'The public's perception of the modern day Fire and Rescue Service'

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I declare that I have personally prepared this article and that it has not in whole or in part been submitted for any other degree of qualification. Nor has it appeared in whole or in part in a textbook journal or any other document previously published or produced for any purpose. The work described here is my own, carried out personally unless otherwise stated. All sources of information, including quotations are acknowledged by means of reference. This dissertation is dedicated to Ff Stephen Hunt, S18 Phillips Park,

Greater Manchester Fire and Rescue Service

1. Abstract

The fire and rescue service has changed dramatically over the past number of years. The types of incidents attended, the uniform, the equipment, the way the service employs, and the list is both ongoing and exhaustive. However, has the public recognised these significant changes, or are firefighters still attached to the outdated cliché of rescuing cats from trees, and carrying helpless casualties from a raging inferno. The fire and rescue service is now heavily involved in a plethora of community engagement activities, and as the service makes the transition from a response to a prevention service, does the general public understand the contemporary role of a firefighter, and the skills and capabilities of the fire and rescue service itself.

This research reflects concerns over the public's knowledge about a service that they pay for, that they rely on in the event of a fire or emergency, and the service that has faced extreme changes.

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4. Introduction

This dissertation will analyse the way the fire and rescue service is perceived by the general public. The research undertaken aims to reveal the perceptions people have of the modern day fire and rescue service, whilst also identifying what factors may have influenced their perceptions.

The core functions of the fire and rescue service stipulated in legislation are fire safety, firefighting, road traffic accidents and emergencies (The Fire and Rescue Services Act 2004). 'Contrary to popular belief, our firefighters don't spend their entire time racing from one raging inferno to another. Yes, a key part of their role is to respond to emergencies- and that role is life saving and must never be forgotten. But the emergencies they deal with aren't just limited to house fires. They attend road, rail and air traffic accidents, clean up chemical spills and floods, and defend against acts of terrorism too'. (Manchesterfire.gov.uk, 2013). Many fire and rescue services find themselves having to justify their existence, whilst attempting to shake off a dated preconception, this displays that fire and rescue services may have already identified that a perception is held by the general public that is not necessarily accurate.

The primary aim of this dissertation is to find out what the perception of the fire and rescue service is, and if the public understand the skills and capabilities that the service currently possess. The secondary aim of this dissertation is to identify where the perception has developed from, has the media portrayed an incorrect image of the service, or has the perception been formed and remained the same from an olden day fire service.

The perception of the public in varying contexts has been studied widely for a number of years, subjects include the public's perception of health care, young people, parliament, government spending, and the list is endless. The perception of the public is a highly regarded matter by most organisations, as the primary consumer, and often also stakeholder, the public can have great influence on an organisation, often being the difference between a growing, successful business, to a business that is on a rapid decline to failure. The fire and rescue service is different, as a service that will always be in existence, and one that is ultimately paid for by the public, the perception matters a great deal and can still influence how the fire and rescue service undertake their work.

5. Literature review

This chapter provides a comprehensive review of literature focusing on the perception of the general public, particularly relating to organisations as a whole. Literature on the public's perception of the fire and rescue service is limited, most literature on the topic is found in fire service journals, articles from fire industry magazines, or statistics and feedback from individual fire and rescue service service questionnaires and surveys.

Perception is a complex psychological area of study that can be split into several categories. Whilst perception includes the five senses of hearing, touch, sight, smell and taste, the perception this research paper will be analysing is based on environmental perception. Cherry (2012) defines environmental perception as our sensory experience of the world around us that involves both the recognition of environmental stimuli and actions in response to these stimuli. Through the perceptual process, information can be gained about properties and elements of the environment that are critical to human survival. Perception not only creates experience of the human world; it allows humans to act within a certain environment'. Agarwal, (2009) defines perception as 'A process by which individuals select, organise and interpret their sensory impressions, so as to give meaning to their environment'

'An organisation serves multiple publics that have a different type of interaction with the company. Because of this, each of these groups is likely to have a different image of a particular organisation; hence, an organisation does not have one image; it has multiple images' (Vos and Schoemaker, 2006, P.17). Members of public that have had a personal interaction with the fire and rescue service will have a different

image compared to those that have never required their services. Some members of the public will never be in a situation where they require the assistance of the fire and rescue service, however many other people will require their services in a range of circumstances, such as being rescued from an emergency situation or simply having a smoke alarm fitted at home, therefore images and perceptions can vary dependant on interaction.

Vos and Schoemaker, (2006) continue by stating 'The image is time linked' (P.17) The image or perception, is subject to significant changes, and is influenced by new events related to the organisation or developments in the social environment of the organisation'. This relates to the PESTLE analysis framework of environmental factors affecting an organisation. PESTLE analysis is a widely used acronym that takes the environmental factors that influence change into perspective. It is an acronym for the Political, Economical, Sociological, Technological, Legislative, and Environmental aspects of the wider environment 'PESTLE analysis can be used to help detect trends in the external environment that will ultimately find their way into the competitive environment' (Henry 2008, p.49) the fire and rescue service is a dynamic and ever-changing organisation, external factors can change the way the service operates drastically, which can consequently change the way the service is perceived. A prevalent example of a social factor affecting the way the fire and rescue service operates is the rising number of elderly people in society. Elderly people (over 65) are often classed as more vulnerable to fire; this is due to a number of factors. 'Around 167 people over the age of 65 die each year in fire to which brigades are called. Poor mobility, poor sense of smell and a reduced tolerance of smoke and burns contribute to fatalities. Major sources of ignition include cookers, materials, candles, coal fires, heaters and electric blankets'. (The Department of

Trade and Industry, Home accident surveillance system: 24th annual report. London: DTI, (cited from Shropshirefire.gov.uk, 2010). Fire and rescue services across the UK have recognised the risk to elderly people and have consequently initiated campaigns based around the protection of elderly people; therefore many elderly people will have a different and perhaps more positive perception of the fire and rescue service following this interaction compared to those under the age of 65.

5.1 Changes to the Fire and Rescue Service

The changes that the fire and rescue service have endured are vast and complex. 'In less than 100 years the fire service has evolved from using horses and horse carts to using complex machines capable of pumping thousands of gallons of water a minute. Firefighters no longer are forced to breathe deadly smoke and gases when they fight fires. Also, instead of only fighting fires, the fire service now provides a whole range of services to its customers' (Strategies for Marketing Your Fire Department Today and Beyond, 1996, p. 19). The fire service in the UK can be traced back as far as the 17th century; a catalyst for change within the UK fire service was the Great Fire of London, which changed the way the country dealt with fires.

'The Great Fire of London erupted almost three and a half centuries ago, but it retains its power to shock and to terrify even to this day. In our world of metal, glass and concrete, it is hard for us to picture the firestorm that devoured that ancient wooden city, but if modern materials, building techniques, fire prevention laws, and fire-fighting methods have made a cataclysm like the Great Fire less likely in some ways (except in wartime), the development of skyscrapers and the introduction of new, highly toxic and combustible materials like plastics, gasoline, and aluminium

have heightened the dangers of urban fires still more. Whether we live in a village, a town or a city, the fear still haunts us today'. (Hanson, 2002)

The Great Fire had such a devastating effect on London and was allowed to spread autonomously because many buildings were constructed of wood. This allowed the fire to burn fiercely, and continue to burn for days; there was also no established fire service at that time, also allowing the fire to burn freely.

'London did not have a fire brigade in 1666. Each London parish kept buckets, axes, fire hooks and ladders to fight fires. They were often stored in churches. Local people were supposed to work together to put out fires in their area. Fire engine technology was basic. The City of London had several hand-pumped machines that squirted water but they were not very effective' (Archive.museumoflondon.org.uk, 2013)

Building materials and building design has developed greatly over time, another factor contributing to the way the fire and rescue service have changed the way they respond to and deal with incidents, one of the greatest pioneers of the fire and rescue service who had great knowledge and empathy of how building materials affected fire behaviour was James Braidwood.

'As Master of Fire Engines, Braidwood drew up principles of firefighting that are still in use today. The former Royal High School pupil pioneered the idea of entering a burning building to fight fire at its source.

His officers would be trained under the cover of darkness to help them become familiar with working in the dark and they practised their climbing skills on Edinburgh's North Bridge. In 1833, Braidwood left Edinburgh to lead the London Fire Engine Establishment, and whilst down south he invented the first form of breathing

apparatus. Sadly, Braidwood was killed by a falling wall while fighting London's Great Fire of Tooley Street in 1861' (Scotsman.com, 2013)

James Braidwood was the first person to make significant contributions and changes to the fire and rescue service, with some of these innovations still being used by today's frontline firefighters. He used his knowledge of building construction to form firefighting techniques and methods that would ensure better efficiency and effectiveness.

Fires were more intense and frequent in those times, and the range of incidents the fire service attended was fairly small. Incidents such as road traffic collisions, high rise fires, aircraft and maritime incidents were infrequent or nonexistent due to the fact that modern transport and buildings had not yet been developed. It is therefore identifiable that an early public perception could have been developed, a perception that the fire service just dealt with raging infernos and not much else, which would have been an accurate perception for that particular time period, however as the world has developed and time has moved on, the range of incidents that the fire and rescue service now attend are vastly diverse. One type of incident that no fire and rescue service was expecting on such a grand scale, or adequately prepared for was the Twin Towers terrorist attack.

5.2 World Trade Centre Attack

Much literature has been produced documenting a wide variety of aspects of the World Trade Centre attack, covering post-traumatic stress of firefighters and first responders, media coverage, failings by the government, conspiracy theories; however, little has been produced on the perception of the fire department post incident.

'9/11 was one of the most traumatic events in U.S history. It powerfully shaped perceptions and emotions of the American public to a degree that few other events have' (Pillar, 2011, p.1, 2)

It is acknowledged that American citizens were given greater exposure to the fire service during this incident; therefore the public perception of the fire and rescue service may differ between UK and US citizens, however a generalisation may exist that both British and American fire and rescue services work to exactly the same job specification, it must be stated that there are vast differences in the way the UK fire and rescue service operates in comparison to the United States fire department(s), however the role of a firefighter is still the same irrelevant of the country.

On September the 11th 2001, every fire and rescue service across the globe was affected by the tragic incident, and consequently fire services emotionally amalgamated into one community from that day onwards.

The United States government, The Federal Bureau of Investigation, The UK government could not hide or be dishonest about what had happened, the media coverage was so intense, that members of public watched the whole incident unfold, from the moment the first plane impacted, to the very end of the arduous clean-up operation.

'The way the media packaged and presented the attacks and their aftermath transformed the web of events leading up to and following the attacks into a mediated public drama. The complexities of the causes and consequences of these events were quickly stripped away as the coverage was fashioned into a story filled with spectacular moments, compelling characters, human tragedy, heroism, gripping images, and other staples of dramatic story telling' (Monahan, 2010, p.9)

The Fire Department of New York (FDNY) lost 343 firefighters/emergency medical technicians on September 11th (9/11 by the numbers, 2012) in comparison to other emergency services such as the New York Police Department (NYPD) who lost 23 police officers (9/11 by the numbers, 2012). The FDNY were observed greatly throughout the course of the incident, and as the only major rescue service at The World Trade Centre, an unenviable amount of pressure was placed on the department to save the lives of thousands of people, and from the moment members of the public realised that the FDNY was in charge of the rescue operations at the horrific incident, perceptions began to form or change.

'We had a very strong sense we would lose firefighters and that we were in deep trouble, but we had estimates of 25,000 to 50,000 civilians, and we had to try and rescue them'.' The chiefs concluded that this would be a rescue operation, not a firefighting operation' (National Commission on Terrorist Attacks upon the United States. and Kean et al., 2004, p.290)

The response from the FDNY was immediate and vast, 'The FDNY response began within 5 seconds of the crash'. (National Commission on Terrorist Attacks upon the United States. and Kean et al., 2004, p.289) Videos and images of the response are easily found on the internet, and seldom will such images or videos be found, without an FDNY vehicle or firefighter in the frame. To the public, the picture of a firefighter, the FDNY logo, the iconic wale of droning sirens, became synonymous with the fact that the FDNY was at the helm of the rescue operation, influencing the public's perceptions of the fire department. 'Unfortunately, public perception is not shaped by an actuarial understanding of the statistics, but by the latest story on the evening news that graphically shows the aftermath of the latest tragic crash' (Bor, 2003, p.129)

The media was responsible for presenting live images of the incident to the public, with news teams in various positions across New York City, but each displaying the same powerful, chaotic scene. The media are therefore one of the main drivers, influencing the public's perception, whatever is captured on camera and broadcasted to television screens, will ultimately lead human beings to make up their own minds and form perceptions in milliseconds. 'The productions of the mainstream media play a pivotal role in modern society. The images and information we acquire through our interactions with media shape our perceptions of social reality'. (Monahan, 2010, p.30)

Images and videos on the internet shows groups of firefighters going in to the World Trade Centre, whilst highly emotional and distressed members of the public can be seen running in the opposite direction. FDNY vehicles are seen doing the same, travelling toward the scene whilst thousands of people are running as far away from the scene as possible. This again reaffirmed the role of the FDNY and the fire service as a rescue organisation, being brave, fearless and heroic. 'After September 11, 2001, the public put the American fire and emergency service on the fast track to celebrity status. People saw what we were capable of and they saw what price we paid. After many years of being in the shadows, we suddenly had the spotlight and a voice'. (International Association of Fire Chiefs, 2013, p. 8, 9)

The FDNY was given a somewhat 'Hollywood' style status, and post 9/11, the fire service were viewed differently, as members of the public watched what they did live on television, and gained a better understanding of their role. Terrorist incidents, particularly on the same level as 9/11 seldom occur, however it did occur, and fire

services across the globe were required to be better prepared and enhance their skills and capabilities to be able to effectively deal with such incidents.

5.3 Key documents

Official documents and legislation supporting the fire and rescue service can be traced back as far as The Fire Brigades Act 1938, since then, many other documents and pieces of legislation have come into power, changing and shaping the service into what it is today. 'It was not until the Fire Brigades Act of 1938 that all local authorities outside London were required to maintain fire services. During the Second World War, all fire brigades were combined to form the National Fire Service, but they reverted to local authority control under the Fire Services Act 1947, which appointed county councils as the Fire Authorities. The local government reforms that took place between 1963 and 1998 saw responsibility for the Fire Service shift to and between various other upper-tier authorities. Nonetheless, the 1947 Act remained the principal foundation of the Fire Service throughout this period, in spite of seven reviews between 1970 and Bain in 2002, each of which stressed the need to overhaul fire prevention and fire fighting and change the culture of the Service'. (Howell, 2012) This shows that the fire and rescue service is no stranger to change, often going full circle in a bid to deliver key strategies. In 2002, Professor Sir George Bain produced a report at the request of the government, into how the fire service operated and how it was managed. The report made several recommendations, stating that the culture of the fire service needed to change. Community fire safety was to be engaged in, better relationships between retained (part-time) and whole-time firefighters needed to be formed, and new national

priorities were required. (Bain, 2002) The report also outlined recommendations to change pay and pension conditions, following the report the fire service went on strike in a dispute that lasted from 2002 until 2003. Emergency fire cover was provided by the armed forces, with the infamous Green Goddess vehicles being used as fire appliances. The strikes were well documented and covered by the media, with such disruption to regular emergency response the public's perception of the service was changed no doubt. 'There have been fears expressed for safety on the roads during the strike, with the Green Goddesses lacking the same cutting equipment and expertise as the fire service for getting people out of vehicles. In London more than 20 tube stations with lifts and no escalators closed and a "handful" of drivers refused to drive trains, apparently because of safety fears'. (BBC, 2002) Fatal incidents soon came to the attention of the media, allowing response times to be scrutinised. The BBC published a poll on whether the public backed the firefighters strike, 4.07 % said yes, and an overwhelming 95.93% said no (BBC, 2002), this was a difficult time for the fire service, creating tension between themselves, the government and the public, the perception of the service in 2002 will be significantly different from the perception held by members of the public today. however there still remains potential for members of the public to hold the same perception based on the events of the firefighters strike in 2002.

5.4 New Dimensions Programme

'The New Dimension programme ("the Programme") was established following the terrorist attacks on the United States of 11 September 2001. The programme now aims to enhance the capacity of Fire and Rescue Services in England to rapidly, effectively and flexibly tackle the consequences of terrorist and other large-scale catastrophic incidents, such as flooding, by: providing appropriate specialist vehicles and equipment; funding training for firefighters to use the new equipment; and supporting planning for deployment of the equipment in the case of an emergency'. (National Audit Office, 2008, p.4)

The Department for Communities and Local Government (DCLG) headed the programme that saw the procurement and delivery of high specification, technical equipment, also budgeting to train firefighters on the new equipment. DCLG invested £330 million to the programme; Appendix 'A' displays the significant differences and enhanced capabilities of the fire and rescue service before and after the programme. From 2004, The Fire and rescue service were now able to respond to and effectively deal with: Terrorist incidents, chemical, biological, radiological, nuclear (CBRN) incidents, mass decontamination, flooding, urban search and Rescue (USAR) on a regional and international level and mass rescue operations. The programme was a pivotal point in the changing and development of the fire and rescue service, and subsequently, fires were no longer the single focus or responsibility of the modern day fire and rescue service.

5.5 The Fire and Rescue Services Act 2004

As the capabilities of the fire and rescue service were enhanced, The Fire Services Act 1947 was replaced. The word 'rescue' was added to the new act, which was a catalyst for 'fire brigades and 'fire services', to rename and rebrand as a 'fire and rescue service' although London Fire Brigade has remained the same. The Fire Services Act 1947 was basic in its arrangement, and outlined that fire services were to provide water for firefighting duties as the main requirement, in comparison to The Fire and Rescue Services Act 2004, which outlines the requirement to engage in community fire safety, fight fires, attend road traffic accidents, and also respond to other emergencies which encompasses terrorist acts, flooding and chemical incidents (The Fire and Rescue Services Act 2004, core functions).

5.6 The Modern Day Fire and Rescue Service

The Fire and Rescue Service is now capable of responding to a vast and diverse range of emergency incidents, supported by legislation that also requires the service to undertake preventative work such as community fire safety. The safety work of some fire and rescue services has proven effective leading to a significant reduction in fires. Natural disasters and adverse weather conditions that are out of the fire and rescue services control are now more prevalent in requiring an emergency response as appose to fires. 'The number of emergency rescue teams in England and Wales equipped to tackle flooding has more than quadrupled. Some £2.5m has been sent funding teams, mostly within the fire service until 2017. The Fire Service is now being described as a "rescue service that occasionally goes to a fire" (Robinson, 2013).

The Fire and Rescue Service may have endured significant changes, and now respond to different kinds of incidents; however the public may not see these changes or have an awareness of the enhanced skills and capabilities as they have developed internally. The media is ultimately responsible for informing the public about important news stories, such as emergency incidents, this often provides an opportunity for fire and rescue service personnel to explain to the public how they are evolving and tackling incidents with the new equipment and enhanced capability, however if the media did not provide this service, the public may not have the correct perception of the fire and rescue service. Therefore it is an accurate conclusion that the media is an important tool in informing the public and creating a perception of the modern day fire and rescue service.

6. Methodology

This section aims to explain the methodology used to gather research for the purpose of this study. The aim of this research is to find out the public's perception of the fire and rescue service. This research uses primary, quantitative and qualitative methodology, by gathering statistics through an online exploratory survey asking a number of structured questions, a literature review, and also a comparative study between the U.K and U.S fire service. The three different methods of sourcing research show that I have adopted methodological triangulation. This type of triangulation 'allows the researcher to see things from as widely different perspectives as possible'. (Denscombe, 2007, p.347)

6.1 Comparative Study

As previously identified, there are vast differences between the U.S Fire Department(s) and the U.K Fire and Rescue Service(s). To ensure a bias toward either service is disallowed, I will undertake a brief comparative study of both comparison groups.

Smelser (1976) makes a relevant statement about how humans have distorted perceptions 'Only recently in the history of human thought has this tendency for human groups to distort their perceptions of the different become widely appreciated. Correspondingly, serious efforts to overcome that distortion by inventing ways to understand differences in social life through categories that transcend a single group are also of relatively recent origin. Most of these efforts have been made in social sciences, especially in anthropology, sociology, political science and history. Such efforts have been labelled differently such as comparative studies cross cultural

analysis and cross national analysis whatever their label, however, they are part of the common enterprise of describing, explaining and developing theories about socio-cultural phenomena as they occur in social units (groups, tribes, societies, cultures) that are evidently dissimilar to one another'. (Smelser, 1976, p.7)

The United States has a total area spanning more than 3.5 million square miles, in comparison to the United Kingdom which spans just over 94 thousand square miles (Nationalatlas.gov, 2014). With such a vast difference of areas to cover, there are significant differences between the U.K and U.S Fire departments.

In 2009, there were 26,250 fire departments that had registered with the National Fire Department Census (Fire in the United States, 2009, p.15) in comparison with England where 46 fire and rescue services exist, Scotland where a single service exists, Northern Ireland where a single service exists, and Wales where 3 services exist, totalling 51 services in The United Kingdom.

The question of whether or not the public's perception of the fire service/department is accurate is also debatable in the United States. A documentary produced and uploaded to 'YouTube' (<u>https://www.youtube.com/watch?v=YdGdLgqjVnw</u>) entitled 'Firefighter Documentary' interviews a number of staff members from the Santa Maria Fire Department, as well as members of the public. In the documentary Leonard Champion, Fire Captain, states 'the public doesn't really understand what we do, they have a misconception of what we do, all they (the public) think we do is run (attend) fires'. The first member of the public that is interviewed states, 'I think they (the fire department) spend all day, just sitting around waiting for a fire to happen'.

Many fire departments in America provide a dual service to members of the public, by providing emergency medical care alongside fire cover. The Fire Department of New York (FDNY) recruits paramedics and emergency medical technicians (EMT) to respond to medical emergencies and provide patient transport to incidents and hospitals within the New York vicinity. The U.K fire and rescue service is yet to adopt such a service; however some services do provide a first or co-responder vehicle in areas where there are high volumes of medical emergencies. Cheshire Fire and Rescue Service have operated a Co-responder scheme from a community fire station in Nantwich since 2009 (Cheshirefire.gov.uk, 2014), this scheme is ran in partnership with the North West Ambulance Service, who still remain the primary statutory medical services responder. Bearing in mind that fire departments in America provide this service, the emergency response activity of the fire departments providing medical cover will be significantly more than U.K fire and rescue services that just provide cover for fires and other emergencies.

The way that both services train, reflects the types of incidents that they attend. Both the United Kingdom and United States fire services have designated training departments, responsible for providing comprehensive training and support to both operational and non-operational crews. Types of incidents attended will often dictate the way training is delivered. Los Angeles Fire Department have broken down their training programme into units, these units comprise of: The exercise unit, special training projects unit, command post unit, and the regional training unit (Lim, 2014). West Yorkshire Fire and Rescue Service has a slightly broader training scheme including operational development, technical rescue, road traffic collisions and casualty care, and breathing apparatus training (Westyorksfire.gov.uk, 2014). Both fire services also take part in onsite training at local risks that are within their

response area to provide resilience and an increased site specific knowledge, Appendix 2 shows Seattle firefighters using a Nuclear power plant for a realistic training exercise, whilst Appendix 3 shows Greater Manchester firefighters utilising a local football stadium to stage an exercise with live casualties.

The American fire department has an illustrious history that is still embedded within local departments, many U.S fire appliances are professionally decorated within reason, to brand slogans and display their engine company, the UK fire and rescue service however have a fairly standard livery branding the corporate logo, with some appliances astutely brandishing safety campaigns and advertisements.

There is a distinct difference in how risk averse both countries are with regards to firefighting, in 2009, the Independent newspaper published an article entitled '*From a reported ban on hanging baskets to rules on playing conkers - has the health and safety brigade really gone mad?*' (Sharp, 2009) Over the past number of years, The Health and Safety Executive who regulates health and safety in the workplace has been accused of implementing unnecessary control measures. A controversial and unfortunate example of health and safety affecting the fire and rescue service is the death of Alison Hulme. On Friday 5th of July 2008, Alison Hulme fell down a disused mine shaft near her home in Ayrshire, Scotland. Strathclyde Fire and Rescue Service (Now amalgamated into The Scottish Fire Service) failed to rescue Alison Hulme, despite having adequate PPE, personnel and resources to do so. The group commander in charge made the decision to halt the rescue operation, and await the attendance of the police mountain rescue team, however by the time the team arrived; Mrs Hulme had died following acute hypothermia and a heart attack. (Brocklebank, 2008)

The U.S fire department is slightly less risk averse, and are often branded as having a 'gung-ho' firefighting style, attacking fires with tenacity, aggression, and strength. Appendix 4 shows a fire in the roof space of a condo complex in Oregon, where several firefighters can be seen standing on the roof, just metres from the seats of fire. In this particular incident, a firefighter fell through the roof following partial collapse. (KGW, 2013). This does not necessarily display how little regard U.S fire departments have for health and safety within fire operations, rather how little health and safety regulates the services they provide. If the same incident occurred within the UK; it would be highly unlikely that firefighters would be able to autonomously walk on the roof without some kind of fall arrest or height safety equipment 'All personnel operating at height must receive appropriate training before undertaking those duties. No FRS personnel should work at height without proper equipment or training' (Communities and Local Government, 2009, p. 10)

It is argued that UK fire services are trained to a higher standard than their American counterparts, with British firefighters receiving greater exposure on the technical aspects of working in the fire and rescue service. 'Firefighters in other countries tend to receive more training, including more training on fire prevention. Once promoted to officers, firefighters in many countries receive a significant amount of additional training on prevention issues. For example, British junior officers attend nine weeks of training, four of which are devoted to prevention issues'. (Schaenman, 1993, p.23, cited in The Federal Emergency Management Agency, 1997) Fire prevention is embedded into the UK fire service through the core function of fire safety, laid out in The Fire and Rescue Services Act 2004; however there is no legislation requiring U.S fire departments to undertake prevention activities as part of their duties, which consequently leads to more fires.

The Federal Emergency Management Agency believes that 'The lack of a strong cultural norm around preventing fires may explain another aspect of U.S. attitudes towards fire. Americans tend to view fires as an inevitable part of life and, unlike citizens in other countries, are more prone to characterize fires as unfortunate "accidents" (The Federal Emergency Management Agency, 1997, p.18)

Although the factors surrounding both comparison groups such as standards, equipment, the way incidents are responded to and dealt with, are extensively different, the core functional differences between the two services are not overly dissimilar. If both services deal with a person's reported house fire, firefighters will enter the property, locate and rescue casualties, and extinguish the fire. If both services deal with a road traffic collision with persons trapped, firefighters will use cutting gear to safely extricate the casualties, and so on. The main similarity between the two services is if anyone calls their respective emergency number and asks for the fire service, an emergency response will be provided.

6.2 Exploratory Survey

An exploratory survey was created using the Survey Monkey website (www.surveymonkey.co.uk); the survey consisted of 10 quantitative and qualitative questions. 'Most people are familiar with three uses of survey techniques: the measurement of public opinion for newspaper and magazine articles, the measurement of political perceptions and opinions to help political candidates in elections, and market research designed to understand consumer preferences and

interests. Each of these well developed programs of survey research is aimed primarily at tapping the subjective feelings of the public'. (Fowler, 2009, p.2)

A survey was chosen as the most effective method of gathering research, as it is most commonly used to gage the public's perception or opinion, the user can also remain anonymous and can therefore provide honest answers. It is also acknowledged that the adverse effect could occur, where anonymity means that the user may skip questions, thus affecting the research, 'Anonymity can lower accountability, making respondents feel that they do not need to respond to certain questions or that it does not matter if their responses are accurate' (Fuller, 1974, Cited by Gideon, 2012, p.384) this issue was considered and dealt with by utilising the option on Survey Money to disallow the user to continue with the survey unless each answer was responded to.

The sample size was 30; this size is considered appropriate as it is large enough for general perceptions to be revealed (Sharp and Peters et al, 2002). The sample is described a purposive (Carey, 2012) as the knowledge held by potential candidates was considered, with restrictions in place on who could take part in the survey. It was identified that a bias could be formed if the participant was a serving or ex-member of a fire and rescue service, a relative of a serving or ex-member of a fire and rescue service, a relative of a serving the fire and rescue service in any discipline, therefore those three groups were asked not to complete the survey, which increases the reliability of this research. The survey was disseminated utilising social media, namely 'Twitter'; the survey was also circulated around the workplaces of friends and relatives.

6.3 Ethical Considerations

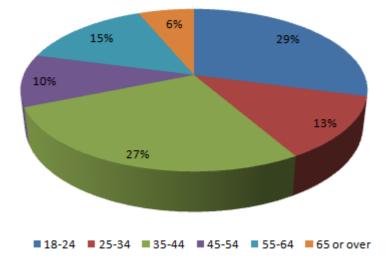
Whilst designing the survey, five ethical responsibilities were adopted and embedded into the survey. The responsibilities ensured: voluntary participation, informed consent, no harm, anonymity and confidentiality, and privacy (De Vaus, 1986). The participant's age and nationality were required; however these variables form important part of the research by gaining public perceptions across a wide age range, whilst analysing the perceptions held by citizens of different nationalities.

7. Results and Findings

This chapter will outline the results and findings the data collated from the exploratory survey. The data will reflect the public's overall perception of the fire and rescue service, their perception of the skills and capabilities of the fire and rescue service, whilst also identifying if the public believe the UK fire service and American fire department have any differences.

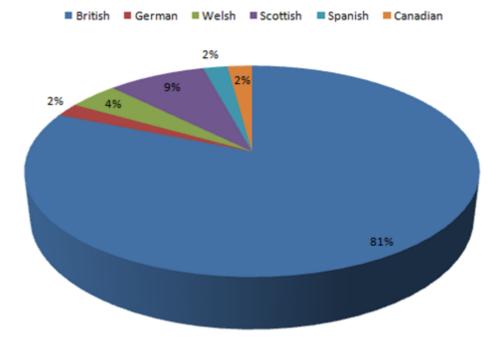
To enable the reader to easily interpret the data, the results are displayed in a graphical form, consisting of tables, and charts. The correct presentation of the data is of high importance to this research, as statistical facts have by themselves no utility, it is the interpretation that makes it possible to utilise collected data (Singh, 2009)

A total of 49 participants completed the survey in part, and 40 participants fully completed the survey.



Age range of participants

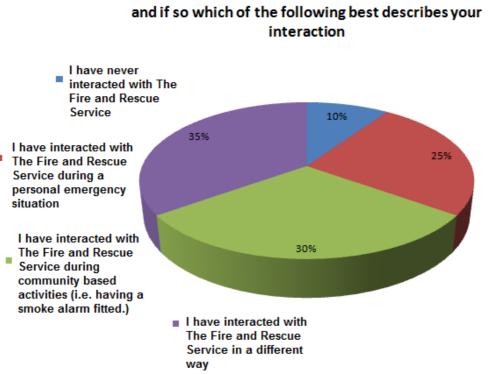
The age range of the participants is of particular importance to this research, a common theory may suggest that the older the participant, the more exposure he or she will have had to the fire and rescue service. However, exposure may come from one particularly significant incident, or the activity levels of the service where the participant resides. 29% of participants were aged 18-24, with this being the youngest category, notionally the group would have been least exposed to the work of the fire and rescue service. 27% were aged 35-44, 15% were aged 55-64, 13% were aged 25-34, 10% 45-54, and 6% were aged 65 and over. This research is broad in its demographic as there are participants from each age category, ranging from 18 years of age to 65 and over.



Nationality of participants

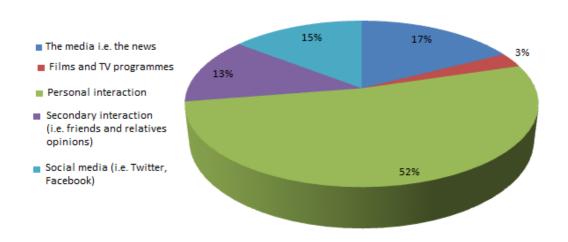
The nationality of participants was required, so it can be identified what perceptions may be held by citizens of different nationalities. This research paper discusses the differences between the US and UK fire and rescue service, however services in other countries may also operate differently, changing the perception of an individual from that country. 94% of participants (including Welsh and Scottish participants) are British; therefore the majority of the date will relate the UK fire and rescue service.

It is acknowledged that Wales and Scotland are part of Britain; however some participants have indicated that their nationality lies with the specific country.



Have you ever interacted with The Fire and Rescue Service,

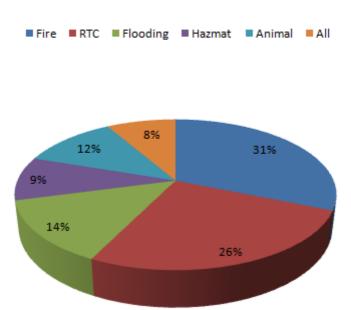
Exposure creates a perception, therefore it was considered appropriate to analyse how many, if any, of the participants had been exposed to the fire and rescue service and in what type of environment. 35% of participants had interacted with the service in a different way the other listed environments. Participants went on to list other ways in which they have interacted as, attending a fire warden training course, attending fire station open days, public events, and community consultations. 30% of participants had interacted with the service during community based activities, this is becoming a more prevalent way of interacting, as incidents are reducing, and community work is increasing. 25% of participants have interacted with the service during a personal emergency situation, it is acknowledged that some situations may be sensitive to the participant and so no further comments were required. 10% of participants had never interacted with the service, the opinion of this demographic is particularly important, as those participants will have only a basic knowledge and understanding of the service, creating an interesting and unbiased perception.



What do you believe gives you the perception you have of The Fire and Rescue Service

Across the study group, 52% of participants have formed a perception of the service based on personal interaction. This perception is most accurate as the participant is stating that no other influences have created their perception, or had an effect on it. 17% stated that the media gives them their perception of the service. The fire and rescue service appear frequently within the media, and the range of topics can be positive and negative, this displays the confirms the media has an impact on the public's perception, however accurate or inaccurate the information may be.15% have a perception that is influenced by social media, the news are heavily connected to social media, however more fire and rescue services are also communicating this way, which may provide two opposite sides of a story. Senior managers of fire and rescue services are increasingly creating social media accounts to convey safety

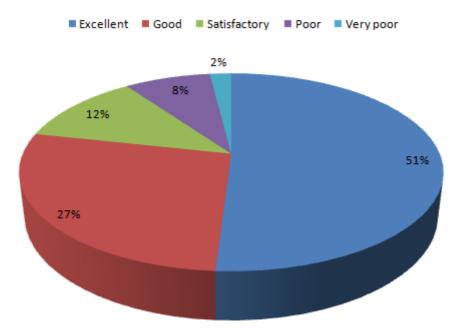
information, and to also provide an extra sense of connectivity to members of the public. 13% have gained perceptions vicariously through the opinions of friends and relatives. This perception is flawed and one that may not necessarily be accurate, as one person's interaction may be different to another. 3% of participants are influenced by films and television programmes. This demographic show a vulnerability to believe what is often fabricated or exaggerated for the pleasure of the viewer, and not necessarily an accurate series of events.



What range of incidents do you think The Fire and Rescue Service attends?

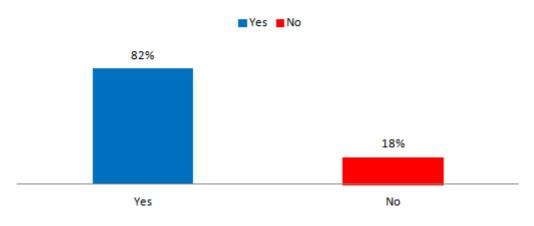
This question was purposely open ended; there were no set categories of incidents for the participant to choose. The answers provided were collated and represented as follows. 31% of participants stated the service attends fires, 26% stated that the service attends road traffic collisions, 14 % stated that the service attends flooding, 12% stated that the service attends incidents involving animals 9% stated hazmat (hazardous materials) incidents, and 8% of participants stated 'all'.

What is your overall perception of The Fire and Rescue Service

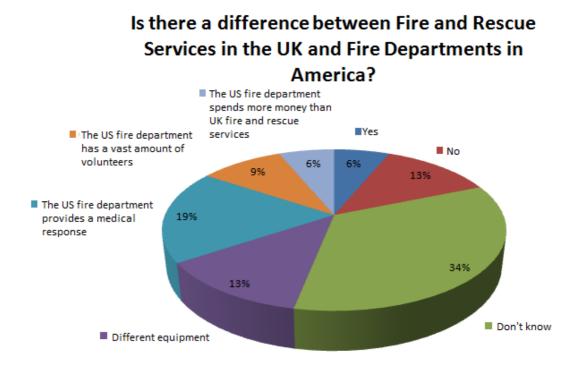


Over half of the study group (51%) have an excellent overall perception of the fire and rescue service, with 27% having a good overall perception. 12% of participants have a satisfactory perception, 8% a poor perception, and 2% a very poor perception.

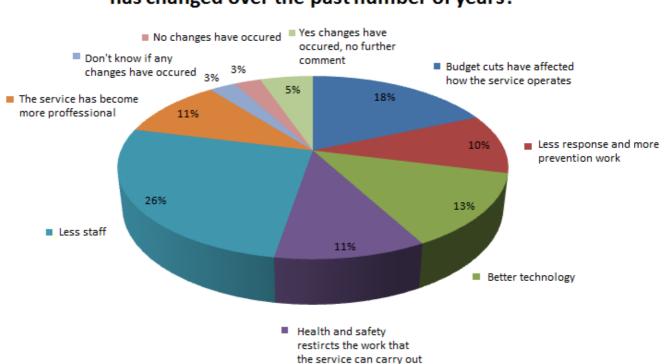
Do you believe that you have a good knowledge of the roles and responsbilities of The Fire and Rescue Service



A simple dichotomous question was posed to participants, to gage an understanding of the knowledge held on the roles and responsibilities of the fire and rescue service. 82% of the study group believe they have a good knowledge of the roles and responsibilities of the service, whilst 18% feel that they do not.

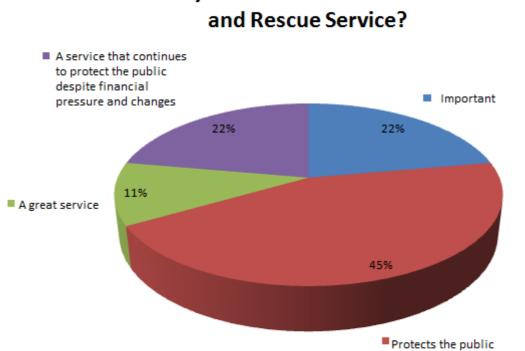


As this research paper includes a comparative study, and reference to the US fire department(s), participants were asked if there was a difference between the fire and rescue services in the UK and in America. 34% didn't know if there were any differences, 19% stated that the main difference is that the US fire department provides a medical response, 13% stated that there is no difference between the two, 13% stated that there is a difference in equipment, 9% stated that the US fire department spends more money than UK fire and rescue services, and 6% of participants stated that there is a difference, but did not elaborate on their answer.



How do you think The Fire and Rescue Service has changed over the past number of years?

Participants were asked how they thought the service has changed over the past number of years, answers were vast and varying. 26% stated that the service now has less staff, 18% stated that budget cuts have affected how the service operates, 13% stated that the service now has better technology, 11% commented that the service has become more professional, 11% stated that health and safety restricts the work that the service can carry out, 10% of participants stated that the service no provides less response and more prevention work, 5% stated that changes have taken place however no further comment was provided, 3% stated that no changes have occurred, and 3% stated that they did not know if any changes have occurred.



How would you summarise the role of The Fire

To end the questionnaire, participants were asked to summarise the role of the fire and rescue service. 45% stated that the service protects the public, 22% stated that the service is important, 22% stated that the service continues to protect the public despite financial pressure and changes, and 11% stated that it is a great service.

8. Analysis of results

The response to the survey was highly successful, with a total of 49 responses. Some responses however, were omitted due to incomplete answers, and also some participants had failed to read the pre-survey instruction, requiring the participant to not be affiliated with a fire and rescue service. Overall, the study sample had a good understanding of the contemporary role of the fire and rescue service, backing up the 82% study sample who stated that they have a good knowledge of the roles and responsibilities of the fire and rescue service, partnered with a positive perception, backing up the 51% of the sample stating they have an excellent perception, and 27% of the sample stating they have a good perception.

Whilst the majority of the responses were positive, and enthusiastic, small numbers of responses in a number of questions were negative, and highly critical of the service. These responses will be the base of primary analysis and discussion.

The majority of the study samples perception showed to be formed following personal interaction with the service, as stated in the diagram notes, this is the most accurate perception, as it is a realistic, unbiased, first hand perception. A small number of participants indicated that television programmes and films formed their perception. At the time of writing this research paper; 'Sky1' produced a drama series named 'The Smoke' which is about firefighters and their personal lives. A review by The Telegraph newspaper stated 'The Smoke, Sky1's new firefighting drama, was supposed to "throw out the familiar formula" of shows about the emergency services. So, of course, the first episode opened with a brave fireman clambering through a burning building, desperately searching for a wailing baby whom he could heroically rescue. Within the first quarter of an hour, all the clichés

were rolled out: giggling girls flashed the fire engine as it sped past, and all the bosses were incompetent box-tickers who forgot their subordinates' names'. (Rowley, 2014)

The review statement summarises the purpose of this study. Clichés appear to dominate the fire and rescue service, displaying an unprofessional, masculine, heroic image. The public are easily influenced by clichés such as the aforementioned, creating a false perception, therefore the sample indicating that their perception is based on television programmes and films, is highly unlikely to be accurate.

A number of responses that were provided stated that the fire and rescue service has 'deteriorated' over the years, owing to austerity and government budgets deficits. At the time of writing Warwickshire Fire and Rescue Service announced plans to save £2.4 million over the next four years. 'The cost-cutting measures will not involve closing any stations but will see 35 jobs - including 30 firefighters - go by 2018, Five control room staff will also be axed'. (Arlott, 2014) Cuts to the fire and rescue service are becoming a more prevalent feature in current news, therefore it is accurate that participants have the perception that austerity and cuts are affecting the service, however there may be confusion between deterioration in service, and efficiencies being made.

Chapter 5.3 of this research paper, The New Dimensions programme, outlines the role of the fire and rescue service at a terrorist and/or hazardous materials incident, however out of 40 responses, only 5 participants listed hazardous materials as an incident attended by the fire and rescue service, and no participants listed terrorist incidents. This displays that whilst the study sample understand the role of the fire and rescue service at fires, road traffic collisions, and other more 'regular' incidents,

the majority of the sample are unaware of the other skills and capabilities of the service at Chemical, biological, radiological, nuclear, explosive (CBRNE) and terrorist incidents. The table below shows an analysis of the words used to describe the type of incidents that the fire and rescue attends as used in question 5 of the exploratory survey. The type of incidents are all relevant and accurate, in the way that they are the types of incidents attended by the service, however the number of times that the participants have mentioned the type of incident does not necessarily reflect the prevalence of occurrence. There are two participants, who have interestingly listed the cliché of the fire service rescuing cats from trees, this category compared to the terrorist incident category, which received no acknowledgement, shows that there is an inaccurate perception held by the public.

Type of incident/ word used	Amount of times mentioned within
	survey - Question 5
Fire	32
RTC/Car crash	23
Animal rescue	10
Lift rescue	2
Cats up trees	2
Floods	9
Terrorist	0
Train and Plane crash	2

Hazardous materials (Hazmat) incident	5

Question 9 was purposely open to a vast amount of answers and perceptions, participants were asked 'How do you think the fire and rescue service has changed over the past number of years'. Two groups of answers were positive, three groups of answers were negative, and four groups of answers were neutral. The negative answers stated that there is less staff, budget cuts affecting the service, and health and safety regulations restricting the work that the service carries out. The positive responses to this question were outweighed by negative responses, and little acknowledgement was given to the successes to the service over the past number of years. 'Deaths from fires in the home are at an all time low; incidents have reduced by 40 per cent in the last decade', (Knight, 2013).

Question 10 was again purposely open to a vast amount of answers and perceptions, and required participants to summaries the role of the fire and rescue service. Whilst the majority of the study sample answered with positive responses, just less than a quarter (22%) of participants stated that the service continues to protect the public despite financial pressure and changes. Finance is a prevalent topic of response from the study sample, being mentioned in three out of ten questions. It is a highly accurate perception that finance is a current topic affecting the fire and rescue service, the media reports on the issue frequently as tensions rise between firefighters and the government. 'There have been 3,845 firefighter job cuts across the UK since 2011. This had the effect of slowing down responses to 999 emergency calls and increasing the risk to communities' (Zych, 2014). On

Wednesday 26th March 2014 (Zych, 2014), firefighters travelled to Westminster to lobby their MPs over issues affecting them and the fire and rescue service.

Appendix 5 shows the results of typing 'Fire Service cuts' into the Google news page. Four separate fire and rescue services, Warwickshire, Humberside, Tyne and Wear and Mid and West Wales, all appear in news no older than 7 days at the time of the search. This displays a common link, that the media strongly influences the public's perception, with news on fire service cuts readily available and regularly updated. Question 5 of the exploratory survey asks 'What range of incidents do you think the fire and rescue service attends', one participant answered 'From what I have seen in the media and through TV and Films the Fire and Rescue Service attend all types of incidents ranging from fitting smoke alarms, car crashes, small fires, people trapped to huge fires and helping during natural disasters'. (Participant 13) This type of response confirms initial concerns of the public being influenced by the media rather than having a personal interaction or firsthand based perception, however the participant as provided a 'get out Claus' by stating that his/her perception is 'from what he/she has seen in the media' this displays that the participant knows that it may not necessarily be an accurate opinion.

Overall, responses provided on the work of the fire and rescue service irrespective of political or financial issues, concluded to be accurate in some areas, primarily the core functions; however respondents seemed unaware of the added capabilities and responsibilities of the service post September 11th. Mitigation is provided however in the way that this particular study sample did not conform to any clichés that have previously shadowed the service. There was no mention of heroism, masculinity, or firefighters being inactive whilst waiting for emergency incidents, and to the contrary,

many of the responses highlighted the prevention work that the service undertakes within the community.

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9. Conclusion and Recommendations

This chapter provides a review of the research carried out, to provide a conclusion to the question 'What is the public's perception of the fire and rescue service'.

To provide any absolutes on the public's perception of the fire and rescue service is extremely onerous, there will of course exist contrasting perceptions that have been formed consciously or sub-consciously, through various means of interactions and instances. To provide a definitive and more conclusive summary of the public's perception, a much wider sample of the public from a vast area of demographic variables is required. Although a comprehensive range of responses were provided to the survey questions, many of the responses focused on the political position of the service, and how finances are creating pressure and challenges. These types of responses are very much critical of the business side of the service, suggesting that the participants are of a good educational background, with a modern understanding of fiscal policy, and political knowledge. The educational background and occupation status of participants could be analysed further through questions in a larger survey, this would allow the demographic variables to be analysed, and to provide a conclusion on whether or not there is a correlation between lower class, middle class or working class participants, and their perception of the fire and rescue service. Interviews may be considered as a methodology for further study, as more information and specific questions and answers can be provided by the participants, contributing to a more conclusive answer.

This research paper has also discovered areas for recommended further study, such as how the media influences people, and how different perceptions are held by

different demographic groups. Both subjects have been touched on briefly within this dissertation, however greater research could be undertaken to lead to new findings on a psychological level.

Through completing this research, it is clear that there is not a completely accurate or positive perception held by the public on the contemporary role of the fire and rescue service. It is also clear that the perception alongside personal interaction is influenced largely by the media. The fire and rescue service seems to have shaken off any dated and inaccurate clichés, but a new challenge has surfaced, ensuring that what is portrayed and disseminated by the media is accurate, and not fabricated or exaggerated, and does not overshadow or rule out the important work that the fire and rescue service undertakes in keeping communities safe.

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11. Appendices

Appendix 1

Fire and Rescue Services' capacity before and after the programme National Audit Office. 2008. *New Dimension – Enhancing the Fire and Rescue Services' capacity to respond to terrorist and other large-scale incidents*. [report] London: The Stationery Office, p. 5.

Fire and Rescue Services' capacity before and after the programme			
	Before New Dimension programme	After New Dimension programme	
Hazardous Material officers to manage	Some Fire and Rescue Services had dedicated	73 incident response units carrying erectable decontamination showers for decontaminating up to 400 people per hour.	
	emergencies involving hazardous substances.	47 clothing (Dis-robe and Re-robe) modules.	
		17 Detection, Identification and Monitoring vehicles – 'mobile labs'.	
		Over 7,000 trained fire-fighters.	
		206 specialist transport vehicles (Prime Movers).	
Urban Search and Rescue	search and rescue capability: usually deployed to	20 fully trained Urban Search and Rescue teams of 30 firefighters each.	
overseas disasters on behalf of UK government on an ad hoc basis. Teams consist of voluntary full time firefighters	Five standardised modules of high specification equipment, containing many hundreds of state of the art items.		
	undertaking work outside of normal work hours.	New local and national training facilities.	
	Prime movers.		
High Volume Pumps One larger capacity pump based in Shropshire. 14 other Fire and Rescue Services have larger diameter hoses able to transport a high volume of water. 'Green Goddesses' have some pumping capacity, otherwise fire engines used.	• • • • • •	46 larger capacity pumps capable of pumping seven times more water than normal fire engines.	
	diameter hoses able to transport a high volume	46 hose boxes with larger diameter hoses and many kilometres of extra hose length.	
	Over 2,000 trained firefighters.		
	Prime movers.		
Command and Control Local control rooms. Some Fire and Rescue Services have low-tech mobile command units.	Local control rooms.	Local control rooms.	
	National Co-ordination Centre dedicated to New Dimension response based at West Yorks Fire and Rescue Service.		
		Nine Enhanced Command Support vehicles with high-tech capacity to be rolled out in late 2008.	
Source: National Audit Office			



Appendix 2

Seattle firefighters come out of a tunnel during a practice putting out fire and rescuing victims to prepare for any emergencies in the Highway 99 and light-rail tunnels under construction. (Oregonlive.com, 2013)



Appendix 3

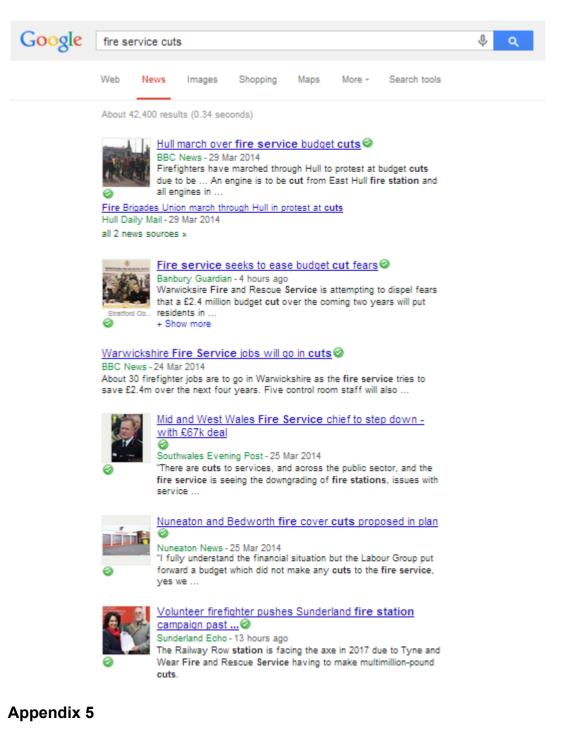
Greater Manchester Fire and Rescue Service stage an exercise at the Manchester City Football Club Etihad Stadium. (Concept-smoke.co.uk, 2013)



Appendix 4

A CNN news helicopter shows firefighters standing on a roof whilst tackling a fire in a condo complex.

(www.kgw.com/news)



Google news page after searching 'Fire Service cuts' (www.google.com)