that he saw a lieutenant "chew out" a patient and ask, "Why did you call us?"

6.4.6 Interagency Operations

MFD focus group participants discussed external communication issues that tend to delay or hinder fire or emergency medical services. These issues mostly pertained to the Milwaukee Police Department (MPD) and other dispatching agencies including: private ambulance companies; police dispatchers who answer the initial Milwaukee 9-1-1 calls from landlines; or the County Sheriff's department who answer 9-1-1 cell phone calls prior to being transferred to Milwaukee Fire Department 9-1-1.

6.4.7 Police Department Challenges

The figures presented in Table 6.4.8 identify the online survey responses to the statement, “I respond to emergency calls where law enforcement is not present when needed.” The mean of 2.51 indicates an almost even split on this issue.

TABLE 6.4.8: MFD Law Enforcement Presence							
Online Statement 3J: I respond to emergency calls where law enforcement is not present when needed.							
	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	16	71	85	10	20	N=202	2.51
Percentage	8%	35%	42%	5%	10%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

MFD and community focus group participants frequently reported that MPD response was slow and that their aggressive actions and/or demeanor frequently escalated the emergency scene toward violence, or destabilized it after firefighters had initiated efforts to steady it.

One community focus group member said that although the MFD and MPD were different departments, they both wear uniforms. Even though one may be called, the other one eventually shows up and it’s difficult for people to separate the two. The lack of trust in the police department is affecting trust in the fire department.

MFD personnel shared experiences where they had entered a shooting scene before MPD arrived in order to quiet the crowd or save the patient. Firefighters also cited communication challenges between MPD and MFD en route to and on the scene, and expressed a need for a common radio frequency between the two agencies.

In one incident, firefighters reported that they were staged near the emergency scene and waited 20 to 45 minutes for MPD to arrive. Firefighters said that the family went ahead and brought the patient to the fire truck in the midst of a neighborhood feud. When MPD arrived, they were antagonistic and made racial slurs which incited the crowd. The MFD was staged back waiting on the MPD to secure the scene during this incident when community members started throwing bottles and cans at the firefighters because they were not going in to the emergency scene.

6.4.8 Dispatch Communication Challenges

MFD first responders also indicated that they did not always receive sufficient or correct information from dispatch and this put them at greater risk, according to the figures presented in Table 6.4.9. Online survey respondents were split between the *Agree* scale (45%) and *Disagree* scale (50%). The mean of 2.42 indicates a slight preference for the *Disagree* response.

TABLE 6.4.9: MFD Information from Dispatch							
Online Statement 6E: We receive sufficient information from dispatch to respond safely to all calls.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	14	76	78	23	11	N=202	2.42
Percentage	7%	38%	39%	11%	5%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Below is a story of the fatal consequences of an apparent miscommunication:

Firefighters relayed the story of an instance in which they were on the way to a car accident and were updated by a dispatcher that shots were fired, so they staged and waited 20 minutes for MPD to arrive. One police officer showed up, thinking she was coming upon a car accident, apparently unaware of the shots fired information. The family of the critically injured little girl, who was in the car accident, grew tired of waiting and drove her to the hospital. The little girl died on the way to hospital. The firefighter said that there was no telling what her injuries were and their extent, but it would have been nice to have at least tried to save her.

6.4.9 9-1-1 System Challenges

Several community focus group participants described their frustrating experiences with dispatch. They were annoyed at having to talk to numerous dispatchers before reaching the appropriate person. Some said they hung up and called a friend or family member to take

them to the hospital. Respondents stated calling 9-1-1 was even more confusing at the University of Wisconsin-Milwaukee (UWM) campus.

One University focus group participant said that for emergencies at the UWM campus students have to call 9-9-1-1 and it goes to campus police, (which is run by the State Patrol), not Milwaukee 9-1-1, and they decide whom to call (private ambulance or fire department). In addition, if a call is from a cell phone, it goes to the County Sheriff, not Milwaukee 9-1-1.

Dispatchers believed their structure worked well and saw the problem with customers' lack of understanding of the 9-1-1 system.

Dispatch focus group participants generally believed that delays were due to a lack of citizen understanding of 9-1-1 procedures (two or three transfers was normal and there could be as many as five transfers). The following routing is not uncommon: the caller is on a cell phone, the 9-1-1 call goes to the County Sheriff's dispatch center, then to Milwaukee 9-1-1 which is answered by MPD, then to MFD dispatchers, then to a private ambulance company for non-life threatening medical calls. If the private ambulance company can not find an available ambulance crew, they transfer the call back to MFD dispatchers, who will then transfer it to another private ambulance company. (Depending on the nature of the call, MFD firefighters or paramedics may not respond at all.)

The figures presented in Table 6.4.10 reveal a majority of the online survey respondents ranked the statement, "Improve associated agency communication en route to, and on the scene of, emergency events" as *Top Priority* (18%) or *High Priority* (43%).

TABLE 6.4.10: MFD Improvement of Associated Agency Communications						
Online Statement 21I: Improve associated agency communication en route to, and on the scene of, emergency events.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Frequency	36	86	53	27	N=202	2.65
Percentage	18%	43%	26%	13%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

6.4.10 Private Ambulance Challenges

Another important issue that affected how the communities perceived MFD service delivery concerned the private ambulance companies. Private ambulance firms actively marketed their services, handing out refrigerator magnets and other items with their phone numbers printed on them to low income housing and elderly community centers. People in many of the multicultural communities, especially the elderly and those that did not speak English as a first language, confused these companies with the fire department. A number of the complaints in the community focus groups about the fire department's emergency medical response were really about the private ambulance service. In several of these situations, customers experienced less than professional customer service and slower response times.

A low-income elderly woman who had a number of debilitating diseases forgot what meds she had taken and overdosed. She called the number on the refrigerator magnet that was given to her by the private ambulance company. The dispatcher told her she was drunk and they hung up. The woman pulled herself off the floor, made it to a bus stop and took a bus to the ER.

A homeless community member said that in 2005 someone beat his ribs with a bar. The victim called 9-1-1 and told them he was spitting up blood. A private ambulance provider came, checked him over and said that he was okay. They told him, 'You're not going to die,' and they left. He walked to a police department and a second ambulance took him to the hospital, where he was diagnosed with bruised or broken ribs.

6.4.11 Multicultural Capacity

Multicultural capacity refers to the degree of proficiency and ease with which Fire/EMS personnel respectfully deliver emergency and non-emergency services to multicultural community members, as well as their willingness to learn about different community cultures. This includes knowledge of cultural practices, values, rituals, differences in expressing emotions, and differences in community priorities.

MFD firefighters and medics expressed they generally understood the communities they served and did not encounter cultural misunderstandings with local residents. The figures

presented in the first part of Table 6.4.11, indicate the majority of respondents disagreed (*Disagree*, 52% and *Strongly Disagree*, 18%) with the statement, “With all of the cultures we serve, I get confused about what is appropriate in one culture and not in another.” Meanwhile, as shown in the second part of Table 6.4.11, respondents were evenly split on the statement, “Firefighters encounter cultural misunderstandings with diverse community members.”

TABLE 6.4.11: MFD Encounters with Cultural Understandings and Misunderstandings							
Online Statement 9E: With all of the cultures we serve, I get confused about what is appropriate in one culture and not in another.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	12	35	105	36	14	N=202	2.12
Percentage	6%	17%	52%	18%	7%		
Online Statement 6H: Firefighters encounter cultural misunderstandings with diverse community members.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	14	79	79	13	17	N=202	2.51
Percentage	7%	39%	39%	6%	8%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Below are some representative comments from MFD and community focus groups, interviews and surveys regarding MFD’s interaction with multicultural communities:

“I would see officers and other firefighters go into a situation...they felt that their presence alone and the fact they were there to provide a service should be reason enough for these people to be accepting of them and accepting of the care that they wanted to give. And although your heart might have been in the right place and this is your job...if you don't understand or take the time out to try to understand their culture and what makes them tick, your services may, although be needed, may not be wanted.”

“We can do much better, we get the job done, that's all. We don't reach out to the multicultural communities. I've never seen or heard of a plan in place to help deaf or hard of hearing etc.”

During one community focus group, which was being conducted in the prayer room at a mosque, a firefighter opened the door looking for where he was supposed to meet someone for a different purpose. He started to walk into the prayer room with his shoes on and had to be asked to remove them. He didn't notice that all focus group participants and researchers, who were sitting in plain view in an open circle by the door, were not wearing shoes.

One focus group participant felt that the firefighters overreacted to a person with HIV and made the patient feel like a pariah.

In the MFD focus groups, participants concurred that cultural issues existed and affected service delivery. When asked what challenges they faced in delivering fire and emergency medical services to multicultural communities, participants identified such cultural issues as:

- Religious customs
- Gender identity (i.e. transgender/transsexual)
- Modesty needs (i.e., covering of one's head, eye contact or lack thereof)
- Blood transfusions (allowed or not)
- Gender appropriate contact (i.e., preference for men treating men and women treating women)
- Culturally inappropriate touching (i.e., handshaking, touching a child's head)
- Methods of dealing with grief

Every multicultural community focus group also expressed concern about cultural misunderstandings between MFD and the communities served. Several community groups indicated that MFD's lack of knowledge of the culture of their customers could result in offending them with regard to beliefs, customs and/or social norms. This was a bigger issue in medical responses rather than in fires. An unintentional act could in turn affect the safety of firefighters, paramedics and ultimately, community members.

"In the African American community they are very different expressing their grief. They scream. They yell louder than other people. And some firefighters don't know how to take that. I've been in scenes where you've got bosses, lieutenants or captains, calling for the cops because (of their perception of an) uncontrollable crowd. When in reality I go, 'No, they're just expressing their grief. There's no problem here. You are in no danger.' [But] they believe that they're in danger."

In the community focus groups, participants cited some of the following reasons they might not call 9-1-1 in an emergency:

- Fear of uniforms and/or the authority they represent
- Fear their language would not be understood
- Inability to pay for services
- Fear they might get in trouble for causing the emergency
- Fear of discriminatory treatment
- Embarrassment for creating an emergency
- Fear their sexual orientation or gender identity would result in mistreatment
- Fear the police department would arrive with the fire department

Researchers noted in a number of community focus groups that some residents' fear of uniforms was not directly related to MFD, but rather to historical memory relating to experiences with police or military.

"Back in Laos, the Communist is anybody in uniform. You had to respect, bow down, or respect others or you get beaten or even killed in many cases. In America...they get very discouraged to talk to people in uniform."

6.4.12 Public Education

The figures presented in Table 6.4.12 reveal the ranking of fire prevention and safety education services by MFD online survey respondents. The responses resulted in a mean of 3.43, between *Good Service* (52%) and *Excellent Service* (39%).

TABLE 6.4.12: MFD Quality of Fire Prevention and Safety Education Services						
Online Question 11: Overall, how well do we provide fire prevention and safety education services in multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Frequency	106	79	14	3	N=148	2.34
Percentage	52%	39%	7%	1%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

Table 6.4.13 identifies that 59% of MFD respondents believed that their public education materials were effective with members of multicultural communities, although almost one in five respondents selected the *Don't Know* category.

TABLE 6.4.13: MFD Effectiveness of Public Education Materials							
Online Statement 12E: Our public education materials are effective with members of our multicultural communities.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	17	104	35	7	39	N=202	2.80
Percentage	8%	51%	17%	3%	19%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

The majority of firefighters reported that customers they met in emergencies lacked basic knowledge about fire prevention and safety. The first part of Table 6.4.14, indicates that 55% of respondents agreed that customers lack basic knowledge about fire prevention and safety. A mean of 2.67 clusters the responses in the low end of the *Agree* response. The figures presented in the second part of Table 6.4.14 show an apparent disparity in that less than half of the online respondents believed that multicultural community members they met were aware of the services provided by the fire department. Of important note, more than 20% of the respondents selected *Don't Know*.

TABLE 6.4.14: MFD Extent of Community Prevention Knowledge							
Online Statement 12A: The customers I meet in emergency situations lack basic knowledge about fire prevention and safety.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	22	89	68	8	15	N=202	2.67
Percentage	11%	44%	34%	4%	7%		
Online Statement 12F: Multicultural community members I meet are aware of the services we provide.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	12	84	52	12	42	N=202	2.60
Percentage	6%	42%	26%	6%	21%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

In the focus groups, firefighters consistently reported that the communities lacked knowledge about fire safety, injury prevention, the 9-1-1 system, general health care practices, MFD procedures and services and whether there is a fee for these services. Focus groups noted that this lack of knowledge often created confusion, increased risk for both community members and firefighters and hindered service delivery. Online survey open-ended responses revealed a variety of opinions about MFD's role in public safety education. Among them were the following:

“Our community needs to take responsibility for their own fire safety. By giving away detectors, we have taught them it is our responsibility, not theirs.”

“I believe our department has one of the best Fire Education Units in the country.”

Public education was a major concern among multicultural community focus groups. Nearly all of the community focus groups expressed a desire for MFD to take a more proactive approach in fire and injury prevention in their neighborhoods, especially with regard to cooking fires, candle use, injury prevention and use of the 9-1-1 system. The majority of focus groups indicated that confusion existed about the differences between MFD and private ambulance companies and the reason why a fire truck arrived when they called for an ambulance. They requested presentations and materials in their language and in a manner that respects their culture. They also suggested television and radio fire prevention public service announcements in their languages.

Several fire and community focus group participants mentioned that a small number of officers and firefighters had actively opened their fire stations to the local neighborhood, to promote public safety education and strengthen bonds with the community. More details are in the Promising Practices section of this report.

The figures presented in Table 6.4.15 identify that most MFD online survey respondents reported frequent misuse of their services. Seventy-two percent of the firefighters selected *All the Time* (14%) or *Frequently* (58%) in response to the statement, “I respond to incidents where customers misuse our services.” A mean of 2.90 indicates a large group of responses in the *Frequently* choice.

TABLE 6.4.15: MFD Community Misuse of Services							
Online Statement 3A: I respond to incidents where customers misuse our services.							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	28	117	40	3	14	N=202	2.09
Percentage	14%	58%	20%	1%	7%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

The quotes below are representative of the sentiments MFD personnel expressed about customers’ use and misuse of fire and emergency medical services:

"...repetitive use of service for inappropriate issues without any remorse is frustrating and no level of education seems to help."

"...the vast majority of people summon EMS and fire personnel for what they perceive to be life-threatening situations. However, I have witnessed citizens admit to calling 9-1-1 because they lack money for a bus fare or their taxi ride had not arrived in a timely manner and they were requesting ambulance services to a hospital near their ultimate destination."

A firefighter said that we need to replace frustration with patience when someone calls repeatedly, use it as an educational opportunity. He said the problem with firefighters is that they live for the opportunity to carry a baby out the window and the guys get irritated by EMS calls. "If we did a better job of educating people [when on these types of calls]...then maybe there would be less repeat offenders."

6.4.13 Summary of Findings, Questions #1-2

Firefighters and multicultural community participants agreed on the following findings and themes: fire services and to a slightly lesser extent, emergency medical services delivered to the multicultural communities rated high; confusion and dissatisfaction with emergency medical services delivered by private ambulance companies; a need for improvement in firefighter interpersonal communication skills; difficulties due to a lack of a productive working relationships between MFD and MPD; communication difficulties caused by the dispatch/9-1-1 system; and the need for more public health, safety and prevention education.

Both the community and firefighters identified issues involving language barriers. However, a majority of the firefighter respondents indicated in the online survey that their communication challenges were infrequent. This was contrary to the sentiments expressed by nearly all of the MFD focus groups. Both firefighter and community focus group participants also acknowledged that communication barriers impeded service and delays could put both first responders and civilians at greater risk.

Both firefighters and multicultural community members identified the need for translation services, although a majority of MFD respondents reported not using the Language Line. Some MFD online survey respondents viewed the language challenge as the customer's problem. Others expressed that they used children or neighbors as translators. Some firefighter focus group members identified a need to hire more people who speak some of the languages spoken by their customers. A few first responder focus group members expressed an interest in studying other languages (especially Spanish and Hmong) to improve their communication skills.

Community focus group participants placed much more importance on the need for translation in both emergency and non-emergency situations. They expressed concern about their difficulties accessing 9-1-1 due to their inability to speak English clearly.

While the online survey respondents overwhelmingly agreed that firefighters provide services to all communities equally, there were differing opinions and stories from both MFD and community focus groups and interviews. MFD online survey respondents reported encountering few cultural misunderstandings, yet, a number of the MFD and community focus group participants were vocal about cultural misunderstandings and expressed that these misunderstandings delayed service delivery, especially in emergency medical situations.

Both the MFD and multicultural community members acknowledged the need for additional public education, but did not agree about how that should be accomplished. A majority of firefighters thought MFD educational materials were effective with members of the multicultural community, although nearly 20% reported not knowing if they were or were not. Community participants reported nearly the opposite, noting that the materials were not in their language or sensitive to their customs and values. They suggested television and radio fire prevention public service announcements in their languages. Focus group participants also asked that MFD provide fire prevention and safety courses in their communities, perhaps at their local fire station and if possible, delivered in their languages.

Members of the community focus groups expressed a desire to be part of the solution and were willing to help teach firefighters what they needed to know about their particular culture, its traditions, customs and values. They identified that they would assist with translation of fire prevention and safety materials and that they would help to bring people from their communities together for presentations.

The majority of firefighters responding to the online survey thought their multicultural customers had basic knowledge about fire prevention and safety. However, MFD focus groups identified a significant lack of knowledge among the multicultural communities in prevention and understanding of MFD services. The community focus groups confirmed this lack of knowledge.

Over 70% of online survey respondents agreed that their customers frequently misuse the services provided by MFD, particularly 9-1-1. Many firefighters expressed resentment and frustration regarding this situation, though there was a small minority who called for patience and education. Many of the community focus group participants, especially first and second-generation immigrants and elderly, expressed confusion and fear about using 9-1-1.

Research Question #3

How does the fire service “hero” culture increase or decrease the risk of injury and loss of life for firefighters and community members when serving multicultural communities?

The research team originally planned to examine fire incident reports to collect data to answer research question #3. However, onsite investigation established that this data was unavailable in a form that allowed a substantive response to this question. Although the fire department reporting system provided the demographic data points, it did not consistently contain demographic information (i.e., race, gender and age) of first responders or community members involved in injuries and Line of Duty Deaths (LODD). The research team was unable to identify the ethnic background of people in fire department incident reports.

Researchers attempted to identify specific incident data with the open-ended questions in the community post-focus group survey. However, the information collected also failed to yield conclusive data to definitively answer this question. In most cases, the incident particulars (date, time, location, etc.) supplied by the community members lacked the detail and/or accuracy necessary to match it with records contained in the Fire Department Reporting System.

The findings depicted below, the “Can Do” attitude, firefighter risk-taking behaviors, reporting of injuries, and fire department leadership, relate in various ways to the health and safety of firefighters and multicultural community members.

6.4.14 The Effect of “Can Do” Attitude on Safety in Multicultural Communities

In this project, researchers used the phrases “Can Do” or “Do Whatever It Takes” as synonyms for what NFFF¹¹ described as the hero culture of the fire service. The researchers acknowledge that firefighters must have confidence that they can do the job safely and effectively. However, in this report, researchers use “Can Do” to reflect on the aspect of the hero culture that has been typically associated with firefighters taking unsafe risks to get the job done. The reasons often stated for this type of behavior were that it fulfills the expectations of the public and that firefighters, in fact, have come to expect it of themselves.

¹¹ National Fallen Firefighters Foundation (NFFF). (N/A). 16 Firefighter Life Safety Initiatives. Available online <http://www.everyonegoeshome.com/initiatives.html>.

The majority of Milwaukee firefighters and paramedics who responded to the online survey (N=202) reported that the “Can Do” attitude of firefighters *Decreases Safety* for firefighters and paramedics when they are providing services in multicultural communities. The figures presented in Table 6.4.16 produced a mean of 2.34, indicating a clustering of responses in the *Decreases Safety* category. Eighteen percent reported that this mindset did not affect safety.

TABLE 6.4.16: MFD Effect of a "Can Do" Attitude on Firefighter and Paramedic Safety

Online Question 14: How does the Fire Department “Can Do” or “Do Whatever It Takes” attitude affect the safety of firefighters and paramedics delivering service in multicultural communities?

	Significantly Increases Safety	Increases Safety	Decreases Safety	Significantly Decreases Safety	Does not Affect Safety	Total	Mean
Frequency	16	45	85	20	36	N=202	2.34
Percentage	8%	22%	42%	10%	18%		

Significantly increases safety = 4 points Increases safety = 3 points Decreases safety = 2 points Significantly decreases = 1 point Does not affect safety = 0 points

Stories from focus group participants and interviewees represented the differing perspectives about the “Can Do” attitude:

A paramedic related a situation in which they were called by MPD for a guy who was on drugs and was in the back of a police car. A patient assessment was needed, but the patient was thrashing, biting, and spitting. The paramedic said he took a few steps back to assess the situation, but his partner jumped in the back of the police car, grabbed the patient and was subsequently bitten by him. Later information revealed that the patient was HIV positive.

One officer said, “I believe we’re good, but I believe we’re also lucky...[I] recently had a garage fire, it’s already down and the truck decides they’re going on the roof to cut a little more. Again that aggressive mentality—that cowboy mentality.”

“The ‘can do’ attitude this survey is questioning is what keeps the department going. Only the politicians and bureaucrats seem to worry that a ‘can do’ attitude may be a concern to someone.”

The fire service is [a] "...high-strung, ego-driven profession. No matter who's doing it, someone else always thinks they can do it better...I think that's what drives the whole 'can do' attitude."

In contrast, when the question referred to how the "Can Do" or "Do Whatever It Takes" attitude affected the safety of members of the multicultural community, the majority of the first responders reported that it increased customer safety. Table 6.4.17 shows a mean of 2.86, which indicates online respondents tend to believe the public benefits from their "Can Do" attitude. Nearly 30% of the respondents indicated that this mindset did not affect safety.

TABLE 6.4.17: MFD Effect of a "Can Do" Attitude on Multicultural Community Member Safety							
Online Question 17: How does the Fire Department "Can Do" or "Do Whatever It Takes" attitude affect the safety of multicultural community members?							
	Significantly Increases Safety	Increases Safety	Decreases Safety	Significantly Decreases Safety	Does not Affect Safety	Total	Mean
Frequency	26	78	32	7	59	N=202	2.86
Percentage	13%	39%	16%	3%	29%		

Significantly increases safety = 4 points Increases safety = 3 points Decreases safety = 2 points Significantly decreases = 1 point Does not affect safety = 0 points

The following comments from a transcript of a MFD video interview exemplified these findings about the "Can Do" approach:

"My personal record is five [rescues] in one fire. And that's something you never forget. The feeling you have after that. It's worth, you know, we've discussed it...If I want to go [die] I want to go charging ahead. Going to get some kid out of a fire and then (clicks his fingers) it's done, if I don't make it. But at least you're striving to do something. And that, after we got the children out and they all were alive...we all had the adrenaline rush gone. We were not good for much of anything...And the chief that put me at that firehouse saw me...He grabs me and he hugs me like this and he says, 'And that's why I put you here'...So that's part of that hero thing that I think about."

6.4.15 Risk-Taking Behavior

The figures presented in Table 6.4.18 reveal that 85% of the respondents *Strongly Agree* (21%) or *Agree* (64%) with the statement, “Sometimes firefighters go beyond their limitations.” A mean of 3.10 falls solidly in the *Agree* response category.

TABLE 6.4.18: MFD Firefighters Sometimes Going Beyond Their Limitations							
Online Statement 15D: Sometimes firefighters go beyond their limitations.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	42	129	20	1	10	N=202	3.10
Percentage	21%	64%	10%	0%	5%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Although 52% of the respondents acknowledged that the “Can Do” attitude decreased safety, (Table 6.4.16), an overwhelming majority of the respondents reported that sometimes firefighters go beyond their limitations. This example originated from one of the video interviews.

“We had a multiple-alarm fire. Not even in our first area. We heard it on the radio...We went on the third alarm. We actually beat some of the second-alarm companies in there...We were there for maybe five minutes. Then they sent the bad boys to work. Because they know that whatever the job is, we'll just get it done and we're not afraid to work real hard. So, I think, yes, safety is very important and I'm one that stresses that to my crew...but I know what I can do, I think, based on experience...I don't do crazy things, but I will push the envelope occasionally.”

The figures presented in Table 6.4.19 show that 70% of online respondents indicated disagreement (53% *Disagree*, 17% *Strongly Disagree*) with the statement, "I expect other firefighters and paramedics to do whatever it takes, no matter what the risks."

TABLE 6.4.19: MFD Expectation that Firefighters and Paramedics will do "Whatever it Takes"							
Online Statement 15A: I expect other firefighters/paramedics to do whatever it takes, no matter what the risks.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	11	44	107	35	5	N=202	2.16
Percentage	5%	22%	53%	17%	2%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Another type of risk-taking behavior identified during MFD focus groups was emergency-response driving. Firefighters responding to calls often drove too fast, didn't slow down at intersections, ran red lights, and, thus, were involved in vehicle accidents. One focus group participant said, "They're like rabid dogs when they get a fire run." However, some firefighters acknowledged the need for both rapid response to calls and safe driving.

Community focus group members also discussed the issue of MFD driving to emergencies:

A community focus group participant described a situation in which her girlfriend's brother was in a car that was hit by the fire truck. The friend's brother had his stereo cranked up loud and was driving through the intersection and couldn't hear the sirens. He was hit and knocked into a pole. She said her friend's brother had the green light and that the fire truck rushed through the red light.

Just over one in five of the online respondents reported that risk-taking behaviors might be more prevalent among new firefighters. According to the figures presented in Table 6.4.20, 22% of respondents reported new firefighters took unnecessary risks to prove themselves worthy to their crew either *All the Time* (6%) or *Frequently* (16%). Fifty-two percent responded that they *Infrequently* observed this type of risk-taking behavior. The mean of 2.16 falls in the *Infrequently* response choice.

TABLE 6.4.20: MFD Observations of New Firefighters Taking Unnecessary Risks

Online Statement 19F: New firefighters taking unnecessary risk to prove themselves worthy to their crew.

	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	12	32	105	27	26	N=202	2.16
Percentage	6%	16%	52%	13%	13%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Newer firefighters with less time and grade admitted that they sometimes took additional risks to prove themselves worthy and to avoid being negatively labeled. Others commented that they couldn't say no because they'd get a reputation for not being a good firefighter:

One senior firefighter said, "If I've got 15 years on the job and this guy's got 16 months on the job—he's gotta prove himself. That's going to be in his head—he's trying to prove himself to me. He's a 'can do' anything because he's trying to get my approval. That's where that comes from, that's firehouse culture...he's going to have to prove himself to his crew that he's worthy...by taking chances."

"...As a young person coming in on this job, you're very intimidated...You're told don't say much at the kitchen table. Don't do this and don't do that. But then on the other hand, [you're told] if there's safety issues, blurt it out. So...you become so comfortable with not saying anything that when it gets to that safety point, you don't want to say anything for fear that you might be ridiculed or [told] 'hey, cub, shut up.'" (video interview)

One firefighter reported he was offensively fighting a fire (within the last four years) in a vacant building. His officer wanted him to go inside to do an overhaul even though the firefighter and others felt the building was not structurally safe.

As they went up the stairs that had just been “rolling” with fire 20 minutes earlier, they noticed that the steps were spongy. Some of the crew fell through the stairs down to the basement. When asked why he did it, the young firefighter said, “...I’m just following orders...Who am I not to have my year on and say it is not okay to go in? In the fire department, you only have a year on, you might be remembered forever as not being willing to go in.”

6.4.16 Reporting Injuries

MFD encourages all personnel to report all injuries sustained in the line of duty. However, the figures presented in Table 6.4.21 show only 11% of respondents observed firefighters reporting all injuries, including minor ones, all the time. An additional 53% of the respondents observed firefighters reporting injuries *Frequently*. Approximately a quarter of the respondents indicated they observed firefighters who *Infrequently* or *Never* reported injuries.

TABLE 6.4.21: MFD Observation of Firefighters Reporting their Injuries

Online Statement 19C: Accurately reporting all injuries (including minor injuries).

	All the time	Frequently	Infrequently	Never	N/A	Total	Mean
Frequency	23	108	47	6	18	N=202	2.80
Percentage	11%	53%	23%	3%	9%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Focus group participants listed numerous reasons for not reporting injuries or taking sick days including giving up shifts, poor workers’ compensation benefits, denial of duty disability, and having to go off the payroll once sick days were used up.

One seasoned officer talked about delaying reporting a fireground injury so that he could assist the arson investigation crews and work another shift. When asked why he didn’t report his injuries, he said, “I’ve been banged up a lot. What I usually do is take three ibuprofen. If that doesn’t cut it, three more. And if that still doesn’t cut it, maybe I’ll think about the hospital...You go to the hospital—you talk to some emergency room doctor. He’ll either lay you up on injury leave if he can find anything really wrong with you or he’ll say go back and suck it up. So I just skipped a step...I’m a child of the ‘60s—Vince Lombardi, no pain, no

gain—you know.” When asked how that kind of ‘can do’ attitude affects safety, he replied, “I don’t think it affects our safety because I don’t do things that are unsafe. I will press the envelope, but I know how far the envelope can be pressed.” Later he also said that he had a high pain tolerance: “I’ve had fillings filled without anesthetic...it’s mind over matter—if you believe you can do it.”

6.4.17 Leadership

According to the figures presented in Table 6.4.22, 93% of the online respondents *Strongly Agree* (33%) or *Agree* (60%) that effective leadership is the best way to manage high-risk behaviors among first responders.

TABLE 6.4.22: MFD Effective Leadership is the Best Way to Manage High-Risk Behavior							
Online Statement 15B: Effective leadership is the best way to manage unnecessary high-risk behavior among first responders.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don’t Know	Total	Mean
Frequency	66	121	10	1	4	N=202	3.27
Percentage	33%	60%	5%	0%	2%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don’t Know = 0 points

Firefighters expressed support for effective leadership in the following comments:

One firefighter stated that although firefighters are always looking to fix things, the “boss” needs to keep the big picture in mind so that no child has to lose a parent.

“When I’m working with a crew, my first words to them at the start of the day: ‘Remember when we make it on the scene, whether it is a fire or EMS, most definitely fire, we’re going to have to take a moment. We’re going to look at the big picture...all of the safety hazards that might be there. You know what, we can’t run in and help that person because we’re putting our own selves at risk.’ And that’s where I come in as the lieutenant, as the supervisor responsible for everyone on that rig.”

"I do believe we as a whole have become more aware of safety issues in recent years. We have been better about toning down risky behavior and I believe our officers, generally speaking, are better in watching out for their crew and their safety."

An important leadership issue related to fire department culture is the need for officers to lead by example with regard to safety, multiculturalism and customer service. Below are differing perspectives from MFD personnel on this issue.

"I had a situation recently in the engine house where they were going through training. Some guys were going, they had to go to a cultural competency training and they were really up in arms about it. They did not want to go. And they had such negative things to say about it. And ironically, I was the only female there...and I just sat there and listened to what they were saying. I was saying to myself...I'm going to see if anybody catches themselves and go, 'Oh...she's a female'...but they did not stop what they were saying, even after they came back from the training. It seemed worse...There was an officer there and I sat there to see if he would even say anything. Because I think when you become an officer, you're managing a crew. And nothing was said.... And this guy said some pretty derogatory things."

One officer said, "I think if you'd ask anyone, they know that I'm someone who takes it to the edge...I tell the guys every day...My first job is to protect them, and I'm not successful if one of them has to go home hurt or burned or whatever. My job is to protect them, and if I'm forced to choose between their safety and a citizen's safety, I'm choosing them...And they're always coming back at me...'But boss, you do this.' I said, 'That's me. I can do that. I'm not going to let you do it. And I'm not going to make you do something I wouldn't try myself.' So the reputation we have, if I may share our nickname, people in our Engine are known as the Bad Boys. Because we just do it."

Another officer said, "I know this is cliché, but it really starts with the leadership—the officer that is on duty at that time. If he or she are pretty strong in their beliefs and the things that they want to accomplish and looking out for the overall well-being of the members as well as the public, then I think they're very successful."

6.4.18 Summary of Findings, Question #3

Respondents were somewhat split on the effect of the “Can Do” or “Do Whatever It Takes” attitude and the impact it has on safety. In general, respondents reported that “Can Do” behavior made it safer for multicultural community members, even though it placed firefighters at greater risk.

A large majority of firefighters acknowledged that they go beyond their limits, agreeing they had a tendency to “push the envelope” when it came to risk-taking behavior, especially for the safety of citizens. However, respondents were quite clear that they did not hold an expectation that other firefighters should “Do Whatever It Takes.”

Some firefighters mentioned how important it was to their career that they earned a reputation for being aggressive. Many of the focus group respondents reported they observed new firefighters taking unnecessary risks, though only a small percentage of online respondents reported observing this behavior frequently or all the time. Some veteran firefighters acknowledged that they had personally taken unnecessary risks as a new firefighter to prove their worth.

While MFD expects firefighters to report all injuries, no matter how minor, only a small portion—about one in ten—of the survey respondents reported observing firefighters always doing so. However, most respondents indicated they frequently observed firefighters reporting their injuries. Focus group participants listed numerous reasons for not reporting injuries or taking sick days, including poor workers’ compensation benefits, denial of duty disability, and having to go off the payroll once sick days are used up.

An overwhelming majority of respondents believed that effective leadership was the best way to manage high-risk behavior among firefighters.

Research Question #4

What health and safety risks to firefighters and community members could be reduced if firefighters had greater multicultural awareness and better reflected the community?

The research team originally planned to examine fire incident reports to determine the degree of correlation between firefighter and community member injuries, loss of life and multicultural issues. As mentioned above in research question 3, the fire departments in the three selected project sites did not consistently report demographic data in their incident reports. This prevented the research team from identifying and quantifying relevant correlations.

While no quantitative data existed that connected firefighter and community safety, multicultural awareness, and department demographics, the research team collected quantitative and anecdotal data that illustrated the unique nature of health and safety risks to firefighters and community members in multicultural settings.

6.4.19 Multicultural Awareness and Safety

Firefighters and emergency medical personnel generally considered themselves to be effectively trained to serve multicultural communities. The figures presented in the first part of Table 6.4.23 generated a mean of 2.96 with 77% of firefighters responding *Strongly Agree* (20%) or *Agree* (57%) to the statement, “Firefighters are effectively trained to serve people from all walks of life and diverse cultural backgrounds.” The second part of Table 6.4.23 produced a comparable mean, 2.94, for the corresponding statement regarding training for emergency medical responders. Both means fall within the parameters of the *Agree* category.

TABLE 6.4.23: MFD Training in Serving Multicultural Communities							
Online Statement 6D: Firefighters are effectively trained to serve people from all walks of life and diverse cultural backgrounds.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	41	115	30	9	7	N=202	2.96
Percentage	20%	57%	15%	4%	3%		
Online Statement 9D: Emergency medical responders are properly trained to assist members of our multicultural communities.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Frequency	35	117	25	11	14	N=202	2.94
Percentage	17%	58%	12%	5%	7%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

However, despite this perception of being effectively trained, a series of multicultural issues remained that potentially affected firefighter and civilian safety. The information presented in Table 6.4.24 contains some multicultural issues that MFD and multicultural community focus group participants identified as having the potential to increase risks to health and safety for both groups.

Milwaukee Fire Department	Community
<p>Language barriers may hinder responders' ability to gather information to effectively and safely fulfill their mission to suppress fires and save lives and property.</p>	<p>Language barriers may hinder firefighters' and paramedics' ability to gather sufficient and accurate information to safely and effectively suppress fires and save lives and property.</p>
<p>Cultural norms/traditions, of which MFD is unaware or does not understand, may place responders in unsafe situations where they are at risk (nonphysical and/or physical).</p>	<p>Stereotypes or apprehension of a particular community or its members may cause MFD personnel to miss important information that may result in unsafe conditions for community members.</p>
<p>Fear of uniforms may cause multicultural community members to avoid calling 9-1-1, and/or provide incomplete or inaccurate information. Such actions may contribute to escalating the level of on-site risk for firefighters.</p>	<p>Fear of uniforms or authority figures may cause multicultural community members to avoid calling 9-1-1 or give incomplete information that could delay emergency service delivery and increase risk to the health and safety of community members.</p>
	<p>There was some concern among women and members of the African-American, Muslim and LGBT communities that MFD attitudes toward their communities affected the quality of service delivered to them. Some members of these groups also voiced concerns about the treatment someone from their community might receive should they be hired by MFD.</p>

There were several stories from both community and MFD focus groups that demonstrated potential safety risks for both firefighters and community members related to multicultural awareness:

During a girls' basketball game at an African American community center, two Caucasian ambulance personnel were treating an African American girl who was complaining of an ankle injury. When the girl's mother touched the responder's

arm, one of the ambulance personnel jumped up and said, "You tried to assault me!" MPD was called. They entered with Billy clubs drawn and grabbed the mother. The director of the community center tried to explain that this was the patient's mother who wanted to check on her daughter. MPD told the director to return to her office. The director, the mother and the daughter all believed they had received bad service because they were stereotyped.

At a house fire, a firefighter slapped what he thought was a hysterical woman to get her to calm down enough to tell him if there was anyone in the home. She was deaf and he didn't realize it. One officer on the scene said the crowd was ready to jump him. He retired as a result of the incident. Co-workers said he was typically a very community-oriented firefighter.

One officer said that the original plan to fight a structure fire was from outside because the flames were coming 10 feet out of every window. There were language barriers according to a number of the firefighters. The officer and a firefighter decided to enter the fully involved first floor without a hose line and without the knowledge of Command. The officer explained, "People on the scene were screaming because people were still inside...I mean, I didn't have any language barriers—I didn't need to know the language to know what was going on...."

A Caucasian officer said, "In regard to safety, having a diverse crew helps in that you go into a household that's one specific ethnicity and you have a member of your crew from that background...you're less likely to run into trouble because a lot of times people will identify with that firefighter...It does make a difference. You go into a volatile situation and if...four white firefighters walk into an African American household where tensions are high, we're less likely to be able to bring those tensions down than if I've got a black firefighter who is professional and well spoken and who can identify, or these people feel that they can identify with him better than they can identify with me. It improves crew safety. It really does!"

Collaborating with multicultural groups and community leaders was identified as a strategy that can reduce risk for firefighters and community members.

One African American community leader who attended a community focus group explained how the MFD asked for her help in a volatile situation in which a 16-year-old boy killed a man and put him in a garbage can behind her house. Some of the African American members of the MFD knew she had worked with troubled youth. One of the firefighters called her at work and asked her to talk to the assailant and encourage him to turn himself in. He did so without incident.

A Hmong community leader said, "...there's resource in the Hmong community.... [The MFD] can call up there and say, 'Hey, I need help. I have a client here who does not speak any English or I cannot understand. I need communication'.... Then we will send a bilingual person on site, or maybe through phone translation.... We do need collaboration with the fire department. And there's a lot that we need to learn about them. There's a lot that they need to learn about us. And I think together we can work better as a community."

6.4.20 Ethnic and Gender Diversity and Safety

The figures presented in Table 6.4.25 offer a comparison of the gender and ethnic demographics of MFD and those of the City of Milwaukee.

TABLE 6.4.25: City of Milwaukee and Milwaukee Department Demographics

Demographic Category	City of Milwaukee	Milwaukee Fire Department
Ethnicity		
White	44.7%	77.5%
Black or African American	40.2%	13.5%
Hispanic or Latino (of any race)	14.5%	6.5%
American Indian and Alaska Native	0.7%	2.0%
Asian	3.6%	0.5%
Native Hawaiian and Other Pacific Islander	0.0%	0.0%
Some Other Race	8.7%	0.0%
Two or More Races	2.1%	0.0%
Total	114.5%*	100%
Gender		
Male	48.1%	95.5%
Female	51.9%	4.5%
Total	100%	100%

**Totals may equal more than 100% because some individuals may have reported more than one race.*

MFD online survey respondents placed a *Medium Priority* on hiring a workforce that was representative of the communities they served. The figures presented in Table 6.4.26 reveal that the responses to the online statement, "Hire a competent, gender and culturally diverse workforce that is representative of our community" generated a mean of 2.08. This mean represented a clustering of responses in the *Medium Priority* category, though the largest percentage of respondents (37%) chose the *Low Priority* choice.

TABLE 6.4.26: MFD Hiring a Representative Workforce						
Online Statement 21J: Hire a competent, gender and culturally diverse workforce that is representative of our community.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Frequency	24	42	62	74	N=202	2.08
Percentage	12%	21%	31%	37%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

Some MFD personnel emphasized in open-ended survey responses, focus groups and interviews that recruitment efforts should focus first on hiring competent firefighters, and that competency should never be overlooked in favor of race or gender diversity:

"Hire the most competent person for the job. Gender and cultural diversity does not work when fighting a fire in a burning building. You need the best firefighter, period!!!!"

"Hiring a competent workforce that is dedicated to the fire service, educated, and open-minded first and foremost should be a priority. If we are able to balance this with diversity, then I am for it. If not, you have to remember my life depends on the individuals around me. Diversity is important, but not at the cost of a fire department that isn't able to perform quickly, safely, and efficiently."

"We as a department are a fairly diverse group who are generally well intentioned. With street experience most become good at dealing with many cultures. Resentment is high, however, regarding heiring and promoting based on race. The best-qualified person should be hired or promoted. It is a matter of safety for us and more importantly for our community. When promotional lists are clearly skewed or heiring standards are watered down, there is a negative

impact on the quality of the workforce and the ability to render quality service to anyone. The resentment from such practices is pure poison to having good relations between races within the department."

Other firefighters supported hiring more women and members of multicultural communities and expressed that diversity and cultural competency related directly to greater safety and improved service:

A Caucasian, male firefighter stated, "...In my perfect world, I'd have myself, a female firefighter, an African American firefighter, and...I'd probably pick a Hispanic firefighter.... So, I'd love to have four different faces walking into a room because there's that much better chance of people identifying with you and things going more smoothly."

Another male firefighter stated, "[Women] bring another side.... They have a sixth sense about them, where they can kind of, take information and get to what's really going on really quickly. And that's essential in the fire service.... And so it's been extremely beneficial to me. The nineteen years that I've been on, I've been fortunate when I was in the field to always have at least one female assigned to my rig or assigned in our fire house."

A male firefighter talked about how females have improved the firehouse environment. "Females bring their emotions. In a fire house (with) mucho bravado...the females bring a little bit of that down. And it's needed."

Table 6.4.27 identifies that members of the multicultural community are interested in having people from their community become MFD firefighters and are willing to support MFD with recruiting qualified, inclusive, safe and competent firefighters in their communities. Seventy-six percent of the community focus group members who responded to the post-focus group written survey responded *Yes* to the question, “Would you like to have a family member or friend get a job on a fire truck or in an ambulance?”

TABLE 6.4.27: Community Interest in MFD Employment				
Community Post-Focus Group Question 19: Would you like to have a family member or friend get a job on a fire truck or in an ambulance?				
	Yes	No	Total	Mean
Frequency	9	31	N=127	1.76
Percentage	76%	24%		

Yes = 2 points No = 1 point

6.4.21 Summary of Findings, Question #4

Online survey respondents expressed clear agreement that both firefighters and paramedics within the Milwaukee Fire Department are well trained to serve the multicultural communities in their city. However, despite this level of training, both firefighters and community members listed numerous situations where one or both groups experienced risk. Focus group findings also indicated that sometimes firefighters might not be aware of that risk.

MFD personnel supported the hiring of competent recruits, but expressed that competency should not be overlooked in favor of gender or diversity. Some firefighters expressed clear reasons for and advantages of a diverse force and identified that it both increased safety and improved service.

A majority of multicultural community focus groups expressed that it was important that the fire department reflect the diversity of the community they served. Seventy-six percent of the participants who responded to the post community focus group written survey reported that they would like to see a member of their community working for MFD and would assist with recruitment in their respective community.

6.5 Research Question #5 – Diversity by Rank

“What is the current multicultural make-up by rank of the firefighters in metro departments in the United States?”

Researchers designed research question #5 to establish a baseline record of multicultural statistics within the largest fire departments in the United States.

Supported by the IAFC, Metro Chiefs Section and DHS Fire Prevention and Safety Research and Development Grant, the research team created an online survey to collect diversity-by-rank numbers for 108 Metro fire departments.

On November 1, 2006, researchers alerted 110 metro fire departments to the survey and provided web-based access to answer the 15 baseline questions. The goal of the survey was to collect and document ethnic and gender diversity numbers in the following categories:

- Firefighter/paramedic
- Company Officers—Sergeant, Lieutenant, Captain
- Chief Officers—Battalion Chief, Division Chief, Deputy Chief, Assistant Chief
- Fire Marshal
- Fire Chief

The 90-day period between November 1, 2006 and February 1, 2007 established an intentionally narrow response window. Because of the fluid nature of demographic data, researchers plan to use the same period for future tri-annual updates, thereby establishing a consistent informational “snapshot” over time.

The following tables establish the baseline data for the 108 departments that responded to the survey. Research question #5 involved gathering baseline data, so the research team made no attempt at interpretation. The raw data for this survey is contained in Appendix C.

The information in Table 6.5.1 contains an overview of the diversity by rank data gathered from the 108 Metro Departments in the United States.

TABLE 6.5.1: Diversity by Rank Survey Statistics	
Category	Total
Number of Metro Departments that responded to the survey	108
Paid Metro Departments	100
Combination Metro Departments	8
Uniformed Personnel Full Time Equivalentents (FTEs) including vacancies*	101,180
Uniformed Personnel (FTEs) reported in all ranks	98,586

**Some departments reported volunteer positions*

Note: Chesterfield, Daytona Beach, Detroit, Houston, Nashville, St. Petersburg, Salt Lake and Tucson reported, but were not Metro members. Three departments only partially completed information about chief and/or company officers (San Diego, Metro Sacramento, Honolulu). Two Metro Member departments were unable to respond (St. Louis, Clark County). Three departments didn't report firefighter vacancies, and six departments reported no Fire Marshal position.

The information in Table 6.5.2 contains data by geographical region.

TABLE 6.5.2: All Department Figures by IAFC Region		
Division	States	Uniformed Personnel
Eastern Division	Delaware, Maryland, New Jersey, New York, Pennsylvania, District of Columbia	22,327
Great Lakes Division	Illinois, Indiana, Michigan, Minnesota, Ohio Wisconsin	12,954
New England Division	New Hampshire, Vermont, Connecticut, Maine, Massachusetts, Rhode Island	3,539
Southeastern Division	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, Puerto Rico, US Virgin Islands	23,579
Missouri Valley Division	Colorado, Iowa, Kansas, Missouri, North Dakota, Nebraska, South Dakota, Wyoming	3,233
Southwestern Division	Arkansas, Louisiana, New Mexico, Oklahoma Texas	14,138
Western Division	Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington	18,816
Total		98,586

Table 6.5.3 is a look at the whole fire service by percentage for the 108 departments reporting:

TABLE 6.5.3: Metro Department Summary by Race/Ethnicity and Gender		
108 Metro Departments	Total Uniformed	Percentage of Total
Ethnicity		
White	70,620	71.63%
Black or African American	14,590	14.80%
Hispanic or Latino (of any race)	11,017	11.18%
American Indian and Alaska Native	558	0.57%
Asian	1,290	1.31%
Native Hawaiian and Other Pacific Islander	153	0.16%
Some Other Race	299	0.30%
Two or More Races	59	0.06%
Total	98,586	100.00%
Gender		
Male	94,121	95.47%
Female	4,465	4.53%
Total	98,586	100.0%

Tables 6.5.4 – 6.5.19 below represent the diversity by rank statistics for IAFC divisions; collectively and individually:

- Table 6.5.4/6.5.5 – All Fire Service
- Table 6.5.6/6.5.7 – Eastern Division
- Table 6.5.8/6.5.9 – Great Lakes Division
- Table 6.5.10/6.5.11 – New England Division
- Table 6.5.12/6.5.13 – Southeastern Division
- Table 6.5.14/6.5.15 – Missouri Valley Division
- Table 6.5.16/6.5.17 – Southwestern Division
- Table 6.5.18/6.5.19 – Western Division

TABLE 6.5.4: All Fire Service Departments Reporting by Rank, Gender and Ethnicity
 108 Departments - 98,586 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	67	4	58	7	2957	124	16151	585	48232	2435
Black or African American	25	0	21	2	421	23	2457	126	10826	689
Hispanic or Latino (of any race)	9	1	12	0	249	6	1932	48	8475	285
American Indian and Alaska Native	0	0	1	0	16	0	121	4	398	18
Asian	0	0	0	0	27	2	154	5	1030	72
Native Hawaiian and Other Pacific Islander	0	0	0	0	25	0	24	0	100	4
Some Other Race	1	0	0	0	3	2	28	0	250	15
Two or More Races	1	0	1	0	6	0	6	0	37	8
TOTAL	103	5	93	9	3704	157	20873	768	69348	3526
	108		102		3861		21641		72874	

* 102 Departments reported having Fire Marshals

TABLE 6.5.5: All Fire Service Departments Reporting by Rank, Gender and Ethnicity - Percentages
 108 Departments - 98,586 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	62.00%	3.70%	56.80%	6.90%	76.60%	3.20%	74.60%	2.70%	66.20%	3.30%
Black or African American	23.30%	0.00%	20.60%	1.90%	10.90%	0.60%	11.40%	0.60%	14.90%	0.90%
Hispanic or Latino (of any race)	8.30%	0.90%	11.80%	0.00%	6.40%	0.20%	8.90%	0.20%	11.60%	0.40%
American Indian and Alaska Native	0.00%	0.00%	1.00%	0.00%	0.40%	0.00%	0.60%	<.10%	0.50%	<.10%
Asian	0.00%	0.00%	0.00%	0.00%	0.70%	0.10%	0.70%	<.10%	1.40%	0.10%
Native Hawaiian and Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	0.60%	0.00%	0.10%	0.00%	0.10%	<.10%
Some Other Race	0.90%	0.00%	0.00%	0.00%	0.10%	0.10%	0.10%	0.00%	0.30%	<.10%
Two or More Races	0.90%	0.00%	1.00%	0.00%	0.20%	0.00%	<.10%	0.00%	0.10%	<.10%
TOTAL	95.40%	4.60%	91.20%	8.80%	95.90%	4.10%	96.30%	3.70%	95.20%	4.80%
	100.00%		100.00%		100.00%		100.00%		100.00%	

TABLE 6.5.6: IAFC Eastern Division Departments Reporting by Rank, Gender and Ethnicity

11 Departments - 22,327 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	7	0	4	0	722	9	3,633	39	13,250	430
Black or African American	4	0	4	0	44	0	402	12	2,272	275
Hispanic or Latino (of any race)	0	0	1	0	6	2	81	0	938	22
American Indian and Alaska Native	0	0	0	0	2	0	7	0	28	2
Asian	0	0	0	0	4	0	5	1	98	5
Native Hawaiian and Other Pacific Islander	0	0	0	0	0	0	1	0	6	0
Some Other Race	0	0	0	0	0	0	2	0	7	2
Two or More Races	0	0	0	0	0	0	0	0	0	0
TOTAL	11	0	9	0	778	11	4,131	52	16,599	736
	11		9		789		4,183		17,335	

TABLE 6.5.7: IAFC Eastern Division Departments Reporting by Rank, Gender and Ethnicity - Percentages

11 Departments - 22,327 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	63.64%	0.00%	44.44%	0.00%	91.51%	1.14%	86.85%	0.93%	76.43%	2.48%
Black or African American	36.36%	0.00%	44.44%	0.00%	5.58%	0.00%	9.61%	0.29%	13.11%	1.59%
Hispanic or Latino (of any race)	0.00%	0.00%	11.11%	0.00%	0.76%	0.25%	1.94%	0.00%	5.41%	0.13%
American Indian and Alaska Native	0.00%	0.00%	0.00%	0.00%	0.25%	0.00%	0.17%	0.00%	0.16%	0.01%
Asian	0.00%	0.00%	0.00%	0.00%	0.51%	0.00%	0.12%	0.02%	0.57%	0.03%
Native Hawaiian and Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.03%	0.00%
Some Other Race	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.00%	0.04%	0.01%
Two or More Races	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL	100.00%	0.00%	100.00%	0.00%	98.61%	1.39%	98.76%	1.24%	95.75%	4.25%
	100.00%		100.00%		100.00%		100.00%		100.00%	

TABLE 6.5.8: IAFC Great Lakes Division Departments Reporting by Rank, Gender and Ethnicity
13 Departments - 12,954 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	4	0	8	0	349	8	2,156	71	6,467	286
Black or African American	7	0	3	0	79	5	507	26	1,987	70
Hispanic or Latino (of any race)	1	1	0	0	13	1	92	2	609	17
American Indian and Alaska Native	0	0	0	0	1	0	14	1	67	4
Asian	0	0	0	0	0	0	11	0	72	1
Native Hawaiian and Other Pacific Islander	0	0	0	0	0	0	2	0	4	2
Some Other Race	0	0	0	0	0	0	0	0	5	0
Two or More Races	0	0	0	0	1	0	0	0	0	0
TOTAL	12	1	11	0	443	14	2,782	100	9,211	380
	13		11		457		2,882		9,591	

TABLE 6.5.9: IAFC Great Lakes Division Departments Reporting by Rank, Gender and Ethnicity - Percentages
13 Departments - 12,954 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	30.77%	0.00%	72.73%	0.00%	65.11%	1.49%	74.32%	2.45%	67.43%	2.98%
Black or African American	53.85%	0.00%	27.27%	0.00%	14.74%	0.93%	17.48%	0.90%	20.72%	0.73%
Hispanic or Latino (of any race)	7.69%	7.69%	0.00%	0.00%	2.43%	0.19%	3.17%	0.72%	6.35%	0.18%
American Indian and Alaska Native	0.00%	0.00%	0.00%	0.00%	0.19%	0.00%	0.48%	0.03%	0.70%	0.04%
Asian	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.38%	0.00%	0.75%	0.01%
Native Hawaiian and Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%	0.04%	0.02%
Some Other Race	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.00%
Two or More Races	0.00%	0.00%	0.00%	0.00%	0.19%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL	92.31%	7.69%	100.00%	0.00%	97.39%	2.61%	95.90%	4.10%	96.04%	3.96%
	100.00%		100.00%		100.00%		100.00%		100.00%	

TABLE 6.5.10: IAFC New England Division Departments Reporting by Rank, Gender and Ethnicity
7 Departments - 3,539 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	6	0	5	0	139	0	657	8	1,634	31
Black or African American	1	0	0	0	9	0	77	1	568	17
Hispanic or Latino (of any race)	0	0	1	0	6	0	52	0	302	3
American Indian and Alaska Native	0	0	0	0	0	0	0	0	7	0
Asian	0	0	0	0	0	0	0	0	2	2
Native Hawaiian and Other Pacific Islander	0	0	0	0	0	0	1	0	2	0
Some Other Race	0	0	0	0	0	0	0	0	0	0
Two or More Races	0	0	0	0	0	0	3	0	4	1
TOTAL	7	0	6	0	154	0	790	9	2,519	54
	7		6		154		799		2,573	

TABLE 6.5.11: IAFC New England Division Departments Reporting by Rank, Gender and Ethnicity - Percentages
7 Departments - 3,539 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	85.71%	0.00%	83.33%	0.00%	90.26%	0.00%	82.23%	1.00%	63.51%	1.20%
Black or African American	14.29%	0.00%	0.00%	0.00%	5.84%	0.00%	9.64%	0.13%	22.08%	0.66%
Hispanic or Latino (of any race)	0.00%	0.00%	16.67%	0.00%	3.90%	0.00%	6.51%	0.00%	11.74%	0.12%
American Indian and Alaska Native	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.27%	0.00%
Asian	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.08%
Native Hawaiian and Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%	0.00%	0.08%	0.00%
Some Other Race	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Two or More Races	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.38%	0.00%	0.16%	0.04%
TOTAL	100.00%	0.00%	100.00%	0.00%	100.00%	0.00%	98.87%	1.13%	97.90%	2.10%
	100.00%		100.00%		100.00%		100.00%		100.00%	

TABLE 6.5.12: IAFC Southeastern Division Departments Reporting by Rank, Gender and Ethnicity
35 Departments - 23,579 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	28	2	22	0	710	68	3,916	238	10,799	845
Black or African American	4	0	8	2	152	9	783	40	3,241	214
Hispanic or Latino (of any race)	1	0	3	0	64	2	426	19	1,628	108
American Indian and Alaska Native	0	0	0	0	3	0	15	2	46	5
Asian	0	0	0	0	2	1	6	1	111	12
Native Hawaiian and Other Pacific Islander	0	0	0	0	0	0	2	0	11	0
Some Other Race	0	0	0	0	0	0	2	0	23	2
Two or More Races	0	0	0	0	2	0	0	0	1	0
TOTAL	33	2	33	2	933	80	5,150	300	15,860	1,186
	35		35		1,013		5,450		17,046	

TABLE 6.5.13: IAFC Southeastern Division Departments Reporting by Rank, Gender and Ethnicity - Percentages
35 Departments - 23,579 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	81.08%	5.41%	62.86%	0.00%	70.09%	6.71%	70.21%	4.62%	63.35%	4.96%
Black or African American	10.81%	0.00%	22.86%	5.71%	15.00%	0.89%	15.20%	0.78%	19.01%	1.26%
Hispanic or Latino (of any race)	2.70%	0.00%	8.57%	0.00%	6.32%	0.20%	8.27%	0.37%	9.55%	0.63%
American Indian and Alaska Native	0.00%	0.00%	0.00%	0.00%	0.30%	0.00%	0.29%	0.04%	0.27%	0.03%
Asian	0.00%	0.00%	0.00%	0.00%	0.20%	0.10%	0.12%	0.02%	0.65%	0.07%
Native Hawaiian and Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.06%	0.00%
Some Other Race	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.13%	0.01%
Two or More Races	0.00%	0.00%	0.00%	0.00%	0.20%	0.00%	0.00%	0.00%	0.01%	0.00%
TOTAL	94.59%	5.41%	94.29%	5.71%	92.10%	7.90%	94.17%	5.83%	93.04%	6.96%
	100.00%		100.00%		100.00%		100.00%		100.00%	

TABLE 6.5.14: IAFC Missouri Valley Division Departments Reporting by Rank, Gender and Ethnicity

5 Departments - 3,233 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	2	0	3	0	100	2	673	27	1,680	77
Black or African American	0	0	0	0	11	0	58	2	180	7
Hispanic or Latino (of any race)	3	0	2	0	13	0	68	1	234	5
American Indian and Alaska Native	0	0	0	0	2	0	6	1	25	1
Asian	0	0	0	0	0	0	6	0	21	0
Native Hawaiian and Other Pacific Islander	0	0	0	0	10	0	0	0	0	0
Some Other Race	0	0	0	0	0	0	0	0	5	0
Two or More Races	0	0	0	0	0	0	0	0	8	0
TOTAL	5	0	5	0	136	2	811	31	2,153	90
	5		5		138		842		2,243	

TABLE 6.5.15: IAFC Missouri Valley Division Departments Reporting by Rank, Gender and Ethnicity - Percentages

5 Departments - 3,233 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	40.00%	0.00%	60.00%	0.00%	72.46%	1.45%	79.93%	3.21%	75.30%	3.45%
Black or African American	0.00%	0.00%	0.00%	0.00%	7.97%	0.00%	6.89%	0.24%	8.07%	0.31%
Hispanic or Latino (of any race)	60.00%	0.00%	40.00%	0.00%	9.42%	0.00%	8.08%	0.12%	10.49%	0.22%
American Indian and Alaska Native	0.00%	0.00%	0.00%	0.00%	1.45%	0.00%	0.71%	0.12%	1.12%	0.04%
Asian	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71%	0.00%	0.94%	0.00%
Native Hawaiian and Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	7.25%	0.00%	0.00%	0.00%	0.00%	0.00%
Some Other Race	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.22%	0.00%
Two or More Races	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.36%	0.00%
TOTAL	100.00%	0.00%	100.00%	0.00%	98.55%	1.45%	96.32%	3.68%	96.50%	3.50%
	100.00%		100.00%		100.00%		100.00%		100.00%	

TABLE 6.5.16: IAFC Southwestern Division Departments Reporting by Rank, Gender and Ethnicity

14 Departments - 14,138 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	6	0	7	1	445	8	2,370	80	5,866	202
Black or African American	4	0	3	0	52	7	331	26	1,538	46
Hispanic or Latino (of any race)	4	0	2	0	58	0	534	10	2,194	53
American Indian and Alaska Native	0	0	1	0	1	0	44	0	105	2
Asian	0	0	0	0	0	0	4	0	45	0
Native Hawaiian and Other Pacific Islander	0	0	0	0	0	0	2	0	10	1
Some Other Race	0	0	0	0	2	0	12	0	58	1
Two or More Races	0	0	0	0	0	0	0	0	2	1
TOTAL	14	0	13	1	558	15	3,297	116	9,818	306
	14		14		573		3,413		10,124	

TABLE 6.5.17: IAFC Southwestern Division Departments Reporting by Rank, Gender and Ethnicity - Percentages

14 Departments - 14,138 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	42.86%	0.00%	50.00%	7.14%	77.66%	1.40%	69.40%	2.34%	57.94%	2.00%
Black or African American	28.57%	0.00%	21.43%	0.00%	9.08%	1.22%	9.69%	0.76%	15.19%	0.45%
Hispanic or Latino (of any race)	28.57%	0.00%	14.29%	0.00%	10.12%	0.00%	15.64%	0.29%	21.67%	0.52%
American Indian and Alaska Native	0.00%	0.00%	7.14%	0.00%	0.17%	0.00%	1.29%	0.00%	1.04%	0.02%
Asian	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	0.00%	0.44%	0.00%
Native Hawaiian and Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.10%	0.01%
Some Other Race	0.00%	0.00%	0.00%	0.00%	0.35%	0.00%	0.35%	0.00%	0.57%	0.01%
Two or More Races	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%
TOTAL	100.00%	0.00%	92.86%	7.14%	97.38%	2.62%	96.54%	3.46%	96.98%	3.02%
	100.00%		100.00%		100.00%		100.00%		100.00%	

TABLE 6.5.18: IAFC Western Division Departments Reporting by Rank, Gender and Ethnicity
11 Departments - 18,816 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	14	2	9	6	492	29	2,746	122	8,536	564
Black or African American	5	0	3	0	74	2	299	19	1,040	60
Hispanic or Latino (of any race)	0	0	3	0	89	1	679	16	2,570	77
American Indian and Alaska Native	0	0	0	0	7	0	35	0	120	4
Asian	0	0	0	0	21	1	122	3	681	52
Native Hawaiian and Other Pacific Islander	0	0	0	0	15	0	16	0	67	1
Some Other Race	1	0	0	0	1	2	12	0	152	10
Two or More Races	1	0	1	0	3	0	3	0	22	6
TOTAL	21	2	16	6	702	35	3,912	160	13,188	774
	23		22		737		4,072		13,962	

TABLE 6.5.19: IAFC Western Division Departments Reporting by Rank, Gender and Ethnicity - Percentages
11 Departments - 18,816 Uniformed Personnel Reported

	Fire Chief Male	Fire Chief Female	Fire Marshal Male*	Fire Marshal Female*	Chief Officer Male	Chief Officer Female	Company Officer Male	Company Officer Female	FF/Medic/Engineer Male	FF/Medic/Engineer Female
White	60.87%	8.70%	40.91%	27.27%	66.76%	3.93%	72.43%	3.22%	61.14%	4.04%
Black or African American	21.74%	0.00%	13.64%	0.00%	10.04%	0.27%	7.89%	0.50%	7.45%	0.43%
Hispanic or Latino (of any race)	0.00%	0.00%	13.64%	0.00%	12.08%	0.14%	17.91%	0.42%	18.41%	0.55%
American Indian and Alaska Native	0.00%	0.00%	0.00%	0.00%	0.95%	0.00%	0.92%	0.00%	0.86%	0.03%
Asian	0.00%	0.00%	0.00%	0.00%	2.85%	0.14%	3.22%	0.08%	4.88%	0.37%
Native Hawaiian and Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	2.04%	0.00%	0.42%	0.00%	0.48%	0.01%
Some Other Race	4.35%	0.00%	0.00%	0.00%	0.14%	0.27%	0.03%	0.00%	1.09%	0.07%
Two or More Races	4.35%	0.00%	4.55%	0.00%	0.41%	0.00%	0.08%	0.00%	0.16%	0.04%
TOTAL	91.30%	8.70%	72.73%	27.27%	95.25%	4.75%	95.78%	4.22%	94.46%	5.54%
	100.00%		100.00%		100.00%		100.00%		100.00%	

6.5.1 Summary

The FIRE 20/20 research team launched the Diversity By Rank survey in partnership with IAFC, the Metro Chief's Section and NFFF between November 1, 2006 and January 31, 2007. One hundred eight of 110 Metro fire departments responded. The findings represented a picture of diversity in metro fire departments during that period of time.

Three major ethnic groups comprised the 108 departments that responded to the Diversity By Rank Survey. These included White (71.63%), African American (14.80%) and Latino or Hispanic (11.18%). Asian American, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, Two or More Races and Other Races made up less than 2.5% of the uniformed Metro fire department uniformed workforce. Males made up 95.47% of uniformed personnel in all ranks and females comprised 4.53%.

The survey data was also analyzed the seven IAFC Divisions: New England, Eastern, Southeastern, Great Lakes, Southwestern, Missouri Valley and Western. Missouri Valley and the Southwestern Divisions had the highest percentages of American Indian or Alaska Native (1.08%); the Western Division had the highest percentage of Asian Americans (4.68%); the Great Lakes Division had the highest percentage of African Americans (20.72%); the Southwestern Division had the highest percentage of Latinos (20.19%); and the Eastern Division had the highest percentage of Whites (81.04%). The Southeastern Division had the highest percentage of females (6.74%) and the New England Division had the highest percentage of males (98.22%).

The Diversity By Rank survey results can be replicated nationally, by division or within a department, and serve as a baseline for recruitment, strategic planning and leadership development.

6.6 Promising Practices

The following section contains some promising practices that the research team identified in the participating cities while conducting the MHSRP study. These promising practices provide potential solutions and address some of the themes discussed in this report.

6.6.1 Seattle Fire Department (Multicultural Capacity)

Donnie Chin/International District Emergency Center (IDEC)

The International District (ID) is one of Seattle's most diverse inner city neighborhoods with first-, second- and third-generation residents from a wide range of Asian, Pacific Island, African, and Hispanic countries. The community is also experiencing gentrification, with an influx of middle- and upper middle-class residents of all cultures. Because of its proximity to Seattle Fire Department Headquarters, the International District has a rich history with the department.

For the last 30 years, the Seattle Fire Department/Medic One has worked closely with the International District Emergency Center (IDEC) in an innovative collaboration to reduce fire and other dangerous incidents, injuries and loss of life of both citizens and firefighter/paramedics in the International District. IDEC is the only Asian American-based uniformed service of this type in North America. IDEC responds to calls within the district alongside the fire, medical and law enforcement departments. IDEC also provides fire and life-safety education and cultural sensitivity training to ID residents, non-profits and businesses. For more than 30 years, a number of firefighters and paramedics have taken the initiative to volunteer with IDEC to get a firsthand experience with the International District culture and challenges. IDEC has an open door—24 hours a day—to support the Seattle Fire Department and Medic One with cultural capacity and incident support in the ID.

Donnie Chin, IDEC Director and Founder, helped start the nonprofit in 1968 with a group of fellow middle and elementary school friends who were experiencing the neighborhood challenges every day and wanted to make a difference. IDEC operates on a bare-bones budget, receiving about \$16,000 a year from the City of Seattle, which funds about three hours of operation a day. Donnie and IDEC's committed team of volunteers cover the other 21 hours a day, seven days a week. These volunteers range in age from 16 to 65 years and some have served for 30 years. Although not an official member of the SFD, Donnie Chin is a valued and treasured part of the SFD and Medic One family.

IDEC volunteers carry SFD radios, funded through the efforts of Medic One paramedics. The IDEC team is among the first on an emergency scene to help with communications, logistics and safety. IDEC plays a key role in responding to and often defusing any gang and domestic violence situations, while working to protect the safety of everyone. IDEC also assists SFD with translations of SFD home safety materials, provides cultural sensitivity education for paramedics, hosts safety/aid stations at International District events. IDEC also provided assistance to the MHSRP research team.

6.6.2 Austin Fire Department (Safety and Prevention Culture)

One of the Promising Practices found during this study is an initiative by the Austin Fire Department (AFD) to address the frequency of unsafe behaviors, injuries and deaths. The intention of this concerted effort is to shift the organizational fire response culture toward greater emphasis on the practice of safety and prevention. The beneficiaries of this effort are both first responders and multicultural community members.

The driving force behind the Austin cultural transformation over the last 5-6 years, according to the focus group participants, was the Training Chief. The initiative has been influencing policy decisions, SOG's, training, post incident reviews and even personal discussions in the department. Fire personnel have started to hold each other accountable for safe practices.

A subsequent interview with the training chief revealed his concern about the number of anecdotally based fire tactic publications; some of them fire service textbooks. "You can do something 50 times and not get hurt, but that doesn't make it safe. Are we professionals or are we just emotional reactionaries?" As a result, AFD's "...training and SOGS are now being re-developed with reason, not tradition."

AFD uses a system that not only ensures standard operating guidelines (SOGs) are in place and training reflects those guidelines, but also provides feedback and evaluation as to whether actual emergency operations reflect compliance and firefighter "buy-in." This system of regular feedback from emergency scenes and continual evaluation of the effectiveness of on-going training provides a continuous quality assurance program and enhances the level of safety compliance in a constructive and encouraging manner.

One key to closing the loop between theory and practice, described by a senior chief officer, was the decision to equip Field Training Officers (FTOs) to shoot videos of many major

incidents and conduct on-scene tailboard reviews with personnel before leaving the emergency scene. Chief officers review and discuss the FTO Report and video and the results are passed to the Training Division. Outcomes generated there include integration into ongoing training programs and/or SOG modification.

One of the most critical components of the tailboard reviews was for the FTO to help personnel understand what really happened on the fire scene. An example cited during an interview told of an event where firefighters initially explained that everything had gone well and that the interior firefighting was quite normal. When the FTO asked more specific questions about conditions, firefighters shared that the smoke was coming with a lot of force and that the fan didn't start right away. The FTO declared the event as a near-miss for firefighters, as conditions were ripe for a flashover.

AFD found that on-scene participation by FTOs, safety officers and the field medical officer enhanced compliance. Qualitative data supplied by AFD-A/TCEMS focus groups support that finding and indicated that peer group influence was having a positive effect on safety. "Surveillance enhances compliance," was how one participant responded.

The second safety and prevention initiative is AFD's expanded joint-wellness fitness initiative by IAFF and IAFC into a Wellness Center dedicated to the health and well being of firefighters and paramedics. The staff assigned to the Center includes a battalion chief, a physician specializing in occupational medicine, a psychologist, a clinic director, an exercise physiologist, two fitness safety seniors, an administrative specialist and a health information specialist.

The Wellness Center serves the function of injury rehabilitation and injury prevention for the department. Injured personnel assigned to the Wellness Center receive in-depth assessments and individually prescribed rehabilitation programs. First responders are eligible for preventive evaluations throughout their career in order to assist them with maintaining good health, fitness and identifying problem areas or potential life threatening conditions at the earliest possible stage.

These two interdependent initiatives are excellent examples of transforming the fire cultural into one with great emphasis on safety and prevention.

6.6.3 Milwaukee Fire Department (Community Relations)

Modeling Community-Friendly Fire Stations and Behaviors

Several Milwaukee Fire Department focus group participants mentioned that a few officers and firefighters had opened their fire stations to the local neighborhood in ways that developed strong bonds with the community.

One officer reported that Fire Station 34, as a result of the station Captain's leadership, has been proactively involved with the surrounding community for many years. Their involvement includes hosting a back-to-school neighborhood BBQ fundraiser each year to provide school supplies for local children. Firefighters then maintain ongoing contact with the neighborhood kids throughout the year. Fire engines often stop along neighborhood streets just to visit with adults and children. Fire station doors are open so that community members feel welcome to come in.

The leadership exhibited at Station 34 has influenced other MFD personnel to open their stations for similar interaction with their neighbors.

At Station 36, a visitor's visual experience is distinctly different from entering other fire stations. Instead of traditional wall pictures of firefighters working on emergency scenes such as fires or medical emergencies and traditional memorabilia, such as antique fire marks or firefighters from a generation ago, ten framed 16-by-20 posters depict how to plan home exit fire drills and get out in case of fire. The pictures feature people who reflect the diversity of the community and the fire safety messages are in both English and Spanish. Firefighters refer to these posters when community members visit the fire station.

In addition to the fire station's community-friendly feel, the firefighters, who also reflect the diversity of the community, spoke enthusiastically about fire prevention, public education and their involvement in the community.

6.7 Community Bridge Building Model

6.7.1 Overview

FIRE 20/20 developed and implemented a community participation model, which they used with the Austin, Milwaukee and Seattle Fire Departments. The FIRE 20/20 Bridge Building Model helped the fire departments to connect with their multicultural communities and better understand critical service issues. Additional outcomes from implementing the process included: identifying multicultural issues that affect the safety of firefighters and customers, building new community partnerships, increasing the reach and effectiveness of prevention programs, and expanding opportunities for recruitment efforts in multicultural communities.

Community partnerships provided opportunities for mutual learning: firefighters learned about their multicultural communities, and community members learned about their fire department, fire department services and fire and injury prevention.

Building community partnerships is a process that based on trust and mutual benefit. These relationships take time and patience. Many cultures have had very negative experiences in the past with people in uniform. The military and police departments have injured and even killed innocent people in other countries. Fire departments in some countries are corrupt. For many, historic memory of this type lives deep and as a result, some people tend to generalize toward anyone in uniform or wearing a badge.

The process uncovered a wealth of data for the participating departments. Three themes surfaced consistently:

- **Multicultural Capacity Issues**—In order to develop and implement effective prevention and recruitment programs, fire departments must be able to relate to and understand the multicultural issues. Multiple languages and cultural traditions, generational differences, and serving people with special needs present new and unique challenges and opportunities for fire departments.
- **Community Involvement**—Relationships, relationships, relationships! Building effective community relations in non-emergency times affects the scope and impact of prevention and recruitment programs. Multicultural community leaders are ready and willing to step forward and help their fire departments find solutions to prevention and recruitment challenges.

- **Leadership**—Reaching out to the multicultural community requires strong “participatory leadership” at all levels throughout the organization. It requires going out with questions, not answers. It means asking the community for help, not just providing solutions. It means enrolling others, not commanding them. It means empowering fire personnel throughout the ranks to be involved in and with the community.

FIRE 20/20 believes the Bridge Building Model will help Fire Departments to:

1. Connect more effectively with multicultural communities
2. Increase their department’s multicultural capacity
3. Enhance mutual learning
4. Improve the reach and effectiveness of prevention programs in multicultural communities
5. Increase the impact of targeted recruitment programs to hire qualified, inclusive, safe and competent firefighters and paramedics
6. Identify service delivery issues that put first responders at unnecessary risk
7. Collect research data that helps drive future strategic planning

6.7.2 A 6-Step Model for Connecting with Multicultural Communities

Every city and community is different, but the basic actions described in the 6-step Bridge-Building Model below are replicable, effective and deliver a high payoff for both fire departments and community members. Before delving into the model, it is critical to commit the resources to develop a community liaison strategy. Going in half-heartedly runs the risk of alienating your customers because it appears the department has not devoted sufficient resources to respond and follow through in a timely manner. It will take time, funding and a commitment to identify the right personnel. The investment will pay off for years to come.

Step 1 – Develop a Community Liaison Strategy

There are a number of strategies for implementing a community liaison model. We have listed a few suggestions below. The important thing to remember is there is not one “right” way. Finding the right person/people with the knowledge, skills and attitude for the work and a high level of organizational commitment is critical: the chief has to be supportive of the process

and demonstrate commitment by being available to participate in meetings with community and organization leaders.

Community Liaison Skills, Knowledge and Abilities (SKAs):

- A high level of multicultural capacity (non-judgmental)
- Multilingual/reflect some of the local multicultural communities
- Credibility with rank and file in the department
- Excellent communication skills (verbal and written)
- A desire to connect with the community (“wants” to reach out and build relationships in the community on behalf of the fire department)

Community Liaison Models include (but are not limited to):

- Create a department community liaison position within the fire department specific to a multicultural community. Many city police departments have implemented this strategy
- Identify a community liaison at each fire station
- Ask the multicultural community leaders to identify a liaison to the fire department from their community

Step 2 – Identify and Contact a Community Partner

A community partner is someone who lives in the community, is well respected and has an extensive network of contacts with a wide variety of multicultural communities and their leaders. An effective community partner opens doors for the fire department, provides access and coaching and facilitates the building of trusting relationships. S/he is as non-partisan as possible and carries little political baggage. Here are some examples of effective community partners from the four participating cities:

1. One community partner worked in a State Senator’s office, was a liaison to the community and was well-respected by all multicultural groups.
2. Another partner was a well-respected community activist and event planner in multicultural communities.
3. In another city, the community partner worked in the City Mayor’s office as a liaison to multicultural communities before starting her own consulting firm.
4. One community partner worked for the city’s Department of Neighborhoods, was well informed about multicultural issues, and had personal relationships with many of the local leaders.

Step 3 – Identify Multicultural Communities

Your department needs to identify which communities you want to target. Spend some time identifying measurable outcomes you hope to achieve and some means of measuring those outcomes. The different communities will likely have their goals for the relationship. Those goals may be different from those of the department. A successful partnership will emerge when both the department's and the community's respective outcomes and goals can be developed jointly. For identifying some multicultural communities you want to work with consider these strategies:

1. **Location:** Where are the highest numbers of fire and emergency medical incidents? Which fire stations receive the most number of calls? Who lives around those stations? Local firefighters usually know these answers. City Department of Neighborhoods may also be a good resource.
2. **Type of incident:** Research fire and emergency medical incident data. Identify the types and causes of these incidents. If possible, use GIS to map the common incidents. Identify which communities are involved and determine if there are commonalities. For example, in one city candles were a major cause of fires. Mapping where these candle fires occurred indicated that the largest number of incidents were in specific multicultural neighborhoods. This helped the department to target prevention and safety education programs and allowed them to identify key stakeholders.
3. **What are the community demographics?** Are they changing? How will the fire department address these changing demographics? What are the languages spoken and the cultural traditions practiced? What are the demographic forecasts for new residents? Are you building or planning to build new permanent or temporary outreach stations in these neighborhoods?
4. **Who in the department comes from these neighborhoods** and can help to provide trust and credibility for your efforts? Some of your firefighters have great community contacts, plus it reinforces and acknowledges their involvement.

Step 4 – Proactively Contact the Multicultural Community Leaders

If your fire department wants to have better relationships with different multicultural communities, you need to proactively reach out. An important finding from our research was that a number of multicultural communities expressed that they are not likely to initiate a relationship with their fire department. Some issues may include fear of uniforms/authority

figures, language and communication challenges, and cultural issues about taking initiative. An example—one of the community focus groups expressed that it is inappropriate to visit a fire station without an invitation. They said in their culture they do not go to someone's house without being invited, and the fire station was the home of the firefighters.

Protocol is important in many cultures, as it is in the fire culture. The process of initiating new relationships can be enhanced if the fire chief invites the community leader(s) to meet. This does not preclude firefighters and paramedics meeting with community members on their own, however, a leader-to-leader meeting can effectively set the stage for formal partnerships, especially if no previous relationship exists.

An effective community partner can help to provide names, contact information and introductions to both formal and informal leaders in the targeted communities.

If you are going to meet with a number of community members to talk about fire programs (i.e., prevention, public education, new or changing codes, recruitment, etc.), or you want to use the meeting to gather information, consider meeting with the community at a time when they are already together—a community organization board or membership meeting, a regular lunch gathering, or during a community festival. Another strategy is to ask the community leader(s) to host a community focus group.

Many multicultural community groups would enjoy having a firefighter or fire officer be a guest speaker at an event or attend a community festival. This is also an opportunity to gather information as well as disseminate it. Q&A will provide some great opportunities for fire department learning.

Our research showed that some firefighters were not aware that many multicultural community members knew very little about the fire department, and the wide range of services offered or the equipment used. If possible, bring turnouts and a piece of fire and/or medical equipment to show. A tour of a truck after a meeting or at a community event is a big draw. When given the chance to learn, see, talk and experience hands-on, community members eagerly took advantage of the opportunity.

If you would like the community to come to you, an invitation for a firehouse tour, including sitting in a truck or trying on turnout gear is a thrill for many. Consider hosting a lunch at the

firehouse. Breaking bread together builds trust. Make sure you have a camera and follow up by sending them pictures as a thank you gift.

Step 5 – Focus Groups

Targeted focus groups are an effective strategy for gathering information from multicultural communities. It is critical to actively listen to understand what the community has to say, rather than to react or defend. The more sensitive the issue is, the bigger the challenge to the representative of the fire department. For this reason, consider hiring or obtaining the volunteer services of a neutral facilitator. Your facilitator can also work with you to develop your agenda, focus group questions, written surveys, etc. Being prepared is key. If community members' first language is other than English, bring in a translator from that community. Note that working with and through a translator requires patience and will extend the length of your focus group. Keep your focus group questions simple and clear. If possible, work with the translator before the focus group to develop or at least review the questions to make sure that they easily translate and your intent is conveyed.

Suggestions for successful focus groups include:

1. Prepare your agenda in advance.
2. Hold meetings in a "safe" environment for all participants (e.g., people who have a fear of uniforms and authority may not want to come to a meeting at city hall or a fire station).
3. Use consent forms to gain permission from the participants who share information and explain how their anonymity will be protected. Explain before the focus group begins how the information will be used and anonymity preserved and do not violate your agreements
4. Record the session results using a note taker and/or audio recording. If you use an audio recorder, you must gain everyone's permission before you turn on the recorder and everyone must sign a recording consent form. We conducted more than 90 focus groups and interviews (firefighter and community) for our research study, and only 4 firefighter focus groups objected to being recorded. None of the community focus groups had objections.
5. Keep the group size manageable so everyone has an opportunity to participate.
6. Food and beverage is critical. If you have the budget, consider ethnic food from respective multicultural restaurants.

The MHSRP research findings determined that communities not only value their fire department, but also want to connect with them. Knowledge that the fire department wants to proactively connect with the communities is usually enough of an incentive for participation. Other incentives to consider are: offering a “safety talk” to their group or organization; providing a visit to a fire station or fire truck at the end of the Q&A or meeting; or a modest cash or gift certificate incentive. Focus group participants also like fire department memorabilia like patches, pins, caps and shirts.

Step 6 – Follow-up

Handwritten thank you notes following the meeting go a long way to building future community relationships. We do so much with email today, so a handwritten note lets someone know you really appreciate their time and their participation. If you take pictures of community members dressed in turnouts, or sitting on equipment, make sure you send copies. If you are going to publish the pictures, make sure to get their written permission on your consent forms. On the other hand, community members may put the pictures in a local community newspaper or post them on their website.

It is also important to follow-up to let participants know how the fire department has responded to their input. This can be a short report, a phone call to the leader and/or a return visit, or a response to a specific request (demonstration of how to use a fire extinguisher or CPR training).

6.7.3 Funding Collaboration and Partnership

Connecting with multicultural communities takes time and money. There are many options for funding and implementation support. Collaboration is key.

- Many community foundations often view community partnerships between non-profits with a common mission and serving a common target population favorably.
- Many cities provide neighborhood grants through their Department of Neighborhoods. They encourage collaborative efforts.
- The Fire Prevention and Safety Grants through the Department of Homeland Security fund prevention efforts, and again look favorably at collaborative efforts.
- Fire departments have become the first line of the public health system. This opens doors for public health funding through private foundations.

- Local universities may be interested in collaborating with the fire department and conducting research.
- Service clubs such as Rotary, Kiwanis, Lions, Shriners and others may be interested in participating if the focus is consistent with their mission and target population.
- Your city, county or neighborhood association may have funding available to help bring the community together to reduce risk and increase safety.

If possible, funding the following services or activities, will significantly increase participation and success:

- Paying for the services of the community partner, facilitator, and interpreter(s)
- Offering a modest focus group incentive (cash or gift certificate to focus group participants or the community group) and/or covering mileage and transportation costs to the meeting
- Providing refreshments
- Providing for childcare during the meeting if needed

6.7.4 Summary

In summary, as cities across the U.S. become more diverse, so do the challenges of providing safe and effective service to the multicultural communities. Community partnerships are a long term, cost-effective strategy to reduce fire and emergency incidents, increase the scope and impact of fire prevention programs, learn about multicultural issues that affect the safety of firefighters and customers, and expand recruitment efforts in multicultural communities.

Section 7 | Discussion of Findings, Commonalities and Recommendations

7.1 Introduction

The findings revealed six themes that had the strongest impact on the safety of firefighters and multicultural community members. These themes included multicultural capacity, communications, customer service, fire service culture, community relations, and leadership issues.

As the themes surfaced during the preliminary analysis, it became clear that they were closely interrelated. While each discussion focuses on an individual theme, this closeness results in some duplication (cross referencing of themes). The discussion of each theme culminates with pertinent study recommendations, some for immediate action and others for future research.

As depicted in Figure 7.1, leadership emerged as a central core theme reaching out into each of the other themes. The leadership discussion provides examples of formal and informal leadership actions from the fire departments in the three participating project sites.

Figure 7.1



7.2 Multicultural Capacity

7.2.1 Introduction

Multicultural capacity emerged as one of the key themes in this research study. For the purposes of this discussion, multicultural capacity refers to the degree of proficiency and ease with which Fire/EMS personnel respectfully deliver emergency and non-emergency services to multicultural community members, as well as their willingness to learn about different community cultures. This includes knowledge of cultural practices, values, rituals, differences in expressing emotions, community priorities, etc.

Because the demographics of the United States, and specifically the three research cities, are constantly evolving and growing increasingly more diverse, a proportionate growth in multicultural capacity seems not only appropriate, but also necessary. For instance, firefighters in all three study sites acknowledged that multiple languages, cultural and religious traditions and generational differences present new and unique challenges to both fire departments and community members. These challenges require the integration of new knowledge and methods to continue to assure the delivery of safe and effective emergency and non-emergency services in multicultural communities.

The research team's primary focus was to study the relationship between the fire departments and the multicultural communities they serve, and to explore multicultural capacity as it related to safety, prevention of injuries and loss of life of both firefighters and community members. In this domain, researchers gathered both quantitative and qualitative data.

7.2.2 Between the Fire Department and the Community

Research by Pitkin¹ and Eisinger² indicated that active representation, rather than passive representation, resulted in more opportunities for multicultural community members to access policy-making positions in the bureaucracy. Lipsky³, Meier⁴ and Morgan, England and Pelissero⁵ found that local government employees who work directly with the public, such as teachers, social workers, police officers and firefighters have considerable discretion in the process of delivering services to their constituents, and are thus able to influence those with whom they interact. Three major studies in the education field with ethnic groups of students, African American⁶, Hispanic⁷ and Native American⁸ found that multicultural teachers had a significant impact upon reducing discrimination toward all multicultural students. That significance carried over in the needs, opportunities and expectations of multicultural students. That is, multicultural community members benefited in significant ways from the presence of multicultural local government workers who delivered services to them because diversity facilitated increased communication, understanding and trust.

None of the three departments that participated in this study reflected the gender, ethnicity, religion, race or social class diversity ratios of the communities they serve. However, all three of the chiefs expressed the desire and commitment to have greater multicultural representation throughout the ranks of their departments.

¹ Pitkin, H. (1967). *The Concept of Representation*. Berkley, CA: University of California Press.

² Eisinger, P. K. (1982). "Black employment in municipal jobs: The impact of black political power." *American Political Science Review* 76: 380-392.

³ Lipsky, M. (1980). *Street Level Bureaucracy*. New York: Russell Sage foundation.

⁴ Meier, K. J. (2000). *Politics and Bureaucracy: Policymaking in the Fourth Branch of Government*. Fort Worth: Harcourt.

⁵ Morgan, D. R., England, R.E., Pelissero, J. P. (2007). *Managing Urban America*. Washington, D.C: CQ Press.
Nachmias, D., Rosenbloom, D. H. (1973). "Measuring bureaucratic representation and integration." *Public Administration Review* 33: 590-597.

⁶ Meier, K. J., Stewart, J., England, R. E. (1989). *Race, Class, and Education: The Politics of Second-generation Discrimination*. Madison: University of Wisconsin Press

⁷ Meier, K. J., Stewart, J. (1991). *The Politics of Hispanic Education*. Albany, NY: State University Press.

⁸ Wright, D. E., Hirlinger, M. W., England, R. E. (1998). "The politics of second generation discrimination in American Indian education: Incidence, explanation, and mitigating strategies." Westport, CT: Bergin and Garvey.

Members of the multicultural community focus groups saw having firefighters from their communities as a way of ensuring someone in the department with whom they could identify, spoke their language and understood their culture. They saw this as a safety factor in emergencies and a positive influence in fire safety, prevention and public education efforts.

The figures presented in Table 7.2.1 reveal that more than 40% of firefighters and paramedics in all three cities acknowledged that they encounter cultural misunderstandings when delivering services to diverse communities. Of note, 13% expressed that they did not know if they encountered cultural misunderstandings. Multicultural service issues generally related more to medical calls and non-emergency interactions, rather than to fire suppression activities.

TABLE 7.2.1: Encounters with Cultural Misunderstandings							
Online Statement 6H: Firefighters encounter cultural misunderstandings when delivering services with diverse community members.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	29	278	260	75	97	N=739	2.41
	4%	38%	35%	10%	13%		
Seattle	7	77	40	11	13	N=148	2.59
	5%	52%	27%	7%	9%		
Austin	8	122	141	51	67	N=389	2.27
	2%	31%	36%	13%	17%		
Milwaukee	14	79	79	13	17	N=202	2.51
	7%	39%	39%	6%	8%		

Note: The scale for computing the mean is as follows: Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Anecdotally, a number of firefighters and paramedics expressed how important it was to have an African American on the crew when they went into an emergency, an inspection or an investigation in an African American community. They expressed that having a Hispanic firefighter was helpful when entering a Hispanic home or business. Numerous male firefighters and paramedics described the importance of having a female on the team and how often that significantly reduced tension (of both the customer and the male firefighters). Having a woman crewmember also improved service delivery when dealing with female related

emergencies such as rape, childbirth or in culturally sensitive situations, i.e., among Muslims who often consider the touching of a woman by a male firefighter disrespectful or inappropriate. Since the largest percentage of calls at all project sites are for emergency medical services, it makes sense, as some officers mentioned, to have personnel options.

A number of community focus group participants identified specific issues that might help firefighters and paramedics. The researchers caution that these suggestions from community members represent their personal opinions and should not be construed to apply to all members of their race, religion, gender or socio-economic group.

The Muslim focus groups identified the need for women to cover themselves as one area that could affect the safety of firefighters and customers. Focus group members said that a traditional Muslim woman might not leave a burning building until she was covered or she might rush back in to get a covering. The recommendation was that firefighters and paramedics be aware of this and in an emergency rescue be prepared with a blanket to offer the woman.

A few members of the Chinese focus groups discussed how some Chinese, especially elders, may not trust banks and will instead keep their money and jewelry hidden in the house. They suggested that in a fire, some people might run back into a burning building to try to reclaim their valuables; in some cases, their life savings. Their recommendation was that firefighters be aware of and watch for this type of behavior in an emergency.

One of the most important safety factors is being able to gather pertinent on-scene information quickly to do a risk vs. reward assessment. According to the figures presented in Table 7.2.2 a small majority (51%) of firefighter respondents indicated they are able to collect the information they need. However, 40% of the firefighters and paramedics reported they did not get the critical information from customers that they needed to do their job. This can put firefighters, paramedics and their customers at risk of injury or loss of life.

TABLE 7.2.2: Critical Information Needed from Customers to do the Job							
Online Statement OL9I: Our customers give us the critical information we need to do our job.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	33	346	242	55	63	N=739	2.53
	4%	47%	33%	7%	9%		
Seattle	7	84	43	6	8	N=148	2.66
	5%	57%	29%	4%	5%		
Austin	20	177	124	30	38	N=389	2.53
	5%	46%	32%	8%	10%		
Milwaukee	6	85	75	19	17	N=202	2.42
	3%	42%	37%	9%	8%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Not only is acquiring key on-scene information critical for the risk vs. reward assessment, but being able to build rapport with the customer(s) quickly and being aware and sensitive to the issues at hand also impacts safety in emergencies. With whom to talk to gather information, male or female, how one addresses elders, and how the firefighter or paramedic positions and conducts himself/herself in the room are all culturally sensitive issues that can help or hinder gathering important data in an emergency.

Firefighters and paramedics identified the presence of language problems as impacting the ability to gather critical information. The research team discusses this further in the Communications section.

A number of community focus groups in all three cities identified trust issues with people in uniform and authority figures. These included first and second-generation immigrant groups, African American, LGBT and homeless/low income groups. Members of these focus groups expressed a feeling of being judged by some firefighters for their race, lifestyle and socio-economic situation.

The figures presented in Table 7.2.3 show a majority of the respondents (67%) reported they know which behaviors are appropriate for each culture. However, more than 25% of the respondents reported confusion about appropriate behaviors in different cultures. This finding exemplifies the importance of firefighters having multicultural understanding and knowledge.

TABLE 7.2.3: Confusion About What is Appropriate Behavior in One Culture and not in Another

Online Statement 9E: With all the cultures we serve, I get confused about what's appropriate behavior in one culture and not in another.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	20	172	328	167	52	N=739	2.07
	3%	23%	44%	23%	7%		
Seattle	4	44	67	27	6	N=148	2.18
	3%	30%	45%	18%	4%		
Austin	4	93	156	104	32	N=389	1.99
	1%	24%	40%	27%	8%		
Milwaukee	12	35	105	36	14	N=202	2.12
	6%	17%	52%	18%	7%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point Don't Know = 0 points

Open-ended survey comments, focus groups and interviews reflected more confusion than the online survey findings indicated. Some firefighters expressed feelings of being overwhelmed with all of the cultures, customs and religious beliefs. Some wanted the community to change and others claimed that it was the fire department's responsibility to take proactive, constructive action to assist first responders to become more culturally competent so they could safely and effectively serve all customers.

A number of community focus group and interview participants recommended that if emergency responders are confused or aware that there may be a cultural issue, the best practice is to respectfully ask. They consistently explained that a sincere desire to learn about someone who is different is not only respectful; it is also an effective way to increase one’s multicultural understanding as well as improve communication.

Having a competent, inclusive fire department is one way to be safer and more effective in working with all of the multicultural communities. Meier, Stewart and England⁹ report diverse groups bring gender and multicultural understanding to work.

The online fire department survey asked respondents in all three departments to prioritize the importance of a competent, gender and culturally diverse workforce that is representative of their community. The figures presented in Table 7.2.4 produce a mean of 2.13, indicating that the responses clustered in the *Medium Priority* option. The largest percentage of respondents (37%) answered with the *Low Priority* choice. A number of open-ended survey responses confirmed this response by commenting that competence was the only criteria for hiring and that race and gender were unimportant.

TABLE 7.2.4: Hiring of a Competent Gender and Culturally Diverse Workforce

Online Statement 21J: Hire a competent, gender and culturally diverse workforce that is representative of our community.

	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Cumulative	91	184	193	271	N=739	2.13
	12%	25%	26%	37%		
Seattle	17	38	38	55	N=148	2.11
	11%	26%	26%	37%		
Austin	50	104	93	142	N=389	2.16
	13%	27%	24%	37%		
Milwaukee	24	42	62	74	N=202	2.08
	12%	21%	31%	37%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

⁹ Meier, K. J., Stewart, J., England, R. E. (1989). Race, Class, and Education: The Politics of Second-generation Discrimination. Madison: University of Wisconsin Press

On the other hand, the figures presented in Table 7.2.5 indicated that community focus group participants expressed a great deal of interest and enthusiasm in having members of their respective communities work for the fire department or on an ambulance. Seventy-nine percent of the community respondents chose an affirmative response.

TABLE 7.2.5: Have a Family Member or Friend Get a Job as a First Responder				
Online Question 19C: Accurately reporting all injuries (including minor injuries).				
	Yes	No	Total	Mean
Cumulative	329	88	N=417	1.79
	79%	21%		
Seattle	152	35	N=187	1.81
	81%	19%		
Austin	81	22	N=103	1.79
	79%	21%		
Milwaukee	96	31	N=127	1.76
	76%	24%		

Yes = 2 points No = 1 point

Members of the multicultural community focus groups saw having firefighters from their communities as a way of ensuring someone in the department spoke their language and understood their culture. They saw this as a safety factor in emergencies and positively affecting prevention and public education efforts.

Some multicultural community focus group members and interviewees expressed two concerns about members of their communities becoming firefighters and paramedics: The first was that the fire department has never recruited in their community, so potentially qualified applicants don't know about the jobs or about what they need to do to prepare for exams. The second was some concern about how the fire department culture would treat firefighters from their communities. One key question was whether current firefighters would respect their religious practices. For example, Muslims pray several times daily and Orthodox Jews do not work on the Sabbath.

Another method for expanding multicultural capacity is job relevant, cultural competency training. The figures presented in Table 7.2.6 reveals that 67% of online participants reported that they considered themselves effectively trained to serve people from all walks of life and diverse cultural backgrounds. Note that more than one in four reported that firefighters did not believe themselves effectively trained to serve members of a diverse community.

TABLE 7.2.6: Firefighters are Effectively Trained to Deal with a Diverse Population							
Online Statement 6D: Firefighters are effectively trained to serve people from all walks of life and diverse cultural backgrounds.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	157	337	149	41	55	N=739	2.89
	21%	46%	20%	6%	7%		
Seattle	22	62	48	9	7	N=148	2.69
	15%	42%	32%	6%	5%		
Austin	94	160	71	23	41	N=389	2.93
	24%	41%	18%	6%	11%		
Milwaukee	41	115	30	9	7	N=202	2.96
	20%	57%	15%	4%	3%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Don't Know = 1 point

Based on qualitative data gathered from firefighters in focus groups, interviews and open-ended online survey questions, the research team believes that firefighters were responding to their technical training in dealing with people, rather than multicultural capacity training. In fact, most firefighters and paramedics reported that diversity training offered by the departments and municipalities was not effective in helping them to safely and effectively deliver services to multicultural communities.

Community focus group participants took a very different view from the Fire and EMS personnel online survey respondents. They identified the need for further first responder cultural training within all project sites and gave several examples of dishonoring religious and cultural traditions and disrespecting members of some multicultural groups. Participants in almost every focus group providing these stories offered to work cooperatively with the local fire department to develop, implement and conduct cultural programs to help first responders increase their capacity.

While firefighter focus groups and interviews identified a need for multicultural capacity training operationally integrated into their job, figures presented in Table 7.2.7 indicate that such an integrated approach was not a high priority. Fire and EMS personnel chose *Medium Priority* for the statement, “Integrate opportunities to learn about different cultures into regular training activities.” In fact, about two-thirds of the respondents selected either *Medium Priority* (40%) or *Low Priority* (26%).

TABLE 7.2.7: Integrate Opportunities to Learn About Cultures into Regular Training Activities						
Online Statement 21E: Integrate opportunities to learn about different cultures into regular training activities.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Cumulative	49	204	293	193	N=739	2.15
	7%	28%	40%	26%		
Seattle	9	37	58	44	N=148	2.07
	6%	25%	39%	30%		
Austin	29	108	152	100	N=389	2.17
	7%	28%	39%	26%		
Milwaukee	11	59	83	49	N=202	2.16
	5%	29%	41%	24%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

Firefighters in some focus groups expressed the importance of a cultural assessment of the on-scene conditions and integrating that into overall on-scene assessment. The figures presented in Table 7.2.8 point out that a majority of online respondents (77%) view a cultural assessment as a *Medium Priority* (44%) or *Low Priority* (33%).

TABLE 7.2.8: Assessing Cultural Condition in the Overall Assessment of an Emergency Situation						
Online Statement 21 B: Integrate the assessing of cultural conditions into the overall assessment of an emergency situation.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Cumulative	22	149	323	245	N=739	1.93
	3%	20%	44%	33%		
Seattle	3	27	57	61	N=148	1.81
	2%	18%	39%	41%		
Austin	11	87	165	126	N=389	1.96
	3%	22%	42%	32%		
Milwaukee	8	35	101	58	N=202	1.97
	4%	17%	50%	29%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

Some community focus group participants and a few firefighters identified cultural misunderstandings and miscommunications that occurred during the inspection of small businesses owned by multicultural community members. The figures presented in Table 7.2.9 reveal a majority of online respondents reported that such an inspection training program was of *Medium Priority* (37%) or *Low Priority* (24%).

TABLE 7.2.9: Develop a Fire Inspection Training Program to Help Uniformed Personnel Work Effectively with Multicultural Community Businesses						
Online Statement 21G: Develop a fire inspection training program to help uniformed personnel work more effectively with multicultural community businesses.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Cumulative	58	229	271	181	N=739	2.22
	8%	31%	37%	24%		
Seattle	10	36	57	45	N=148	2.07
	7%	24%	39%	30%		
Austin	31	130	136	92	N=389	2.26
	8%	33%	35%	24%		
Milwaukee	17	63	78	44	N=202	2.26
	8%	31%	39%	22%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

Generally, first responders were aware that cultural misunderstandings happened and they were sometimes unable to obtain critical information from their customers. In the online survey, however, methods presented to help resolve barriers—particularly in providing service to multicultural communities—were consistently rated as *Medium* or *Low Priority* by the majority of firefighters and emergency medical services personnel who responded.

7.2.3 Summary

Based on studies of representative bureaucracy, the research team believes that fire departments with better representation would potentially experience more effective relationships and open communication with many of the multicultural communities. Although the demographics of the three fire departments researched in this study are not proportionately representative of the communities they serve, all three chiefs expressed a desire and commitment to increase that representation.

The qualitative, quantitative and anecdotal data presented a number of multicultural capacity-related issues between fire departments and the communities they serve. All three departments identified challenges in recruitment of multicultural community members, language and communication barriers, understanding culturally appropriate behaviors and encountering cultural misunderstandings. Some first responders also expressed the importance and advantage of having a culturally diverse team and a desire for receiving job-specific, cultural relevance training.

Most multicultural issues related to rescue and/or medical emergencies, and non-emergency situations, in which customers identified some emergency responders who did not respect their customs or religious beliefs. Some members of the LGBT, homeless/low income, special needs (deaf, blind) and African American focus groups in all three study sites identified issues relating to lack of respect.

Few multicultural issues directly related to fire suppression consistently emerged from the three cities. However, some community focus group members identified occasions when community members might put themselves at risk (by going back in or not coming out of a burning building) as a result of cultural norms or traditions. Firefighters and community members both agreed that there is a need for increasing knowledge of fire safety in multicultural communities.

7.2.4 Recommendations

Background

Study findings identified that first responder personnel encountered cultural misunderstandings when delivering services to multicultural communities. Focus group participants identified several cultural issues that had the potential for creating misunderstandings that could negatively affect and potentially delay service:

- Gender to gender issues
- Religious values and practices
- Child birthing practices
- Death and mourning rituals
- Cultural cooking methods and use of fire
- Cleanliness and modesty issues
- Folk or non-traditional medical practices

Value Statement

Greater multicultural capacity increases respect and teamwork within the department and builds trust and mutually beneficial relationships with multicultural community members. It also leads to opportunities for shared learning, expanded prevention efforts and safer and more effective emergency services.

Recommendations

Between the Fire Department and the Community:

1. Develop and implement an operations-oriented multicultural competency training program for all first responders and dispatchers. Multicultural community members and fire department personnel should jointly develop and conduct the program to maximize the opportunity for shared learning. Initiate the training in recruit school as well as throughout the force. Integrate the training into regular company level training (i.e., staging/incident management systems) and maintain a company training focus on carrying out job responsibilities more safely and effectively.

Within the Fire Department:

2. Develop a Cultural Assessment Procedure and integrate it into SOP/SOG for all calls.
3. Revise all firefighter and paramedic job descriptions to include multicultural competencies. Align hiring and promotional requirements/standards for those positions with revised descriptions.
4. Create and implement incentives to encourage firefighters/medics to recruit young people with needed multicultural and language competencies. Inspired firefighters/medics are the best recruiters.
5. Develop a cadet program to target young people with multicultural and language competencies. Use the LBJ Academy operated jointly between the Austin Fire Department and Austin Public Schools as a model.

7.3 Communications

For the purpose of this study, the research team defined communications as the accurate exchange of verbal, non-verbal and written information to, from and within the Fire/EMS agency. Communication topics discussed in this section include: communication with customers, language barriers, internal communications, interdepartmental communications and use of the Language Line.

7.3.1 Communication Barriers

The figures presented in Table 7.3.1 contain cumulative and individual project site online survey findings about communication barriers. Communication barriers generally referred to language issues, including accents, but could also be related to volume, interpersonal skills in situations with displays of anger or grief, sender/receiver messages, non-verbal communication, misinterpretations in English, and communication challenges related to lack of information provided by dispatch. Firefighter and paramedic online survey respondents reported that they experienced communication problems, but less frequently than was indicated in the qualitative data collected in the focus groups and interviews. The cumulative mean of 2.47 indicated a clustering of responses in the *Disagree* category, but in close proximity to the *Agree* option.

TABLE 7.3.1 Providing Services When Communication is a Problem							
Online Statement 3C: I am faced with providing services to a customer with whom communication is a problem.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	46	281	374	32	6	N=739	2.47
	6%	38%	51%	4%	1%		
Seattle	7	56	83	2	0	N=148	2.46
	5%	38%	56%	1%	0%		
Austin	31	164	165	25	4	N=389	2.52
	8%	42%	42%	6%	1%		
Milwaukee	8	61	126	5	2	N=202	2.36
	4%	30%	62%	2%	1%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

Milwaukee firefighters and paramedics who participated in the online survey reported the lowest percentage of communication problems, with 34% reporting that they experienced communication barriers by choosing *Strongly Agree* (4%) or *Agree* (30%). Austin experienced the highest, with 50% of the online respondents reporting that they had experienced communication barriers by choosing *Strongly Agree* (8%) or *Agree* (42%).

7.3.2 Language Barriers

The three participating fire departments represent and serve very diverse communities comprised of many multicultural groups who speak numerous languages. It was difficult to determine the exact number of languages firefighters and paramedics had to contend with in each city, but the languages spoken by public school students served as a barometer: more than 129 in Seattle, 63 in Austin and 35 in Milwaukee. In all three cities, Spanish was the predominant second language.¹

Seattle and Milwaukee asked firefighters and paramedics to voluntarily provide information about languages they spoke (other than English). They kept a list available in case firefighters and paramedics needed translation assistance in an emergency. Many firefighters did not use or were not aware of this list. Of the three cities, only Austin offered a hiring incentive (one additional point) for proficient language skills in Spanish, French/Haitian, Vietnamese, Cantonese, Thai, Korean, Japanese, Malaysian, German and American Sign in the entry-level hiring process. Austin also paid a monthly bonus for firefighters and paramedics who passed a proficiency test in Spanish.²

In the three cities, most fire department focus groups and nearly all of the firefighter interviewees identified growing challenges in communicating with customers who did not speak English.

¹ Seattle Bilingual Student Services <http://www.seattleschools.org/area/bilingual/index.dxml>.

Austin Independent Schools DPEReport: DPE Publication No. 06.10, 2007. Cornetto, Doolittle
http://www.austinisd.org/inside/docs/ope_Immigrant_Report_rev_20070321.pdf

Milwaukee Public Schools ESIS Technology Home Language Survey, 2006.

² Austin Assignment Pay Ordinance 020926-13

Community focus group participants, primarily first- and second-generation immigrants, identified language barriers as a problem. They identified a need for translators at emergency scenes and at fire safety presentations. They also requested that the fire departments provide fire prevention materials translated into their respective languages. A few focus group participants from the deaf community in Seattle also indicated a need for translators.

The figures presented in Table 7.3.2 identify how firefighters and paramedics view the adequacy of their crew’s language skills to meet the emergency needs of the community. A cumulative mean of 2.56 shows that the respondents in all three cities responded in the low end of the *Agree* response. Milwaukee had the highest mean, 2.87, with 60% reporting *Strongly Agree* (7%) or *Agree* (53%). Seattle had the lowest mean of 2.38, with 52% reporting *Disagree* (37%) or *Strongly Disagree* (15%).

TABLE 7.3.2: Adequacy of First Responder Language Skills to Meet the Emergency Needs of the Community Served							
Online Survey Statement 9B: Emergency medical responders provide services equally to all people in our city.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	335	309	61	12	22	N=739	3.35
	45%	42%	8%	2%	3%		
Seattle	64	66	14	2	2	N=148	3.32
	43%	45%	9%	1%	1%		
Austin	171	165	31	8	14	N= 389	3.33
	44%	42%	8%	2%	4%		
Milwaukee	100	78	16	2	6	N=202	3.41
	50%	39%	8%	1%	3%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

The number of languages spoken in each of the three cities may be one possible reason for this variance.

7.3.3 Service Delays

Operationally, a larger question is: Does the challenge posed by communication barriers delay service delivery to the customer? Firefighters’ and paramedics’ responses in the online survey (N=739) to the statement “I am forced to delay services to a customer due to communication barriers” are reported in Table 7.3.3.

The findings presented in Table 7.3.3 are consistent with the online responses presented in Table 7.3.2 relating to adequacy of crew’s language skills. A cumulative response mean of 1.97 identifies responses from all three cities in the *Infrequently* answer choice. Seattle identified the highest number of service delays due to communication barriers with 18% reporting delays *All the Time* (1%) and *Frequently* (17%). Milwaukee identified the lowest with 9% reporting *All the Time* (2%) and *Frequently* (7%).

TABLE 7.3.3 Service Delays Due to Language							
Online Statement 3E: I am forced to delay services to a customer due to communication barriers.							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Cumulative	8	88	497	127	19	N= 739	1.97
	1%	12%	67%	17%	3%		
Seattle	1	17	106	23	1	N= 148	1.97
	1%	11%	72%	16%	1%		
Austin	3	56	249	71	10	N= 389	1.98
	1%	14%	64%	18%	3%		
Milwaukee	4	15	142	33	8	N= 202	1.95
	2%	7%	70%	16%	4%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Qualitative data collected from fire department focus groups and interviews in all three project sites identified that communication barriers do cause delays in service. Firefighters and emergency medical personnel acknowledged that it took more time because they had to locate a translator. People in translator roles often included a younger member of the family, a neighbor or someone looking on, another firefighter on the other end of a cell phone, or the Language Line.

Additionally, it took more time to obtain the necessary information through the translator. Online respondents reported that depending on the incident, confusion in terminology sometimes occurred. They also reported that using a translator through a cell phone often complicated and delayed service because they needed to pass the cell phone back and forth between themselves and the customer. Researchers present further explanation about this issue in the discussion below about the Language Line. Finally, firefighters and paramedics said that communication barriers created delays when attempting to inform non-English speaking family members about what was transpiring.

Some focus group and interview participants identified the language challenges as a safety risk for both customers and firefighters. When the response required additional time because of translation, customers did not receive immediate medical attention. They also said that adding time in an escalating emergency might result in greater risks for all parties.

One possible explanation for the difference between quantitative and qualitative data to the statement, “I am forced to delay services to a customer due to communication barriers” is that online survey respondents replied from a purely technical, rather than a communication perspective. From a technical point of view, response time and initiating medical treatment or fire suppression were rapid; however, their perception of service delays due to communication issues is not considered a delay, just part of normal incident mitigation challenges.

One of those options is reaching out into the community for assistance. Some community members shared suggestions to address communication challenges for emergency and non-emergency situations. Participating multicultural community organizations in each of the three cities expressed interest in providing both onsite and phone (translation and multicultural capacity) assistance their local fire departments and emergency medical service personnel. They also expressed an interest in receiving train-the-trainer fire prevention programs so that members of their own community could present fire safety programs.

For additional information about a successful partnership between the Seattle Fire Department and the International District Emergency Center, see Promising Practices in the Findings Section.

7.3.4 Language Line

The Language Line is one method for overcoming language barriers. It provides access to a variety of translators for a wide number of languages. Language Line services are available to both dispatchers and first responders. The process begins with a call to the Language Line from a dispatcher in the call center or from a firefighter or paramedic on a cell phone in the field. Callers provide a fire department password and billing number, and their request for a certain language. In a few moments, someone who speaks the requested language and English is on the phone. If the initiator was dispatch, they bridge the caller with the Language Line translator. If the initiator is at an emergency event in the field, the caller provides an explanation of the situation to the Language Line translator and then hands the cell phone over to the customer or, if the customer is too injured or unable to speak, another person who has additional information. The translator and the customer (or assisting person) discuss the circumstances. Data is gathered. The first responder takes the phone back and the translator relays the critical information to them. This “back and forth” process may continue for some time until the first responder gains the necessary information.

Firefighters and paramedics identified numerous challenges with the Language Line, including not knowing what language the customer was speaking so it was difficult to request a language; difference in dialects; new languages that Language Line translators did not speak; translator comprehension of medical terminology; and in the heat of the emergency, important information sometimes being lost.

The use of the Language Line varied widely by study site. The figures presented in Table 7.3.4 indicate that a significant majority of the respondents in all three study sites use the Language Line *Infrequently* (29%) or *Never* (51%). Seattle had the highest usage and Milwaukee had the lowest.

TABLE 7.3.4 Use of the Language Line by First Responders

Online Statement 3I: I use the Language Line for translation purposes.

	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Cumulative	8	68	215	379	69	N=739	1.56
	1%	9%	29%	51%	9%		
Seattle	1	18	84	40	5	N=148	1.86
	1%	12%	57%	27%	3%		
Austin	7	49	101	201	31	N=389	1.61
	2%	13%	26%	52%	8%		
Milwaukee	0	1	30	138	33	N=202	1.19
	0%	0%	15%	68%	16%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

The responses of firefighters and paramedics were split on the effectiveness of the Language Line. Paramedics used it more frequently than firefighters and dispatchers who participated in focus groups and interviews were especially complimentary and found it very useful.

7.3.5 9-1-1 Communications

Complaints about the 9-1-1 system registered by multicultural community focus group participants were directed at 9-1-1 operators, who also serve as Fire and EMS dispatchers. Concerns included operators who: a) sometimes transferred their calls up to five times, b) asked too many questions, c) asked questions some residents did not know how to answer, and d) sometimes asked questions that did not make sense to the caller. Negative past experiences combined with anxiety about their English or what might happen to them for causing the emergency resulted in some multicultural community members not calling 9-1-1 at all. Language barriers in combination with a level of anxiety or fear often resulted in confusing communication between 9-1-1 operators and community members that created a ripple effect of confusing information to firefighters and paramedics in the field.

Firefighters speaking in focus groups expressed concern that they did not always receive sufficient information or the “right” information they needed, while some in other groups thought they were overloaded with information. Responding to the question about level of information in the online survey, cumulative findings showed a split almost down the middle. The figures presented in Table 7.35 show 51% of the respondents selected Strongly Agree (4%) and Agree (47%) and 40% chose Disagree (33%) and Strongly Disagree (7%). A mean of 2.53 showed a split slightly favoring agree.

TABLE 7.3.5: Critical Information Needed from Customers to do the Job							
Online Statement OL9I: Our customers give us the critical information we need to do our job.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	33	346	242	55	63	N=739	2.53
	4%	47%	33%	7%	9%		
Seattle	7	84	43	6	8	N=148	2.66
	5%	57%	29%	4%	5%		
Austin	20	177	124	30	38	N=389	2.53
	5%	46%	32%	8%	10%		
Milwaukee	6	85	75	19	17	N=202	2.42
	3%	42%	37%	9%	8%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

These communication issues increased risk for both firefighters/paramedics and customers, according to fire and EMS focus groups and interviews in all three cities. This was especially true when responding to domestic violence and gang-related emergencies in which different agencies may have provided additional information. For example, miscommunication sometimes increased with separate fire and police dispatchers and different dispatch protocols. To increase the safety of first responders and the effective and timely delivery of services to multicultural community members, the research team believes it is critical that fire departments address this cycle of communication.

7.3.6 Interagency Operations & Communication

Regarding the question of whether law enforcement is present when needed, the figures presented in Table 7.3.6 reveal that cumulative online survey responses clustered in the *Infrequently* category with a mean of 2.35. This was a bigger issue for Milwaukee where the mean of 2.51 indicates a clustering of responses just into the *Frequently* choice.

TABLE 7.3.6 Responding to Emergency Calls Where Law Enforcement is not Present When Needed							
Online Statement 3J: I respond to emergency calls where law enforcement is not present when needed							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Cumulative	49	200	382	55	53	N= 739	2.35
	7%	27%	52%	7%	7%		
Seattle	3	18	106	11	10	N= 148	2.09
	2%	12%	72%	7%	7%		
Austin	30	111	191	34	23	N= 389	2.37
	8%	29%	49%	9%	6%		
Milwaukee	16	71	85	10	20	N= 202	2.51
	8%	35%	42%	5%	10%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

The anecdotal findings from the Milwaukee multicultural community and the Fire and EMS focus groups supported these findings regarding the communication challenges between MFD and MPD. However, that was not the case in either Seattle or Austin.

7.3.7 Summary

One-third to one-half of online respondents in all three cities reported experiencing communication problems when providing services to multicultural communities. The majority of both fire department personnel and members of the multicultural communities in all cities identified language as a barrier to communications. The three departments had varying opinions of whether they had adequate language skills to meet the emergency needs of the community, but they did agree—as the qualitative data shows—that communication barriers did cause service delays and safety risks. However, the cumulative quantitative data revealed that responders do not believe communication barriers caused a delay of services. This presents a discrepancy, which may be explained by the perception of the definition of “service delay” in a purely technical sense. The cumulative majority said they *Infrequently* used the Language Line as a way to assist with language barriers, but the individual cities’ use of the line ranged from 15% (Milwaukee) to 70% (Seattle) and was used more frequently by paramedics and dispatch.

Regarding communication with 9-1-1 and dispatch, multicultural focus groups expressed concern over too many transfers and/or questions, worry about language barriers, and anxiety and fear of calling. Slightly more than half of first responder online respondents believed they do not receive enough information from dispatch to safely respond to emergencies. Qualitative data in all three cities confirmed that these issues increased risk to both firefighters and customers.

7.3.8 Recommendations

Background

The findings identified that language and other communication issues between multicultural customers, 9-1-1/Dispatch and first responders created barriers that put firefighters, paramedics and multicultural customers at greater risk by:

- Delaying service
- Contributing to incident escalation
- Creating confusion in an emergency, both at dispatch and on-scene
- Inhibiting the exchange of critical information

The findings also identified that community organizations would like to provide support to the fire department as both language and cultural interpreters.

Value Statement

Proficiency in language and communication is an important skill-set to ensure the safe and effective delivery of both emergency and non-emergency services.

Recommendations

Within the Fire Department:

1. Conduct a formal inventory of personnel language capabilities and make it available to response personnel in both the Fire Department and 9-1-1/Dispatch. This skill inventory data could be associated at the Dispatch/CAD level as a resource capability (similar to other skills such as EMS, Haz Mat, USAR). The use of the daily personnel roster could be an alternate method of disseminating this data.
2. Pay multilingual incentives to firefighters/paramedics who proficiently speak the languages of their customer base (including American Sign Language).
3. Train department members in the most efficient and effective use of the Language Line, beginning in recruit school.

Within the community:

4. Work with multicultural community leaders to conduct an inventory of community organizations willing to assist with language issues to:
 - a. Identify needs (i.e., on-scene, telephone, written translation)
 - b. Identify key community contacts
 - c. Create a list of skills that these organizations can provide
 - d. Make the list(s) accessible by dispatch and/or responders
 - e. Invite community members to collaborate with the fire department and dispatch

9-1-1/Dispatch-Related Recommendations

The Seattle Fire Department Alarm Center was the only dispatch center of the three participating cities totally staffed by firefighters who understood on-scene emergency issues. For the other two project cities and for other fire departments whose dispatchers are not firefighters, greater operational knowledge of how first responders use and apply dispatchers' data and information in the field would reduce the potential for miscommunication.

5. Create a Dispatch Ride-Along experience as part of Call Taker/Dispatcher Training. Real-life knowledge about the emergency response process and the kinds of challenges responders face with unclear information would help clarify job functions.

Recommendations for Future Research

Accurate and timely data collected at 9-1-1/Dispatch about language and communication problems would allow fire departments an opportunity to track and analyze data at the beginning of the information exchange cycle.

6. Collect accurate and timely data at 9-1-1/Dispatch about language and communication problems would allow fire departments an opportunity to track and analyze data at the beginning of the information exchange cycle.
7. Identify communication barriers during 9-1-1 calls and enter the data into the dispatch data system. Categorize data by communication issue, specific language spoken and location of the caller.

While the cumulative online survey findings indicated that service delays to customers were infrequent, the qualitative data indicated that communication barriers did cause delays in service. One possible explanation for the dichotomy in findings is that the online respondents reported from a purely technical point-of-view rather than a human perspective.

8. Conduct further study to more closely examine service delays due to language and communication issues.

7.4 Customer Service

7.4.1 Introduction

For the purpose of this study, the research team defines customer service as satisfaction with the capability of and quality of safe and effective services provided by fire and emergency medical service departments to all communities.

Customer service feedback can provide departments with both an internal and external perspective about how well and how safely they are serving their customers. In an attempt to move toward a safety culture, customer service ratings, like near-miss reviews, offer an opportunity to learn from errors, incidents and accidents.¹ They are also a way to identify areas where performance is exemplary, and provide opportunities to build on successes and promising practices. This knowledge can help the department to deliver services more safely and effectively.

Customer service encompasses a wide range of skills, attitudes and behaviors of both technical responses (response time, how quickly the emergency is mitigated, whether SOPs/SOGs are followed) and interpersonal responses (personal interaction with the customer, cultural awareness and follow-up with customers after the emergency).

Also affecting the scope of customer service are issues relating to dispatch—the first step in the process of an emergency response. A miscommunication or a problem between dispatch and the customer (i.e., language problems, transferring calls, disrespect), or between dispatch and the first responder (i.e., lack of information, miscommunication), can lead to customer service challenges or risks for the first responders and the community member(s).

Four departmental services, fire service, emergency medical service, fire prevention/public safety and the 9-1-1/dispatch system are the topics developed in this discussion.

¹ Pessemier W. (2006). "Developing a safety culture in the fire service." Unpublished Manuscript.

7.4.2 Fire Service Ratings

The figures presented in Tables 7.4.1 and 7.4.2 contain the frequency distribution of responses from first responders and multicultural community members regarding the quality of fire services delivered in the multicultural communities. The tables present each project site individually and also cumulatively (N=739).

The fire department service delivery ratings (Table 7.4.1) were very high in all three departments, and the frequency distribution was similar. While the multicultural community focus group participants (Table 7.4.2) rated the service slightly higher than the firefighters rated themselves, the cumulative means were very close—3.59 (multicultural community rating) and 3.50 (first responders’ rating). Responses in both ratings clustered in the “excellent” category.

TABLE 7.4.1: First Responders’ Rating of Quality of Fire Services in Multicultural Communities						
Online Statement 5: Overall, how well do we deliver fire services to multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Cumulative	453	209	69	8	N=739	3.50
	61%	28%	10%	1%		
Seattle	94	43	10	1	N=148	3.55
	64%	29%	7%	1%		
Austin	209	118	56	6	N=389	3.36
	54%	30%	14%	2%		
Milwaukee	150	48	3	1	N=202	3.72
	74%	24%	1%	0%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

The research team learned that collecting meaningful customer service ratings from firefighters and paramedics about their service presented a unique challenge. Qualitative responses in focus groups, interviews and open-ended survey questions indicated that some responded to the more technical aspects such as response time, how quickly the emergency was mitigated and whether SOPs/SOGs were followed. Others focused more on the interpersonal aspects of the services including personal interactions with customers, cultural awareness and follow-up with customers after the emergency.

When discussing safety issues, it was easier for most firefighters to deal with technological issues than it was to deal with people related issues.² The research team believes the same parallels exist when measuring customer service and that its technical aspects are easier to measure and are more aligned with the fire culture norms.

The figures presented in Table 7.4.2 address customer service from the community's perspective. The source of these findings is the community post-focus group survey (N=332).

TABLE 7.4.2: Community Members' Rating of Quality of Fire Service in Multicultural Communities						
Community Focus Group Survey Question 15: How well does the Fire Department deliver services to my community?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Cumulative	223	83	24	2	N=332	3.59
	67%	25%	7%	1%		
Seattle	102	24	8	1	N=135	3.68
	76%	18%	6%	1%		
Austin	73	31	6	0	N=110	3.61
	66%	28%	5%	0%		
Milwaukee	48	28	10	1	N=87	3.41
	55%	32%	11%	1%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

² Pessemier W. (2006). "Developing a safety culture in the fire service." Unpublished Manuscript.

Qualitative data from community focus groups and interviews generally supported the quantitative results, but with a few exceptions. Negative feedback originated from some members of the low income/ homeless, LGBT, African American and deaf focus groups. Their criticism was generally related to a specific past event in which they felt they were treated with a lack of respect, or an isolated event with the fire department in a situation unrelated to an emergency service call (for example, a family member or friend's experience with recruitment or hiring). In all cases, community members shared suggestions for improvement. The figures presented in Table 7.4.3 show that 84% of all the online firefighter and medic survey respondents in all three departments *Strongly Agreed* (47%) or *Agreed* (37%) that firefighters provide services equally to all communities.

TABLE 7.4.3: Firefighters Provide Equal Service							
Online Statement 6A: Firefighters provide services equally to all communities.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	349	275	53	18	44	N=739	3.37
	47%	37%	7%	24%	6%		
Seattle	74	56	10	2	6	N=148	3.42
	50%	38%	7%	1%	4%		
Austin	173	140	29	12	35	N= 389	3.34
	44%	36%	7%	3%	9%		
Milwaukee	102	79	14	4	3	N=202	3.40
	50%	39%	7%	2%	1%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Don't Know = 1 point

However, anecdotal data from some participants in both firefighter and community focus groups and interviews in all three cities produced contrary findings: indicating that certain neighborhoods were treated differently. Some multicultural firefighters and paramedics told stories about property being less respected in low income areas. One firefighter told a story about how the department placed greater emphasis on checking and replacing batteries in smoke detectors in higher socio-economic neighborhoods. Community focus group members told of a fire in an African American nightclub and one at a BBQ restaurant frequented by African Americans where dispatch delayed response. Gay and lesbian firefighters and community members talked about gay and lesbian clubs receiving different treatment during inspections.

7.4.3 Emergency Medical Ratings

The figures presented in Tables 7.4.4 and 7.4.5 contain the frequency distribution of responses from all first responders and multicultural community members regarding the quality of emergency medical services delivered in the multicultural communities. As with the fire service ratings, strong similarities emerged in the distribution as well as the means from all three departments. Unlike the fire ratings however, the multicultural community focus group participants generally rated the emergency medical services slightly lower than the first responders rated themselves, though the combined means were very close with 3.46 (multicultural community rating) and 3.54 (first responders’ rating).

TABLE 7.4.4: First Responders’ Rating of Quality of Emergency Medical Services						
Online Question 8: Overall, how well do we deliver emergency services in multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Cumulative	450	242	45	2	N=739	3.54
	61%	33%	6%	0%		
Seattle	93	45	10	0	N=148	3.56
	63%	30%	7%	0%		
Austin	212	148	28	1	N=389	3.47
	54%	38%	7%	0%		
Milwaukee	145	49	7	1	N=202	3.67
	72%	24%	3%	0%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

As with fire services, the research team learned that collecting meaningful customer service ratings from firefighters and paramedics about Emergency Medical Services presented a unique challenge. Emergency service responses in focus groups, interviews and open-ended survey questions paralleled those for fire service; they displayed a division of respondents who related to either the technical aspects or the interpersonal aspects of emergency service.

The written and online survey questions did not go into depth about or separate the technical vs. the interpersonal aspects of emergency medical service described above. More objective measures can help departments to safely and effectively deliver a wide range of services to multicultural communities by providing data to assist with strategic planning, program development, budgeting and resource allocation.

TABLE 7.4.5: Community Members Rating of Quality of Emergency Medical Services in Multicultural Communities						
Community Focus Group Survey Question 17: How well does the Ambulance Service (EMS Department) deliver services to my community?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Cumulative	244	132	31	10	N=417	3.46
	59%	32%	7%	2%		
Seattle	123	47	8	3	N=181	3.60
	68%	26%	4%	2%		
Austin	68	29	8	1	N=106	3.55
	64%	27%	8%	1%		
Milwaukee	53	56	15	6	N=130	3.20
	41%	43%	12%	5%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

Negative feedback came from some members of the low income/homeless groups in each of the three cities. Many in the lower socio-economic strata had no medical insurance or personal physician. These people often gained access to medical and mental health treatment and care through calling 9-1-1. As with the discussion about fire services, the interaction with dispatch (9-1-1 or private ambulance companies) influenced customer’s feedback about service emergency medical service in a number of cases.

The figures presented in Table 7.4.6 reveal that 87% of online respondents *Strongly Agree* (45%) or *Agree* (42%) with the statement “Emergency medical responders provide service equally to all people in our city.”

TABLE 7.4.6: Emergency Medical Provides Equal Service							
Online Survey Statement 9B: Emergency medical responders provide services equally to all people in our city.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	335	309	61	12	22	N=739	3.35
	45%	42%	8%	2%	3%		
Seattle	64	66	14	2	2	N=148	3.32
	43%	45%	9%	1%	1%		
Austin	171	165	31	8	14	N=389	3.33
	44%	42%	8%	2%	4%		
Milwaukee	100	78	16	2	6	N=202	3.41
	50%	39%	8%	1%	3%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

Anecdotal findings from community focus groups and interviews generally supported the quantitative results with a few exceptions. Negative feedback originated from some members of the low income/homeless, LGBT, African American and special needs focus groups. Their criticism generally related to a specific past event in which they believed they were mistreated or dealt with disrespectfully. Additional events included those related to private ambulance companies in which the ambulance was late or the attendants inadequately trained.

7.4.4 Fire Prevention and Safety Education

Researchers found that all three participating fire departments delivered fire prevention services and safety education. However, each department had different organizational and operational structures to provide these services.

The figures presented in Table 7.4.7 contain the responses from firefighters and medics regarding the quality of fire prevention and safety education services delivered in multicultural communities. Seventy-five percent of all online respondents from the three study sites rated this delivery as *Excellent* (36%) or *Good* (39%). Of particular note, almost 1 in 4 rated this service as *Adequate* or *Poor*.

TABLE 7.4.7: Fire Department’s Rating of Fire Prevention and Safety Education Services						
Online Survey Question 11: Overall, how well do we provide fire prevention and safety education services in multicultural communities?						
	Excellent Service	Good Service	Adequate Service	Poor Service	Total	Mean
Cumulative	269	291	136	43	N=739	3.06
	36%	39%	18%	6%		
Seattle	25	64	42	17	N=148	2.66
	17%	43%	28%	11%		
Austin	138	148	80	23	N=389	3.03
	35%	38%	21%	6%		
Milwaukee	106	79	14	3	N=202	3.43
	52%	39%	7%	1%		

Excellent Service = 4 points Good Service = 3 points Adequate Service = 2 points Poor Service = 1 point

The research team asked questions about fire prevention and safety education in the multicultural community focus groups, but did not include specific questions on the community post-focus group survey, thus, no quantitative data is available.

Although many of the multicultural community focus group members spoke highly of fire prevention programs for their children in the schools, the majority was unaware of fire prevention and safety education programs for adults, and more specifically, for elders. Community participants expressed a strong need for adult and elder programs to be delivered in their communities.

The figures presented in Table 7.4.8 indicate the perspective of all first responder online survey respondents regarding the effectiveness of public education materials within multicultural communities. Study sites responded very differently on this survey question. One explanation may be the difference in each department’s allocation of staffing and resources committed to public education. Of particular interest to the researchers was the large percentage of *Don’t Know* responses that ranged from a high of 34% in Seattle to a low of 19% in Milwaukee. The research team believes that the high *Don’t Know* response is a strong indicator of the low level of involvement by first responders throughout the ranks in fire prevention and public safety efforts.

TABLE 7.4.8: Effectiveness of Public Education Materials in Multicultural Communities

Online Statement 12E: Our public education materials are effective with members of multicultural communities.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	56	286	148	55	194	N=739	2.63
	8%	39%	20%	7%	26%		
Seattle	7	30	50	11	50	N=148	2.34
	5%	20%	34%	7%	34%		
Austin	32	152	63	37	105	N=389	2.63
	8%	39%	16%	10%	27%		
Milwaukee	17	104	35	7	39	N=202	2.80
	8%	51%	17%	3%	19%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

Multicultural community focus group participants identified the need for materials to be translated into the languages appropriate to the attendees and, if possible, to have a translator available. Some groups expressed that they would be willing to help with written and verbal translation services.

One aspect of public education identified in the community focus groups related to customer confusion about which services their fire department provided. This uncertainty was consistent across the board in all three cities. It was especially confusing if someone was a first generation immigrant, did not speak English or moved from another community where the organizational structure of fire and EMS was different.

Two specific areas of confusion expressed by community focus group members included: why a fire truck responded when a community member had called for a medical emergency and which fire and emergency medical services cost money. In some cultures, people were averse to calling attention to themselves and their issues. They were embarrassed that they have caused an emergency. When a fire truck with a siren and blinking lights arrives, it brought a great deal of unwanted attention to them and their situation. Some multicultural community leaders who participated in the focus groups implied that this may be a reason some people do not call 9-1-1, and not calling has the potential to escalate the risk for all involved. Many community participants were also unaware that firefighters have medical knowledge and skills.

A number of community focus group participants in all three project sites expressed that they were concerned about cost of services. Some participants thought there was a charge for calling 9-1-1. Others believed that there was a charge if the fire truck responded. There was also confusion about cost of transport and the difference between a fire department ambulance and a private ambulance service. This confusion and reluctance also potentially placed both the customer and first responders at greater risk.

While no literature exists on measuring the effectiveness of fire prevention and public safety education programs in the fire service, the research team believes that increasing prevention and public safety education efforts will: a) enhance the development of trusting community relationships and partnerships; b) increase community knowledge and practice of fire and injury prevention; c) reduce confusion about services; and, perhaps most importantly, d) decrease the number of fire and emergency medical incidents. All of these can reduce the risk of injury and loss of life for both first responders and multicultural community members. The advantages to the fire department and the community of further emphasizing prevention have not been fully explored, but the potential outcomes for both parties appear positive. Further discussion of the community outreach effort appears in the Community Relations Discussion section and a highlighting of a prevention and safety culture may be found in the Fire Service Culture and Promising Practices Sections.

7.4.5 Trust

A key element of the relationship between first responders and customers is trust. Lack of trust can easily create a ripple effect that potentially shapes the safety of both parties, especially in emergencies. When it comes to fire and EMS personnel providing services to multicultural community members, that topic becomes even more important. Anecdotal data from the community focus groups indicated that due to a lack of trust, community members sometimes gave incomplete or inaccurate data to first responders, which increased risk. The figures presented in Tables 7.4.9 and 7.4.10 focus on trust issues that potentially affect customer service and ultimately safety. Sixty-seven percent of the cumulative online respondents reported that they experienced customer misuse of emergency services *All the Time* (20%) or *Frequently* (47%). In other words, first responders believed customers could not be trusted to use the 9-1-1 system strictly for emergencies.

TABLE 7.4.9: Customers' Misuse of Emergency Services							
Online Statement 3A: I respond to incidents where customers misuse our services.							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Cumulative	151	345	189	15	39	N=739	2.90
	20%	47%	26%	2%	5%		
Seattle	16	72	52	4	4	N=148	2.69
	11%	49%	35%	3%	3%		
Austin	107	156	97	8	21	N=389	2.98
	28%	40%	25%	2%	5%		
Milwaukee	28	117	40	3	14	N=202	2.90
	14%	58%	20%	1%	7%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Qualitative data from first responder focus group participants referred to this misuse primarily with “non emergency” medical calls, also known as “aid calls.” Many firefighters and paramedics in the three cities also specifically spoke about the growing predicament involving people without medical insurance and proper health care using first responders as an alternative to a doctor’s treatment or as entry and free transport to the emergency room.

This issue impacts firefighter and civilian safety when firefighters and paramedics are put into service for a call that is not an emergency and are therefore “out of service” and not available to respond to a more urgent emergency. First responders expressed concern that this growing situation puts an added strain on resources, may result in a delay of service and/or cause incident escalation. While the preponderance of the findings supported these concerns, a few firefighters discussed the commitment to provide service to the community that they committed to when they accepted the job of first responder. The explanation—contributed mostly by veterans—was, when there is a need; we show up and do whatever is necessary.

No data was collected in this study about the number of non-emergency 9-1-1 calls or their impact on resources or delayed service.

Similar to firefighters’ lack of trust in customers, the figures presented in Table 7.4.10 reveal that many firefighters and paramedics reported customers did not trust them. Forty-four percent of the online respondents said they experienced lack of customer trust *All the Time* (6%) or *Frequently* (38%). The clustering of the responses, as indicated by the mean of 2.47, occurred very close to the midpoint between the *Infrequently* and *Frequently* categories.

TABLE 7.4.10: Customers’ Trust in Emergency Responders

Online Statement 3D: Customers I serve don’t seem to trust emergency responders.

	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Cumulative	46	281	374	6	21	N=739	2.47
	6%	38%	51%	4%	1%		
Seattle	7	56	83	2	0	N=148	2.46
	5%	38%	56%	1%	0%		
Austin	31	164	165	25	4	N=389	2.52
	8%	42%	42%	6%	1%		
Milwaukee	8	61	126	5	2	N=202	2.36
	4%	30%	62%	2%	1%		

All the Time = 4 points *Frequently* = 3 points *Infrequently* = 2 points *Never* = 1 point *N/A* = 0 points

Community focus group members in the three cities generally concurred with the online survey findings. Some multicultural focus group members in all three project sites did not have a great deal of trust in emergency responders. The distrust generally resulted from three causes: 1) a person, group or someone they knew had a negative experience with firefighters, paramedics and/or dispatch, 2) an emergency-related event where the person experienced lack of respect or was dissatisfied with the service provided, or 3) a non-emergency related event such as an issue with a fire inspection or during the testing and hiring process in their local fire department.

Another primary reason for distrust of firefighters and paramedics was unrelated to the local fire department, but affected them. It was the distrust of anyone in uniform or wearing a badge. This was often the case with immigrants and refugees from other countries where military, police and even firefighters are corrupt. Community focus group participants at the lower end of the socio-economic scale and some immigrant groups also verbalized a similar lack of trust. It was with these focus groups that a set of customer service inconsistencies began to show-up; their concerns seemed to be associated more with firefighters than emergency medical service personnel, with the exception of the employees of some of the private ambulance services in Milwaukee.

It is difficult for those charged with protecting public safety to deliver services in communities where distrust exists on the part of the service recipients. Sir Robert Peel developed a set of principles that have served as guideposts for community policing projects. These principles, based on a continuing relationship of trust and cooperation with the public, are applicable to all service agencies whose responsibility it is to protect the public.³

The findings that emerged from this study indicated that distrust exists among both service providers as well as recipients. Two-thirds of the first responders who completed the online survey reported that they could not trust the community members to use the 9-1-1 system in compliance with its emergency objective. When multicultural issues such as: language barriers; a lack of knowledge about fire prevention and safety; a sense that values, traditions and customs are not always respected; and a sense of distrust of authority are factored in, it is clear that a gap exists. It is at this point the safety and effectiveness of service delivery seems to deteriorate with, for example, lower socio-economic, homeless, recent immigrants, African Americans, LGBT groups.

³ British Police Administration, Wm Hewitt, Charles Thomas pub, 1965.

7.4.6 9-1-1 System Ratings

The research design did not specify any data collection from dispatch or community focus groups about customer service of 9-1-1/dispatch in the three project sites. However, in reviewing qualitative findings from focus groups and interviews, a common theme emerged about customers' experience with the 9-1-1 system. The quality of the initial interaction with dispatch (9-1-1 or private ambulance in some cases) often set the tone for how the department handled the emergency and the customer's perceptions of the fire or the emergency medical response.

A miscommunication or problem between the 9-1-1 operator (dispatch) and the customer (i.e., language barriers, transferring calls, disrespect), or between dispatch and the first responder (i.e. lack of information, miscommunication), often resulted in unanticipated customer service challenges in multicultural communities. Such miscommunication often brings potential safety hazards for both the first responders and the customers.

Due to the differences in the operational organization of dispatch in each of the three project sites, it was difficult to identify commonalities between them.

7.4.7 Community as Partner

Community members openly shared their needs and ideas during focus groups and interviews. Many of the community focus group participants viewed researchers as an extension of their local fire department. They believed the research team conducted the focus groups and interviews on behalf of the fire department to find out what services the community wanted and needed. Many directly articulated their pleasure at being invited as well as their appreciation for the opportunity to enter into a dialogue where the contents would be shared with public safety agency leadership.

Study findings indicated that multicultural focus group participants in all three cities were motivated to assist the fire and EMS agencies to provide safe and effective fire, emergency medical, fire prevention and safety education services in their respective communities. Some focus group participants offered to assist with language and cultural translation, cultural competency/cultural sensitivity training, introductions to community leaders, logistical support for fire prevention, safety education programs and incident support.

7.4.8 Summary

In general, first responders in all three cities believed that they provide excellent and equal service to the multicultural communities they serve. Except for a few specific criticisms related to those areas where first responders believed customer service was lacking, the multicultural communities concurred, and considered the services provided excellent or good. However, a discrepancy between the quantitative and qualitative responses regarding firefighters providing equal service points to a gap in the perception of services provided and those actually provided.

Researchers found a possible discrepancy in the area of effective fire prevention and safety education. Though varied throughout the three study sites, the departments considered the effectiveness of their education materials excellent or good but also revealed a fair number of respondents who did not know. On the other hand, members from the multicultural community identified a number of areas in which they felt their knowledge was lacking, such as: which services the fire department provided, why fire trucks and firefighters came during a medical emergency, cost of services, and the difference between department and private ambulances.

A lack of trust appeared to exist between first responders and community members, some of which was a result of misuse of the 9-1-1 system by the community. First responders also believed that the members of the multicultural community did not trust them. The reasons for that distrust were related to a negative experience or general distrust of uniformed personnel. Despite a lack of trust in some cases, the majority of community members were quite willing to assist their local fire departments to provide safer and more effective services in their communities.

7.4.9 Recommendations

Background

Study findings identified a degree of interconnectedness between customer service, communications and community relations' theme discussions, so there is some overlap in the recommendations. Language difficulties and multicultural capacity influenced how customers perceived service when calling 9-1-1 and on-scene during emergency events. Both language challenges and multicultural capacity issues sometimes resulted in service delays that potentially increased risk to first responders and civilians. The findings also identified customer dissatisfaction with the lack of translated public education and prevention materials.

Value Statement

A continuing process of assessing customer satisfaction with the delivery of services, identifying prevention needs and other service issues establishes open communication and allows the fire department to take early action when something unforeseen occurs. This represents a proactive safety-and-prevention orientation rather than a reactive approach.

Recommendations

The FIRE 20/20 research team recommends the following:

1. Conduct yearly surveys of multicultural customers to identify service issues and fire and injury prevention needs.
2. Conduct focus groups with members of a variety of multicultural communities to explore service issues and fire and injury prevention needs at a more in-depth level.

Recommendations for Further Research

1. The research team recommends further study of the multicultural and language issues between the 9-1-1 operators/dispatchers and callers.

2. The research team recommends further study to identify the frequency of and time devoted to non-emergency 9-1-1 calls and the impact of these calls on both department resources and delays in service.
3. The research team recommends further study of the quality of customer service provided by 9-1-1 operators/dispatchers and its impact upon the safety and effectiveness of emergency service response.
4. The research team recommends further study about the accessibility and effectiveness of fire prevention and safety education within multicultural communities.
5. The research team recommends further study and development of objective quantitative and qualitative measures that are meaningful and effective in assessing the degree of customer satisfaction with the delivery of fire and emergency medical services.

7.5 Fire Service Culture

7.5.1 Introduction

The fire culture (also known as the “hero” culture) is the number one initiative from the National Fallen Firefighters Foundation 16 Life Safety Initiatives. “No advocacy point carries more importance and potential than the need to change from within—that is, the need for fire departments and the fire service as a whole to change its safety culture.”¹ As was clearly articulated at the 2007 Everyone Goes Home Summit in Navado, California, it is difficult, if not impossible, to make a significant reduction in the number of injuries and line of duty deaths (LODD) without changing the culture.

Edgar H. Schein² identified three basic levels of organizational culture: behaviors, values, and at the deepest cultural level, beliefs. For the purpose of this study, the research team defined “fire service culture” as related to the norms of the fire service that involve firefighters’ beliefs, values and behaviors such as a sense of belonging, teamwork, attitude, safety, camaraderie, heroism and tradition. Consistent with the literature, organizational culture affects not only the personnel working within the organization, it extends into the external community as well.

In an effort to further identify behaviors associated with the fire service, researchers used the terms “Can Do” or “Do Whatever It Takes” as synonyms for the hero culture.

This discussion section explores firefighters’ beliefs, values and behaviors about data reporting and data collection, safety initiatives and issues for first responders and civilians, risk taking and issues related to multicultural communities.

7.5.2 Data

The research team identified two data-collection challenges. The original plan called for the use of NFIRS data from the three project site departments to establish a baseline of firefighter and multicultural community member injuries and losses of life. During the pilot study, the researchers found that the NFIRS data was inadequate for this purpose due to incomplete

¹ Manning, B. (2000) “Creating the ‘New’ Fire Service Safety Culture: A Perspective, Part I.”

² Schein, E. (2004). *Organizational Culture and Leadership*. 3rd Ed.

entry of critical demographic information. The reporting fields regarding race, gender and age exist in NFIRS, but they are optional items rather than required reporting fields.

While the lack of demographic data precluded a complete response to the study's research question #4, the identification of inadequate data to track the race, gender and age of firefighters and multicultural community members injured or killed during emergencies surfaced as one of the most important study findings. Without baseline data, it was not possible to determine whether strategies designed and implemented to reduce emergency event injuries and deaths were effective.

The second challenge related to accurately reporting injuries. Injury data is critical to collect and analyze because it is often a predictor of more serious injuries and even loss of life. Manning³ describes a mathematical relationship among the frequencies of unsafe behaviors, injuries and deaths, and states that almost every serious injury event is preceded by hundreds of unsafe behaviors which led to it.

7.5.3 Culture of Safety and Prevention

During the data collection phase of this study, the researchers heard a consistent theme in the Austin Fire Department (AFD) and Austin-Travis County Emergency Medical Services (A/TCEMS) focus groups about an effort to address the frequency of unsafe behaviors, injuries and deaths. Initiated by the training chief following a serious accident 5 or 6 years ago, the endeavor appeared to be gaining the acceptance of first responders and the leaders alike.

Following an interview with the chief officer, the research team discovered that this project was a concerted effort to shift the departmental culture toward greater emphasis on the practice of safety and prevention. Rather than repeat the detailed description of this AFD organizational change initiative to depict a culture of safety and prevention, the reader is referred to Promising Practices in the Findings section.

³ Manning, B. (2000) "Creating the 'New' Fire Service Safety Culture: A Perspective, Part I."

7.5.4 Reporting Injuries

The findings in Table 7.5.1 show that more than one-third of the online respondents (N=739) from all three project sites reported they *Infrequently* (31%) or *Never* (3%) accurately report all injuries, only 14% of the first responders indicated injuries were always reported.

TABLE 7.5.1: Accurately Reporting All Injuries							
Online Question 19C: Accurately reporting all injuries (including minor injuries).							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Cumulative	101	342	226	22	48	N= 739	2.76
	14%	46%	31%	3%	6%		
Seattle	17	64	57	3	7	N= 148	2.67
	11%	43%	39%	2%	5%		
Austin	61	170	122	13	23	N= 389	2.76
	16%	44%	31%	3%	6%		
Milwaukee	23	108	47	6	18	N= 202	2.80
	11%	53%	23%	3%	9%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Qualitative data gathered from firefighter and paramedic focus groups, interviews and open-ended survey questions indicated that injuries often go unreported due to fire culture-related issues. A concern about being labeled was a reason some female and minority male firefighters did not report injuries. Others indicated that reporting injuries had a financial impact due to reassignment to light duty, which meant giving up shifts and losing the opportunity of working overtime.

Some veteran firefighters reflecting back on their “rookie” experiences stated that injuries went unreported due to fear of earning a reputation that would negatively influence their careers. Interviews with personnel at the AFD Wellness Center confirmed that not reporting injuries actually began in recruit school. “If you don’t finish recruit school, you don’t get hired” was the rationale. Related directly to firefighter safety, the reluctance to report injuries while in recruit school could result in permanent physical damage later in one’s career. This learned and reinforced aspect of the fire culture was likely a contributing factor in the general under-reporting of injuries.

The non-reporting or under-reporting of injuries has a direct impact on the safety of firefighters in at least two modes. The training mode requires information about injuries and the conditions surrounding them, similar to that gathered by the AFD safety Field Training Officers. The lack of data precludes any assessment or evaluation of cause and any opportunity for others to learn from what happened or how they can avoid similar situations.

The second mode is operational. Emergencies may call upon personnel to work safely at the peak level of performance. When a first responder is working injured, s/he is unable to safely reach those performance standards and this limitation places the firefighter and all other team members at risk.

“Operating near the edge of safety represents a conflict between two competing goals. The first is to provide effective service delivery, which means being able to rescue civilian casualties in a fire. The second is to provide for firefighter safety. Operational safety is a trade-off between an appropriate and acceptable level of risk taken by firefighters to extinguish fires and rescue or protect civilians and the level of safety required to prevent firefighters from becoming casualties themselves.”⁴

Finally, while these study findings apply only to three project sites out of more than 100 Metro Fire Departments in the US, the results are a cause for concern. If this is a trend, these findings bring in to question the accuracy of both local and nationally reported injury data.

7.5.5 Can Do Attitude

The research team identified the “Can Do” or “Do Whatever It Takes” mindset as an important attitudinal component of the fire culture. The “Can Do” Attitude is a critical element of firefighting and is unto itself, neither good nor bad. It stems from the belief that one can solve the problem at hand safely and effectively. A major portion of this study was devoted to measuring the impact of this attitude on firefighter and multicultural community member safety.

⁴ Pessemier W. (2006). “Developing a safety culture in the fire service.” Unpublished Manuscript.

The findings presented in Table 7.5.2 reveal that the “Can Do” attitude can increase risk to first responders when delivering services in multicultural communities. Forty-three percent of the online respondents from the three project sites (N=739) indicated that the “Can Do” attitude *Decreases* (37%) or *Significantly Decreases* (6%) first responder safety in multicultural communities. Twenty-eight percent of the respondents believed the “Can Do” attitude *Increases* (21%) or *Significantly Increases* (7%) first responder safety, and 29% of the respondents thought the attitude does not affect safety.

TABLE 7.5.2: “Can Do” Attitude Affects Firefighter and Paramedic Safety							
Online Question 14: How does the FD “Can Do” attitude affect the safety of firefighters and paramedics delivering service in multicultural communities?							
	Significantly Increases Safety	Increases Safety	Decreases Safety	Significantly Decreases Safety	Does Not Affect Safety	Total	Mean
Cumulative	52	155	271	46	215	N=739	2.41
	7%	21%	37%	6%	29%		
Seattle	10	22	59	7	50	N=148	2.36
	7%	15%	40%	5%	34%		
Austin	26	88	127	19	129	N=389	2.47
	7%	23%	33%	5%	33%		
Milwaukee	16	45	85	20	36	N=202	2.34
	8%	22%	42%	10%	18%		

Significantly Increases Safety = 4 points Increases Safety = 3 points Decreases Safety = 2 points Significantly Decreases Safety = 1 point N/A = 0 points

The findings presented in Table 7.5.3 show that 74% of all online respondents *Strongly Agree* (13%) or *Agree* (61%) that firefighters sometimes go beyond their limitations. With a Mean of 2.91, the responses were clustered in the *Agree* category, indicating that firefighters were aware that they did take risks and went beyond their limitations in their job.

TABLE 7.5.3: Firefighters Go Beyond Limitations

Online Question 15d: Sometimes firefighters go beyond their limitations

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	93	448	121	16	61	N=739	2.91
	13%	61%	16%	2%	8%		
Seattle	18	106	17	1	6	N=148	2.99
	12%	72%	11%	1%	4%		
Austin	33	213	84	14	45	N=389	2.77
	8%	55%	22%	4%	12%		
Milwaukee	42	129	20	1	10	N=202	3.10
	21%	64%	10%	0%	5%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

Qualitative data from first responder focus groups, interviews and open-ended survey questions indicated that the “Can Do” attitude increased risk when one or more of the following conditions were present: a) the drive from an “adrenaline rush” is especially strong; b) overconfidence about training and equipment; c) holding the belief that it is okay to die while saving another; d) the lack of effective and safety-oriented leadership making sound decisions; e) the internal or external push of peer pressure.

In addition, near-miss events also contributed to a sense of false confidence that a past practice was safe. In reality, what happened was unsafe and those involved were merely the recipients of good fortune. If that occurred more than once over a period of time, it could lead to flawed policy, procedures and training.

The findings presented in Table 7.5.4 raise an important point about the fire culture: that, in the name of customer safety, some first responders justify their risky “Can Do”, “Do Whatever It Takes” behavior. A plurality of 48% of the online respondents agreed that the “Can Do” attitude *Increases* (36%) or *Significantly Increases* (12%) the safety of multicultural community members, while 34% percent reported the attitude does not affect safety.

TABLE 7.5.4: “Can Do” Attitude Affects Community Member Safety							
Online Question 17: How does the “Can Do” attitude of firefighters affect the safety of multicultural community members?							
	Significantly Increases Safety	Increases Safety	Decreases Safety	Significantly Decreases Safety	Does Not Affect Safety	Total	Mean
Cumulative	90	263	120	16	250	N=739	2.87
	12%	36%	16%	2%	34%		
Seattle	22	58	19	2	47	N=148	2.99
	15%	39%	13%	1%	32%		
Austin	42	127	69	7	144	N=389	2.83
	11%	33%	18%	2%	37%		
Milwaukee	26	78	32	7	59	N=202	2.86
	13%	39%	16%	3%	29%		

Significantly Increases Safety = 4 points Increases Safety = 3 points Decreases Safety = 2 points Significantly Decreases Safety = 1 point N/A = 0 points

These findings strongly support the perspectives Pessemier⁵ developed in his paper on Fire Safety Culture. “In the fire service, there is a perception that the higher the level of risk that is taken by firefighters, the higher the level of safety of those who might otherwise perish in a fire.” Pessemier continues, “The identity of the fire service could be described as one that includes a culture and image based on the values, beliefs, and practices that result from the idea that members are willing to risk their lives to save others. Because firefighters are willing to take this kind of risk, they receive a very positive social identity as part of the image that the public carries about firefighters and the profession.”

⁵ Pessemier W. (2006). “Developing a safety culture in the fire service.” Unpublished Manuscript.

The findings contained in Table 7.5.5 highlight an interesting perspective about the attitudes and beliefs of the fire culture that potentially increase risk. Seventy-five percent of the online respondents reported that they *Disagree* (56%) or *Strongly Disagree* (19%) that they expect *other* firefighters and paramedics to do whatever it takes, no matter what the risk.

TABLE 7.5.5: Expectation of Others to Take Risks							
Online Question 15a: I expect other firefighters/ paramedics to do whatever it takes, no matter what the risks							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	32	148	408	136	15	N=739	2.10
	4%	20%	55%	18%	2%		
Seattle	4	31	85	27	1	N=148	2.08
	3%	21%	57%	18%	1%		
Austin	17	73	216	74	9	N=389	2.09
	4%	19%	56%	19%	2%		
Milwaukee	11	44	107	35	5	N=202	2.16
	5%	22%	53%	17%	2%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

At first glance these findings appeared in direct conflict with the risk-taking data presented in Table 7.5.3, where a similar percentage of the respondents reported firefighters sometimes go beyond their limits. However, further consideration of these two sets of findings indicated that both might exist simultaneously.

Schein⁶ identified a key tenet of organizational cultures as, "...a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems." Applying this to the fire culture maxims of "covering one another's back" and "risk a life to save a life," they certainly qualify as ingrained cultural norms in the tradition of the fire service.

⁶ Schein, E. (2004). *Organizational Culture and Leadership*. 3rd Ed.

Thus, if firefighters are personally willing to go beyond their limits because it is a cultural norm, then it's not necessary to *expect* others to do the same: it's implicit. The researchers conclude that the basic assumption that I'm willing to risk, but I don't expect that from others is a selfless feature of the "hero" culture of the fire service.

7.5.6 Risk

Becoming a firefighter today can be an especially daunting undertaking for a new recruit. Informal rites of passage exist to challenge the worthiness of the candidate even though s/he has completed recruit school. Rising to the challenge, recruits often feel pressured to prove their worth by taking risks.

The findings contained in Table 7.5.6 identified that a majority (70%) of the online respondents *Infrequently* (48%) or *Never* (22%) observed new firefighters taking unnecessary risks.

TABLE 7.5.6: New Firefighters Taking Unnecessary Risks							
Online Question 19f: New firefighters taking unnecessary risks to prove themselves worthy to their crew							
	All the Time	Frequently	Infrequently	Never	N/A	Total	Mean
Cumulative	21	84	358	159	117	N= 739	1.95
	3%	11%	48%	22%	16%		
Seattle	0	19	85	30	14	N=148	1.92
	0%	13%	57%	20%	9%		
Austin	9	33	168	102	77	N=389	1.84
	2%	8%	43%	26%	20%		
Milwaukee	12	32	105	27	26	N=202	2.16
	6%	16%	52%	13%	13%		

All the Time = 4 points Frequently = 3 points Infrequently = 2 points Never = 1 point N/A = 0 points

Qualitative data from first responder focus groups, interviews and open-ended survey questions revealed that each of the departments was concerned about this issue. Some veteran firefighters articulated that new firefighters might be at greater risk of injury because

they did not feel comfortable speaking up when they perceived an unsafe situation or behavior. Others indicated they did not speak out as rookies because doing so might have given them a negative reputation that could have followed them for the rest of their career.

The research team noted a connection between the under-reporting of injuries and inability to speak-up regarding unnecessary risk taking. Departmental policies appeared clear regarding both activities. Yet, the practice seemed to override policy due to subtle peer pressure, in what could be identified as a form of silent complicity.

Informal mentoring is an ongoing and important function in the fire culture and critical to the safety of the team. Depending on the mentor and the situation, the experience can lead to either safer or riskier behavior. Interviews revealed modeling was a powerful element of the mentoring process. "Do as I say, not as I do" was expressed in terms of seat belt usage, entering an unsecured scene without police back-up, freelancing, (operating independently without being part of the overall strategic plan of managing an incident), hazing activities at the station, talking about other crew members behind their backs and demeaning a customer to team members after a response. Veteran firefighters discussed the importance of their mentoring experiences. The researchers observed that it was a process for passing on a tradition to the next generation. Some rookies, on the other hand, expressed a desire for someone in the department to help them bridge from recruit school theory to the practice of becoming a professional firefighter.

7.5.7 Impact in Multicultural Communities

The findings in Table 7.5.7 identify how the “Can Do” and “Do Whatever It Takes” attitude affected both first responder and civilian safety when working in multicultural communities. Although 49% of the respondents *Disagree* (38%) or *Strongly Disagree* (11%) that the “Can Do” attitude can cause first responders to miss important cultural issues during emergency events, a considerable number of respondents (38%) saw this as an area of concern.

TABLE 7.5.7: “Can Do” Attitude Causes Missed Cultural Issues							
Online Question 15C: A "Can Do" attitude may cause us to miss important cultural issues during emergency events							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	19	258	282	81	99	N=739	2.34
	3%	35%	38%	11%	13%		
Seattle	2	64	53	15	14	N=148	2.40
	1%	43%	36%	10%	9%		
Austin	14	132	137	43	63	N=389	2.36
	4%	34%	35%	11%	16%		
Milwaukee	3	62	92	23	22	N=202	2.25
	1%	31%	46%	11%	11%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

Anecdotal data from focus groups, interviews and open-ended online survey responses indicated that the desire to “rush in” to mitigate the emergency without paying attention to situational cultural issues was more of a problem in medical calls than fire. Understanding how to show respect, with whom to speak and other cultural protocols were important in obtaining the information necessary to respond to a medical emergency. The Multicultural Capacity discussion section contains more information about this topic.

7.5.8 Summary

Exploring the issues and impacts of the fire culture on the health and safety of first responders and multicultural community members is both critical and complex. The “Can Do” attitude is an important element of firefighting and is, in itself, neither good nor bad. It stems from the belief that one can solve the problem at hand safely and effectively.

Researchers noted that a “Can Do” attitude increased risk when one or more of the following conditions were present: a) the drive from an “adrenaline rush” was especially strong; b) overconfidence about training and equipment; c) holding the belief that it was okay to die while saving another; d) lack of effective and safety-oriented leadership making sound decisions; and e) internal or external push of peer pressure. Near-miss events also contributed to a sense of false confidence that a past practice was safe. These, combined with high multicultural customer approval ratings and customers’ expectations that first responders will do whatever it takes to rescue them in an emergency, continue to perpetuate some unsafe attitudes and behaviors of the fire culture on a basic belief level.

The majority of first responders did not identify the “Can Do” attitude as the cause of missing important cultural issues during emergencies. However, anecdotal data indicated that the desire to “rush in” was a problem in some medical calls.

Accurately collecting and rigorously analyzing and using data is an important first step to creating a fire culture oriented toward safety and prevention. The research team identified a lack of both NFIRS demographic data and accurate injury data in the three project departments. First responders presented a number of reasons for not reporting injury data, some of which related to fire culture issues such as reputation, image and losing shifts. Some participants noted that working while injured affects a team from working safely at peak levels of performance in emergencies and puts both first responders and customers at greater risk.

Although online respondents reported that new firefighters generally did not take greater risks, a number of veteran firefighters related personal stories about the impact of peer pressure. They also told stories about the inclination of the fire culture to be unsupportive of rookies speaking up when they perceived unsafe situations.

Online respondents identified effective leadership as the best way to manage risk. Focus group participants identified “informal mentoring” as an important aspect of the fire culture where both safe and unsafe behaviors, attitudes and beliefs were learned and reinforced.

7.5.9 Recommendations

Background

Study findings and the subsequent discussion regarding the fire service culture explored firefighters' beliefs, values and behaviors about data reporting, data collection, risk taking and safety issues for first responders and civilians in multicultural communities.

Value Statement

Departments that embrace a safety and prevention culture as their primary mission will: reduce the number of incidents; form partnerships with the community that increase the impact of targeted prevention programs and recruitment efforts; and decrease risk of injury and loss of life for both civilians and responders.

Recommendations

The FIRE 20/20 research team recommends the following to enable fire agencies to re-focus their efforts on pro-actively pursuing a culture of safety and prevention:

1. Embrace the concept of accurate reporting of injuries as a safety and prevention strategy at all levels throughout the organization—beginning in recruit school.
2. Make NFIRS demographic data fields concerning race, gender and age required entry fields in both the civilian and firefighter casualty reporting modules.
3. Encourage the use of the near-miss reporting systems and develop an internal review process to learn from all near-misses.
4. Develop policies and procedures to ensure the reporting and treating of injuries sustained by recruits who are attending recruit school.
5. Partner with NFFF and ask them to include disabled and disease survivors in their "Courage To Be Safe" program.

Recommendations for Future Research

The "Can Do" attitude is an important and necessary element of being a successful first responder. This study attempted to identify a correlation between the "Can Do" or "Do Whatever It Takes" mindset and high-risk behaviors that increase injuries and loss of life of both first responders and civilians in multicultural communities. The findings were inconclusive due to the researcher's operational definition of the "Can Do" attitude.

6. Following the recommendation of the NFFF in their commitment to steer the fire culture from a response culture to a safety culture, the research team recommends further study of the "Can Do" attitude, the desire to "get it done", and its affect on a safety and prevention culture.

7.6 Community Relations

7.6.1 Introduction

The research team defined community relations as Fire/EMS' ability to build and maintain quality, ongoing relationships with all aspects of their multicultural community.

Effective community relations builds bridges into the community and improves communication between first responders inside the firehouse and those who reside in the neighborhoods that surround them. Fire and EMS personnel can reduce risk to themselves and multicultural community members through increased interaction with the community, expanded fire prevention and safety education efforts and strong partnerships with community groups and organizations

7.6.2 Fire Department Community Relations Efforts

All three fire departments had a variety of formal and informal community relationships throughout all levels in their respective departments. All three departments had at least one public information officer (PIO) who was responsible for formally communicating with the media, handling press conferences and press releases. The PIOs also helped to coordinate department public events. All of the fire chiefs were active, visible presences in their community, attending public functions and serving as the face of their respective fire departments. Chief officers also represented their fire departments at community functions and events.

Many firefighters, paramedics and company officers also participated in and enhanced their department's community relation efforts by building both professional and personal relationships in their communities. On-the-job activities included safety talks, prevention programs, hosting events at the fire station, follow-up with emergency victims, helping elderly in the fire station neighborhood, taking fire apparatus to a community event, recruiting at high schools and career fairs, joining elementary-school children for lunch, making presentations during fire prevention month and offering blood pressure checks. Off-the-clock community outreach included coaching sports, volunteering with non-profit organizations, tutoring students, or being a members of local service clubs. Through these formal and informal community relations activities, the fire departments built trust, strengthened community

relationships, built partnerships, informed their communities about fire department services, educated community members about fire prevention and fire safety and recruited future firefighters.

7.6.3 Lack of Knowledge Increases Risk

In terms of awareness about fire department services, multicultural community members evenly cover the spectrum, according to firefighters surveyed. The figures in Table 7.6.1 reveal 40% *Strongly Agree* or *Agree* and 40% *Strongly Disagree* or *Disagree* with the statement, “Multicultural community members I meet are aware of the services we provide.” Of note, 20% of the firefighter respondents reported they did not know if community members were aware. That firefighters might not know their customers’ needs and baseline knowledge of fire and prevention services could increase risk for both firefighters and community members.

TABLE 7.6.1: Community Awareness of Fire Services							
Online Statement 12F: Multicultural community members I meet are aware of the services we provide.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	41	248	231	70	149	N=739	2.44
	6%	34%	31%	9%	20%		
Seattle	8	43	53	18	26	N=148	2.34
	5%	29%	36%	12%	18%		
Austin	21	121	126	40	81	N=389	2.40
	5%	31%	32%	10%	21%		
Milwaukee	12	84	52	12	42	N=202	2.60
	6%	42%	26%	6%	21%		

Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point

Table 7.6.2 reveals that 53% of online respondents *Agree* (45%) or *Strongly Agree* (8%) that customers they meet in “emergency situations” lacked basic fire safety knowledge. Lack of knowledge about safety issues increases the chances of dangerous emergencies occurring.

TABLE 7.6.2: Customer Knowledge of Fire Prevention and Safety							
Online Statement 12A: The customers I meet in emergency situations lack basic knowledge about fire prevention and safety.							
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total	Mean
Cumulative	60	331	223	24	101	N=739	2.67
	8%	45%	30%	3%	14%		
Seattle	10	76	42	5	15	N=148	2.68
	7%	51%	28%	3%	10%		
Austin	28	166	113	11	71	N=389	2.66
	7%	43%	29%	3%	18%		
Milwaukee	22	89	68	8	15	N=202	2.67
	11%	44%	34%	4%	7%		

**The means were very similar for the three cities, however the “Don't Know” response percentage is skewed. The “Don't Know” percentages ranged from a low of 7% to a high of 18% but do not directly affect the mean. Strongly Agree = 4 points Agree = 3 points Disagree = 2 points Strongly Disagree = 1 point*

Community focus group qualitative findings in all three cities differed, by degree, from the online survey findings. A majority of multicultural community focus group participants acknowledged being uninformed about fire prevention, safety knowledge and the range of services provided by their local fire department. That was especially true of immigrant and elderly groups. Specifically, many of the participants were unaware the fire department provided medical support as well as fire and injury prevention services. A number of community focus group participants also expressed confusion about how and when to use 9-1-1.

7.6.4 Two-Way Learning

Based on the research findings, the research team believes that effective community relations is a two-way opportunity for the fire department to teach the community about fire safety and injury prevention and to learn from them about multicultural issues that potentially increase risk for both firefighters and civilians.

For example, community focus groups informed the researchers about potentially dangerous issues as well as prevention opportunities related to the cultural use of fire (i.e. candles, incense):

- Hispanic participants talked about the fire hazards with home altars and suggested that the fire department work through the church with smoke detector and fire prevention programs. One focus group member said that some members of her community were placing altar candles in dishes of water so if they tipped over they would go out. The focus group member suggested that the fire department promote this fire safety technique in prevention talks.
- Orthodox Jewish participants explained that if a Sabbath or holiday candle tips over, they could not put it out. They also said they will not use the phone during the Sabbath or other Jewish holidays to call 9-1-1 unless someone's life is at risk. One focus group member explained that Orthodox Jews burn their leavened products before the Passover holiday (in the spring) and they usually do it inside or outside of their home. They suggested that the fire department have a community burn site that would bring the community together and create a safer environment to burn the leavened products.

A number of community focus groups informed researchers about cultural cooking issues. Among them:

- Many immigrants from African countries have a special coffee ceremony where they cook coffee on a charcoal burner inside the house or apartment. This creates fire and carbon monoxide hazards.
- Some Chinese focus group members disclosed that woks get very smoky and often set off smoke alarms, frequently prompting people to disconnect them or remove the battery.
- A number of first-generation immigrants in all three cities talked about their difficulties in cooking on an electric stove because they cannot see a flame. Community leaders noted that this was an important fire safety educational opportunity.
- Focus group participants explained why some people from their community might not leave the house immediately if there is a fire or other emergency
 - Members of the Muslim focus groups explained that some women might not leave a burning house right away if they are not covered. They suggested that firefighters and paramedics bring a blanket to offer as covering.

- A community leader in the Chinese focus group explained that some elderly Chinese do not believe in banks and may go back into a burning building to get their life savings or jewelry.
- A number of community focus group participants told researchers about why they or members of their communities may not call 9-1-1 during an emergency:
 - Cultural shame and embarrassment for creating the emergency
 - Language and communication barriers
 - Fear of uniforms and authority figures
 - Concern about cost of services

The research team believes this kind of information will help fire departments in both prevention and emergency response efforts. This study served as a vehicle for such exchanges and many focus group members viewed the groups as proactive community outreach initiatives by their fire department.

7.6.5 Building Partnerships

Members in many of the community focus groups expressed interest in working more closely with their fire department. They offered to help to translate and distribute fire safety and prevention materials, provide space, and arrange for safety presentations at a community centers, elderly activity centers, regularly scheduled meetings or community events.

Most community participants thoroughly enjoyed the times when firefighters brought fire trucks or firefighting equipment following some of the community focus groups in each of the study sites. Multicultural community leaders who participated in the focus groups said that they would welcome a fire department presence at their cultural events and festivals, but did not know who to contact or how to arrange such an activity. They said firefighters could learn about their culture at such events, as well as reach many members of their community to hand out prevention and safety materials, to recruit future firefighters, and to build trusting relationships that would help ensure safe and effective delivery of emergency services should such event occur.

Effective community relations programs can create partnerships with community organizations that cost-effectively extend the services of the fire department directly into some of the higher-risk populations. As an example, the Seattle Fire Department's long-term partnership

with the International District Emergency Center (IDEC) is an excellent model. The Promising Practices section of this report describes this program.

7.6.6 Leader to Leader

Hierarchy is important in many cultures (including the fire culture). A number of community focus groups in the three cities discussed the need for “leader-to-leader” conversations. Community members viewed this as a sign of respect. Community focus group participants reported these conversations would be most successful if initiated by a fire chief’s invitation. Of note, the word “invitation” was important. Some cultures (Arab, African, Asian, South Asian) viewed it as inappropriate or rude for members of their community to initiate a new relationship with authorities.

Community focus groups expressed that the appropriate community leader may be either a formal or an informal leader. Participants offered to help to identify the right person in their respective communities.

A number of community focus groups in all three cities said that the police department had reached out to their community leaders by asking them to serve on a task force or citizen advisory board. The fire department had not issued such an invitation, which focus group members said would be most welcomed.

7.6.7 At the Station Level

Although leaders often establish formal partnerships, community relations should be practiced through out the ranks and at the station level. The relationships between firefighters and people who live and work in the neighborhoods surrounding the fire station establish and maintain trust. Some firefighter participants talked about the metaphor of the “open bay door” to let community members know they were welcome. In Milwaukee, firefighters talked about how they had created events like a back-to-school fundraising BBQ at the neighborhood firehouse to raise money for local children’s school supplies. Another firefighter described how he and his team went to the local school cafeteria on a monthly basis and spent 45 cents to have lunch with the kids. More about Milwaukee’s outreach is in the “Best Practices” section of this report.

7.6.8 Strategies for Connecting to the Community

Creating culturally relevant fire prevention and safety radio and TV public service advertisements would be an excellent strategy to help the multicultural community gain knowledge about fire safety, firefighters and community members agreed. With a mean of 2.63, Table 7.6.3 shows that 58% of the firefighters and paramedics who responded to the online survey rated culturally relevant public service ads as a *Top Priority* (19%) or *High Priority* (39%).

TABLE 7.6.3: Culturally Relevant Public Service Ads						
Online Question 21H: Produce culturally relevant fire prevention and safety radio and TV Public Service Ads.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Cumulative	142	291	195	111	N=739	2.63
	19%	39%	26%	15%		
Seattle	25	52	45	26	N=148	2.51
	17%	35%	30%	18%		
Austin	77	157	101	54	N=389	2.66
	20%	40%	26%	14%		
Milwaukee	40	82	49	31	N=202	2.65
	20%	41%	24%	15%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

Some firefighters as well as some community focus group members suggested that fire stations would be good community gathering places. Some fire stations in each of the three cities have community rooms or spaces outside of the living quarters where people can meet. However, as the figures presented in Table 7.6.4 reveal, firefighters in all three cities who responded to the online survey overwhelmingly disagreed. Seventy-three percent indicated that they were not in favor of opening their fire station to the community by ranking this as *Low Priority*. Some firefighters expressed in focus groups, interviews and online survey open-ended questions that many of their stations were old and crowded, with insufficient space for their own accommodations, let alone for hosting community meetings.

TABLE 7.6.4: Fire Stations as Meeting Places

Online Survey 21A: Invite the community to use the fire station as a meeting place.

	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Cumulative	12	44	144	539	N=739	1.36
	2%	6%	19%	73%		
Seattle	1	5	26	116	N=148	1.26
	1%	3%	18%	78%		
Austin	4	21	82	282	N=389	1.35
	1%	5%	21%	72%		
Milwaukee	7	18	36	141	N=202	1.46
	3%	9%	18%	70%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

The figures presented in Table 7.6.5 indicate more than 60% of firefighters who participated in the online survey placed a *Top* (16%) or *High Priority* (45%) on involving community members in the development of educational materials.

TABLE 7.6.5: Co-Development of Public Survey Materials						
Online Survey 21D: Involve community members in the development of public education materials.						
	Top Priority	High Priority	Medium Priority	Low Priority	Total	Mean
Cumulative	117	334	203	85	N=739	2.65
	16%	45%	27%	12%		
Seattle	24	61	48	15	N=148	2.64
	16%	41%	32%	10%		
Austin	69	182	96	42	N=389	2.71
	18%	47%	25%	11%		
Milwaukee	24	91	59	28	N=202	2.55
	12%	45%	29%	14%		

Top Priority = 4 points High Priority = 3 points Medium Priority = 2 points Low Priority = 1 point

With the proper staffing, including firefighters with high multicultural capacity, this kind of a partnership could develop meaningful training for members of the community, increase cultural competency in the fire department and build effective partnerships that reduce the number of emergency incidents.

7.6.9 Summary

Community relations is a two-way path. It not only alerts the public to fire department programs, but it also proactively seeks out and builds relationships and partnerships that benefit both the community and the fire department. The multicultural communities in the three study sites expressed appreciation for the invitation to participate in the research study. They saw the focus groups as an invitation from the fire departments to learn about them and to listen to their input. The analysis of all the quantitative and qualitative data indicates that through effective community relations, fire departments will enhance the safe and effective delivery of both prevention and emergency response services.

7.6.10 Recommendations

Background

Study findings indicated that the three project fire departments lacked well-established, non-emergency relationships with many of their multicultural communities. Fire prevention materials used in the three cities, for the most part, appeared in English and perhaps one or two additional languages. All three cities had public safety education programs in the schools, but consistent programs for adults were absent, even though many multicultural community members lacked knowledge and understanding of their fire department's services. Cultural norms and fear of authority precluded many multicultural community members from initiating non-emergency relationships with their fire departments. This was especially true within the elder, first- and second-generation immigrant populations.

Value Statement

In order to have effective fire and injury prevention and safety programs, there must be good working relationships and open dialogue and communication between the fire department and the multicultural communities they serve.

Recommendations

1. Develop a community relations/community liaison strategic plan including vision, goals, projected outcomes, staffing and an evaluation plan.
2. Develop a Community Liaison Position(s) to work proactively with the multicultural communities. The documentation for the Bridge Building Model employed during this study is located in the Findings section of this report.
3. Implement a "Breaking Bread Project" where the fire chief hosts a special invitation, monthly luncheon at different neighborhood fire stations with leaders/members of local multicultural communities. The goals of the luncheon may include: building relationships with community leaders, identifying community needs and input, providing educational information to the multicultural community about fire department services, and promoting the local fire station as a friendly and inviting neighborhood resource.

4. Send formal invitations to local multicultural community groups, community leaders and school principals in the neighborhood for a tour of a fire station.
5. Develop and launch a joint PR campaign with multicultural community leaders and multicultural media outlets (radio/newspapers) in their audiences' languages. The purpose is to inform respective community members about the services offered by the Fire Department, cost related issues, how and when to use 9-1-1 and safety and prevention messages. The media would be willing to translate these materials, according to local representatives.
6. Work with multicultural media to develop a list of all multicultural events and festivals in the community. Talk with multicultural leaders about attending these events and festivals. When possible, bring apparatus and do a fire or EMS demo, a safety lecture, or blood pressure checks.
7. Explore the potential for constructing public meeting space in new fire stations and develop a plan to publicize this space for community meetings and fire prevention and safety training programs.
8. Develop and implement a "mini" fire academy or recruit school day specifically targeted at multicultural community leaders during which they would go on calls, learn and practice CPR, darn gear, and fight a controlled fire. Houston, TX has a successful model that they recently conducted for politicians and community leaders.

7.7 Leadership

7.7.1 Introduction

The importance of good leadership, both at the top of the organization and within the ranks, was a consistent theme relating to the safe and effective delivery of services in multicultural communities. Manning¹, in his white paper for the NFFF 2007 Summit, supports this premise, arguing that leadership at all levels of the organization is necessary to shift to a safety culture.

For the purpose of this study, the research team defined leadership as the process of influencing others; in this case, taking actions that ensure the health and safety of civilians and first responders, planning strategically, allocating resources and managing the overall direction of the Fire/EMS agency. Positive leadership inspires, motivates and directs the organization to come together for greater effectiveness.

The three participating chiefs unequivocally stated their willingness to address safety issues within their respective departments and improve their safe and effective delivery of services to multicultural communities. The chiefs demonstrated their commitment with active participation in this study and through the allocation of time and staff resources. In addition, all three chiefs plan to apply the results of this study to increase their community outreach and improve the effectiveness of their safety and prevention programs.

The content of this discussion focuses on leadership-related issues, both in the departments and in the community. These include collecting and using data, mentoring and role modeling, and enrolling stakeholders.

7.7.2 Valuing and Collecting Accurate Data

Valuing, collecting and using accurate data to support the safe and effective delivery of services in multicultural communities are leadership responsibilities. Two specific areas, identified in the study, where additional information is needed are: injury data and available demographic data (race, gender, age) relating to 9-1-1 calls, near-misses, injuries and loss of life.

¹ Manning, B. (2000) "Creating the 'New' Fire Service Safety Culture: A Perspective, Part I."

The three participating departments recommended that personnel report all injuries. Yet, respondents to the online survey (N=739) indicated that they observed only 14% of firefighters accurately reporting all injuries all the time. Based on observations of Manning², Pessemier³ and other fire service leaders, the lack of accurate injury data was most likely a challenge that plagued the fire service as a whole rather than just being unique to Seattle, Milwaukee, or Austin.

In this study, firefighters identified reasons they did not report all injuries. These included financial reasons (giving up a shift, not meeting the requirements of the fire academy) and image concerns (perceived as weak, accident prone). The research team believes that leadership throughout a department must clearly articulate the importance and value of accurate injury reporting and then enforce policies that require all injuries be accurately reported at all levels of the organization.

All three departments lacked valuable demographic data relating to 9-1-1 calls and about firefighter and civilian near-misses, injuries, and loss of life. Although the demographic fields exist in NFIRS, they are not required fields. This unreliable data source precluded the research team from being able to accept or reject the study hypothesis.

Collection and analysis of demographic data provides a rich foundation of understanding about the complexities of first responder and civilian safety in multicultural communities. It gives department leadership a baseline from which to measure the effectiveness and value of prevention programs in multicultural communities and important information for strategic planning, training and resource allocation decisions.

7.7.3 Enrolling Stakeholders

A key to the fire chiefs' success was their ability to enroll stakeholders who influenced, developed, implemented and/or were impacted by fire department policies and services.

Although each of the three fire departments involved in this study had unique reporting structures in their respective departments, a common element was the need for the fire chief to enroll, influence and work with stakeholders, both outside of their department and within

² Manning, B. (2000) "Creating the 'New' Fire Service Safety Culture: A Perspective, Part I."

³ Pessemier W. (2006). "Developing a safety culture in the fire service." Unpublished Manuscript.

the ranks. Some of the stakeholders included multicultural community leaders and union leadership.

Research findings indicated that the leadership in the three project sites possessed few ongoing working relationships with many of their multicultural communities or their respective leaders. One of the unexpected outcomes of this study was that the community focus group process initiated new relationships for the fire department and some of their multicultural communities. Qualitative data from community focus groups and interviews identified that the messenger, the message and the process were all important in building successful relationships and partnerships with multicultural communities.

Findings showed how 'culturally' important it was for the fire department—specifically the leadership—to take the initiative to reach out 'leader to leader' in the multicultural communities. Focus group participants expressed that for some communities it was viewed as inappropriate, and even rude, for community members to initiate relationships with government leaders without an invitation. A South Asian focus group in the pilot study clarified this in their response to the question, "Have you ever visited a fire station?" The response was simple—"We have never been invited." They went on to say that in their culture, it was unacceptable to go to someone's home without an invitation, and the firehouse was where the firefighters lived.

During the course of this research study, labor and management worked cooperatively with FIRE 20/20 in the three cities. They jointly signed letters sent to all personnel encouraging participation and personally participated in focus groups and interviews. When labor and management work together in this way, opportunities increase to achieve desired outcomes for safe and effective service in multicultural communities.

7.7.4 Mentoring and Role Modeling

A second unexpected result of this study was anecdotal data gathered about mentoring and role modeling and their effect on firefighter safety. Although these points were not identified in the Findings section, the research team thought them sufficiently important to mention in this discussion on leadership and ensuing recommendations.

Informal mentoring is an integral part of the fire culture tradition. The mentoring process assists younger firefighters to learn and refine their firefighter skills and helps to integrate her/him into the culture of the station and crew.

Veteran firefighters reported they often took new recruits 'under their wing.' They explained that someone had done the same for them and it had meant a lot. It was a way to give back, teach the job and pass along department knowledge and traditions.

A number of firefighter focus group and interview participants in each of the three project sites reported that seniority and experience were highly revered by new recruits. They said 'rookies' were hungry to 'learn the ropes' and desired acceptance as members of the team. Some reported that veterans' stories were powerful vehicles for young firefighters and paramedics to learn about the job, policies and procedures, the department, and the fire culture.

Influences from informal mentors may encourage both positive and negative behaviors, attitudes and values. Some focus group and interview participants reported that not all mentors reinforced departmental policies and procedures. 'Near-miss storytellers' often became role models for impressionable, young recruits. The research team identified this type of informal connection as an example of how the fire department culture taught, modeled and reinforced unsafe and risky behaviors.

A number of firefighters reported that the informal mentoring process often took place between people of the same race/gender. If senior firefighters (of all races and both genders) had had a negative experience or believed they had been unfairly treated, they often warned new recruits who may potentially suffer the same circumstances. The researchers observed that this aspect of mentoring contributed to preserving tradition and keeping the culture the same, rather than confronting negative behavior and encouraging change.

A formalized mentoring program can act as an effective strategy to help realign the organization toward becoming a safety and prevention culture. Such a program can also serve a department as an intentional effort to develop future leaders. Identifying, selecting and acknowledging mentors who 'walk the walk' are keys to a successful mentoring program. Training mentors in active listening, and coaching and counseling skills is critical. Developing cross-gender and cross-racial mentoring relationships builds multicultural capacity and promotes the development of a caring and compassionate firehouse culture. Designing a mentoring evaluation component provides a gauge to measure growth and progress.

7.7.5 Recommendations

Background

The findings identified that all three fire chiefs saw the value of better connecting with their respective multicultural communities, but none of the departments had unified strategies to accomplish this goal. None of the departments collected consistent demographic data about firefighter or multicultural community member injuries and loss of life. While informal mentoring is a tradition in fire service and fire department culture, none of the three departments had a formal mentoring program.

Value Statement

The research team believes that the key to increasing the effectiveness of current and future fire service leaders lies in their efforts to promulgate actions that ensure the health and safety of multicultural community members and first responders.

Recommendations

1. Develop a Fire/Multicultural Community Task force that meets quarterly to discuss fire department/multicultural community issues. Possible topics include: Community and Fire Department Prevention/Public Education needs analysis, joint projects (e.g., translation of materials, smoke detector campaigns), 9-1-1 issues and community disasters.
2. Initiate a pilot study collecting a baseline of demographic data from near-misses, injuries and loss of life of both fire personnel and civilians. These findings serve as a level against which to measure the effectiveness, value and results of prevention programs, training activities and strategic planning efforts and allocating resources.
3. Develop and launch an intentional, structured mentoring program. The program should include: a selection process for mentors, mentor training, a reward/recognition element for both mentors and mentees and an evaluation component that measures the mentoring program's effectiveness for the mentees, mentors and the department.
4. Encourage the National Near-Miss Reporting System to add demographic data fields to their online reporting module.

Section 8 | Summary

FIRE 20/20 greatly appreciates the opportunity to gather and share the knowledge gained in this study to help the fire service improve the safety and effectiveness of the delivery of fire and emergency medical services to multicultural communities.

The National Fallen Firefighters Foundation has done an incredible job of initiating the Sixteen Life Safety Initiatives, identifying behaviors, values and attitudes within the fire service that contribute to high risk behavior, and helping to change the paradigm from a “response culture” to a “safety culture”.

The Sixteen Life Safety Initiatives had not identified multicultural communities or their related issues as either a part of the problem or part of the solution. That is, until this study. The Multicultural Health and Safety Research Project identified that multicultural related issues such as language barriers and cultural misunderstandings can directly affect safe and effective service delivery.

The real contribution of this research is the understanding that multicultural communities want to be part of the solution and possess the resources to significantly contribute. After spending more than a year talking with firefighters and multicultural community members in the three project sites, the research team proposes that NFFF and the fire service consider taking the “safety culture” one step further to include “safety and prevention.”

The benefit is that ‘prevention’ expands the sphere of influence to include multicultural customers. It asks both first responders and civilians alike to take responsibility and be part of the solution. Firefighters will always be seen as heroes for saving lives and property, but they can also be courageous and heroic prevention role models by partnering with their multicultural customers to reduce neighborhood circumstances that have the potential to escalate to emergency levels.

Appendices

The following appendices are available on the CD accompanying this report:

Appendix A: Case Study Instrumentation

1. Project Descriptions
 - Seattle Project Overview*
 - Austin Project Overview*
 - Milwaukee Project Overview*
 - Human Subjects Policy*
2. Memorandum of Understanding MOU
3. Community Participant Invitations
 - SEA Community Invitation*
 - MIL Hmong Community Invitation*
 - MIL Spanish Community Invitation*
4. Participant Consent Forms
 - General and Recording Consent Form*
 - Photo Video Audio Adult Release*
 - Parental General and Recording Consent Form*
 - Parent Photo Release*
 - Spanish Consent Form*
5. Focus Group Procedures
 - FD Focus Group Facilitation Guide*
 - Community Focus Group Facilitation Guide*
 - Focus Group Questions*
 - Focus Group Write-up Template*
6. Post-Focus Group Written Survey Questionnaires
 - FD Focus Group Written Survey*
 - Combined FD EMS Focus Group Written Survey*
 - Community Focus Group Written Survey*
 - Chinese Focus Group Written Survey*
 - Spanish Focus Group Written Survey*

7. Online Survey Questionnaire
FD EMS Online Survey
8. RQ5 Data Collection Instrument
National Diversity By Rank Online Survey

Appendix B: FIRE 20/20 Research Team Biographies

Appendix C: Raw Research Data

1. Focus Groups
SEA AUS MIL Focus Group List
2. FD Focus Group Write Ups
SEA Qualitative Focus Group Data
AUS Qualitative Focus Group Data
MIL Qualitative Focus Group Data
3. FD Post-Focus Group Survey Results
SEA FD EMS Focus Groups Survey Raw Data
AUS FD EMS Focus Groups Survey Raw Data
MIL FD EMS Focus Groups Survey Raw Data
4. FD Online Survey Results
SEA Online Survey Raw Data
AUS Online Survey Raw Data
MIL Online Survey Raw Data
5. Multicultural Community Post-Focus Group Survey Results
SEA Community Focus Groups Raw Data
AUS Community Focus Groups Raw Data
MIL Community Focus Groups Raw Data
6. RQ5 Data
RQ 5 Data