2020 VISION

A FUNDAMENTAL REVIEW OF THE RETAINED DUTY SYSTEM

FOR

ROYAL BERKSHIRE FIRE AUTHORITY

TO

ESTABLISH RECOMMENDATIONS UP TO 2020 AND BEYOND

George Cross and Les Gollop

August 2010

ROYAL BERKSHIRE
FIRE AUTHORITY

INTEGRATED RISK MANAGEMENT PLANNING: REVIEW OF THE RETAINED DUTY SYSTEM WITHIN ROYAL BERKSHIRE FIRE & RESCUE SERVICE

Contents

Executive Summary

Background

Over the years Royal Berkshire Fire and Rescue Service (RBFRS) has seen a steady decrease in incident numbers. A reduction of 33% of total calls and 37% of Retained Duty System (RDS) station ground calls over the past eight years.

Legislation

The Fire & Rescue Services Act 2004 contains no reference to the Retained Duty System so identifies no difference between RDS and Wholetime Duty System (WDS) staff.

The final implications arising from the Part Time Workers legislation and the Working Time Directive are, as yet, unknown.

The driving legislation as it impacts on RBFRS is manageable.

Although the current Government has set up a review into the Health & Safety at Work Act it is not yet known what any outcome might be and, therefore, the implications for the Fire & Rescue Service are unknown.

Recruitment

There has been a decline in the number of RDS staff and at no time since 2002 has RBFRS managed to recruit to the full complement. The impact on the delivery of the service has been that, on average, six RDS fire appliances, out of a possible eleven, are not available during the day.

The availability research has shown that day time cover is worse than at night and an analysis of each RDS station ground confirms that there is limited opportunity for recruitment. Analysis of the data shows that extending the catchment area for recruitment would have limited positive affect and would question the viability of some stations.

It takes considerable commitment to get through all the selection, testing and initial training requirements and, therefore, the management of RDS recruitment needs overseeing, corporately.

Learning & Development

Under the Integrated Personal Development System (IPDS) initial RDS staff training is a modularised version of the WDS course and is broadly compatible with WDS training.

Both WDS and RDS staff are enrolled on the NVQ programme and receive development rate of pay at this point. Competent rate of pay is achieved on qualification with the NVQ. One member of RDS has completed their NVQ (purely as an RDS member of staff at the time) and it took approximately 4.5 years, about twice as long as WDS.

The training requirement for both RDS and WDS staff has increased significantly with the introduction of new equipment and procedures. This has the potential to impact on the maintenance of competence for RDS staff, as their training time is limited compared with WDS staff. The estimated time required per year is nearly 300 hours. RDS staff currently achieve, for positive core training, about 50 hours. RBFRS must immediately improve the time efficiency for training.

The time evidence shows that, in the hours available, it is impossible for RDS staff to maintain full competence across the entire suite of knowledge and skills. Extra training time must be considered and paid. Significant RDS support is required to assist in training, maintenance of competence and NVQ completion.

There is limited and inconclusive evidence of a lack of competence of RDS staff.

Risk Assessments

The RDS within Berkshire has been identified as the highest risk to the organisation following the completion of an organisational risk assessment.

A profile of each RDS station and unit is given. Further, a two step risk assessment process has been developed that measures the Community risk and the Organisational risk, enabling comparisons of relative risks. Cookham Fire Station has been identified as being unviable. Pangbourne and Wargrave fire stations also have a combination of low station ground risk and are less able to deal with the risk to the Authority.

Surveys

We await the result of a national survey commissioned by Communities & Local Government (CLG) (expected September 2010). The local survey of RDS staff and their partners, conducted by Opinion Research Services (ORS) for RBFRS, was added to information gained from station and group visits.

It is disappointing to note the poor response rate of 33%, resulting in ORS advising that caution is needed when interpreting the results. However some key issues that were highlighted in the survey will be amalgamated with other methods of data gathering.

Staff and their partners have a great deal of pride in their work and feel they give essential service to the community but only 32% of RDS personnel expressed the opinion that they feel valued.

Mapping and Modelling

ORH Ltd were commissioned to complete the mapping and modelling exercises based on specifications directed from the project team. The performance standard of 8 minutes for the first appliance was primarily used and the negative impact on the second appliance response standard was noted.

The initial mapping and modelling was based on a ‘green field’ scenario and was progressed to enable stations to be ‘fixed’ and subsequent options for remaining stations to be developed and the impact of any changes to be identified.

Stations have been identified that are most important and least important in terms of incident response times and, overall, the RDS has very little impact on performance standards, due to the relatively small numbers of dwelling fires and RTCs involved.

The impact analysis of potentially closing 3 RDS stations is shown to be minimal within their respective station grounds but an improved performance is gained across Berkshire.

Two optimum locations have been identified (Theale and Knowl Hill) for two additional WDS appliances giving week day cover only.

Conclusions

The evidence above gives a clear view that there are issues related to:

- Legislation and Regulation potentially making the RDS unviable into the future
- Lack of training time heightening risk to employees and employer.
- A drop in the incident call rate (a good thing), unfortunately leads to lack of experience, morale and pay.
- Staff levels are low, leading to a lack of availability, especially during the day.
- Recruitment is difficult with low levels of recruitment opportunity.

- There is an overwhelming need to give support to the RDS and the status quo is not an option.

For ease, the final recommendations from the report are also given here:

Recommendation 1

Cookham Fire Station should close.

Recommendation 2

RBFRS should employ 12 weekday staff, as additional to the establishment, to form a Retained Duty System Support Officer (RSO) unit, employed on a flexible WDS contract to manage and support the RDS.

Recommendation 3

If it is not possible to fund the RSO Unit (RSU) from existing resource, the Fire Authority could consider that funding for the RSU may be achieved through alteration to crewing arrangements at Pangbourne and Wargrave, by removing RDS staff and replacing them with RSO weekday cover.

Recommendation 4

The RSO Unit (RSU) should form two teams ideally based in the Theale and Knowl Hill areas but, in the short term and until any new station is built, should be based at Pangbourne and Wargrave.

Recommendation 5

The RSU will be used exclusively to support the RDS and to implement and manage all further relevant priority RDS work, as identified elsewhere in the detailed report.

Recommendation 6

Within three years of any RSU implementation, the effectiveness of all the arrangements, particularly as they relate to maintenance of competence, must be reviewed. This review must be supported by significant interim audit and effective monitoring.

Recommendation 7

The Fire Authority should develop and publish a long term strategic plan for the delivery of the service across RBFRS that should include consideration of the risk of external drivers reducing or removing RDS viability.

About Royal Berkshire Fire & Rescue Service

Introduction

Royal Berkshire Fire Authority is responsible for Royal Berkshire Fire and Rescue Service. It sets an annual budget for the Service and decides how the Service will be run. The Authority Members are 25 Councillors appointed by Berkshire's six Unitary Authorities (a Combined Fire Authority):

- Bracknell Forest Borough Council
- Reading Borough Council
- Royal Borough of Windsor and Maidenhead
- Slough Borough Council
- West Berkshire Council
- Wokingham Borough Council

Berkshire is amongst the most prosperous and successful areas in Britain, with varied urban and rural communities and a vibrant multicultural population. One of the UK's most densely populated counties; it has some of the busiest roads in Europe. Royal Berkshire Fire and Rescue Service (RBFRS) has 19 fire stations across the county. There are 10 wholetime (24-hour crewed) stations at Reading, Newbury, Bracknell, Langley, Maidenhead, Slough and Windsor, whilst the stations at Lambourn, Hungerford, Mortimer, Pangbourne, Wargrave, Ascot, Crowthorne and Cookham are crewed by retained (part-time) firefighters who are mobilised to fire calls from their workplace or home. Newbury, Maidenhead and Bracknell also have a retained crew in addition to the wholetime crews. Wokingham fire station is crewed by full-time firefighters during the day only, with the intention to go wholetime in the future. From next year, Windsor will be covered at night by fire appliances from Slough. The operational vehicle fleet includes 23 fire engines and a number of special appliances such as an Incident Response Unit, rescue support vehicles, a fire boat and water rescue unit, operations support unit and high reach aerial appliances (Corporate Plan 2009, page 31 paraphrased).

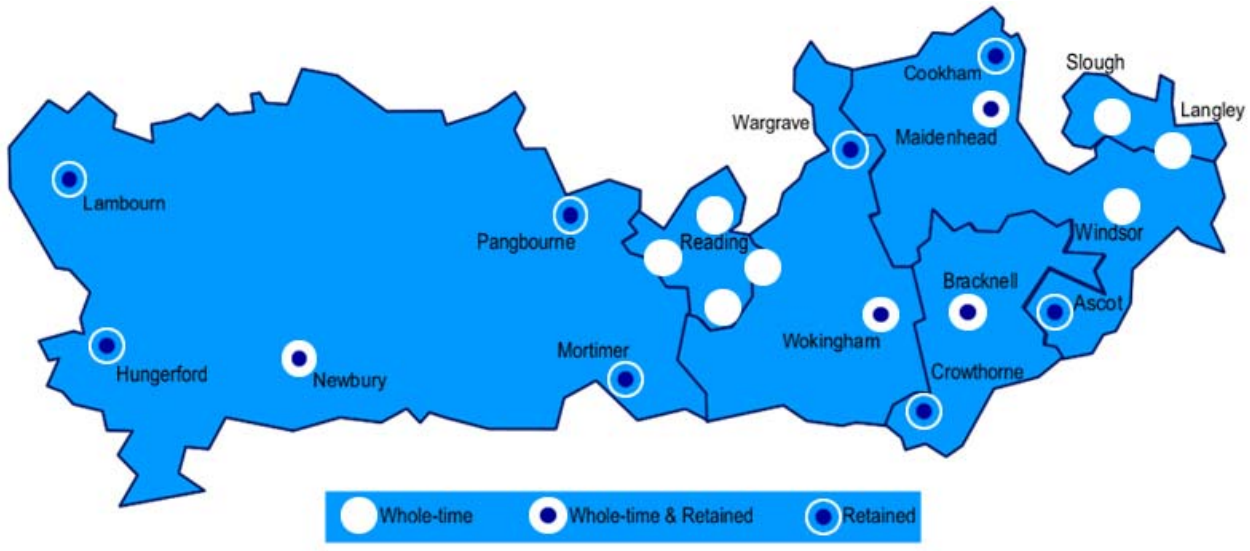


Figure 1 – Map of Royal Berkshire Fire & Rescue Service Fire Stations

As noted within the Corporate Plan, it is the intention of the Integrated Risk Management Plan (IRMP), agreed by the Fire Authority, that there will be changes to the Wokingham and Windsor crewing arrangements (IRMP 2010 page 9). The Retained Duty System

IRMP project will, as far as practicable, work on the understanding that these proposals will be enacted.

Table 1 lists the station number and location, with the pumping appliances at that station. The pumps listed are those intended at the conclusion of the current 5 year IRMP, which is the same planning assumption as made for the RDS project.

Station Number	Station Location	Pumps on Station
1	Caversham Road, Reading	1 x Wholetime
2	Wokingham Road, Reading	1 x Wholetime
3	Dee Road, Reading	1 x Wholetime
4	Newbury	1 x Wholetime; 1 x Retained
5	Hungerford	1 x Retained
6	Lambourn	1 x Retained
7	Pangbourne	1 x Retained
9	Wargrave	1 x Retained
10	Wokingham[1]	1 x Wholetime
11	Mortimer	1 x Retained
12	Cookham[2]	1 x Retained
13	Windsor[3]	1 x Wholetime (day only)
14	Ascot	1 x Retained
15	Crowthorne	1 x Retained
16	Bracknell	1 x Wholetime; 1 x Retained
17	Slough	2 x Wholetime
18	Langley	1 x Wholetime
19	Maidenhead	1 x Wholetime; 1 x Retained
20	Whitley Wood, Reading	1 x Wholetime

Table 1 – list of current stations and station numbers with front line pumping appliances

1. Wokingham Fire Station, under the 5 year IRMP, is moving towards being fully Wholetime.
2. Currently, Cookham Fire Station is unable to crew and the remaining Cookham crew are temporarily based at Maidenhead.
3. Windsor Fire Station is currently Wholetime but, under the 5 year IRMP, is moving towards Wholetime during the day only.

Therefore, in RBFRS (and allowing for Wokingham and Windsor) there are 11½ wholetime appliances and 11 retained appliances (3 of which are at wholetime stations.)

Duty System Naming Convention

Retained Duty System (RDS) staff are those personnel that respond to their Fire Station from home or place of work when emergency paged. (Full cover is deemed to be when the individual can offer 120hrs or more per week in this manner.) RDS staff therefore take longer to respond to calls than Wholetime Duty System staff.

Wholetime Duty System (WDS) staff are on duty when on station and are therefore immediately available for emergency calls. The current WDS in RBFRS averages at 42 hrs per week for operational firefighters.

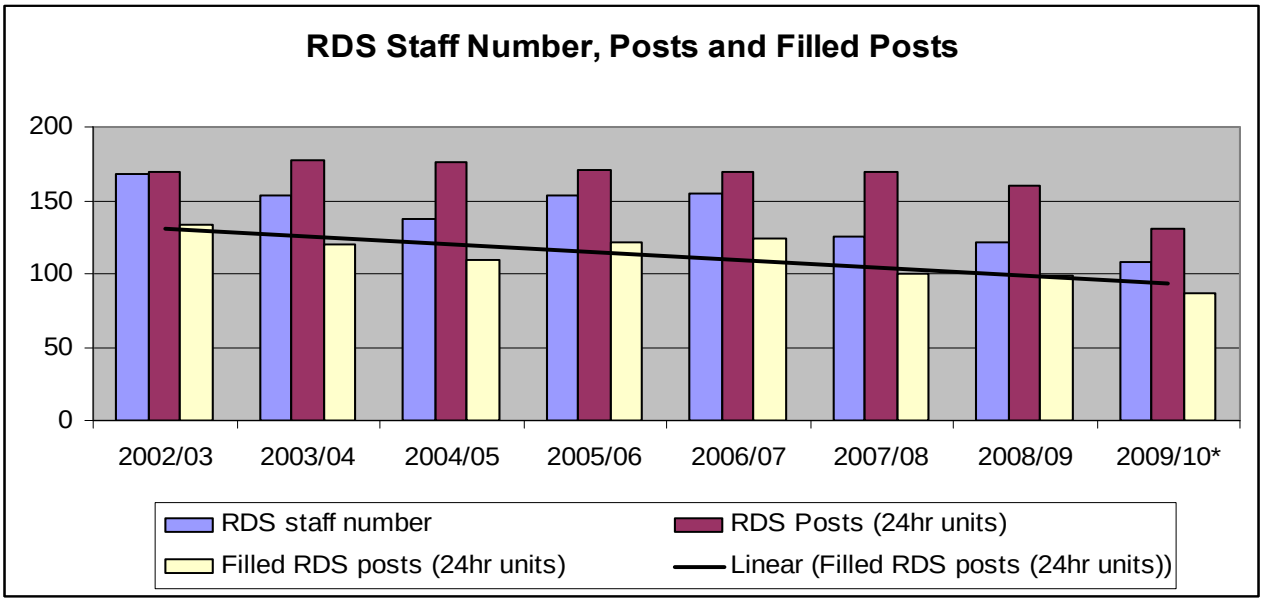
Although discussion at national level (key meeting notes 2009) considered that the term 'RDS' might not be the best to use, for the purposes of this report, the recommendation from the Retained Review Team, that the term RDS will be used, is followed (ODPM 2005 page 28)[1]. There is no equivalent recommendation for Wholetime Duty System (WDS) staff but, again for the purposes of this review, WDS will be used.

Historical data and performance for RBFRS

A full performance report is made annually within the RBFRS Corporate Plan (Corporate Plan 2009) but, to provide some context for the RDS Project, it is worthwhile giving some background data for RBFRS.

The operational statistics bulletin for Fire & Rescue Services, for the year 2008/09, gave the population of Berkshire as 836,000 (Office of National Statistics Mid-year estimate). There were 589 uniformed personnel of which 125 were RDS crew. There were 146 RDS posts (in 24 hour units of cover) but only 98 of these were filled. The data shows two RDS 'joiners' but seven 'leavers' (CLG 2009a).

Analysis of RBFRS data (Department meeting notes 2009) over time gives the following graph and this has been validated against the Operational Statistics Bulletins (CLG 2009b)



*Graph 1 – Graph of RDS staff numbers and trend for filled posts. (*2009/10 data taken at 31/1/10).*

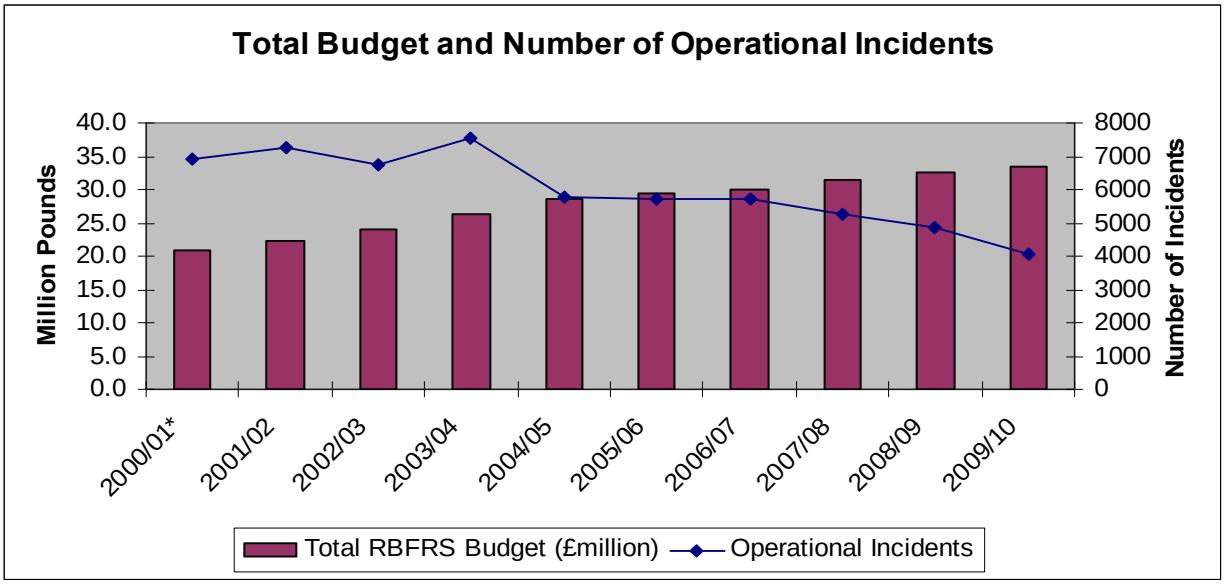
In the above graph, the blue bar is the number of staff actually employed as RDS. The red bar is the number of *required* staff (in 24 hour units). The cream bar is the number of 24 hour units that are actually filled.

Graph 1 shows that there has been a gradual decline in the number of posts required, staff employed and posts filled (in 24hr units) and, at no time, has RBFRS managed to recruit to the full complement.

Overall, RBFRS has seen a decrease in incident numbers and a rise in budget, as seen in graph 2. Operational incidents are defined here as all incidents except AFAs, Over the

[1] The term 'On Call Firefighter' was used at a conference attended as this research was being completed (Key meeting notes 2010).

Border incidents, False Alarms and Exercises. The budget figure has not allowed for inflation.



*Graph 2 – Graph of RBFRS operational incident numbers and total budget. * = estimate*

No two fire stations are the same but to give some idea of the relative costs, three 'standard' RDS stations were compared with three 'standard' WDS stations (stations 5, 11, 15 and 2, 13 and 18 respectively). This gave an average estimated cost of an RDS station, based upon 2008/09 figures, at £184,000, and for WDS an estimated cost of £1.2 million (a ratio of approximately 1:6) (Appendix A).

If the cost per operational incident on the station grounds (not including AFAs, Over the Border incidents, false alarms and exercises) is calculated then the ratio is changed.

WDS Station	2008/09 Ops Incidents* (On Stn Ground).
2	317
13	202
18	373
Approx Average	300

RDS Station	2008/09 Ops Incidents* (On Stn Ground).
5	90
11	126
15	149
Approx Average	125

*Table 2 – WDS and RDS average 'Operational' incidents. * - checked on PB Views data system 19/7/10.*

Therefore, the WDS incident number average, per year, is approximately 300, giving £4000 per incident. For RDS the average operational incident number is approximately 125, giving cost per incident of £1472, a closer ratio to WDS of 1:2.7.

Therefore, even taking into account the relatively larger number of incidents attended by WDS stations, it can still be seen that the RDS system is cost effective on average across RBFRS.

Background to the Retained Duty System Project

On 11 February 2009 the Royal Berkshire Fire Authority noted a report from the Chief Fire Officer (appendix B) that outlined RDS availability issues and the potential impact upon the viability of the RDS. Subsequently, the 2010 – 2015 IRMP consultation document for the 2010/11 action plan introduced the need for a full review of the RDS in order to support and build upon the long term risk management plans for RBFRS and to 'review the long term viability of the RDS' (IRMP 2010, page 26).

Project methodology

Starting in August 2009, an Integrated Risk Management Plan (IRMP) project team was set up following established RBFRS procedures, ensuring inclusion of all relevant internal stakeholders including the Fire Brigades Union (FBU) and four RDS staff representatives. The team met monthly to review progress, agree processes, agree outcomes and derive further work. RBFRS employed two RDS project managers on a job share and temporary contract to liaise, collate, consult and conduct all relevant, appropriate work. These project managers were previously responsible for IRMP projects at an Area Manager level.

The project is managed administratively via MS Project which forms the hub of all the project information. The team members have access to all relevant information and an open and transparent process was followed.

Key aspects of the project included:

Stakeholder Analysis and Communications

Appropriate communication has been undertaken for stakeholders, ranging across Organisational Briefing Notes, Routine Orders, intranet pages, presentations, station visits and other face to face meetings (including consultation – both formal and informal). Also, these avenues were used to gain information for the project and project team.

Risk Assessments

At the commencement of the project a standard organisational risk assessment was completed and endorsed by the RBFRS Risk Management Group (RMG), which confirmed the RDS as the highest risk to the organisation (appendix C).

The project itself was also risk assessed and identified control measures put in place.

Also, a large number of risk assessments were conducted to identify a range of risks such as RDS station ground community risks, relative risks of unavailability, second pump importance, etc. These are dealt with in detail later.

Research

A full literature search was conducted and reference library established. Surveys to gain data and opinion were conducted. As far as possible, all evidence collected was collated into the MS Project and data analysis is shown there. The principles of basing any recommendations upon evidence based research were established early in the project. Wherever possible, triangulation of evidence has been employed to strengthen the robustness of the results. To widen the research base, contact with other Fire & Rescue Services (FRSs) was made and visits and presentations given.

IRMP project steps

The established IRMP project steps, as derived from the national IRMP guidance notes (IRMP 2003) have also been embedded in the MS Project as a double check for completeness of the project management process.

Project parameters

A project 'terms of reference' (TOR) document was derived before the team first met and is at appendix D. The remit is very wide ranging and further briefing from the Chief Fire Officer highlighted the need to consider short, medium and long term options for up to the next twenty years.

On further discussion with the project sponsors it also became clear that there was a need to not be constrained by the existing IRMP work within the five year plan but to ensure it was considered and, therefore, station 10 (Wokingham) would be deemed a WDS station for the purposes of the review and station 13 (Windsor) would be assumed as covered from Slough at night.

Project definition

Subsequent to the approval of the Corporate Management Team (CMT Sept 2009), the IRMP RDS Project team also agreed the following definition for the project.

> The IRMP Retained Duty System (RDS) project is to risk assess, research, analyse and evidence all issues regarding RDS arrangements within RBFRS but having regard to neighbouring FRS' provisions and report (with all options, implications and appropriate recommendations) on viable and sustainable proposals that plan to deliver Fire Authority duties in the most efficient, resilient, safe and effective way, for the longer term. (IRMP RDS 2009/10, minutes for 28/10/2009).

With this definition in place, a set of key aspects were outlined for research and analysis:

- Legislation
- Learning & Development
- Risk Assessments
- Surveys
- Mapping and Modelling
- Conclusions
- Options and Recommendations

The time frame was such that work was conducted concurrently and the structure of the following research tends to reflect the order in which appropriate findings could be reported. The first section relates to legislation, perhaps the area that is most outside the control of the Fire Authority.

Legislation

Relevant legislation

The primary legislation for the Fire & Rescue Service is the Fire & Rescue Services Act 2004 and it contains no reference to the Retained Duty System but it does direct that 'Fire and Rescue Authorities must have regard to the Framework in carrying out their functions.' (FRS Act 2004, Part 3, Section 21(7)). The Framework referred to is the National Framework regularly published and updated by the department of Communities and Local Government (CLG).

Recent rulings regarding the Part Time Workers (Prevention of Less Favourable Treatment) Regulations 2000, regarding RDS, has led one Chief Fire Officer to write "this is in fact a major impact and we will not be able to maintain the [RDS] workforce in its current structure." (Hendry 2009). Chief Fire Officer Hendry's fear is that the ruling effectively precludes RDS staff from being primarily employed and then being able to be released for RDS activity as they (the RDS crew member) 'cannot legally duplicate positive hours worked'. Whilst this may yet have to be tested in Court, it is noteworthy that the rulings are seen to potentially remove the ability to have RDS staff.

On 28 April 2009 EU talks failed to reach agreement on proposals to change the Working Time Directive (LGA briefing 2009a). The EU parliament had voted on 17 December 2008 to remove the 'opt-out' provision that, effectively, is the only thing that enables the RDS to be in place (LGA briefing 2009b).

Bearing in mind that the intention of the Working Time Directive (WTD) is to assist in health and safety by reducing tiredness in the workplace, the TUC General Secretary stated:

> "We are disappointed that another opportunity has been missed to end the UK's dangerous long hours culture. Long hours cause stress, illness and lowers productivity. And when many employers are moving to short-time working, the need for an opt-out of the 48 hour week is even more out of date. The UK Government still needs to tighten the law on working time, otherwise the EU could take it to court in order to protect UK workers from abuse of the 48 hour week" (Barber B 2009)

It appears, for example from the LGA briefing notes (LGA Briefing 2009a), that there is political opposition to the removal of the opt-out but it should be noted that a number of speakers at the RDS conference in 2009, including the Fire Minister of the time (Shahid Malik), whilst in support of keeping the opt-out, commented that 'it had not gone away' (Key meeting notes 2009 page 6). It should be noted that a consultation was under way in April 2010 regarding the Working Time Directive, led by the Local Government Association (LGA 2010) but that at the time of writing the results were not available. However, CFOA has been working with European colleagues and call upon all National Governments, the European Commission and Parliament 'to maintain, for professional firefighters, the flexibility in the calculation of weekly working time (opt out) and to put in place a system that recognises the relationship between active operational duty time and inactive operational duty (standby) time 24hrs/day, 365 days a year.' (Howell L 2010.)

Some influence has already been felt from the driving hours regulations and ACFO Robinson stated that the EU drivers hours regulations were complicated but that up to 17% of RDS staff could be affected (Key meeting notes 2009 page 6). This figure was endorsed by a Communities & Local Government (CLG) advice paper as 17.2% (CLG 2010, page 8). Within RBFRS there seems to have been less impact but, never-the-less, it is estimated that three to six RDS staff may have left or be leaving RBFRS and approximately six to twelve may need to alter their covering hours due to the drivers regulations (Department meeting notes 2009 page 5). It is worthy of note that, if an RDS

member of staff is a ‘full time’ driver in their primary employment, the advice paper shows that only 24.25 hours per week would remain to cover for the RDS (CLG 2010, page 37).

Therefore, there appears to be two pieces of legislation that have the potential, in the long term, to deprive RBFRS of the ability to employ RDS staff, these being the Working Time Directive (by removal of the opt-out) and the Part Time Workers (Prevention of Less Favourable Treatment) Regulations 2000.

There is another key piece of legislation that affects RDS staff - the Health & Safety at Work Act 1974. Under this legislation employers are required to provide:

> “Whatever information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety at work of your employees. This is expanded by the Management of Health and Safety at Work Regulations 1999, which identify situations where health and safety training is particularly important, eg when people start work, on exposure to new or increased risks and where existing skills may have become rusty or need updating. You must provide training during working hours and not at the expense of your employees. Special arrangements may be needed for part-timers or shift workers.” (HSE 2010 page 4)

It is interesting that the management regulations have regard for the need for special arrangements for part time workers but it does not contain further guidance on what ‘special arrangements’ actually means. Given the importance, the complexities of the firefighter role map and the time availability, the issue of training is recognised as crucial, including by RDS staff themselves (RDS meetings 2009/10) and is therefore dealt with in detail, following a brief conclusion regarding legislation.

Conclusions and recommendations regarding legislation

Some of the relevant legislation is complex and may not yet have been ‘tested’ in Court. That being the case it is very difficult to give absolute recommendations. The conclusion here is that the Fire Authority must comply with the relevant legislation and put in place arrangements that meet the requirements as they become known. The driving legislation is manageable. The final implications arising from the Working Time Directive and the Part Time Workers legislation is, as yet, unknown but the Fire Authority should bring representation to bear on the legislators to influence any outcomes in such a way as to enable a continued delivery of fire & rescue service functions. In the meantime, RBFRS should work to ascertain, as far as possible, a legal opinion for the effect of the relevant laws, particularly the Part Time Workers (Prevention of Less Favourable Treatment) Regulations 2000.

Although the current Government have set up a review into the Health & Safety at Work Act (Young 2010) it is not yet known what any outcome might be and the implications for the Fire & Rescue Service. But the law in this area has been tested and it is clear that employers (and employees) have responsibilities and, for this project, it would appear this is particularly the case for Training. Hence this is the area of research considered next.

Learning and Development

Introduction

Fire Service Circulars 8/1996 (FRS Circular 8/1996) and 15/1997 (FRS Circular 15/1997) introduced the Fire & Rescue Service to 'The Competence Framework' and thereby initiated the principles of competence, national occupational standards and role maps etc. Since that time various circulars and documents have confirmed the need to apply consistent and robust standards to the acquisition and application of skills, knowledge, understanding and behaviours to staff development and assessment. This is now through the auspices of the Integrated Personal Development System (IPDS).

A complete list of relevant fire service circulars is given on the RBFRS intranet web site:

1. FRS Circular 22/2009 - Changes in the Support Arrangements for IPDS
2. FRS Circular 47/2007 - IPDS and the Retained Duty System (Report on the Findings from the RDS Staff Survey from CLG. (ODPM 2005.))
3. FRS Circular 20/2003 - IPDS: Guidance on Personal Development Records, Development Programmes and Development Activities
4. FRS Circular 14/2003 - IPDS: Guidance on Workplace Assessment
5. FRS Circular 11/2003 - IPDS: Guidance on IPDS Components
6. FRS Circular 10/2003 - Progress and Implementation of IPDS
7. FRS Circular 9/2002 - The Integrated Personal Development System
8. FRS Circular 8/1999 * - Training for Competence and National Occupational Standards
9. FRS Circular 15/1997 * - Training for Competence (The Competence Framework)
10. FRS Circular 8/1996 * - Standards of Occupational Competence

* paper copy available from the Training Centre. (RBFRS intranet 2009a)

The National Framework issued by central Government has consistently required Fire & Rescue Services to apply IPDS to workforce development. The National Framework 2008 – 2011 states:

> **Fire & Rescue Authorities must:**
>
> - **Apply IPDS principles to the recruitment, development and progression of all staff.**
> - **Use IPDS and the national processes based upon it […] for all Grey and Gold Book staff.**
>
> (National Framework 2008 - 2011, page 31).

The Framework goes on to state:

> "Evidence from a RDS staff survey suggests that they do not always have the same access to training and development opportunities as their wholetime colleagues. To develop an effective, professional and inclusive organisation Fire and Rescue Authorities will wish to ensure equality of access to training and development opportunities for all staff." (National Framework 2008 - 2011, page 32).

This National Framework discussion leads to the following:

Fire and Rescue Authorities must:

- **ensure that they have in place role related training, development and assessment arrangements to develop and maintain the competence of staff. These should be linked to the IPDS framework and National Occupational Standards across the *full range of operational activities***

(National Framework 2008 - 2011, page 33 – italics added).

Alongside and in support of the above, an extensive literature search (Document Reference List 2009) has shown that the expectation is that a 'firefighter is a firefighter' regardless of duty system and there is no recent information found that contradicts this position[2].

The intention to have no distinction between RDS and WDS staff was laid out within the Independent Review of the Fire Service 2002 (Bain 2002) where it states:

> "RDS firefighters should be included in IPDS; they should be trained to the same standard so that they provide a resource interchangeable with that of WDS firefighters." (Bain 2002 page 107) and
>
> "They should be trained to the same standard as WDS firefighters and have sufficient work, subject to demand, to enable them to maintain their skills." (Bain 2002 page 109)

This principle is also perhaps supported by the House of Lords ruling on the 'part-time workers regulations' regarding 'broadly similar work' leading to a re-consideration by the relevant employment tribunal (Employment Tribunal 2001), where the tribunal states:

> "Applying the guidance of the House of Lords judgments we have no hesitation in concluding additionally that the central fire ground work is to be treated as "exactly the same". (Employment Tribunal 2001, paragraph 57).

and

> "…the two job roles [WDS and RDS] are truly comparable within regulation 2(4)(a)(ii) of the Part Time Workers (Prevention of Less Favourable Treatment) Regulations 2000." (Employment Tribunal 2001, paragraph 70).

And, perhaps most recently, the then Fire Minister Shahid Malik stated, in response to a question at a conference on 29 October 2009, that (paraphrased) he 'expects the same equipment to be available to RDS and WDS staff' (Key Meeting Notes 2009, page 6)[3].

Royal Berkshire Fire & Rescue Service (RBFRS) has positively adopted the position that RDS and WDS firefighters have essentially the same job and was (and is) at the forefront of introducing the same selection tests, training (as far as possible) and qualification structure (NVQs) for RDS staff as for WDS staff. This led to, again among the first (if not the first) of Fire & Rescue Services, the ability to transfer staff from the RDS to the WDS (Department Meeting Notes 2009). The ability to transfer from RDS to WDS is endorsed, subject to a structured selection process and the best person being employed, by a CFOA (Chief Fire Officers Association) report that states:

> "The IPDS and the FF role map do not differentiate between firefighters employed on differing duty systems. However, existing contracts do. This underpins the view that "a firefighter is a firefighter" and this, in turn, is supported by the Fire Brigades Union." (CFOA 2008 page 1)

[2] ,At the 2010 RDS conference, Tam Mitchell of the FBU reiterated 'a firefighter is a firefighter' (key meeting notes 2010).

[3] The fire minister (Bob Neill) stated at a conference in September 2010 (paraphrased): "RDS valued & vital. Same risks tackled. RDS deal with all incident types. No distinction between RDS and WDS" (key meeting notes 2010).

RDS staff are subject to the ‘Grey Book’ conditions of service and it states there that RDS will attend for duty:

> “At the station to which the employee is attached for training, development and maintenance duties for an average of two hours per week (or three hours at the discretion of the fire & rescue authority).” (Grey Book 2004. Section 4A, paragraph 16(1)).

It should be noted that the Royal Berkshire Fire Authority supports three hours training per week. Also, it is worth noting that this time is to include ‘maintenance duties’ that is interpreted here as equipment maintenance.

The other duty systems outlined in the Grey Book contain no specific mention of training time requirement (Grey Book 2004 Section 4A).

Anecdotally, the time available for RDS training was not and is not considered sufficient to acquire and maintain competence. This is perhaps supported by the intention that the ‘CFBAC (now defunct Central Fire Brigades Advisory Council) working party into the Retained Service’ was to look at:

- Training – Validate what is needed, viable and achievable?
- Fundamental review of Retained – is the use of retained limited by the availability of training? (FBU 1998, pages 49 & 50)

There is no evidence found that there was a concluding report. Further support of the feeling at the time may also be given by an ‘occasional paper’ from the Health & Safety Executive (HSE) that stated that whereas ‘full time firemen are available for all the training time necessary’ the ‘time retained men are available for training is limited by cost and by their own willingness to give up their leisure time.’ It goes on to state:

> “Because of these constraints [RDS] training inevitably differs from that of full-time men.”

And

> “These problems become more acute in the fire service where special calls are concerned.” (HSE 1985, page 9).

As can be seen from the language this is old information and a letter with follow up e-mail (appendix E) was sent to the HSE to request if any update is available. A reply was received (dated 1 February 2010) stating:

> “The HSE occasional paper OP8 – “Training for Hazardous Occupations – a case study of the fire service” is no longer in print but its contents are still useful guidance. I am not aware of any other equivalent guidance.” (HSE 2010a)

This HSE response suggests that the above extracts from the occasional paper would still form guidance and therefore, as noted by the HSE, there is the difficulty of maintaining training for RDS staff, especially for ‘special services’ and this will therefore also apply to special vehicles. Within RBFRS the only specialist vehicle crewed almost exclusively by RDS staff is the Incident Command Unit at Maidenhead, for which extra training time, of three hours per week, is given and paid.

The other special appliances crewed by RDS within RBFRS are:

- The water bowser at Pangbourne - crewed by a ‘central team’ Monday to Friday (with RDS covering the other times) and no extra training to operate the pump is given as it is deemed a simple vehicle to operate.
- The High Volume Pump (HVP) at Bracknell where training has been offered on a separate evening but there has been little take-up.
- The off-road vehicles at Maidenhead. (Mancey 2010a).

(It should be noted that all vehicles will require some level of driver training.)

Also, the HSE occasional paper noted the difficulty of time available for RDS training. This theme was picked up by John McGhee of the FBU when he wrote:

“I would say that the quality of training is not in question - it is simply the quantity” (McGhee J 2010, page 32).

In John McGhee’s article, he was applying this statement to all Firefighters but he goes on to be specific about the RDS by saying:

“How can FRSs pay firefighters working Retained Duty for only two, at best three hours a week and expect them to fulfil their training commitments?” (McGhee J 2010, page 32).

Elsewhere in the same article, reference is made to a need for more emphasis on training them [RDS] as well as WDS staff in order to reduce firefighter fatalities (Taylor T 2009 page 21) and ‘the HSE have made comments and demands for improvements following each of the inspections [into selected FRSs]’ (FBU 2010). The most recent report from these inspections gave a recommendation that ‘The service must ensure that adequate training is provided to maintain competencies in safety-critical areas. The outcome of the RDS training-needs review should assist this.’ (HSE 2009a page 13). This recommendation came from a finding, from within the particular FRS and being addressed, that they had ‘identified a gap between the ongoing training time required and the time available to RDS fire fighters ...’ (HSE 2009a page 6).

The following research, discussion and analysis is framed in the light of the above background for the Learning & Development (L&D) of RDS staff and is aimed at answering the key question as to ‘whether or not the RDS is a safe system of work’ in terms of Learning & Development.

Initial training

Under IPDS initial training is known as ‘phase 1’ training (RBFRS intranet 2009c). The initial training course for RDS staff is a modularised version of the WDS course. Subject to student numbers (Mancey A 2010 and as reported to the Corporate Management Team (CMT) (Jefferies B 2010)), there are two RDS courses (of nine modules each) per year run at the RBFRS Training Centre and each takes nine months to complete (Department Meeting Notes 2009 page 1). This is supported by the RBFRS learning & development intranet site where there is an overview of the training timeline (RBFRS intranet 2009b)

Research has found (RDS meetings 2009/10 page 1) that RDS station staff feel it takes too long to get ‘to ride’ but it is worth noting that the RDS staff are available to ride appliances after the 4 month module (at which point they have enough training to wear BA (Breathing Apparatus) for their own safety and to manage a BA Board.) Therefore, apart from course cancellations, a substantial part of the wait will be related to the selection systems that are the same as for WDS staff (Department Meeting Notes 2009, page 5).

Course cancellations will cause much frustration, for both the individuals concerned and the RDS station, as there is the potential (indeed likelihood when numbers are low) that availability will be compromised. This issue is dealt with in detail below.

The WDS course is of 16 weeks duration (including 1 week before the 13 week basic training course and 2 weeks at the end for induction) and run either at an external provider or, more recently, the RBFRS Training Centre has been able to accommodate the course. Although there is a disparity in the time available for initial training, between the RDS and WDS courses, the difference is reduced if the trainer time per student is calculated. With fewer RDS staff on each course they have more personal attention. (Department Meeting Notes 2009 page 1).

Until initial training is complete, staff receive the 'Training' rate of pay as outlined within the Grey Book 2004 (Section 3(2)). This will be at about 3 months for WDS and 9 Months for RDS (RBFRS intranet 2009b).

Therefore, the initial training of WDS and RDS staff is broadly compatible and this complies with the principles of IPDS.

The project team notes that some Fire & Rescue Services have reduced the length of the initial training course (Department Meeting Notes 2009 page 1) and, although there has been discussion of a regional training programme proposal (RDS SE Meeting Notes 3/12/9), there is no such programme in place (Rayner M 2009).

However, there is no evidence to suggest that, given sufficient initial training, RDS staff cannot acquire competence. The training outlined above for RDS is broadly compatible with WDS training and, therefore, is at least adequate so no further research will be conducted in this area at this time for the current RDS review.

National Vocational Qualification (NVQ)

RBFRS and its' Authority have consistently supported the delivery of NVQ to qualify staff as it is an accredited process leading to quality assured outcomes. This stage of IPDS (the development, assessment and records of staff to qualify in the workplace) is termed 'phase 2'. Both WDS and RDS staff are enrolled on the NVQ programme and receive development rate of pay at this point. Competent rate of pay is achieved on qualification with the NVQ. The Assessment Centre Manager notes the difficulty with time to complete the NVQ for RDS staff (Department Meeting Notes 2009 page 1) and the records show that only one member of RDS has completed their NVQ (purely as an RDS member of staff at the time) and it took approximately 4.5 years (Palmer J 2009a). This supports the view that RDS will take about twice as long as WDS to complete an NVQ. In itself this might not be a problem and, as the system becomes more firmly embedded (with the addition of e-portfolios), this time could be reduced. However, although a grey area (Palmer J 2009), it should be noted that the NVQ system requires evidence to be within two to three years, thereby creating a tension between what is possible and what is required. Also it should be noted that the 'Grey Book' (Conditions of Service for operational staff) expects completion of qualification for a Firefighter within 3 years (Grey Book 2004, section 3 (3)). Communication from Humberside FRS suggests that RDS NVQ qualification can be achieved in three years (Shakesby V 2009).

As NVQs are workplace based it is important to understand that it is real events that are assessed to support the judgement of competence. The experiential learning of incidents is considered further below but, for the purposes of qualifying, there is no evidence to suggest that RDS staff cannot achieve the NVQ given adequate time and support. However, although three hours per month extra is identified to support the candidate and assessor (Station Commanders Handbook 2010, page 17) there is evidence that the support and time given is not adequate (Department Meeting Notes 2009 page 1), possibly leading to extended time frames to achieve competence. Recommendations to assist, in terms of time availability, will be considered further later, as part of possible overall solutions.

Maintenance of competence

Maintenance of competence is phase 3 of IPDS and it is perhaps this phase that is the crux of the issue for the health & safety of RDS staff. If, as expected by the National Framework and IPDS, there is no difference between RDS and WDS staff, then each individual firefighter must maintain their competence across the whole range of National Occupational Standards (NOS) (Skills for Justice 2009) and for the full range of operational activities (National Framework 2008 - 2011, page 33).

However, due to the wording of the NOS it is possible to bring some flexibility into the issue. For example, it is sensible to assume that only those firefighters with a particular special appliance on their station will maintain their competence on that appliance. This principle would apply to WDS and RDS. But, before making any recommendations, a robust analysis of what is possible in terms of training need and training time is required and is considered below.

Training Time Analysis

The employment tribunal found in 2008 that:

> Neither party had before us sought to dispute that in very broad terms the WTF's [WDS firefighters] still and always have spent a much greater proportion of their time carrying out "training" than that of the RTF's [RDS firefighters]. It would of course be impossible for us to work out percentage wise how much time was spent by RTF's on "training" since the percentage of time spent on training by a part time fire fighter who did not carry out many call outs/attendances would be very much higher. We would still conclude that in very broad terms WTF's spend approximately one quarter/one third of their time on "training". (Employment Tribunal 2001, paragraph 51).

From this it would seem that WDS staff spend approximately eight hours per week or more on training, on average. And the tribunal seemed to accept that, whilst a percentage could not be calculated, RDS staff undertook training time of two (or three) hours per week as outlined by the Conditions of Service.

Over time RBFRS has adopted the Training & Assessment Plans (TAPs), amended them and embedded a set of Maintenance of Competence modules within FireWatch such that an individuals' record contains mapped information from scenarios, exercises, lectures and real incident data.

This set of competence modules are used to derive the Training Requirements Indicator (TRI) a traffic light system to guide Watch Managers and others in the necessary training, scenarios, lectures and incident events to maintain competence (FireWatch 2009).

A professional analysis by Officers, including Learning and Development personnel, of the Maintenance of Competence (MOC) modules on the TRI shows that it takes just under 300 hours per year training to maintain competence for a Firefighter across the suite of modules (appendix F). Further work was conducted to compare the Maintenance of Competence modules with the 'work assessment plans' of Hampshire FRS and this found broad compatibility for operational risk modules (Hampshire 2010). The 'non-operational' modules in the Hampshire FRS system are within the RBFRS system but they are not cascaded into the TRI. Also, as the TRI is for an individual (in this case a Firefighter), Crew and Watch Manager modules are not included in the time calculation. Therefore, it is important to note that the following are not in the RBFRS time calculation above:

- Knowledge based lectures
- Incident Command
- Personal Development
- Community Safety and other 'customer care' work
- Leadership
- Management
- Administration
- Equality

- Training and supporting others
- Standard tests and maintenance
- 7(2)d information collection for risks.

Some initial work has been completed within RBFRS to estimate the time required for Administration and Maintenance of Resources (RBFRS 2010). This brief report found that 38 hours per month is required. Of this time, 26 hours would be primarily for the Crew and/or Watch Manager (administration) and 12 hours would be primarily for Firefighters (maintenance.)

Additional work has been undertaken with a training frequency analysis tool supplied, with thanks, from Oxfordshire FRS in order to confirm the estimated time required for maintenance of competence training. In detailed consultation with the training department, the analytical tool was adjusted (appendix G) and used to re-estimate the frequency and time requirement. This confirmed the time to be in the order of 280 hours (appendix H) but also calculated that a 'basic firefighter' would need 150 to 180 hours per year to be able to do nothing but dwelling fires and RTCs. For this work, an estimate has been made for the inclusion of knowledge based lectures within this time. The key query that arises from this result is - why is this time so different from other FRSs? For example, the Oxfordshire result gave a training requirement of about 100 hours. Any answer to this question would impinge upon the national understanding of training time for RDS and CLG commissioned a research survey from the company Employment Research & Consulting (ERC) that specifically asked this question (ERC 2010a, page 16). For the purposes of this project, it is necessary to note the maintenance of competence training time, for a firefighter able to perform the full role, is estimated at approximately 280 hours per year.

In order to calculate current RDS training time, the starting point is that each Monday night is scheduled for three hours training. This is usually from 19.00hrs to 22.00hrs (Station Commander Handbook, page 16), although some flexibility is allowed to accommodate a particular station need. For example, station 7 (Pangbourne RDS) commences at 18.45hrs.

To confirm the time available for RDS staff training, two surveys were completed. The first of these is to approximate the number of weeks actually used for training in the year. In discussion with the Watch Manager and in consultation with the station diaries, the number of weeks where training was substantially effected by extraneous matters were counted. To this was added the leave expectation. The research found that, on average, 31 weeks remained for training (appendix I).

The second survey, again in discussion with the Watch Manager, estimated the time given to actual training in each week available. The research attempted to account for those matters that were required to be completed but could not be counted against the maintenance of competence TRI modules. The research shows that, on average, actual training is done for 1.6 hours on each training night (appendix J).

Therefore, using current working practices, RDS staff receive:

31weeks x 1.6hrs = 50 hours per year (approximately) actual training

and would therefore need to be in service for nearly six years to complete the required 280 hours of training for maintenance of competence of a firefighter, that are expected to be completed in just one year. To stretch the training to this extent would in no way maintain competence.

This correlates reasonably well with research from Scotland where it was identified that, for the option where a 'firefighter is a firefighter', to complete at phase 2 all the 45 development modules used in Scotland would take some eight years (Burnett G 2010, pages 9 -12). Although an early paper, a recommendation is clearly stated in that the

firefighter is a firefighter option gives an eight year cycle, and that '…the currency of an 8 year development cycle is unacceptable and therefore this option is not recommended.' Burnett G 2010, page 10).

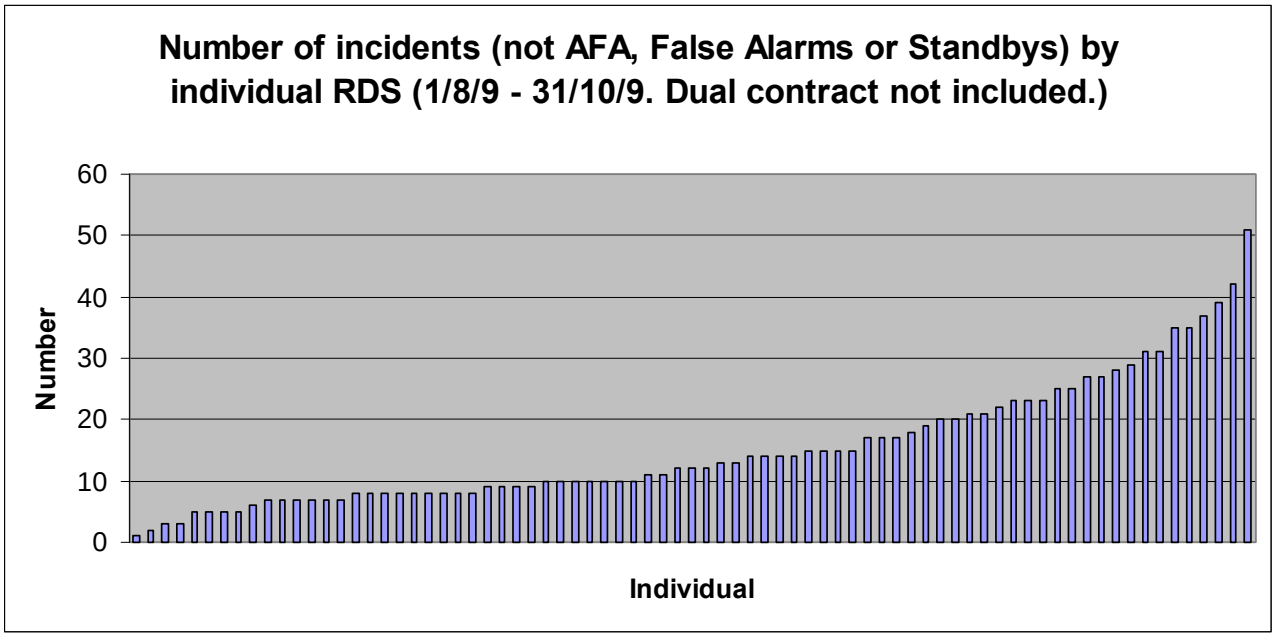
Measurement of Competence

The above research suggests that time is very short to maintain competence for RDS staff. It is necessary to attempt to measure competence to ascertain if there is evidence to support the time based numbers given above. It would be reasonable to suppose that with such a disparity there would be evidence.

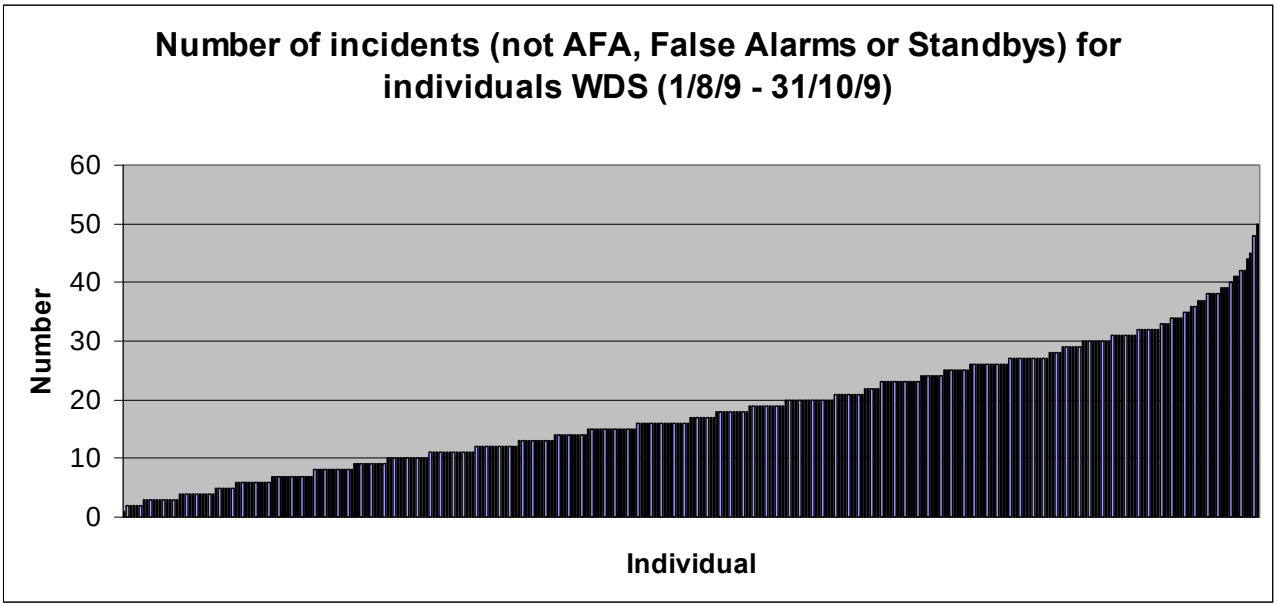
A survey of incident and exercise debriefs (appendix K) was inconclusive as it gave minimal evidence (related to special appliances that are not under consideration here). It should also be noted that the debrief systems do not readily enable a separation of WDS and RDS staff.

An analysis of accident and near miss data (appendix L) gives another inconclusive outcome. There is no direct evidence of maintenance of competence issues but it should be noted that the Operational Assessment Peer Review report on RBFRS stated that there appeared to be under-reporting (I&DeA 2009, paragraph 20).

A further source of maintenance of competence is the experiential learning gained whilst attending 'real life' incidents. In order to ascertain these experience levels, the RBFRS incident database was interrogated for a sample three month period. The two graphs below indicate the number of incidents attended by each individual firefighter.



Graph 3 – Number of incidents attended by individual RDS staff.



Graph 4 – Number of incidents attended by individual WDS staff.

The data shows that the average number of incidents attended in the three month period for WDS is eighteen and for RDS is fifteen. Although this difference is some 17% it is not thought significant enough to negatively affect competence.

The Fire Brigades Union Report on firefighter deaths notes that whether or not the firefighter who died was RDS or WDS was not always known. However, in the last ten years of firefighter fatalities the role was known for all but two cases. 53% (17) were WDS and 47% (15) were RDS, suggesting a higher proportion of RDS deaths, as there are proportionately more WDS staff (CiPFA 2008). They go on to say that further research is required (FBU In the Line of Duty 2008, page 25). In agreeing with the need for further research, it should therefore be noted that the following data must be treated with caution.

Using the FBU data (FBU In the Line of Duty 2008, page 17) and only those fatalities that were operational or training related (so not including such things as natural causes and Road Traffic Collisions) it can be seen that there were seventeen firefighter fatalities since 1 January 1998. Of these, seven fatalities (41%) were RDS and ten fatalities (59%) were WDS[4].

This can be compared to the total UK workforce (Full Time Equivalent (FTE) and using Watch Manager, Crew Manager and Firefighters only) that is composed of 34% RDS and 66% WDS (CiPFA 2008, pages 13-15). Therefore there does seem to be a disproportionate number of RDS fatalities but, hence the caution, it is difficult to show here (without the further research) that these were, or were not, related to competence issues.

As noted earlier, RBFRS has transferred a number of RDS staff into the WDS. An analysis of the transferee induction and courses is given at appendix M. Some comments contained there include:

> "At no time during the assessments did any candidate display any inherent unsafe practises or actions
>
> "Although some training issues were identified during this process the report did not indicate that the students were not competent or unsafe.
>
> "Technical knowledge is very limited including that of those that have/are completing NOS

[4] The two WDS firefighter deaths in Hampshire in 2010 occurred after the FBU report and after the bulk of the work here was completed. A quick check concluded that the prevalence result would be substantially the same.

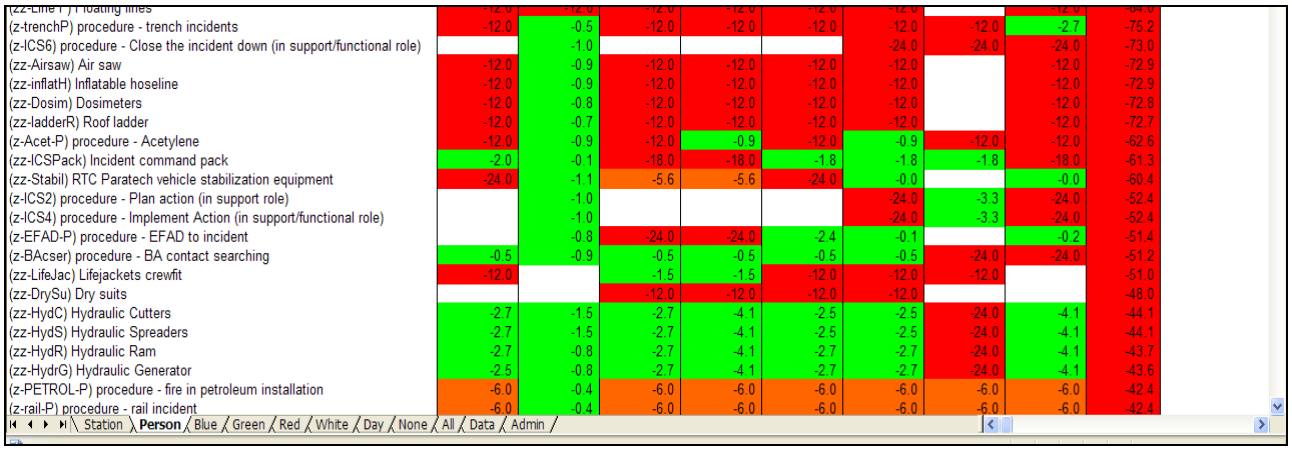
> “Core skills were of a poor standard due to a lack of competency training within their own stations.
>
> “There were no development needs identified for the external WDS transferees.
>
> “Development needs were identified for all RDS to WDS candidates the majority of which involved BA, confined space ladder, hand signals and knots and lines.
>
> “Two of the candidates were deemed not competent to wear BA and two were deemed competent to ride number two BA only.

Although the conclusion seems to be nobody is unsafe, the transferees require further development to be competent. And some were deemed unsafe enough to be removed from Breathing Apparatus (BA), which is a key skill and absolutely essential to the safety of staff.

An opportunity to assess staff was presented by the relatively recent introduction of Working at Height equipment and procedures. Learning & Development staff led an assessment of staff and the results are at appendix N. This shows that, of the 23 activities that were relevant to both RDS and WDS, the sum of percentage failures for WDS was 153 and for RDS, 294, giving a clear difference with RDS performing less well than WDS.

The FireWatch recording system includes the maintenance of competence modules that were used to determine the time required for training (appendix H). The difference in the completion of the Training Requirements Indicator (TRI) between RDS and WDS has been noted (Department Meeting Notes 2009 page 1) but it should also be noted that the requirement to complete the TRI has only formally been in place since April 2009. Never-the-less an analysis of the TRI completion up to November 2009 (appendix O) shows that the RDS staff had completed approximately half as much as WDS (at -690 and -356 respectively. The TRI would be 100% complete if the score moved up to zero.)

The following screen shot indicates a comparison with one individual being predominantly ‘green’ and this person being dual contract, serving at an RDS station. (Names and station have been cropped to preserve anonymity.)



(z-trenchP) procedure - trench incidents	-12.0	-0.5	-12.0	-12.0	-12.0	-12.0	-12.0	-2.7	-75.2
(z-ICS6) procedure - Close the incident down (in support/functional role)		-1.0				-24.0	-24.0	-24.0	-73.0
(zz-Airsaw) Air saw	-12.0	-0.9	-12.0	-12.0	-12.0	-12.0		-12.0	-72.9
(zz-inflatH) Inflatable hoseline	-12.0	-0.9	-12.0	-12.0	-12.0	-12.0		-12.0	-72.9
(zz-Dosim) Dosimeters	-12.0	-0.8	-12.0	-12.0	-12.0	-12.0		-12.0	-72.8
(zz-ladderR) Roof ladder	-12.0	-0.7	-12.0	-12.0	-12.0	-12.0		-12.0	-72.7
(z-Acet-P) procedure - Acetylene	-12.0	-0.9	-12.0	-0.9	-12.0	-0.9	-12.0	-12.0	-62.6
(zz-ICSPack) Incident command pack	-2.0	-0.1	-18.0	-18.0	-1.8	-1.8	-1.8	-18.0	-61.3
(zz-Stabil) RTC Paratech vehicle stabilization equipment	-24.0	-1.1	-5.6	-5.6	-24.0	-0.0		-0.0	-60.4
(z-ICS2) procedure - Plan action (in support role)		-1.0				-24.0	-3.3	-24.0	-52.4
(z-ICS4) procedure - Implement Action (in support/functional role)		-1.0				-24.0	-3.3	-24.0	-52.4
(z-EFAD-P) procedure - EFAD to incident		-0.8	-24.0	-24.0	-2.4	-0.1		-0.2	-51.4
(z-BAcser) procedure - BA contact searching	-0.5	-0.9	-0.5	-0.5	-0.5	-0.5	-24.0	-24.0	-51.2
(zz-LifeJac) Lifejackets crewfit	-12.0		-1.5	-1.5	-12.0	-12.0	-12.0		-51.0
(zz-DrySu) Dry suits			-12.0	-12.0	-12.0	-12.0			-48.0
(zz-HydC) Hydraulic Cutters	-2.7	-1.5	-2.7	-4.1	-2.5	-2.5	-24.0	-4.1	-44.1
(zz-HydS) Hydraulic Spreaders	-2.7	-1.5	-2.7	-4.1	-2.5	-2.5	-24.0	-4.1	-44.1
(zz-HydR) Hydraulic Ram	-2.7	-0.8	-2.7	-4.1	-2.7	-2.7	-24.0	-4.1	-43.7
(zz-HydrG) Hydraulic Generator	-2.5	-0.8	-2.7	-4.1	-2.7	-2.7	-24.0	-4.1	-43.6
(z-PETROL-P) procedure - fire in petroleum installation	-6.0	-0.4	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-42.4
(z-rail-P) procedure - rail incident	-6.0	-0.4	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-42.4

Figure 2 – Screenshot of an RDS Station Training Requirements Indicator

Finally, little of the above has measured the knowledge requirements to maintain competence. It was noted via the transferees courses that ‘technical knowledge is very limited’ (appendix M) but there is no measurement. Previous research into the multimedia packages (that are now available on-line and recorded within FireWatch as lectures) showed a disparity between the levels of technical knowledge (Cross D 2001, appendix C therein) and that the RDS staff knowledge level was behind that of WDS staff. A random sample analysis of FireWatch records shows that, on average, the RDS staff viewed the lecture packages under 0.5 times per year, the WDS staff viewed them 8 times per year (appendix P). If nothing else, this suggests that time is too limited for RDS staff to maintain their knowledge base, at least from the provided lecture packages. A further source of knowledge assessment was located within the Training Centre ‘Optivote’ system. At the

start of the 2008 High Rise and Backdraft courses carried out within RBFRS, all trainees were tested for their knowledge levels. Overall, WDS scored 76% and RDS scored 70%, a relatively small but, never-the-less, clear difference (appendix Q).

Conclusions Regarding Learning & Development

At phase 1 of IPDS, the research finds that initial training for RDS is comparable with WDS and suitable and sufficient. At phase 2, for RDS staff to qualify with an NVQ it has proved very difficult, at least, due to the time taken to collect and collate the evidence. Bearing in mind that the NVQ confers the competence qualification (and commensurate competent rate of pay) this is an important difficulty. However, it is concluded that it should be possible to complete the NVQ given adequate time and support.

At phase 3 of IPDS, it is a national expectation that RDS firefighters will achieve the same as WDS firefighters in the skill sets, knowledge base, level of competence and in the full range of any equipment provided for any foreseeable incident type they might attend. And that they will maintain this competence in three hours training per week (plus any experiential learning.) RBFRS and the Authority have adopted the national position and, therefore, the expectation of the RDS staff within Berkshire reflects the national stance. To change from this position would require agreement on a change of role maps and possible changes to the conditions of service, such as pay and allowances and it is thought that it would require local agreement in the absence of any national agreement.

The analysis above in a wide range of learning & development activity does show a large disparity between RDS and WDS in terms of the time available. The estimated time required per year is nearly 300 hours[5]. RDS staff currently achieve, for positive core training, 50 hours. This indicates a shortfall of some 250 hours per year and this must be improved.

The measurement of training outputs (for example the TRI and the lecture packages) shows this lack of time availability, as RDS lag significantly behind WDS in the records.

Although there is limited and inconclusive evidence of a lack of competence (for example in the RDS to WDS transfer process) it should be noted that any Health and Safety investigation would require evidence that the management of health and safety, especially training, gave sufficient opportunity to maintain competence and safety. The response to a freedom of information request to the Health & Safety Executive (HSE) reveals a number of Improvement Notices served on Fire & Rescue Services related to training (HSE 2010a. Notice numbers 70004090, 70004091 and 200004487). It should be noted that three improvement notices were not retrievable by the HSE, not all improvement notices were found by the HSE and the Warwickshire firefighter fatalities incident is still subject to Police investigation (HSE 2010a). The status of the Improvement Notice may be explained by the following extract from the Warwickshire Audit & Standards Committee:

> "The Committee were reminded that following the incident at Atherstone on Stour on 2nd November 2007, the Health & Safety Executive had issued an improvement notice. The Improvement Notice incorporated a schedule of actions that it required the Authority to take. Subsequently the County Council appealed against the Notice and at an Employment Tribunal in March 2008 it was agreed that the Improvement Notice be 'stayed'. The effect of this decision was that both the appeal and the Improvement Notice were suspended." (Warwickshire 2008, paragraph 7).

[5] As this report was being completed a time calculation arrived from Kent FRS that gave WDS training time required as up to 380 hours and RDS as up to 144 hours (Escudier D 2010). A quick analysis suggests that Kent used many fewer modules of training for RDS. A set of national maintenance of competence modules would help resolve these apparent discrepancies and, to that end, a request was made at the RDS South East meeting on 23 June 2010.

It may be inferred that the issue of a Fire & Rescue Service Circular (FRS Circular 18/2009) attempts to deal with some of the issues identified at the Atherstone on Stour fatal incident. Throughout the circular there are many references to training requirement, such as for Incident Command initial and refresher training (FRS Circular 18/2009, paragraph 2.2); Breathing Apparatus Entry Control skills, knowledge, initial and refresher training (paragraphs 2.4 & 2.5); consistency of BA training and assessment (paragraph 2.6); BA training incident simulation assessment (paragraph 2.9); Compartment fire behaviour training as distinct from BA refresher training (paragraph 3.2); building construction knowledge and recognition (paragraph 4.2).

Of the Notices not found by the Freedom of Information request, the Hertfordshire Notices (HSE 2009) are clearly related to training and this was emphasised by the FBU in reports (Comet 2010). RBFRS resolved to confirm and fill any training gaps, identified within the Hertfordshire Improvement Notice, at a meeting of the Health Safety and Welfare Committee (HSW 2009, page 4).

The time evidence here is that, in the hours available, it is impossible for RDS staff to maintain full competence across the entire suite of knowledge and skills and therefore, to return to the question set at the beginning of this section – 'is the RDS a safe system of work', the answer is that, at the very best, it is doubtful in the current format.

This conclusion leaves the Fire & Rescue Authority at risk of litigation and/or prosecution (possibly up to the level of corporate manslaughter). More importantly, there is a duty of care to the RDS staff to prevent accident, injury and death.

Possible Learning & Development Options

Do nothing

Although an option that would be easy, doing nothing would not resolve the potential safety issue to any extent and to not address this issue would be a dereliction, especially when the RDS staff themselves recognise the seriousness.

Better use of current available training time

Given that the Authority already fund the extra hour on drill nights to take the weekly potential to three hours, it is essential that this is used more effectively. This will give an immediate increase of training time available, to about 100 hours per year, at no extra cost. There is ongoing work between the Training Department and Central Team to give greater guidance and structure to the Monday drill nights, including a suite of training simulations that will assist meeting the Training Requirement Indicator – and therefore the ongoing competence of RDS staff. This safety critical work must be implemented immediately and will have a knock on effect of improving morale as RDS staff will feel better guided.

It must be recognised that other activities will therefore be diminished. For example, officer visits and exercises will need to be curtailed or managed in a different way. By removing the extraneous activity on drill nights and supporting a more structured training regime, it might be possible to improve the training time up to an estimated 100 hours per year. But it is the case that the probable concentration on the 'basics' from this solution, even in the time made available here, will not fulfil every element of the role map.

Spread training over time

The analysis at appendix H shows it takes, for example, 6 hours per year to maintain competence for First Aid. Spreading this over time, say over three years, will mean that only 2 hours per year will be given to first aid training. It will not be possible to maintain

competence on this basis and will create difference between RDS and WDS. As noted above, the research from Scotland indicated that, to cover the 45 development modules used in Scotland, would take (dependent on a range of re-skilling options) eight years or more (Burnett G 2010). This amount of lengthening is untenable for maintenance of competence but, by spreading the training time over years, it will at least ensure everything is covered - eventually. It would also be easy to understand and to implement.

Increase Training Time

The project team noted that other Fire & Rescue Services had not taken up the three hours per week (Other FRS 2010). For example, Shropshire FRS had a regime of two hours per drill night but added to this by an extra three hours per person per month to be managed by the local Watch Manager. This could be, say, for a weekend morning training session.

Every hour of extra training for every member of RDS staff would cost £1776 (Appendix R). So, to add one hour per week to the current RBFRS three hours would cost in the region of £92,000 per year. And, instead, to add three hours per month per RDS staff member would cost about £64,000 per year.

Any additional training time, as noted by the HSE occasional paper, relies on the 'willingness [of RDS crew] to give up their leisure time.' (HSE 1985, page 9).

For this reason, a survey of RBFRS staff to evaluate this willingness was contracted and is reported in detail below. It should be noted that there must be doubt in the acceptability to the RDS staff of this further intrusion into their family life, when they already give so much commitment.

Even if willing to do the extra training time suggested here, the time calculated as being required to maintain competence is beyond this. The best case is that an extra 3 hours per month (36 hours per year) added to the 100 hours estimated once greater efficiency is applied, gives 136 hours per year. This is still far short of the approximate 280 hours required.

Watch Manager support

RBFRS has a policy to allow 'dual contracts'. This is where a WDS member of staff may, subject to vacancies and strict control over total hours worked, work as a RDS member of staff on their off duty days. RDS station visits have noted that this is well received and supports the RDS station. The suggestion here is that a WDS Watch Manager may give more consistent support over time.

A report on a trial into the methodology of effectively posting a WDS Watch Manager to an RDS station has measured the time requirement to manage administration and maintenance (RBFRS 2010). This has been tried at Station 14 Ascot as a trial due to some particular training and management issues. Certainly a possible positive must be the ability to get through more of the administrative and management work and, perhaps most importantly, provides additional day cover for incident response.

It should be noted that, currently, RDS stations have an assigned WDS Station Manager, who supports the RDS station according to the handbook (Station Commanders Handbook 2010).

The disadvantages include the cost per year for a Watch Manager and this tends to deal with the RDS problem one station at a time. A more flexible solution may be to create a support team.

RDS support teams

As an outcome from an earlier IRMP it was recommended that a Retained Recruitment and Retention officer should be employed. RBFRS advertised (and re-advertised) this post but, although an offer an employment was given, it was never filled. There was a clear recommendation within the ODPM report (ODPM 2005, recommendation 15, page 9) that a RDS 'liaison' Officer (RLO) be recruited in each FRS. And this was emphasised by the Chairman of the RDS conference in 2009 (key meeting notes 2009, page 5)[6]. Therefore, in any event, RBFRS must employ somebody to co-ordinate RDS activity. However, the project team visited Shropshire FRS to ascertain their system of Retained Support Officers (RSOs). These RDS teams do much more than 'liaise' and are heavily involved in the implementation of all the relevant recommendations of the RDS ODPM report. The activities include:

- Venue seeking and risk assessments for training.
- Delivery of training.
- Monitoring and audit of training and training recording.
- NVQ assessment and support.
- Administration of RDS stations.
- Standard tests and other maintenance.
- Management functions appropriate to role.
- Recruitment campaigns and selection testing.
- Retention monitoring.
- Mentoring of new trainees (including basic training for motivation).
- Home Fire Risk Checks and Community Fire Safety.
- 7(2)d risk information collection and visits.
- Community partnership working.
- Engagement with primary employers and, most importantly,
- Manage and provide operational day cover availability for RDS stations to keep them on the run.

Effectively, in Shropshire FRS, these teams are RDS crews (there are eight staff involved) that support RDS stations. During the visit, it was noted by the RBFRS project managers that the staff were RDS but that the selection processes they employ (easier written test) disallow transfer to the WDS (RDS meetings 2009/10, page 2). This seems restrictive and against the spirit of IPDS. As RBFRS is more mature in this area of IPDS, any proposal to create RSO posts would allow RDS or WDS to apply.

Throughout the discussion above it has been noted that greater support is required across the sweep of RDS activity and RSOs give this support. However, RSOs cannot create extra training time.

Reduce number of RDS staff

If it is accepted that RDS staff are at risk due to the lack of training then one method of reducing risk is to reduce the number of RDS staff. Of course, this must be balanced against the risk to the public. This balance is considered in greater detail below.

[6] The need for support was also emphasised by a number of speakers throughout the 2010 RDS conference (key meeting notes 2010).

Have no RDS staff

To take the logic above to the limit, removal of all RDS staff removes the risk of lack of RDS training completely. It might be the case that, in the very long term, the decision is taken away from RBFRS should, for example, the Working Time Directive 'opt out' be removed. The Authority should note that, according to the calculations of required training time, it is impossible for RDS firefighters to maintain their competence across the full range of firefighter activities. Therefore, to account for the Health, Safety and Welfare of employees, consideration must be given to the removal of all RDS staff.

Re-skill RDS to reduce training need.

A possible way to resolve the dilemma of 'not enough time' might be to concentrate on the core skills and re-skill RDS staff to only deal with particular incident types. A review of the incident data (appendix S) shows that all stations attend broadly similar incident types, it is just the number they attend that differentiates the risk level. For example, all RDS stations attended Road Traffic Collision incidents and Station 14 (Ascot RDS) attended one of only five 'industrial accident' incidents. Therefore, to try and concentrate on particular incident types (and therefore equipment) would not only be against the principles of IPDS; Fire Service Circular 47/2007 (FRS circular 47/2007) and the associated research report (CLG 2007); the National Framework and the then Fire Ministers statement (Key Meeting Notes 2009, page 6) but it would also potentially leave RDS staff without appropriate equipment and skills to deal with an incident.

Never-the-less, for the Health & Safety of the RDS staff and to maintain some level of service delivery to a local community it may be necessary to so re-skill (Key Meeting Notes 2010, H&S section). Such a change would require very robust management of mobilisation and assurance that such management could be dealt with by any future Control Centre (be it Regional Control Centres or otherwise.) Also, any re-skill would necessitate the consideration of change to the National Occupational Standards (NOS) and change to the emphasis over the last ten years or more, with the moves towards RDS and WDS parity (including pay parity), as supported by the Employment Tribunal ruling (Employment Tribunal 2001, paragraphs 57 and 70).

In any event, before steps such as removing equipment, disallowing RDS to certain incident types and re-skilling could be recommended, it is necessary to consider if this is achievable.

A further analysis of the maintenance of competence modules was conducted with training centre staff and calculated that a 'basic firefighter, able to deal with dwelling fires and little else, requires 150 hours per year training. If RTC incidents are included, it would take 180 hours per year in training (appendix H). Also included in appendix H is the calculated adjustment following the use of the analytical tool and comparison with Oxfordshire FRS modules.

Whilst noting the issues and problems above, this does give a potential target to achieve for training time per individual per year. But it can be seen that any idea of RDS staff being involved in specialist vehicles or only being trained for the risks on their station ground is negated, as this training time covers only the most basic skills.

It will require negotiation with the representative bodies for any proposed re-skill. It is also not known if RDS staff will accept the idea that effectively creates (or re-creates) two different types of firefighter leading to a difference in skill sets. It should be noted that it is possible that a new NVQ could be established at level two, of the NVQ system, that would in effect create this second level. But it is also possible that WDS firefighters would take RBFRS to an Employment Tribunal (ET) on the grounds that RDS staff are paid the same but are not doing the same job – in a complete reversal of the earlier ET.

Therefore, it is thought here that, whilst it may be possible, it is not desirable (in the short term) to backtrack on the RDS/WDS parity issue and any such proposals would need to be aware of any national approach and national changes that are not within the scope of the project (although influence could be brought to bear).

Summary table of learning & development options

Option	Advantages	Disadvantages
1. Do Nothing	No cost or extra resource requirement. Easily understood. No change required.	Doesn't solve the problem/s. All risks, including that of litigation, rise. Unsafe. De-motivation of RDS staff.
2. Better Use of Current Available Training Time	Limited additional cost. More effective and efficient. Potential to double training time. Increased competence making safer, reducing risk. Improves morale.	Reduces hours on 'other activity' eg equipment maintenance and additional resource required to cover this activity in a different way.
3. Spread Training over time.	Limited costs. Easy to implement. Ensures everything covered – eventually.	Does not ensure competence. Spread may be as much as 8 years. Creates difference between RDS and WDS.
4. Increase Training Time	Message of investment, improves morale. Reduces risk.	Increases cost. Impacts on family life – increases commitment. Doubt over acceptance from staff. Doubt over achievability.
5. WDS Manager Support	Frees training time for RDS managers. Improves direct support and communication. Improves management systems on RDS station. Assists training.	Costs. Lone working. Works around 2 days 2 nights. Lack of flexibility to deal with full range of issues. Only one station at a time.
6. RDS Support Teams	Frees training time for RDS managers. Improves direct support and communication. Improves management systems on RDS stations. Improved training and competence. Reduces risk. Ability to deliver CS and other community partnership work. Flexible, multi-role. Improved Ops availability and strategic fire cover. Enhanced recruitment and primary employer liaison. Potential to be part of phased, long term process. Possible career progression for staff.	Day only. Salary Costs (dependent upon structure). Other costs (eg vehicles) Potential conflict on clarity of line management. New system and associated cultural change required. No consistent workplace for RSOs. Potential to lose RDS staff to become RSOs. Not a complete solution for lack of training time to maintain competence.

Option	Advantages	Disadvantages
	Possible further increase in dual contract staff, enhancing transferability.	
7. Re-skill RDS to reduce training need.	Minimal cost. Reduces risk to individual (with proviso that individual will not arrive at an incident that they are not trained for.) Easily implemented. Recruitment improves on change to selection systems.	RDS/WDS operational difference. Removal of transferability. Increased organisational risk. 'Second class' FF - morale declines. Complicates strategic emergency cover plans. What not to do? What equipment to take away? Not in line with role maps and national 'push'. Possible equal pay issues. Legal challenge. Rep Body challenge.
8. Reduce number of RDS	Reduces risk and competence issues. Reduces cost (dependent upon solutions). Reduces management time. Greater certainty for fire cover. Reduces organisational risk (dependent upon national change/s).	Cost (dependent upon solutions) RDS station closures. Possible reduction in cover, especially night (dependent upon solutions).
9. Have no RDS staff	Reduces cost (dependent upon solutions). Removes competence risk. Removes lack of availability risk. Removes RDS management time. Greater certainty for fire cover. Removes organisational risk (dependent upon national change/s).	Cost (dependent upon solutions) RDS station closures. Possible reduction in cover, especially night (dependent upon solutions). Significant political and legal challenge.

Table 3 – Summary table of Learning & Development options

Learning & Development Recommendations

Of the nine options considered above the following process is recommended, on the basis of current information and learning & development systems. It must be recognised that, should fundamental changes come about at the national level (for example should a level 2 NVQ become available or there be a nationally recognised training timetable for RDS) then these recommendations must be reviewed. Until such time, these report recommendations will reflect the national stance as far as practicable. Essentially, for Learning & Development, this means a 'firefighter is a firefighter', able to perform the full function of a firefighter regardless of duty system.

Learning & Development Recommendation 1

Firstly, it is clear that it is impossible for RDS staff to maintain competence in the time currently used for training. Therefore, RBFRS must immediately improve the time

efficiency for training by implementing better use of current training time, which has the potential to double effective training time.

Learning & Development Recommendation 2

Extra training time must be funded and introduced, based upon this research and the outcomes of an internal RDS survey (considered in detail below). A national survey is due for publication and any suggested changes from the internal survey and elsewhere will need to work alongside this, giving added complexity over the delivery of any changes.

Learning & Development Recommendation 3

Whatever the outcomes of the various surveys, it is clear that RBFRS must enhance the clarity of any extra paid time (Station Commanders Handbook 2010, page 16) so that training time is used for training and not for maintenance, administration, 7(2)d visits, senior officer visits etc. The budget allows for at least 40 hours per month per station but this could be re-distributed, should RDS support teams be implemented, and any savings re-invested to fund additional training time.

Learning & Development Recommendation 4

RDS support teams should be implemented. This will support the enhancements recommended above and go much further in supporting the RDS across RBFRS. Finance permitting, the time scale is for immediate work to commence with a view to having the first Retained Support Officers (RSOs) and any Retained Support Unit (RSU) in place in 2011. In addition to the immediate support given to RDS this option can be seen as a phased approach to the reduction in reliance on RDS staff, thereby reducing risks across the organisation.

Ultimately, RBFRS cannot guarantee the maintenance of competence of RDS staff and, despite the obvious national issues, this means RBFRS is obliged to consider the options to reduce and/or remove the RDS duty system over the very long term. In the medium term re-skilling could be considered[7]. However, until the above recommendations are implemented and reviewed for impact, it is recommended here that, in the short term, the re-skill option be avoided as, although it is believed it could be managed, it is likely to be complex and retrograde.

Having considered two possible societal issues that could, effectively, lead to the RDS system being unviable (Maintenance of Competence and Legislation) and given recommendations it is now necessary to analyse how RBFRS can and should deliver the service into the future and to what extent the RDS will play a part in that delivery. To do this it is necessary to conduct a number of risk assessments.

[7] As this research report was about to be published, informal discussion with an Officer from Derbyshire FRS took place (at the 2010 RDS conference) and they are in the process of ‘re-skilling’ – a project that should be kept under review by RBFRS.

Risk Assessments

Aside from the Learning & Development findings, there are a number of other risks associated with RDS that must be considered. The first of these is to consider what risk there is to the public on each of the current RDS station grounds. This can be seen as the 'primary risk' to the community and is the first of a two step process of risk assessment for each station ground. The second step is to risk assess how each of the RDS units is managing the risk for the fire Authority, how well it is delivering the service on behalf of the Authority. This can then be seen as the 'secondary' or organisational risk.

Part of the risk assessment includes an examination of the current station profiles and to model and map possible future scenarios.

Other risks to consider are those related to tolerability of risk (what level of risk would be deemed tolerable by society) and the risk related to resilience (how well the service can continue to be delivered in exceptional circumstances).

The various risk analyses, combined with the L&D findings, may then lead to overall conclusions for the risk posed and viability of the RDS.

RDS Station Ground Risk Assessments

Introduction

Through the latter part of 2009 the IRMP RDS project team agreed a risk assessment methodology and risk factor weighting that indicated the relative risk rating of each RDS station ground. The risks to be considered first here are 'primary' risks. That is, they are a measurable risk to the public when they are within that particular station ground. Many factors were considered and some were rejected at this stage. For example, for 'future development' it was agreed that this would be important for any proposals, but not for current risk measurement. For each factor the methodology was decided and the overall methodology was validated by a contracted external company, Occupational Research in Health (ORH) Ltd (ORH 2009). ORH noted that the weighting was a matter of professional judgement and hence the RDS project team agreed the weighting at the meeting of 16 December 2009 (IRMP RDS 2009/10, minutes 16/12/2009).

The team agreed the following as the key components of station ground risk.

Station ground risk assessments

Incidents on Station Ground (weighting = 30%)

Using historical incident data for 2006/07 – 2008/09, the number of each incident type on each RDS station ground was multiplied by the public risk of that incident type (appendix S). The public risk within RBFRS for each incident type has been determined over years for the IRMP process. Then the incident type risks were summed for each station. For those RDS units on WDS stations (stations 4, 16 and 19) the algorithm was included as these RDS units give resilience to these larger station grounds. However, it is obvious that these stations will have greater scores, so this has been balanced to some extent by giving a zero score to these three stations in the category for 'number of postcodes not covered by another station in 10 minutes'.

Building Stock on Station Ground (weighting = 4%)

Using the National Land Property Gazetteer (NLPG) information for 2008/09 it is possible to give the total building stock on each station ground.

Central Risk Register (CRR) Risks on Station Ground (weighting = 6%)

RBFRS has developed a Central Risk Register identifying high risk premises. Some of these are developed further (because of the higher level of risk) into full tactical plans. The sum here was a score of ‘one’ for each premises on the RDS station ground in the CRR and ‘ten’ for each tactical plan.

Number of postcodes not covered by the RDS station within 8 minutes (weighting = 7%)

RBFRS has an optimum response standard of 8 minutes for the first attendance to any dwelling fire and, to give some weight to those properties that are more remote, the number of postcodes in each RDS station ground that could not be reached within eight minutes was totalled.

Number of postcodes of RDS station ground not covered by another station in 10 minutes (weighting = 10%)

Similarly, the risk is greater if properties are more than ten minutes from the next nearest station, especially in the event that the particular RDS station is not available. RBFRS has a standard response of 10 minutes for the first appliance to dwelling fires and, as an indicator of risk, the number of postcodes on each RDS station ground outside this time was totalled. As noted above, for those three stations that are WDS with a RDS pump, a score of zero was entered as, in the normal course of events, the WDS pump would always attend before the RDS unit on their own station ground.

Mosaic dwelling fire risk data (weighting = 18%)

Mosaic is an analytical system that is extensively used in marketing to categorise socio-economic groups. RBFRS has noted that the best correlation of dwelling fire risk with Mosaic data (Mosaic 2009) is with Mosaic groups I and J (Department Meeting Notes 2009, page 4). For each RDS station ground the number of postcodes within these Mosaic groups was totalled.

Mosaic deliberate fire risk data (weighting = 15%)

RBFRS has also noted (Department Meeting Notes 2009, page 4) the best Mosaic data correlation for deliberate fires is with Mosaic Groups D and H. So, for each RDS station ground the number of postcodes with these Mosaic data groups were totalled.

Fire Safety (Protection) life risks inspected (weighting = 10%)

The number of formal fire risk assessments/inspections in 2008 completed by RBFRS on each RDS station ground is deemed to give a further indication of building and life risk in a particular area.

Station ground risk assessment result

The step one ‘primary’ risk assessment is at Appendix T and the ‘actual’ scores for each risk above are given.

However, perhaps more importantly, the weighted and relative risk score of each station ground is also given and leads to the following relative risk rating:

	Highest risk									Lowest risk
Station	4	16	19	14	15	11	5	9	7	6	12
Relative Risk (%)	25.90	19.55	14.15	7.58	7.42	5.85	5.06	4.50	4.43	3.52	2.04

Table 4 – Summary table of RDS station ground risk

The above table indicates that, of the 100% of RDS station ground 'primary' community risks in Berkshire, 25.90% is at station 4 down to 2.04% of the risk at station 12.

It should be noted that earlier drafts of this report gave Station 9, Wargrave, a score of 2.5 (with minor adjustments to other stations in compensation). This difficulty arose due to the complication of Sonning Fire Station being closed over the New Year 2008/09 and the amalgamation of its station ground into surrounding stations. The current, rather dated, mobilising system in RBFRS Control is difficult to adjust and it had been intended that the new Regional Control Centre (RCC) would remove this issue. Therefore a second pass of the RBFRS data was required on the basis of the station ground map derived at appendix U, leading to the revised scores given above.

Organisational Risk Assessments for RDS stations

Introduction

The IRMP RDS team agreed the methodology and weighting for the step 2 'organisational' (or 'secondary') risk assessments and ascertained the key parameters as being availability, possibility of recruitment, second pump importance and staff retention. It can be seen that these risks are not directly related to the risk to the public on the station ground but are, rather, related to RBFRS organisational factors. For each of these parameters, where possible, a number of data sources were analysed and, in the same way as for the primary risks, a weighting factor was allocated based upon the judgement of the IRMP RDS team (IRMP RDS 2009/10, minutes 17/2/10).

The data for the step two, secondary, organisational risk assessments are at appendix V where, again, it can be seen that there is an 'actual score' and a relative risk assessment. Each of these organisational relative risks is individually considered against the primary relative risks in the graphs below. The 'x' axis of each graph gives the relative total station ground, or primary, community risk. The 'y' axis gives the relative secondary, or organisational, risk.

The team agreed the following as the key components of organisational risk.

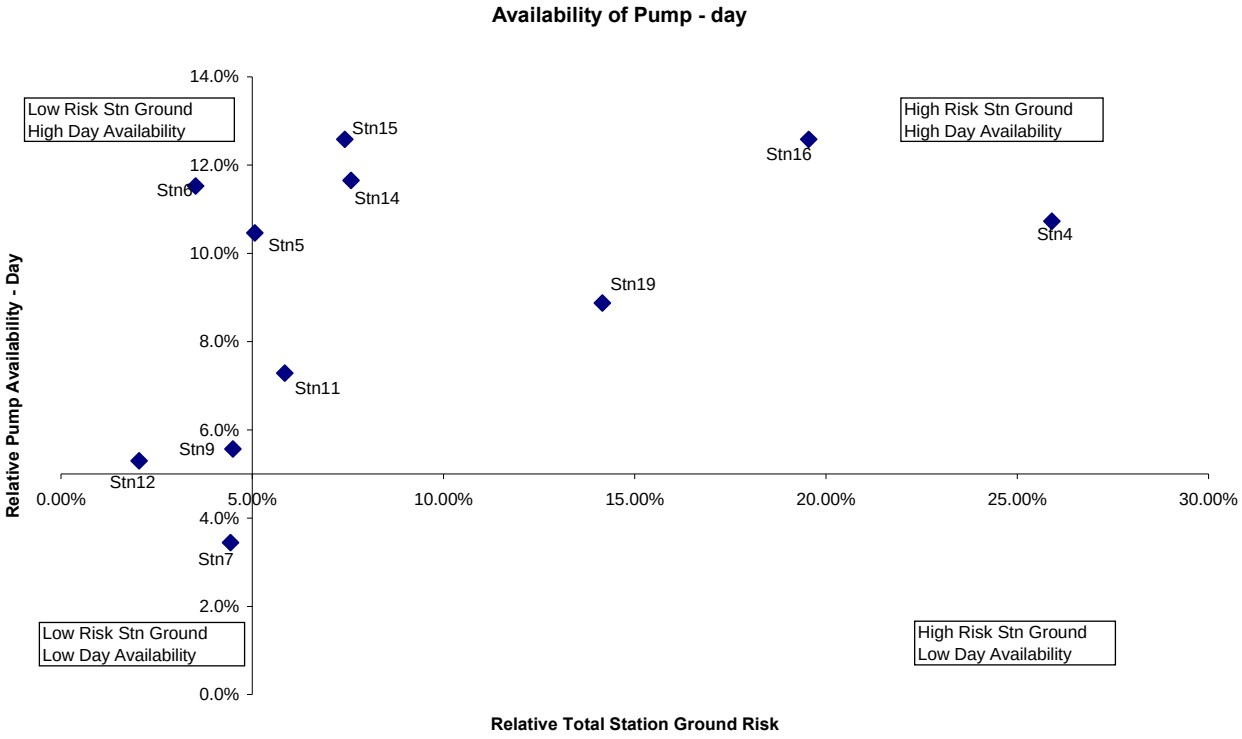
Availability

One driver for this research was a continuing problem with maintaining RDS availability. For example, in 2007/08 the data shows that the unavailability of RDS stations ranged from 4% to 49% across the whole year. This is known to be significantly worse during the day (appendix B, annex B). The IRMP RDS project team noted that there were a number of recording systems for availability and 'reflected on the need for FireWatch to be the only source of availability data' (IRMP 2009/10, minutes 16/12/09). Central recording of the reasons for unavailability is essential and would show day by day whether a particular RDS station is generally short of crew numbers or, more specifically, somebody qualified to drive or wear BA wearer or an Incident Commander. This management of RDS crewing would also identify the best Watch for dual contract staff, when they work at their WDS station (IRMP 2009/10, minutes 16/12/09). The records for 2009 show that 22 staff transferred from RDS to WDS but that 8 of these then became dual contract (HR 2010a).

To ascertain the level of risk associated with unavailability, five measurements were identified that give an indication of relative RDS station availability. These are night and day availability; contract availability; crewing success rate and turnout time success rate. (An analysis of weekend cover showed a slight improvement during the day but the weekend data is factored into the relevant 'day' and 'night' availability data.)

Availability during the day (weighting = 12%)

Over time ORH has reported on RDS station unavailability (ORH 2009a, appendix F1a) and an analysis of the data shows that a 'worst case' 12 hour day unavailability is from 06.00 to 18.00hrs. Therefore these were the times used to measure the day time availability.



Graph 5 – XY graph of relative RDS pump day availability

To see what this actually means 'on the ground' and to support the above data, random day sampling was conducted and gave the following results:

Date/Time	RDS Pumps unavailable	Number of RDS pumps NOT available
3/12/9. 16.00	04P2, 06P1, 07P1, 09P1, 12P1, 14P1	6
7/12/9. 09.40	04P2, 09P1, 12P1, 14P1	4
10/12/9. 09.50	04P2, 06P1, 07P1, 11P1, 12P1, 19P2	6
14/12/9. 07.40	09P1, 12P1, 14P1, 16P2, 19P2	5
14/12/9. 10.30	04P2, 07P1, 09P1, 12P1, 14P1, 16P2, 19P2	7
16/12/9. 12.00	09P1, 12P1, 14P1, 15P1, 19P2	5
21/12/9. 11.51	04P2, 06P1, 07P1, 09P1, 12P1, 16P2, 19P2	7
4/1/10. 10.21	07P1, 12P1, 16P2	3
18/1/10. 12.47	04P2, 06P1, 07P1, 09P1, 12P1, 14P1, 19P2	7
21/1/10. 15.00	04P2, 06P1, 07P1, 09P1, 12P1, 14P1	6

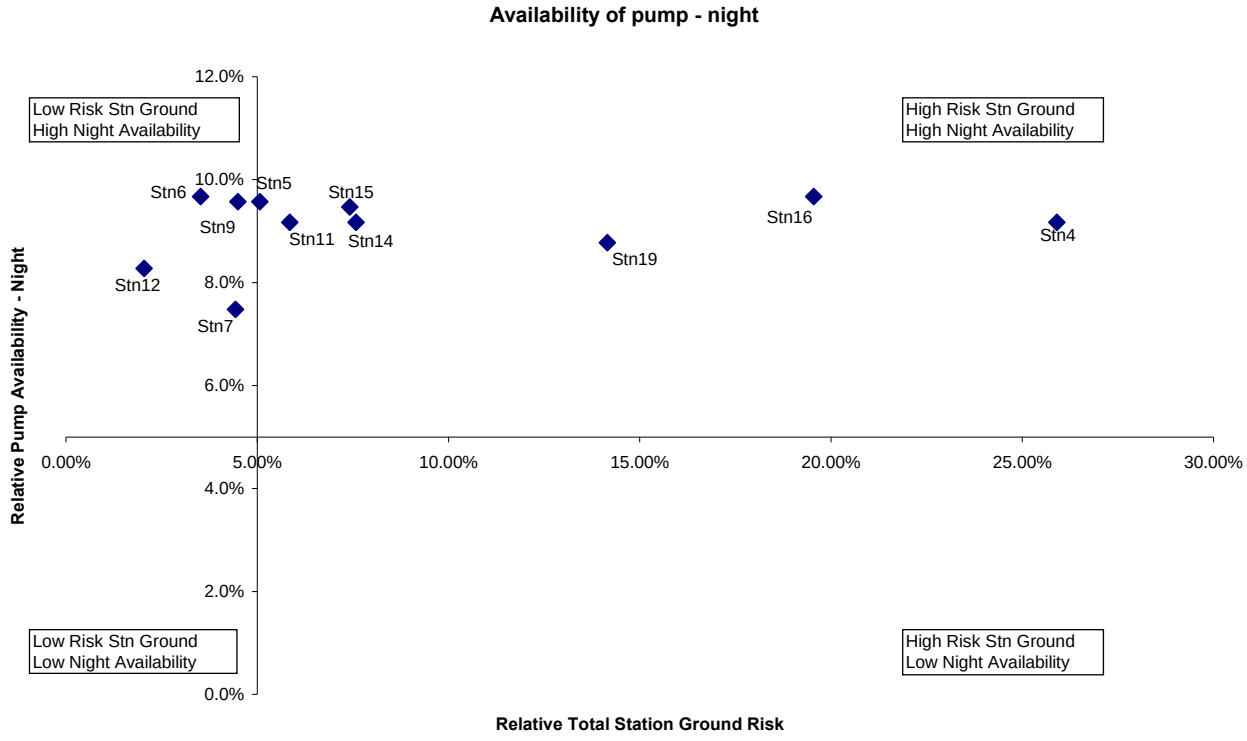
25/1/10. 17.45	07P1, 09P1, 12P1, 14P1	4
1/2/10. 14.47	07P1, 09P1, 12P1, 14P1, 16P2, 19P2	6
9/2/10. 07.35	04P2, 06P1, 07P1, 09P1, 12P1, 14P1, 16P2	7
23/2/10. 13.43	04P2, 07P1, 09P1, 12P1, 14P1, 16P2, 19P2	7
25/2/10. 13.13	04P2, 07P1, 09P1, 11P1, 12P1, 19P2	6
1/3/10. 07.32	04P2, 06P1, 07P1, 09P1, 12P1, 19P2	6
26/3/10. 15.10	07P1, 09P1, 12P1, 14P1, 16P2, 19P2	6
	Average	**5.8**

Table 5 – Random day sampling of RDS unavailability

So, during any day and from this sampling, it is possible to predict that on average there will be approximately 6 RDS pumps (out of 11) NOT available for incidents.

Availability during the night (weighting = 8%)

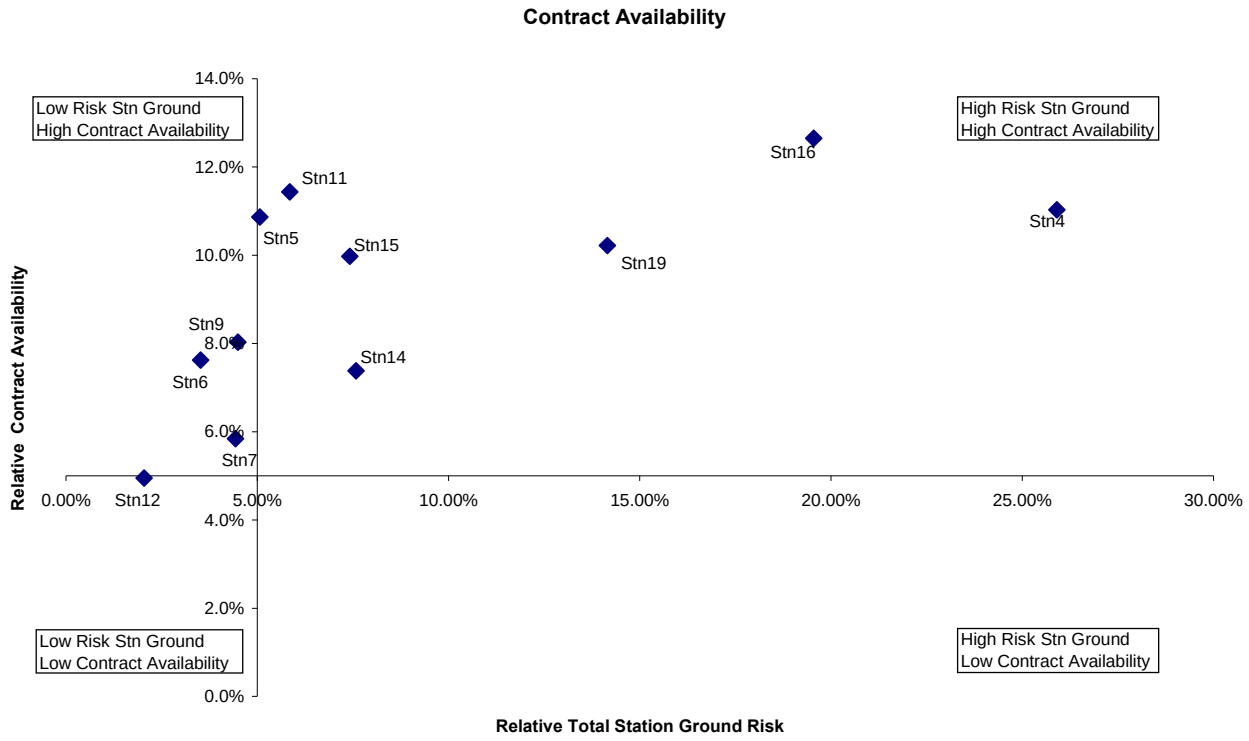
In the same way, the night time availability time is therefore 18.00 – 06.00hrs and the graph below gives the relative night availability against the relative station ground risk. It can be seen that this is a 'flatter' graph, reflecting the fact that RDS stations have similar night time availabilities (between, relatively, about 7.5% and 10%).



Graph 6 – XY graph of relative RDS pump night availability

Contract Availability (weighting = 10%)

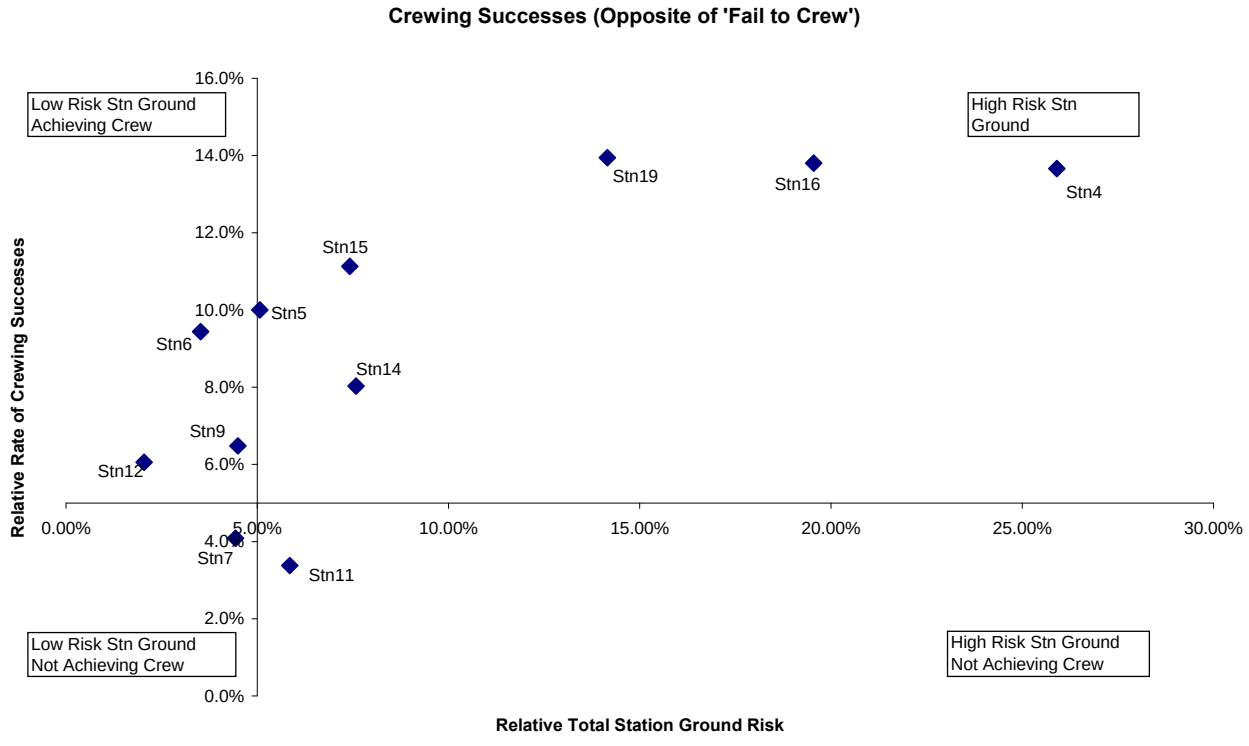
The contract of each RDS member was accessed for the contract hours per week given. (The project team noted that, during 2009/10, Cookham could no longer crew due to a lack of staff. Remaining staff then transferred to Maidenhead but, to enable fair comparison, they were considered to still be at Cookham.) A calculation of the minimum time required to cover the whole week was made (5 staff x 168 hours in a week = 840 hours) and the contract hours were calculated as a percentage of this figure. The relative percentages are graphed below.



Graph 7 – XY graph of relative RDS crew contract availability

Crewing Success Rate (weighting = 10%)

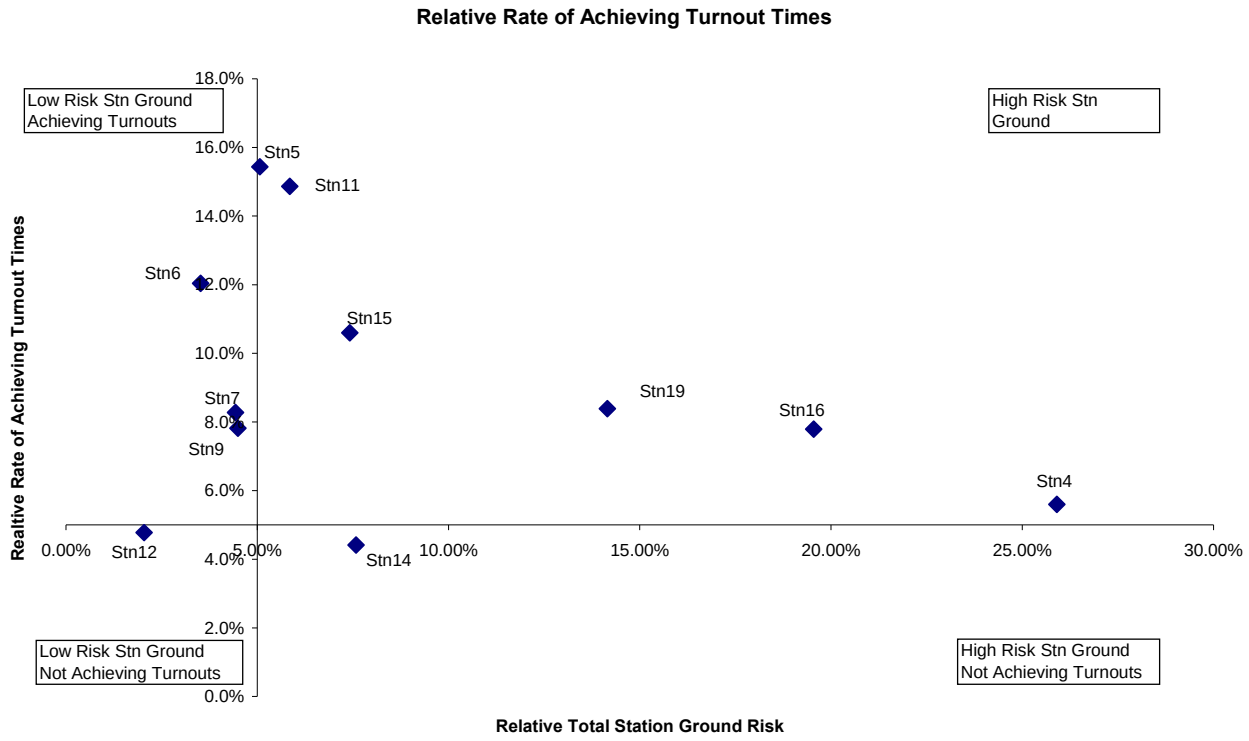
RBFRS records the number of 'failures to crew' in the Incident Reporting System (IRS) (Department Meeting Notes 2009, page 4). It should be noted that, to give parity, data was taken for 2008/09 – from before the time Cookham staff moved to Maidenhead. To make arithmetical sense it was necessary to inverse this data to 'crewing successes' and these are shown below.



Graph 8 – XY graph of relative RDS crewing successes

Turn Out Time Success Rate (weighting = 10%)

The PBViews (RBFRS data recording and performance management system) data records were examined with the Information Systems Manager on 7 December 2009 and the data year 2008/09 was used to gather the data graphed below.



Graph 9 – XY graph of relative RDS turnout time successes

Possibility of recruitment

It has been noted above that the selection systems for RDS staff are the same as for WDS and, also, that RBFRS has not achieved the full complement of RDS staff over years. An example of the selection testing timings is at appendix W and shows how extensive the testing is.

The numbers of people applying and how and when they drop out of the selection process is indicated in the following table (HR 2010).

Training Start Dates	**Aug/Nov07**	**Apr-08**	**Aug-08**	**Apr-09**	**Aug-09**	**Apr-10**
Requested an application form	83	49	60	104	65	88
Application form **NOT** returned	55	29	35	58	43	50
Rejected at application	12	3	6	24	6	9
Rejected at written	8	10	11	5	6	18
Rejected at physical	4		2	9	4	5
Rejected at interview		3	3			1
Rejected at medical	1	1		1	1	3
Appointed	**3**	**3**	**3**	**7**	**5**	**None - but 2 carried over to next programme.**

Table 6 – Application to RDS positions and numbers removed by selection stages.

The One Place survey notes that RBFRS has difficulty recruiting RDS firefighters (One Place Survey 2009, page 2). This is an essential feature of the work here as however important or risky a particular station ground is, it will be impossible to staff that particular appliance if there is nobody to recruit that satisfies the stringent entry criteria set down in the National Firefighter Selection Tests (CLG 2009).

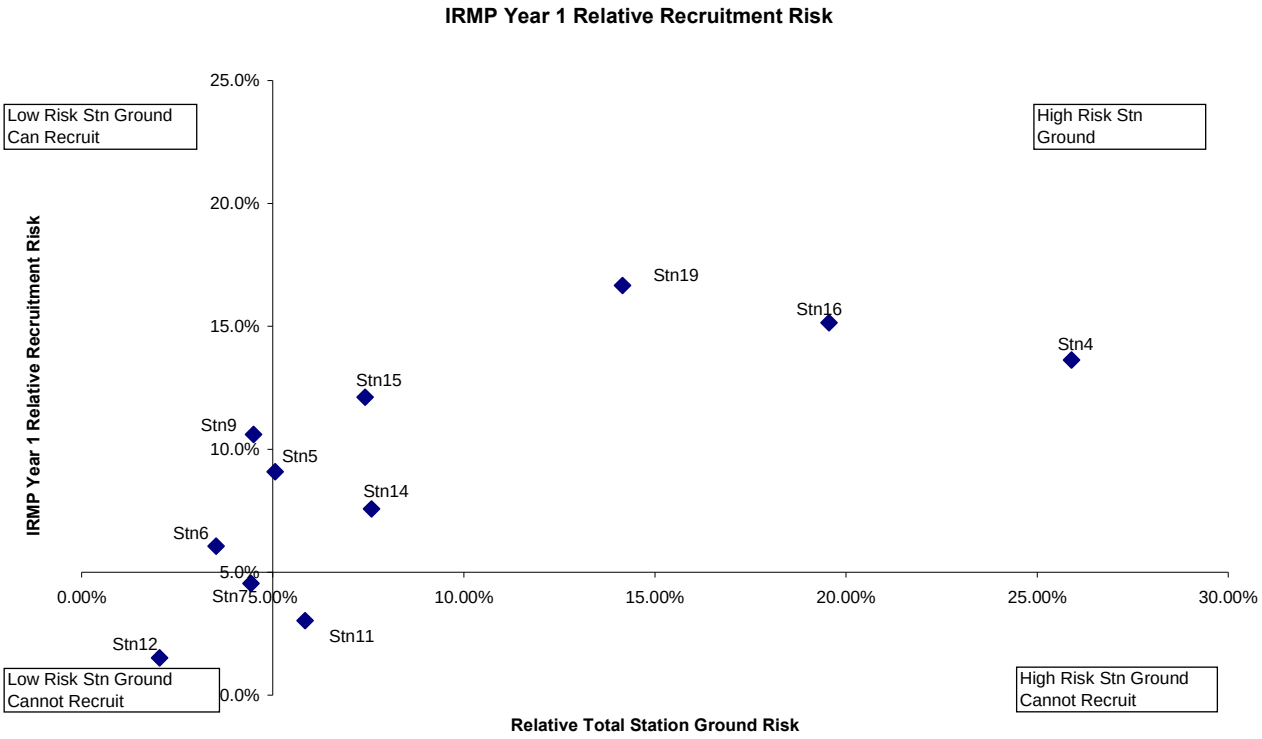
Two sources of data were considered. The first was the IRMP year one project that reported in early 2006 and used the 2001 census data to ascertain the likelihood or otherwise of recruiting in a particular area. The second data set uses the Mosaic data of 2009 and correlates existing RDS firefighters with the possibility of recruitment.

IRMP Year 1 Result (weighting = 5%)

A key conclusion from the IRMP year 1 report is included here:

> "It can no longer be assumed that working harder in the area of recruitment, through advertising and leaflet drops, will be sufficient to attract applicants for the Retained Duty System. The analysis of census data has shown that within the five-minute catchment zone for each station, relatively small numbers of people of the right age exist. Now is the time to consider other ways of attracting people to the RDS, for example extending the catchment area of each station or look at new ways to provide cover in these areas." (Strategic Plan 2009).

It should be noted that the time allowed (in 2006) to attend the station was 5 minutes but, since the time of the IRMP Year 1 report, the standards of cover work generated response standards that necessitated the reduction (rather than extension) of the catchment area to 3 minutes. And even at 5 minutes, at that time the conclusion was that there would be great difficulty in recruiting at adequate levels. So it is perhaps not surprising to find that this has indeed occurred. The current IRMP RDS team analysed the IRMP Year 1 report and graded each RDS station (based upon the IRMP findings) from most to least likely to recruit and this is shown graphically below.



Graph 10 – XY graph of relative RDS recruitment potential based on IRMP year 1 data

At the conclusion of the IRMP year one project a report went to the Directorate Strategy Group (DSG 2006) and the recommendations were endorsed. It was a key recommendation that the RDS required a Retained Liaison Officer (RLO) who would then be able to become the focus of work and change within the RDS. Unfortunately, despite a number of attempts, no individual actually started work as a RLO within RBFRS. Therefore the other recommendations fell or, at best, were implemented piecemeal. These include:

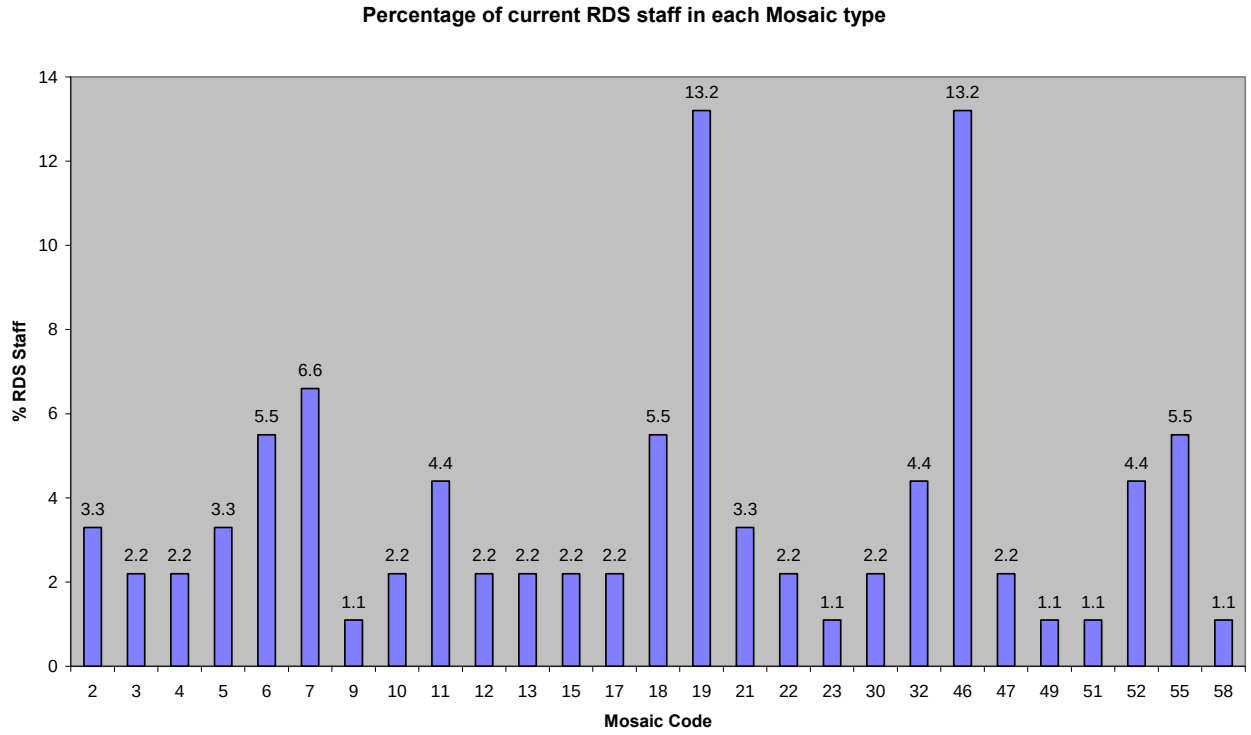
Recommendation:	Current RDS Project Notes
Incorporate into the Council Tax leaflets a recruitment page for RDS personnel.	It is believed that this was done and further recruitment work has been ongoing. Recently a national toolkit was published. Also this was included in the IRMP published documentation.
Service Delivery must review and set establishment levels for individual stations following the introduction of the 120-hour week	Establishment levels are set at 13 RDS staff on each station.
When re-building/refurbishing stations, build in “office space” and locate specialist employees willing to undertake RDS duties to work from the fire station thus making them available to respond to incidents	Any new build should be looked at in this way but there has been no ‘new RDS build’ since IRMP Year 1 review.
A year long pilot remuneration package scheme that improves recruitment, retention and availability should be introduced. Because of the additional costs this is likely to incur and the difficulty of using another Services scheme, a working group should be established to develop this.	Currently under review here. Recommendations to progress via RDS support.
Service Delivery should consider extending the turn out times for all retained stations based on identified risk on the station ground and year 3 IRMP Standards of Fire Cover. This should include analysis of the current turn out arrangements and recording mechanisms employed.	Current review indicates limited value in this approach.
The year 3 Standards of Fire Cover IRMP team should look at the relocation of fire stations to achieve the best uses of existing resources and to future proof the RBFRS to take account of planned growth in Berkshire. In considering the locations of fire station account should be taken of the likely availability of personnel to recruit.	This already considered done - as part of normal IRMP process and, specifically, the current 5 year plan proposals. Mapping and modelling within this review takes this further.

Table7 – IRMP Year 1 RDS Recruitment & Retention project key recommendations.

Therefore, although it could be interpreted that there was a lack of resolve to implement the RDS IRMP year 1 recommendations, efforts were made. However, this may be an early indication of a lack of ‘corporate support’ to the RDS.

Mosaic data and Current RDS Demographic (weighting = 15%)

To bring the possibility of recruitment up to date it was decided to use Mosaic data that has now become embedded within RBFRS systems. To try and arrive at a relative weighting of RDS station (from most likely to least likely to recruit) it was first necessary to ascertain which Mosaic 'types' of people would be likely to be a firefighter. To answer this it was decided that the current RDS staff postcodes would be used, on the grounds that the type of person already an RDS firefighter would be the type most likely to be able to become a firefighter. The results are given below.

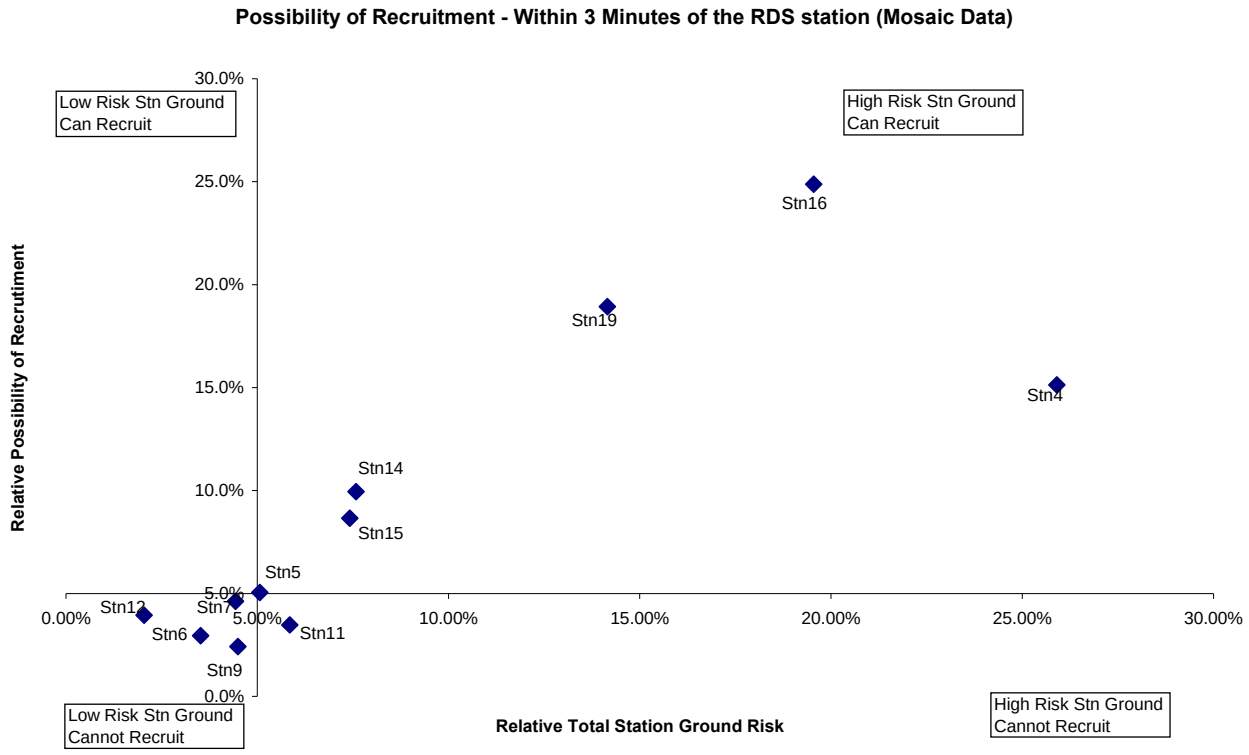


Graph 11 – graph showing Mosaic types of current RDS staff

From the graph above it can be seen that, for example, there are no current RDS staff in Mosaic type 1 ('A01 Global Connections') but that Mosaic types 19 and 46 ('C19 Original Suburbs' and 'H46 White Van Culture' respectively) are well represented at 13.2%. Appendix X lists the Mosaic groups and types of households. As there are 61 Mosaic types it can be seen that, although there is a fair 'spread' the method here does indicate a limitation to the recruitment pool by type of person but, also, a possible method of identifying the targeting of recruitment material.

Next the postcodes (and number of households in each postcode) for each Mosaic type were ascertained at up to 3 minutes, at 3 – 4 minutes and at 4 – 5 minutes away from each RDS station. This data was then correlated in percentage terms against the current RDS staff type postcodes to give the number of households that may offer the opportunity to recruit an RDS firefighter, living a given time away from the RDS station. Therefore this also gives the relative likelihood of recruitment at each RDS station at 3, 3 – 4 and 4 – 5 minutes away from each station.

The 3 minute data (the current time allowed to live away from an RDS station) gives the following:



Graph 12 – XY graph of relative RDS recruitment potential based on Mosaic data (up to 3 minutes)

The graph gives the relative likelihood of recruitment at 3 minutes from each RDS station, based upon the number of households around each station as a total percentage of each Mosaic type that reflects the current RDS staff demographic. This was a complex data exercise and cannot be exact but the results broadly correlate with the IRMP year 1 data and therefore strengthen the robustness of the outcomes. However, it can also be seen that the situation has, if anything, worsened for the 'stand-alone' RDS stations relative to the WDS/RDS stations. This is what might be expected in less urban areas and as the catchment time is now reduced to 3 minutes.

So a number of stations, as is known, are having difficulty recruiting. To adequately recruit it will be necessary to know at least two things:

1. Are there too low a number of households to expect the possibility of recruitment levels to be maintained?
2. How far away from the station (in terms of time) would the recruitment catchment 'pool' need to be expanded to expect any possibility of maintaining crewing (and, additionally, what impact would this have on service delivery)?

The IRMP year 1 report suggested that expanding the catchment area may offer a solution to recruitment issues. Any discussion on whether or not to expand the time away from any RDS station that RBFRS will recruit must be predicated on the fact that RBFRS has a set of response standards (IRMP 2010, pages 12 – 13) that are very unlikely to be met if the time allowed is extended beyond 3 minutes. However, it may be necessary in the more remote areas to be more flexible but any change must be logical and robust.

The first step was to agree that it would make no sense to allow the expansion to be beyond the time that the next nearest WDS station could arrive at the front door of the RDS station concerned. These times are given in Table 8:

RDS station	Nearest WDS station	Travel Time Minutes and seconds
5	4	16:02
6	4	26:28
7	3	8:35
9	2	11:10
11	20	16:27
12	19	5:55
14	16	7:42
15	16	8:22

Table 8 –table showing travel times to RDS stations from WDS (IT Data 2009)

It should be noted that for stations 4, 16 and 19, as they have a WDS pump, the time would be zero, so not included here.

To take the discussion further, it would initially seem reasonable to set a time allowed for RDS staff to attend their station that was half the time from the nearest WDS station. In this way a RDS crew member would be turning out from their own station as the nearest WDS appliance was within striking distance of the RDS station (figure 3). The only real exception here is station 6 Lambourn, for which special consideration may be needed.

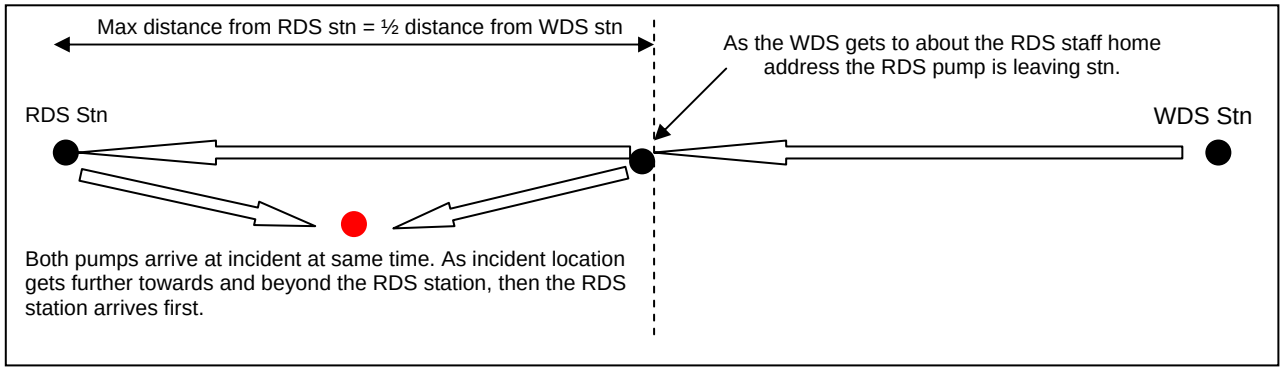


Figure 3 – pictorial representation of methodology for determining recruitment catchment pool

It is suggested here that there must be a maximum time allowed based upon the response standards and this to be 5 minutes. This is arrived at because RBFRS response standards are based upon survivability in fire and 10 minutes is the 'standard' first pump response. Allowing 2 minutes for the RDS crew member to leave their house and getting kit onto the pump, plus 5 minutes travel, leaves 3 minutes travel time to incident. This is not enough nor ideal (indeed, hardly adequate) but allows the immediate vicinity around an RDS station to be covered.

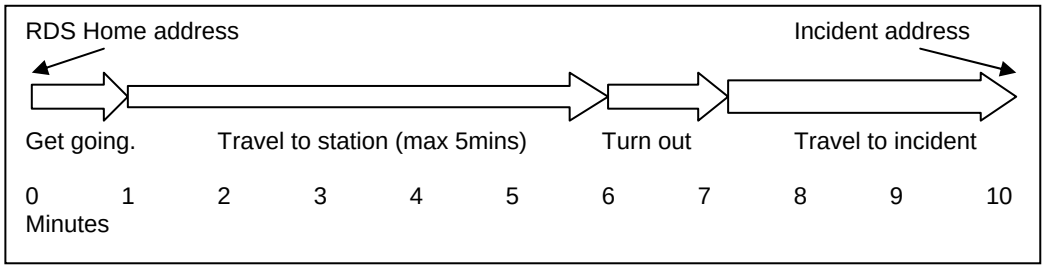


Figure 4 – pictorial representation of (10 minute) travel times to incident

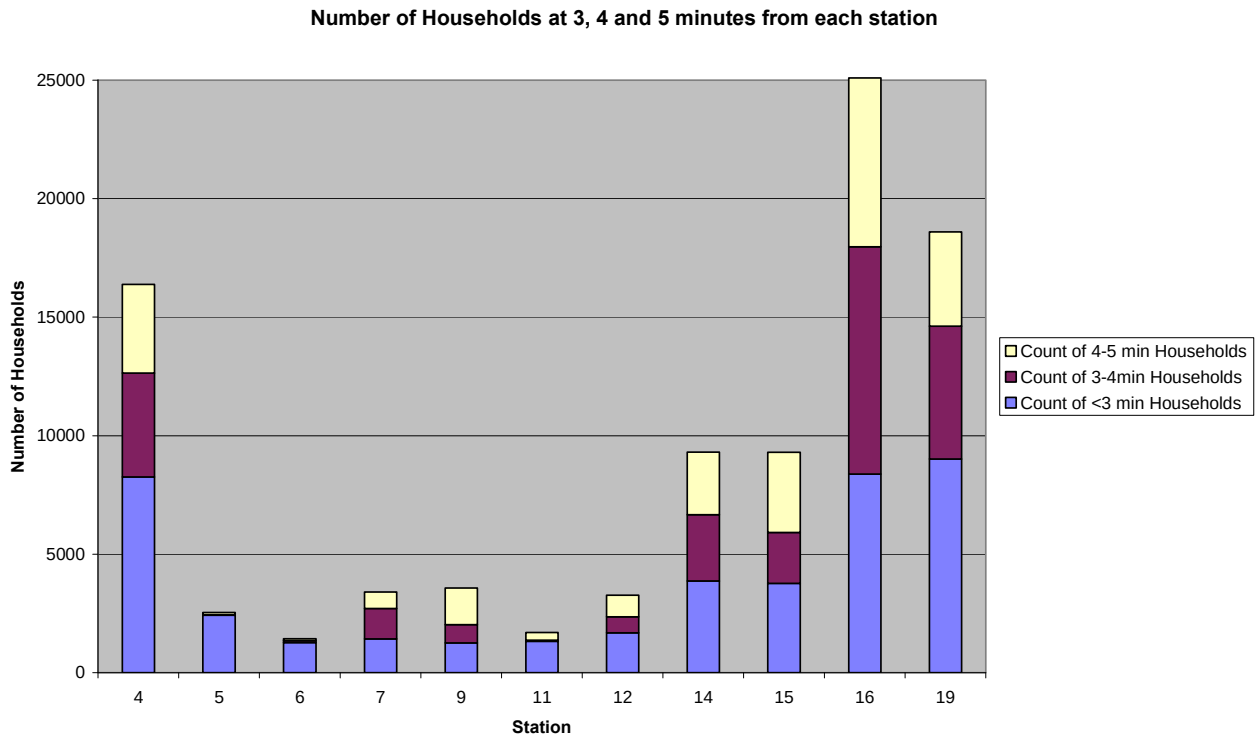
Taking all the above into account gives the following, more flexible, catchment area times:

RDS station	Nearest WDS station	Travel Time Minutes and seconds	Half travel time minus 2 minutes for 'turnout'	Final catchment time (Maximum 5 minutes applied and rounded to nearest ½ minute)
5	4	16:02	06:01	5 minutes
6	4	26:28	11:14	5 minutes
7	3	8:35	02:18	2.5 minutes
9	2	11:10	03:35	3.5 minutes
11	20	16:27	06:14	5 minutes
12	19	5:55	01:00	1 minute
14	16	7:42	01:51	2 minutes
15	16	8:22	02:11	2 minutes

Table 9 – summary table for proposed RDS recruitment catchment pools

Therefore it would make no sense to extend the 3 minute catchment for stations 7, 12, 14 and 15 as the next nearest WDS station is within reasonable distance but it might be of value to extend the catchment area for stations 5, 6, 9 and 11.

To ascertain if there would be value in extending the catchment areas the following graph indicates the total number of households around each RDS station at 3, 4 and 5 minutes.



Graph 13 –Number of households at 3, 4 and 5 minutes from RDS stations

Looking at stations 5, 6, 9 and 11 (previously identified as possibly needing extended catchment areas), it is unfortunate that it would appear to be the case that the increase in the number of households derived by extending the pool is minimal except for station 9.

The raw data for the number of households around each RDS station is tabulated here.

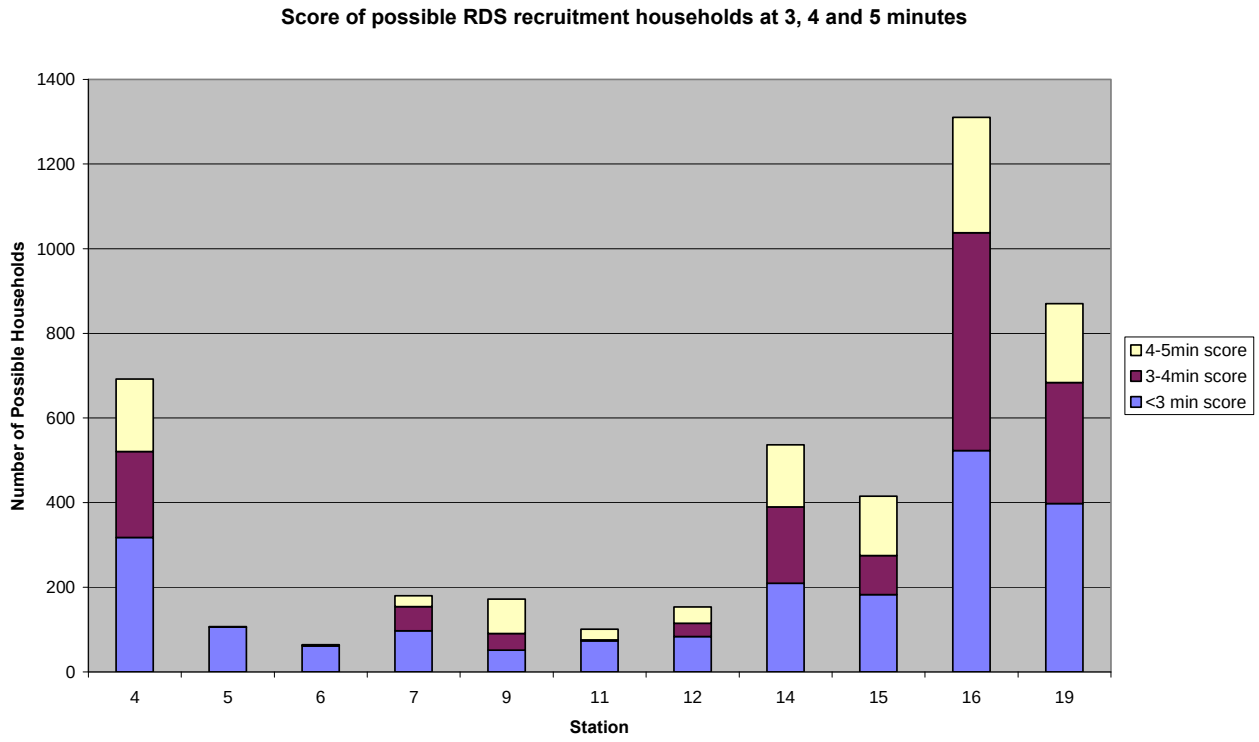
Station	Count of <3 min Households	<3 min score	Count of 3-4min Households	3-4min score	Count of 4-5 min Households	4-5min score
4	8257	317.57	4382	202.906	3743	171.501
5	2421	105.677	19	0.231	97	1.177
6	1267	61.82	85	0.935	74	1.584
7	1422	96.899	1284	57.288	690	25.663
9	1251	51.04	775	39.237	1542	81.598
11	1321	73.26	50	2.178	322	25.41
12	1679	83.468	674	31.526	917	38.401
14	3872	209.341	2793	180.356	2635	146.938
15	3767	182.281	2142	92.752	3382	140.184
16	8380	522.907	9587	514.602	7129	272.921
19	9014	397.738	5611	285.868	3978	186.296

Table 10 – Table of data for household numbers around RDS stations

To take the discussion into further detail, using the current RDS demographic it is possible to estimate the total number of households where it may be expected that recruitment could be successful.

For example, 3.3% of current RDS staff are Mosaic type 2. Within 3 minutes of station 4 there are 129 Mosaic type 2 households. Therefore, 3.3% of 129 households (4.257 households) could be expected to have a successful outcome from recruitment within 3 minutes of Station 4, Newbury.

Continuing this example for every RDS station at 3, 3 - 4 and 4 - 5 minutes it is possible to estimate the total number of potential recruitment households. The scores are in the raw data table above and shown graphically below.



Graph 14 – showing number of possible RDS recruitment households (based on Mosaic types)

Again, looking particularly at stations 5, 6, 9 and 11 it can be seen that the possible number of successful households is very small - at between about 60 and 180 for these four stations, even having expanded the catchment area.

Of course, this is not an exact science and it might be possible (and, for diversity, necessary) to attract people from different Mosaic types and/or increase the percentage of successful applicants from those types already shown to have a high percentage in current RDS staff numbers. Indeed, current RDS recruitment at station 5 Hungerford is improving (PBViews accessed on 29/3/10). Therefore it is concluded here that it might be worthwhile considering an expansion of the catchment pool for stations 5, 6, 9, and 11 if it is needed for recruitment, with an expectation that Station 9 would see the greatest benefit.

Worryingly, it is known that all RDS stations do have difficulty recruiting and this should not be expected in all areas when looking at the numbers of households and possible recruit households, especially around stations 4, 16 and 19 (the WDS/RDS stations of Newbury, Bracknell and Maidenhead). This suggests that huge effort, support and direction are required to recruit sufficiently.

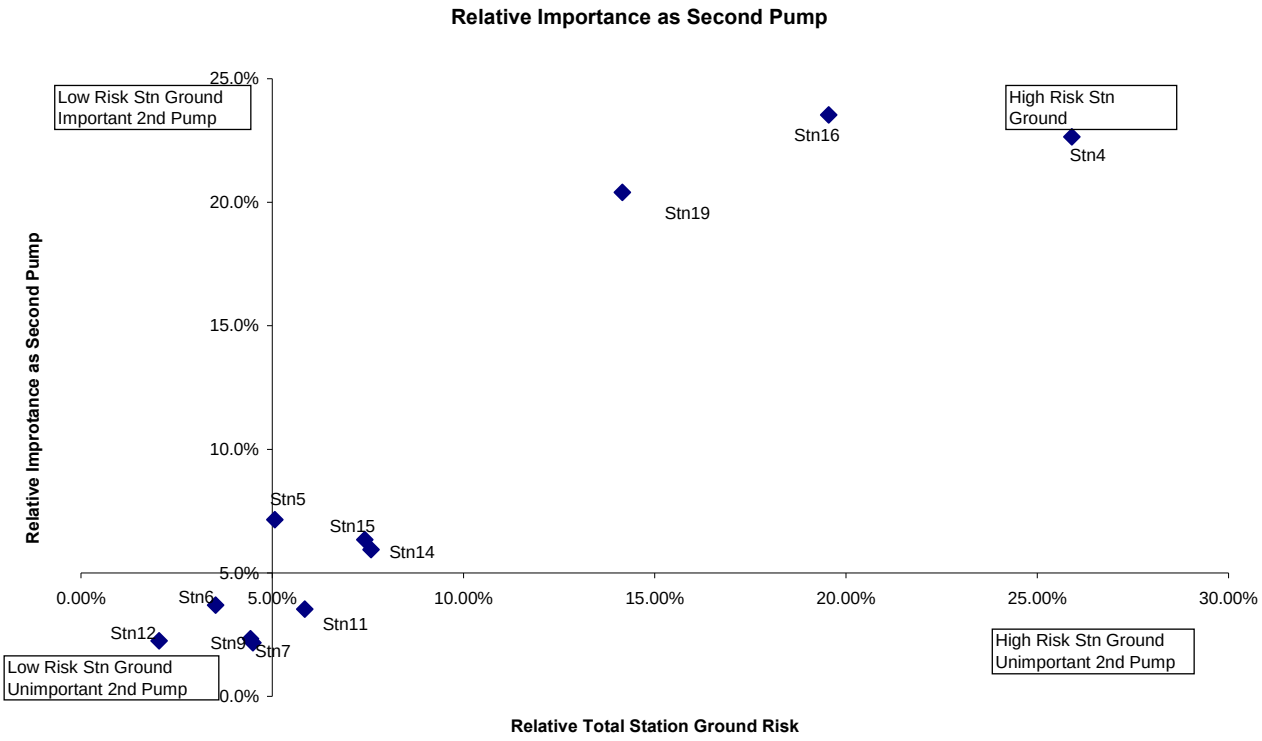
The data research and analysis here concentrates on the home address of the RDS staff member but could equally apply to the place of work, particularly the discussion regarding location and distance from the RDS station. The availability research has already shown that day time (working hours) cover is worse than at night. There is little doubt that this will be, at least in part, related to the increasing ‘commuterisation’ of Berkshire, with individuals being prepared to travel further and further to work (see, for example, Williams N 2005 page 5) and, therefore, away from their RDS station. Any solutions proposed would need to factor ‘place of work’ and the recent survey commissioned by CLG may help here (CLG 2010a, pages 3 - 5).

The research above suggests that it may prove very difficult (but not impossible) to recruit sufficient RDS staff (using the same Point of Entry Selection tests as for WDS). The work here begins a process to differentiate RDS stations on the basis of risk in that the time allowed for RDS crew to get to station could be more flexible. If it becomes impossible to recruit then RDS stations will need to close. Before closure of any RDS station were considered, it is necessary to evaluate the risk in that station area, using the risk assessments contained in this report.

A positive spin off from this data analysis is that RBFRS now knows which postcode areas are most likely to contain potential RDS recruits and it is these areas that can be targeted for job application literature. This should be done in a focussed way giving support to the most risky RDS stations.

Second pump importance

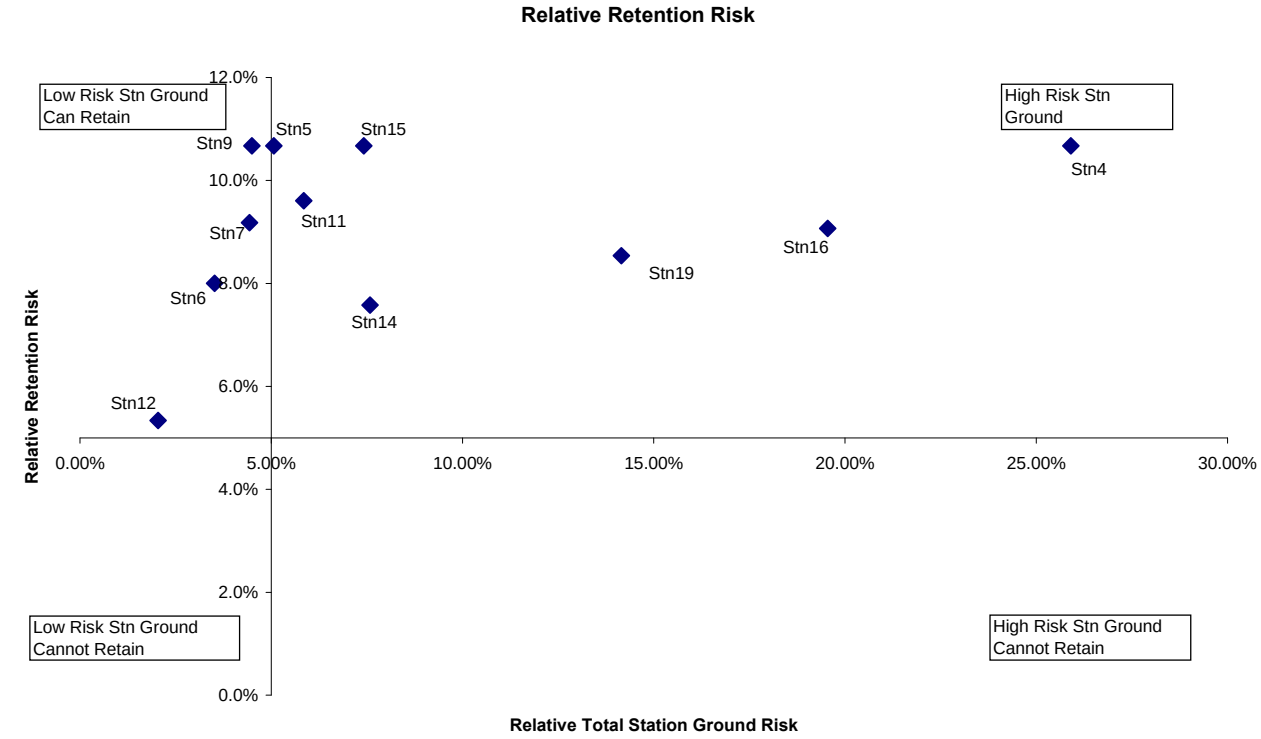
The measurement used here was the number of times the RDS pump was used as the second pump to an incident. At first sight it might seem that the second pump to an incident would be part of the primary, public, risk. But it is most important (weighted at 25%) for the organisation as the second pump is mainly for firefighter safety - and this is reflected in the high weighting. The public are deemed served by the first pump in attendance.



Graph 15 – XY graph of relative importance of RDS station as second pump.

Retention risk assessment

The low weighting (weighted at 5%) for retention is a consequence of the data being largely unknown as 'retention' is primarily a matter of personal choice. However, retirement due date data is within PBViews and was accessed. The percentage of staff who could retire over the next 5 years was used to arrive at the following graph.



Graph 16 – XY graph of relative RDS crew retention

To give some historical context for retention, the following data has been collected from exit interviews (Jefferies B 2009).

	Leavers	Number that may have been influenced to stay	Joiners	Overall loss
2008/09	8	4	5	3
2007/08	13	2	3	10
2006/07	8	4	4	4
2005/06	6	3	3	3
2004/05	8	2	3	5

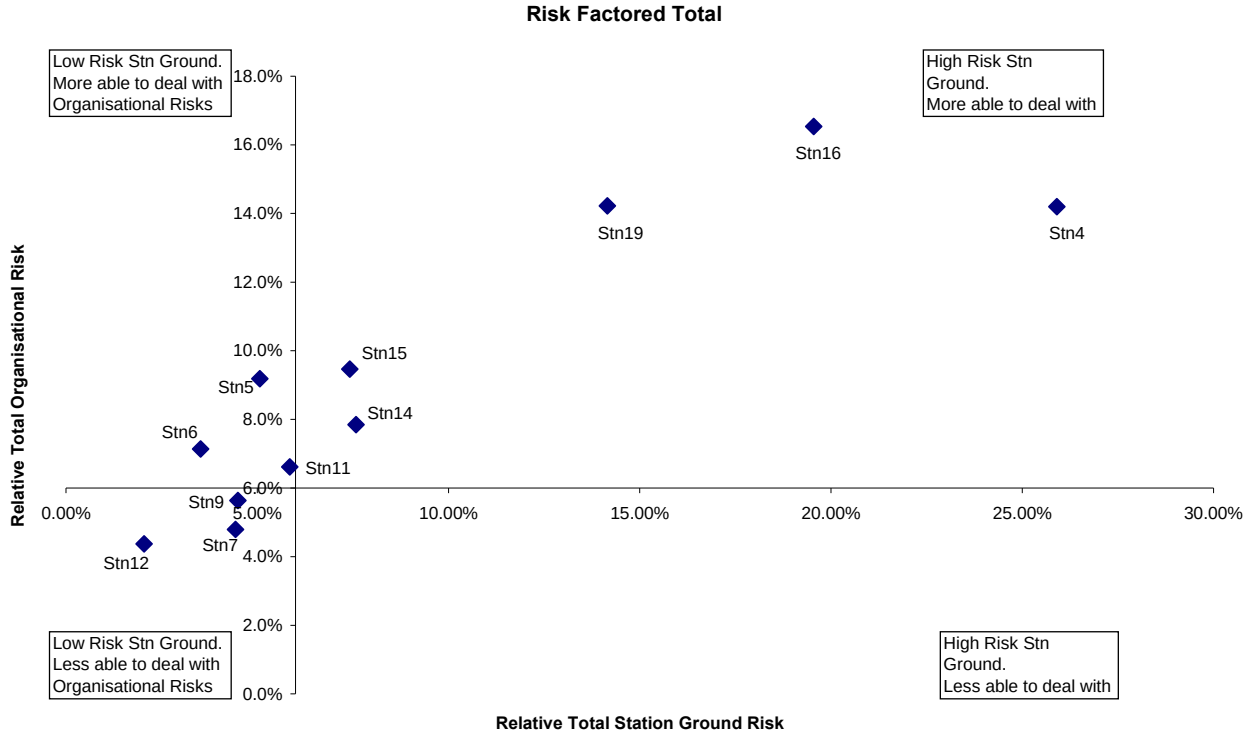
Table 11 – Leavers and Joiners over years.

The table shows that RBFRS has, overall, lost 25 RDS staff in five years, which is about 20% of the RDS workforce.

All the above XY relative graphs indicate, by the quadrant of the graph into which each station falls, how risky the station ground is against the particular organisational risk. In the same way that the primary, station ground risk was totalled, the same can be achieved for the secondary risks. And all may then be displayed on one 'total risks' graph.

Total Risks of RDS Stations

Combining the relative scores and weightings for all primary (community) and secondary (organisational) risks enables the following graphical representation of total RDS station risk.



Graph 17 – XY graph of total relative RDS station risks

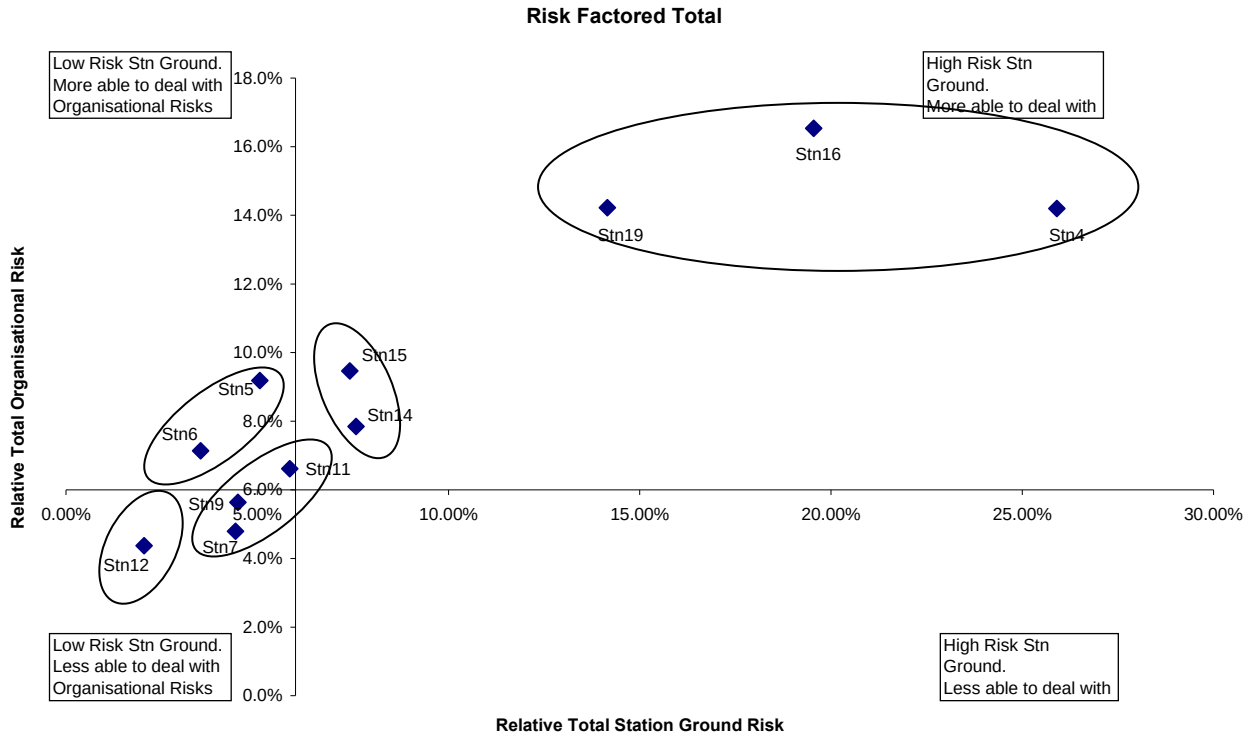
The above graph can be see as an attempt to establish an objective risk assessment for each RDS unit, for both community and organisational risks and, in large part, this has been achieved. Although the methodology was externally validated, some caveats must be given in that, firstly, a professional judgement was needed for the relative importance of each risk in comparison with other risks. Inevitably this could lead to difference of opinion

but, as far as possible, this has been negated by the project team agreement of the relative weightings and by the use of a large range of factors. Secondly, as can be seen from the graph, the three RDS units on WDS stations are separated from the others by some distance. This is to be expected but it also highlights the difficulty of comparing these stations. Again, as far as possible, adjustments were made in the risk assessments to allow for this difference, for example, by giving them a zero score for postcodes covered by others. Thirdly, and finally, the axes on the XY graph could have been drawn to cross anywhere. On this graph it is at 6% - why? (It could be noted that the previous graphs are at 5%.) Again this comes down to judgement and, this time, the judgement is about what risk might be tolerable to the public and the organisation. If the axes were set at 10% all stand-alone RDS stations would be in the bottom left hand quarter. If set at 2%, none would. Later is a discussion on risk tolerability that may assist.

Having given the provisos, it is probably fair to say that the total risk graph is very useful, in that it clearly and pictorially identifies the relative risks of each station ground when compared with one another. This gives the opportunity to identify resource re-distribution in the following manner:

- Bottom Left Quarter – low relative risk, not managing – remove resource
- Top Left Quarter – low relative risk, managing – re-distribute available resource
- Bottom Right Quarter – high relative risk, not managing – put resource into these areas and support the management of the resource.
- Top Right Quarter – high relative risk, managing – resource required to be in place and maintain resource support.

Another useful by-product is that it is possible to see ‘groups’ of RDS stations in the graph.



Graph 18 – XY graph of total relative RDS station risks repeated with RDS station ‘groupings’

Again, judgement has been used to identify these groups and alternatives could be proposed, but it is the case that the graph enables this process. In this case the judgement was a combination of primary risk, secondary risk, quarter of the graph, station type and geography, including distance from next nearest WDS station. This last factor might

indicate the possibility of support on the basis of areas and this will be explored later. But, before that, what level of risk is tolerable?

Tolerability of Risk

Another important facet of risk is the public understanding and tolerability of risk. In terms of the discussion here this will require an analysis of the level of public risk as it relates to dwelling fires, as this is deemed to be the most important aspect of service delivery to individuals and their understanding of what the Fire & Rescue service is for.

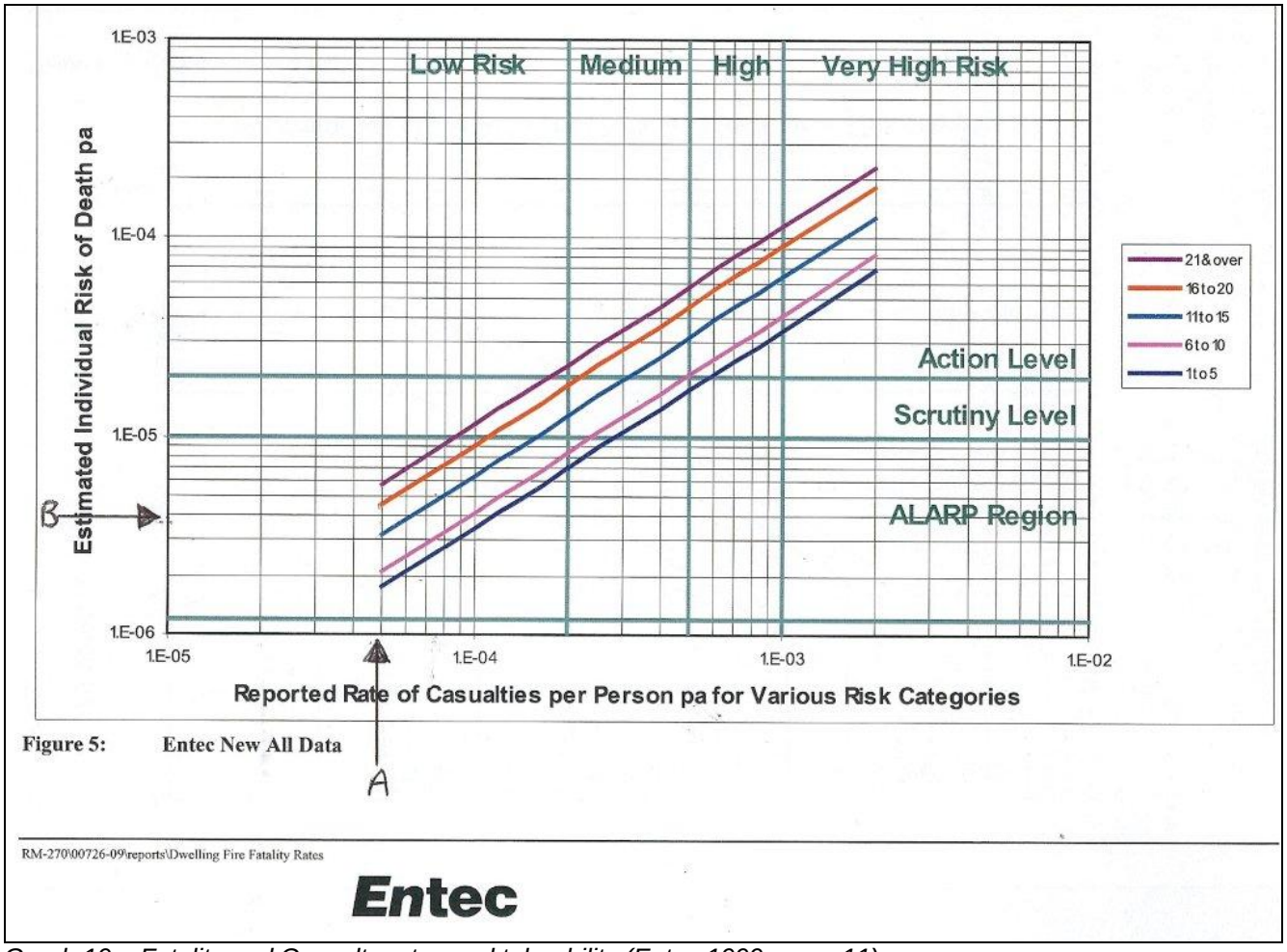
RBFRS has collected Best Value data for return to Government and the following table gives the number of casualties and fatalities in dwellings across Berkshire.

Year	BV143i Number of deaths in dwellings per 100000 population.	BV143ii Number of casualties in dwellings per 100000 population.
2004 – 05	0	3.874
2005 – 06	0.124	4.095
2006 – 07	0.369	5.17
2007 – 08	0.492	6.032
2008 - 09	0.863	4.809
5 Year average	0.3696	4.796
Average rate per person pa (5 yr average/100000)	0.0000037 ($3.7x10^{-6}$)	0.000048 ($4.8x10^{-5}$)

Table 12 – Fatality and Casualty rates in Berkshire *(PBViews 2010)*

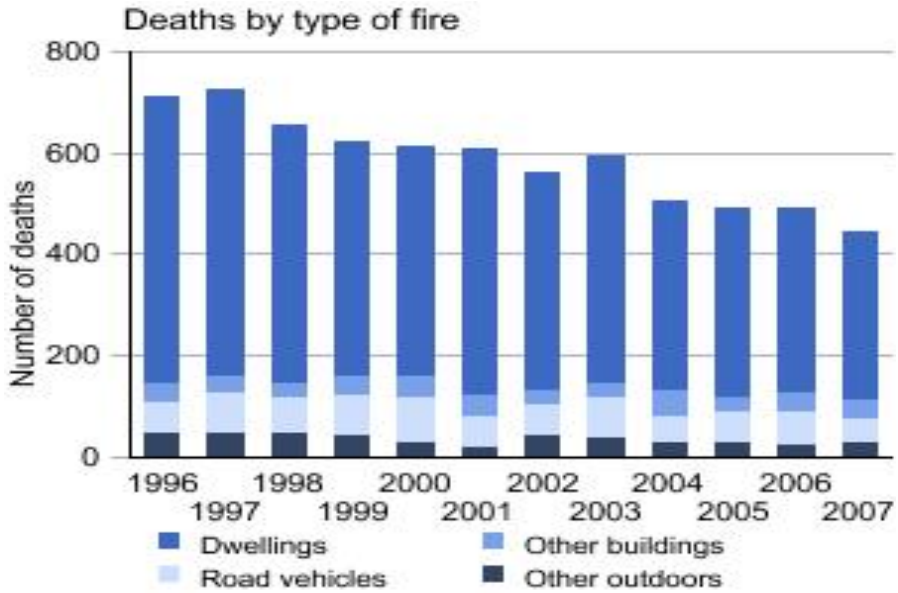
Building upon earlier work (Entec 1997), a research report for the Home Office contained the following graph (scan only available) that derives estimated individual risk of death from the casualty rate and the attendance times of the Fire & Rescue Service[8]. For ease, the RBFRS casualty (A) and fatality (B) rate is added.

[8] Thanks for permission to publish, given by CLG, Research & Statistics Division, on 12/1/10, when they also took the opportunity to point out the FSEC software update that included 'dwelling fire response time fatality rate relationships'



Graph 19 – Fatality and Casualty rates and tolerability (Entec 1999, page 11)

Point A (casualty rate) on the graph correlates well with point B (the expected death rate), thereby confirming the validity of the graph for Berkshire. It should be noted that, according to the research of 1999, with the current casualty rate in Berkshire, any attendance time would remain within the ALARP (As Low As Reasonably Practicable) region and therefore be tolerable. Indeed it appears the risks are so diminished that the current risk is off the bottom of the graph. This does fit with the known changes over time, with death rates from fire nationally falling year on year, as seen in the graph below, perhaps as a result of the ongoing Fire Protection and Prevention work.



Graph 20 – National number of deaths by fire (UK Statistics 2010)

However, a word of caution must be made, as the public over time may become less tolerant of risk (or indeed, the perception of risk). Therefore, the comment in the conclusion of the Entec report that this work is re-visited (nationally) every ‘4 years or so’ is supported here (Entec 1999 page 16).

To reinforce this caution with statistics, the FBU has argued (FBU 2010a) that:

“If appliances could attend in less than 5 minutes, the probability of death was 3.8 per hundred fires. If appliances took 6 – 10 minutes to attend a fire, the probability of death was 4.2 per hundred fires.” (FBU 2010a page 45) and,

“from the average 1 – 5 minute attendance time upwards, the probability of death increases exponentially.” (FBU 2010a page 46)

Both these statements appear incorrect. The first as, from the Entec work, it is clear that the probability of fire death was based upon ‘per hundred fires where there was a casualty or rescue’. This is very different than ‘per hundred fires’. The second statement is incorrect as the FBU appeared to be using the original Entec work (Entec 1997), that was superseded by a later Entec report (Entec 1999). This later report clearly states that the correlation of the statistics is better for 1 to 5, 6 to 10 and 11 to 15 than for any attendance time over 15 minutes (Entec 1999, page 3) and that the graph, whilst rising for longer attendance times, is more linear (Entec 1999, page 7).

However, it is agreed with the FBU that the research shows that ‘above 5 minutes any increase in attendance time means an increase in the probability of fire death’ (FBU 2010a, page 46).

The discussion above demonstrates that there is no clear answer as to where it would be ‘tolerable’ to draw the axes on the total risk graph (graph 17 above). Currently, the line is drawn at 6% of the total relative risk but there can be no definitive assessment of where the line should be drawn to be tolerable. Some may say that any risk of death from fire is intolerable but interpretation of the Entec graph suggests that any attendance time in Berkshire would be ‘tolerable’.

At this time though, it is possible to conclude that, for tolerability for dwelling fires, RBFRS may give thought to greater flexibility to response standards and that any reasonable adjustment to those standards might be deemed acceptable.

Station Profiles

The risk assessment work above enables a profile of each RDS station to be displayed. In the following sections there are two sets of graphs for each RDS station and maps for each stand-alone RDS station.

The first graph for each station displays the profile as a relative risk. (This is the percentage of the total risk on RDS station grounds that the individual station has.) The first eight bars are related to the primary (step 1), community risks on the station grounds and the remaining nine bars are secondary, organisational (step 2) risks. Effectively, this is another way to look at the risk assessment data but to do so 'station by station'. All the 'y' axes have been normalised (to 45%) such that the graphs may be compared by 'eyeball'.

For each station profile there is a second graph that displays the following items as actual numbers, rather than relative data.

- Number of 'operational' incidents on RDS station ground. (Operational incidents are defined as all incidents, not including AFAs, false alarms, Over the Border incidents and exercises.)
- Number of incidents NOT attended by RDS on own station ground.
- Number of hours unavailable on average for whole year.
- Number of times used as second pump.
- Number of RTC extrication incidents on RDS station ground.
- Number of dwelling fires on RDS station ground.
    - Number of fire fatalities in dwelling fires on RDS station ground.
    - Number of incident casualties in dwelling fires on RDS station ground.
    - Number of people rescued from dwelling fires on RDS station ground

(The last three categories on the list are deemed to be considered in the risk assessments as part of the overall dwelling fire numbers). The risk assessments above indicate the difference between those RDS units that are 'stand-alone' and those that are attached to a WDS station, at Newbury, Bracknell and Maidenhead. Because of this, it is very difficult to extract some of the RDS data from the WDS components of the data sets. Where this is the case the graphs are blank. Where possible, the graph axes are again 'normalised' to allow direct comparison.

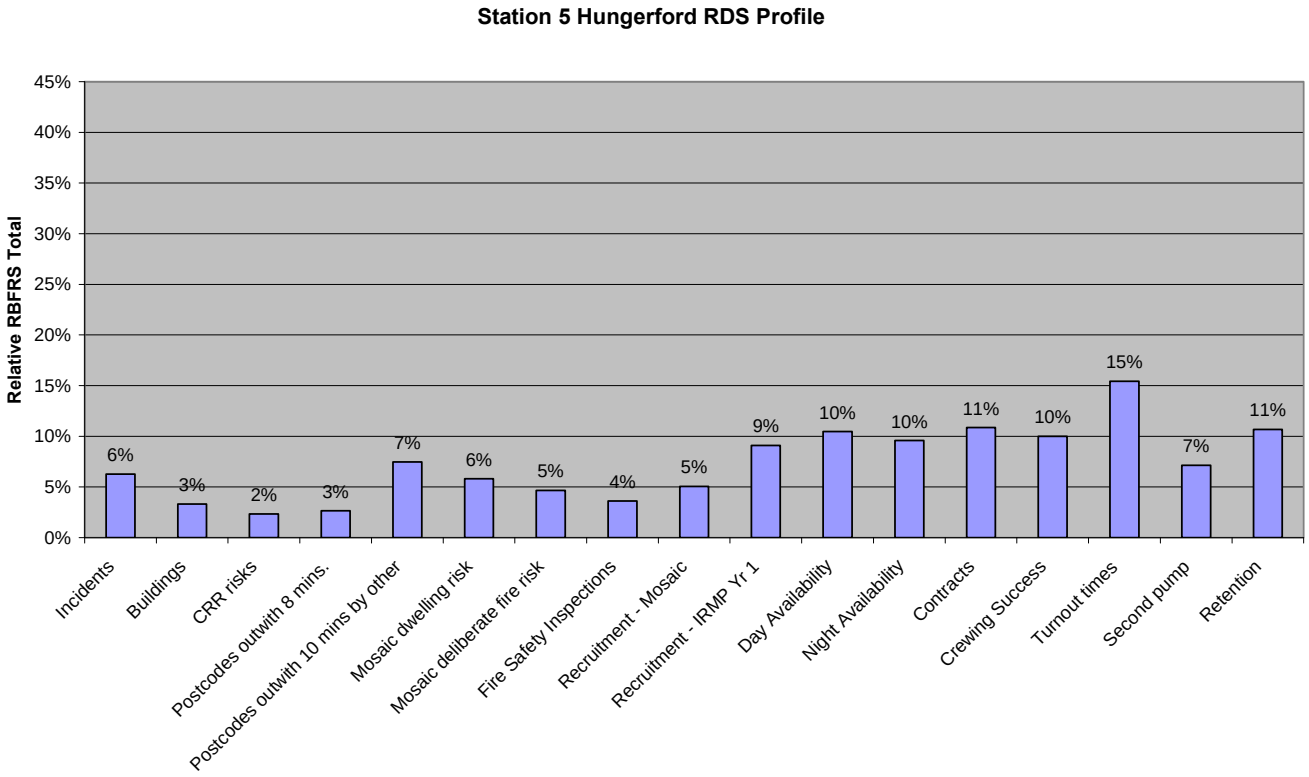
It should be noted that Home Fire Risk Assessments (HFRAs) are not included as the RDS have not performed many of these. Into the future this important aspect will need to be included more robustly into RDS work and could be achieved if there was more support.

Finally, also included is a map of each stand-alone RDS station ground displaying the dwelling fire and RTC incident attendances for the years 2006/07, 2007/08 and 2008/09. From a risk perspective it is deemed that those RDS units on WDS station grounds are covered in a different way and the mapping would be complex and not as useful.

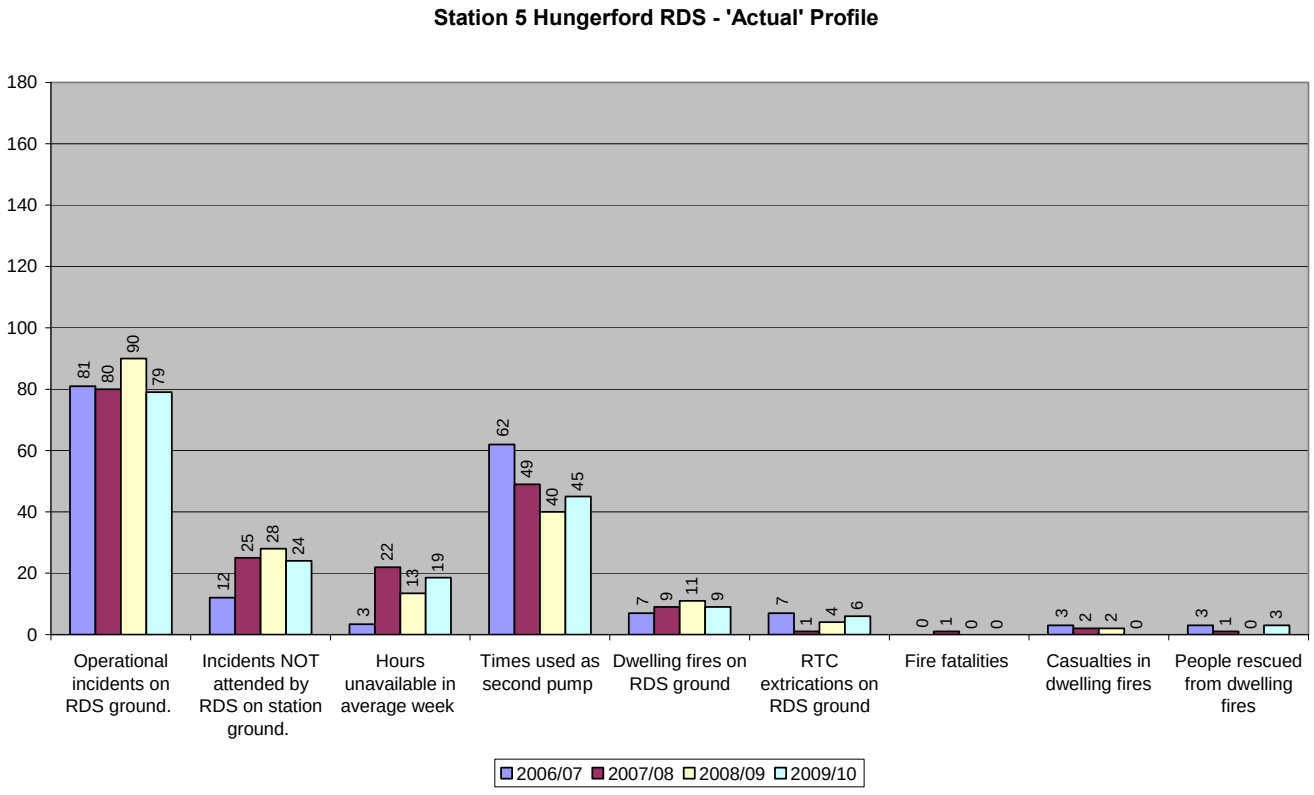
For the above reasons, great care must be taken in interpreting the data when comparing stand-alone RDS stations with the others and, also, is why station 4 (Newbury RDS), is placed alongside stations 16 (Bracknell RDS) and station 19 (Maidenhead RDS) below.

The graphs and maps are presented here without interpretation but give as complete a picture as possible of the current situation with each RDS station or unit without comment.

Station 5 - Hungerford



Graph 21 – Relative profile of RDS station



Graph 22 – Actual data profile of RDS station

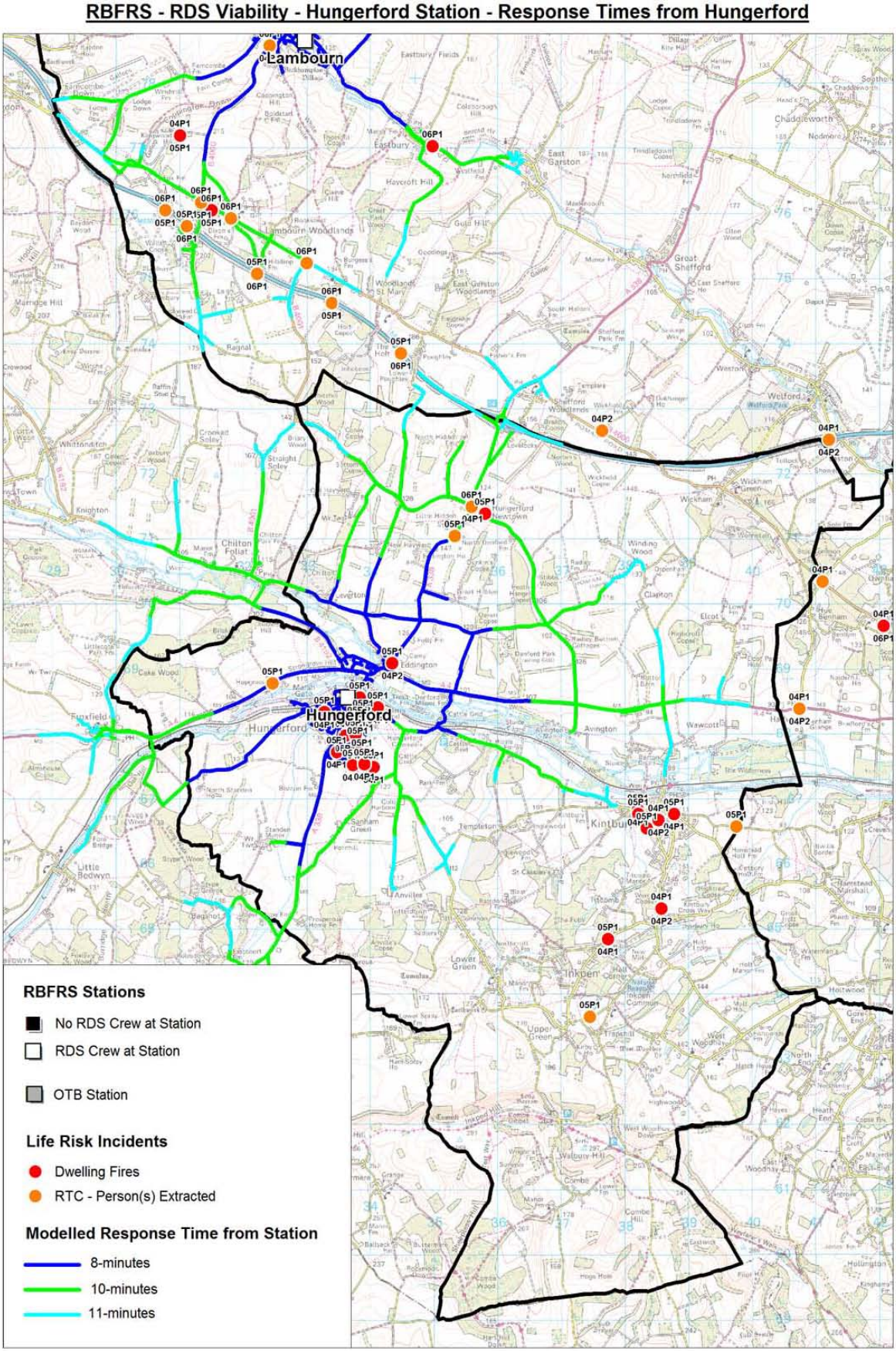
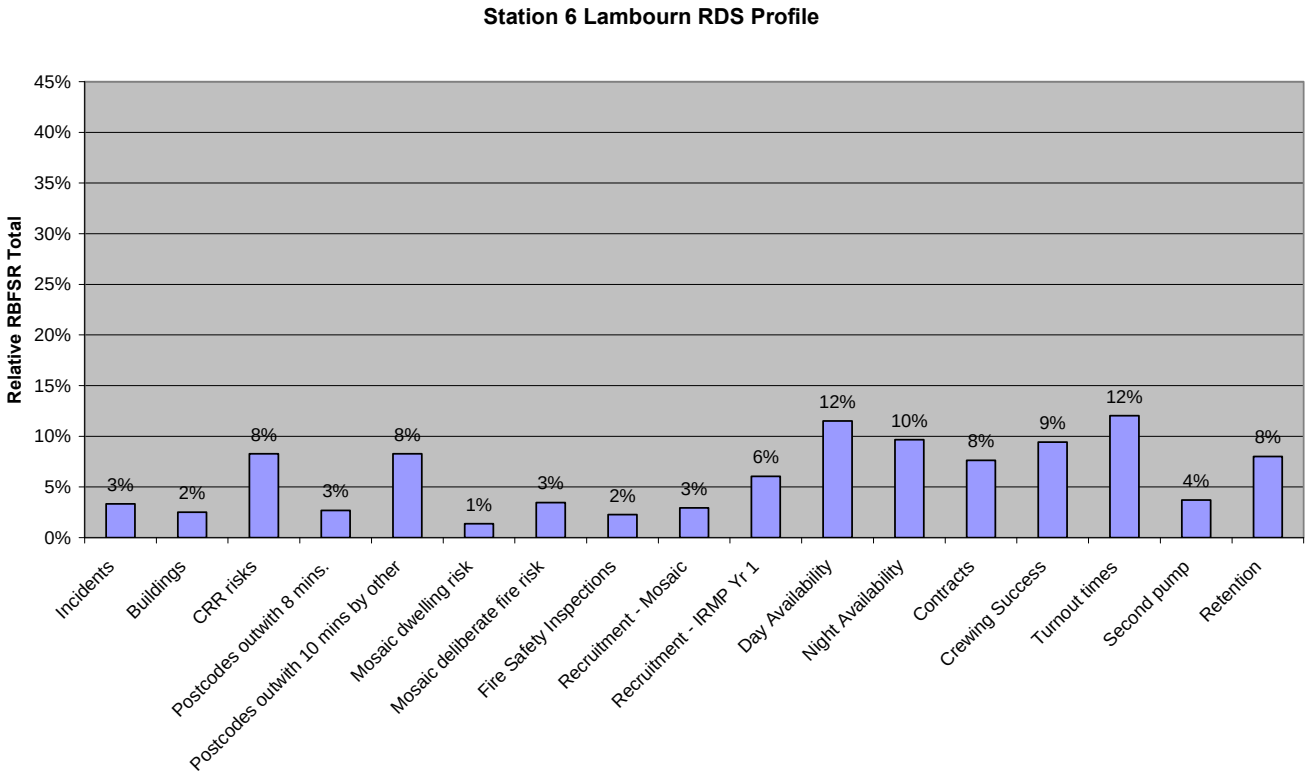
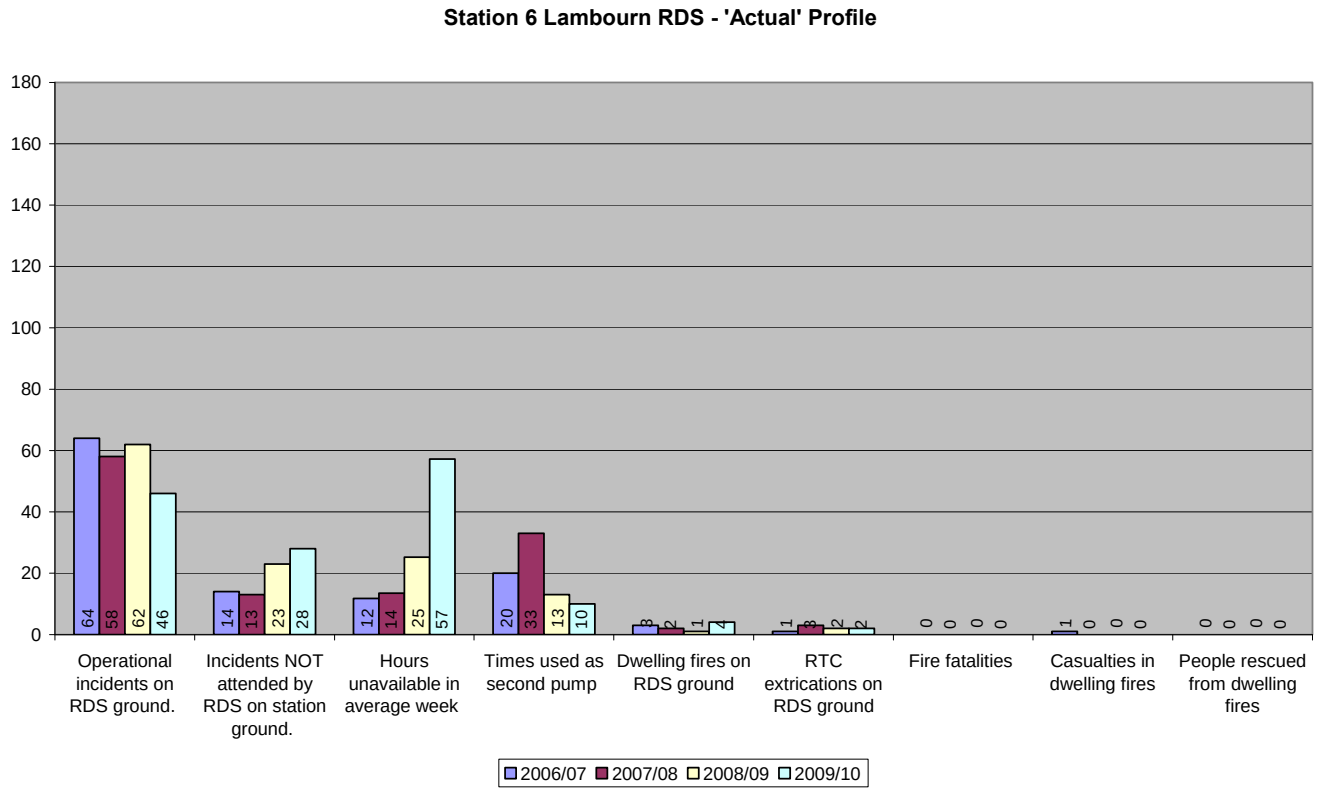


Figure 5 – RDS station response times model and risk critical incidents 2006/07- 2008/09

Station 6 - Lambourn



Graph 23 – Relative profile of RDS station



Graph 24 – Actual data profile of RDS station

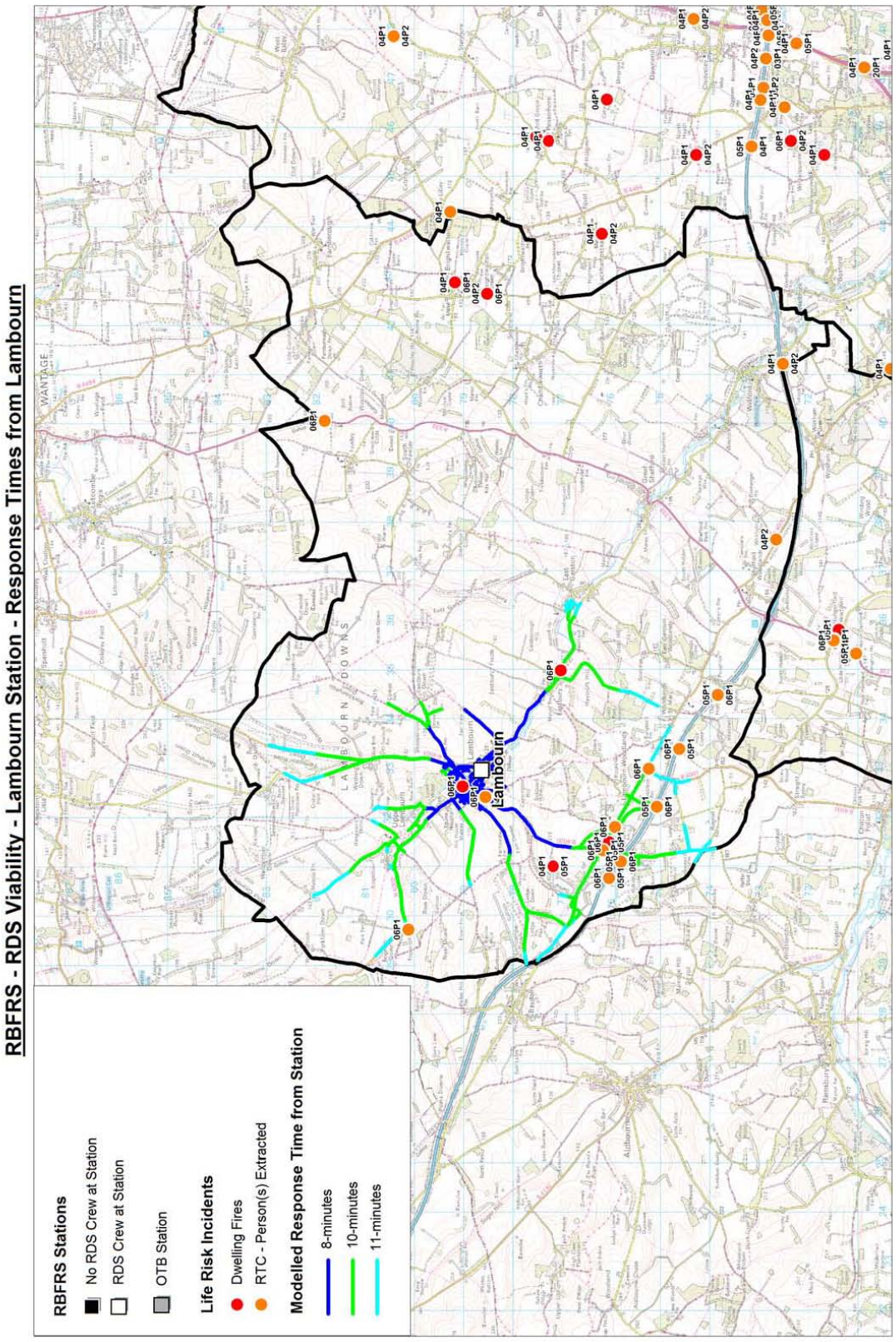
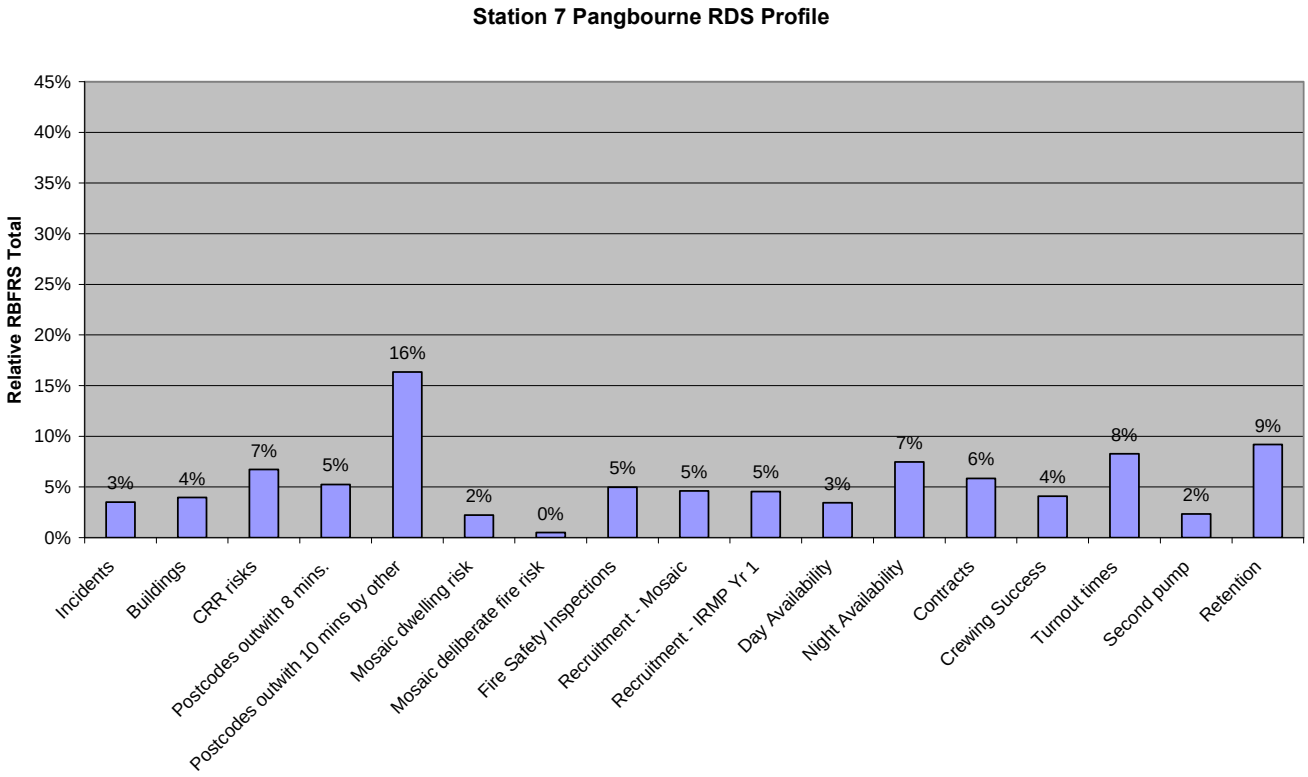
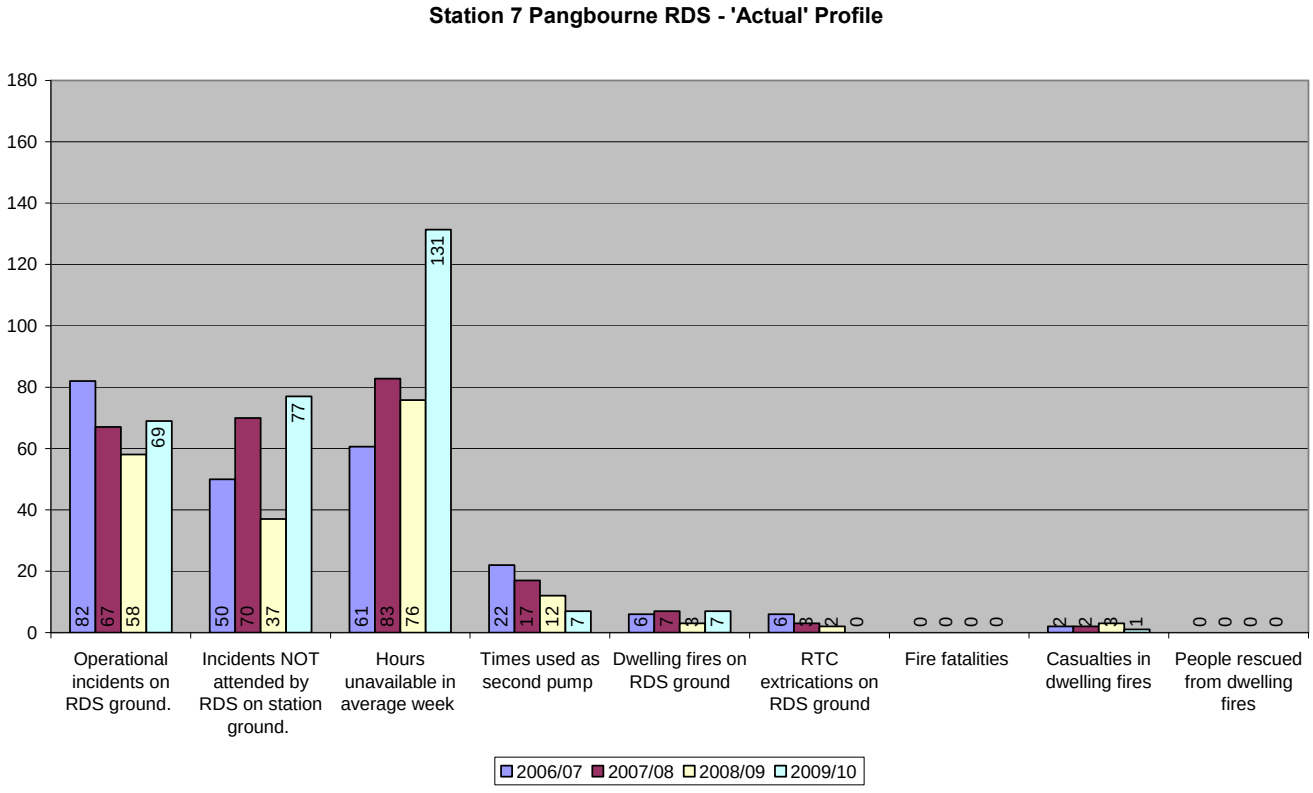


Figure 6 – RDS station response times model and risk critical incidents 2006/07- 2008/09

Station 7 - Pangbourne



Graph 25 – Relative profile of RDS station



Graph 26 – Actual data profile of RDS station

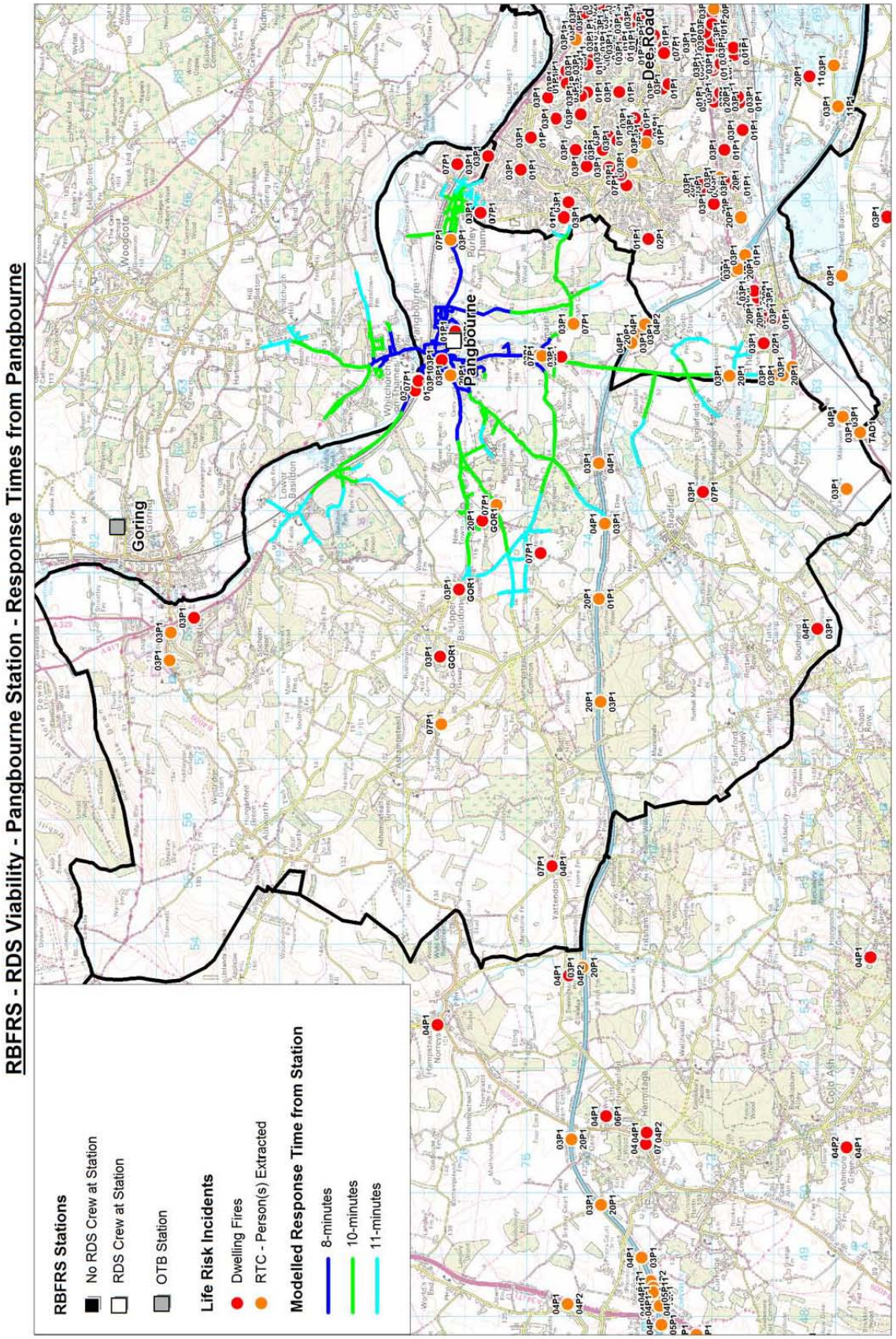
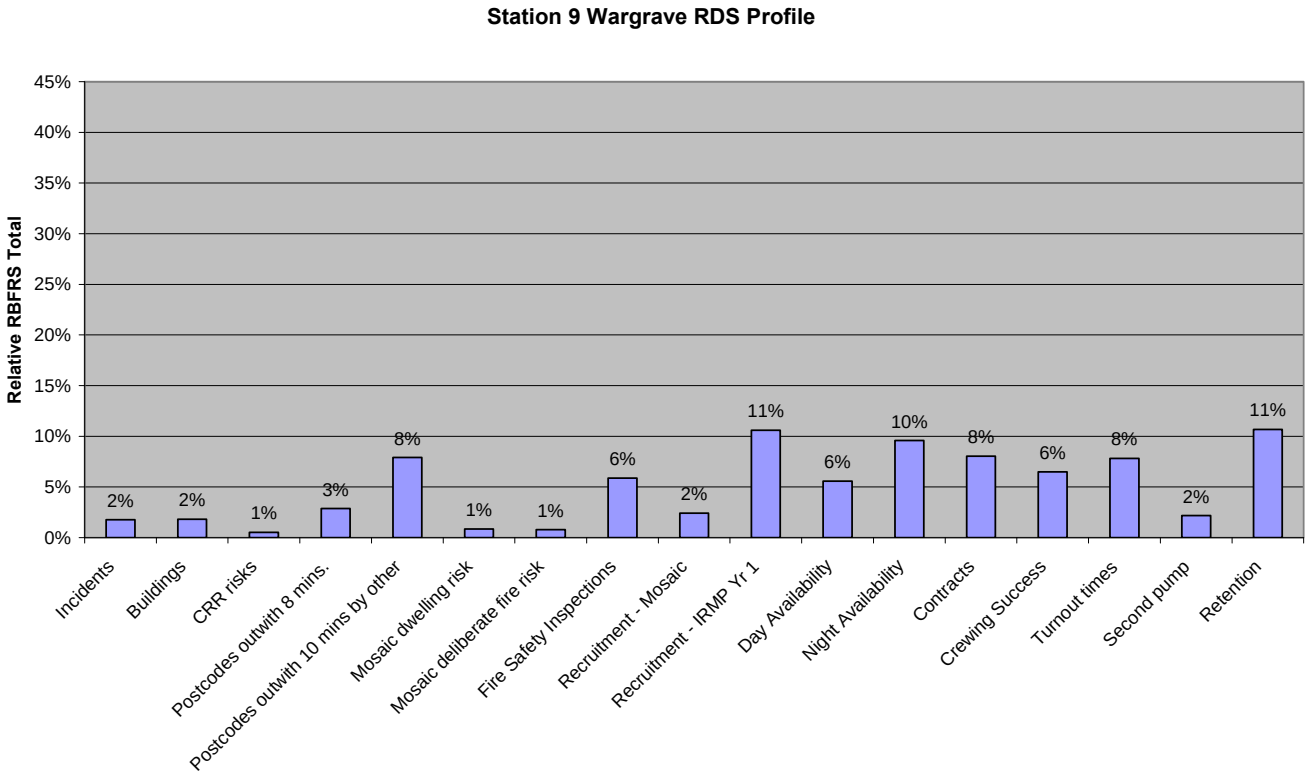
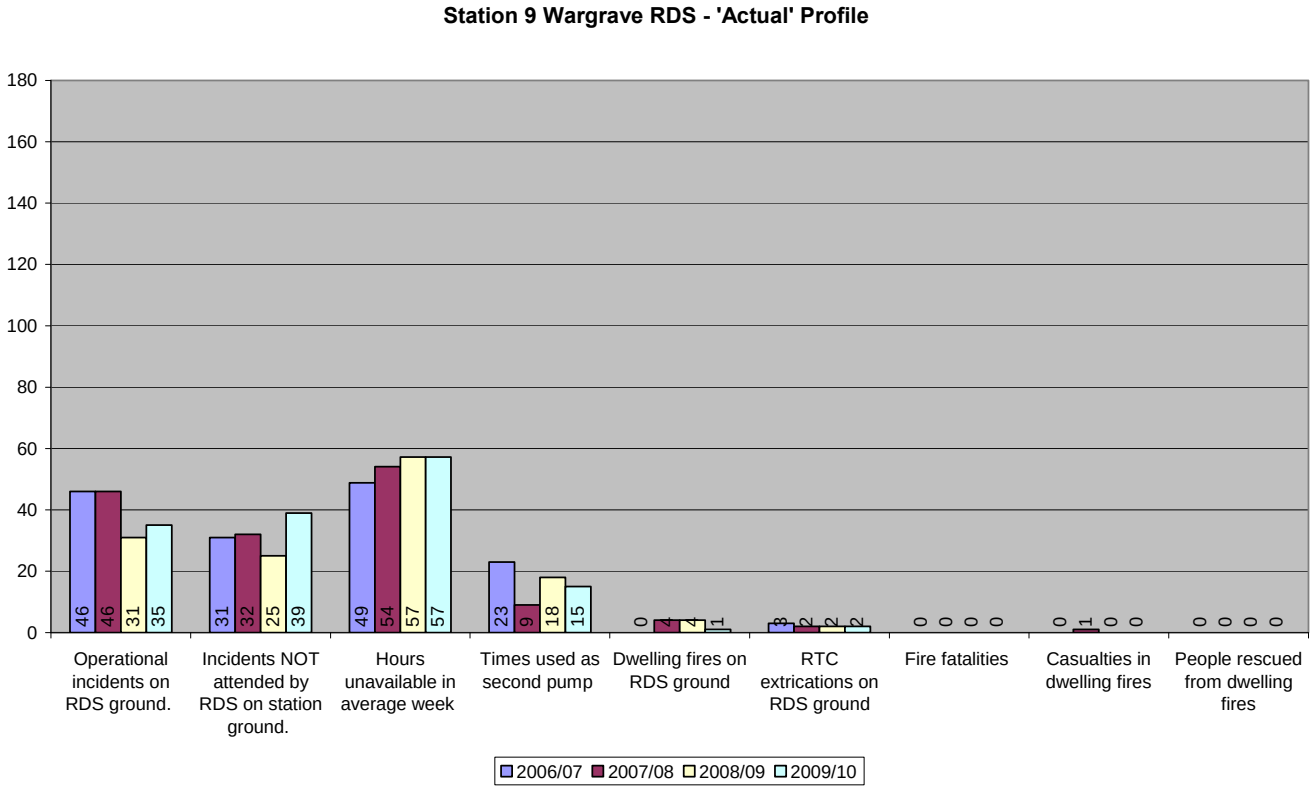


Figure 7 – RDS station response times model and risk critical incidents 2006/07- 2008/09

Station 9 - Wargrave



Graph 27 – Relative profile of RDS station



Graph 28 – Actual data profile of RDS station

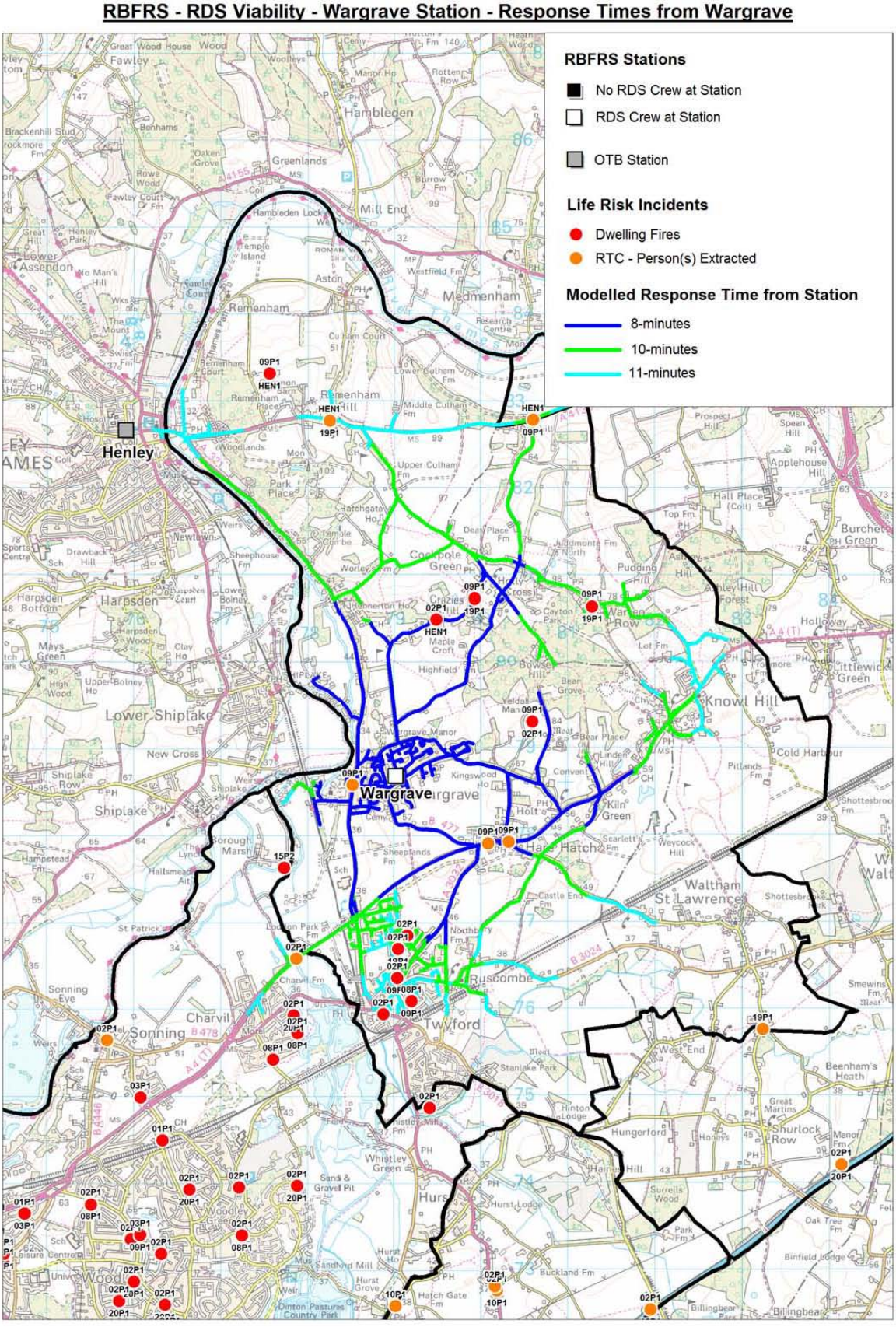
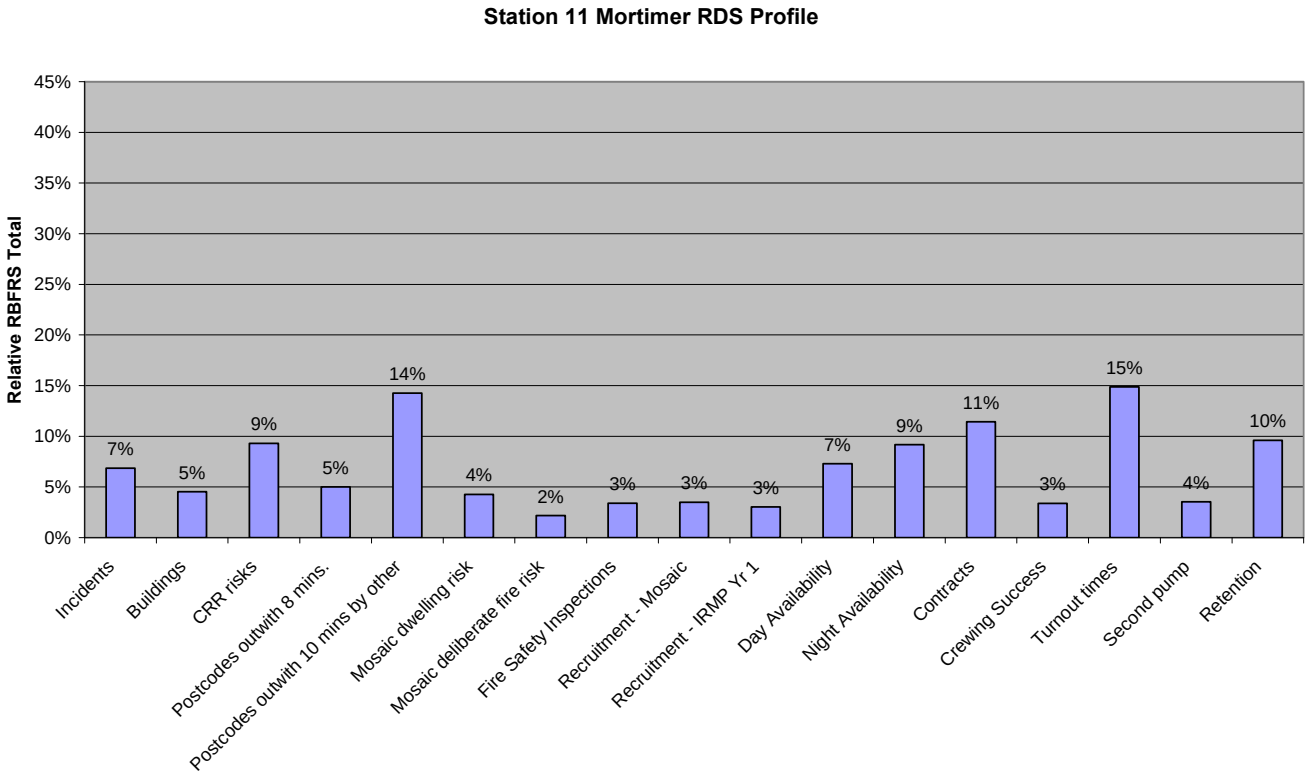
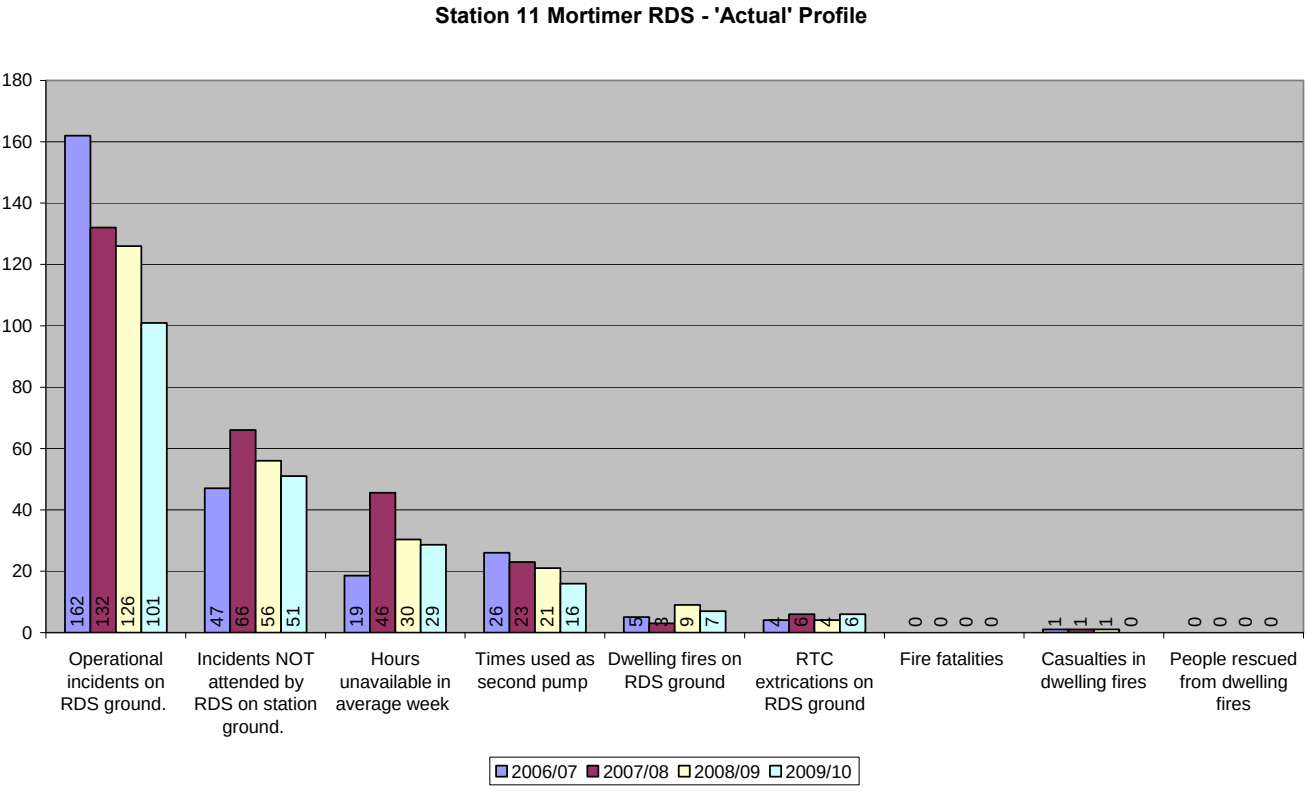


Figure 8 – RDS station response times model and risk critical incidents 2006/07- 2008/09

Station 11 - Mortimer



Graph 29 – Relative profile of RDS station



Graph 30 – Actual data profile of RDS station

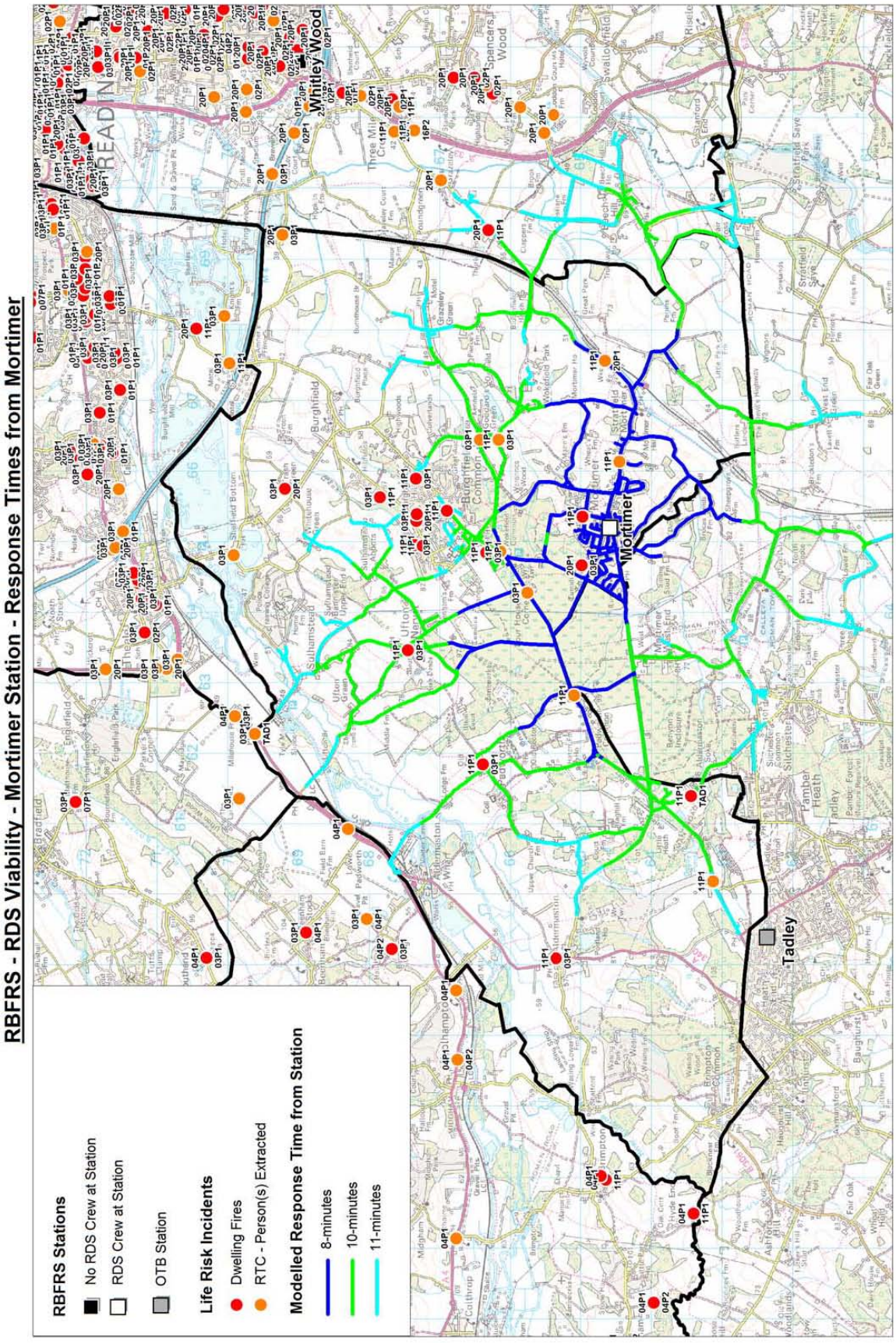
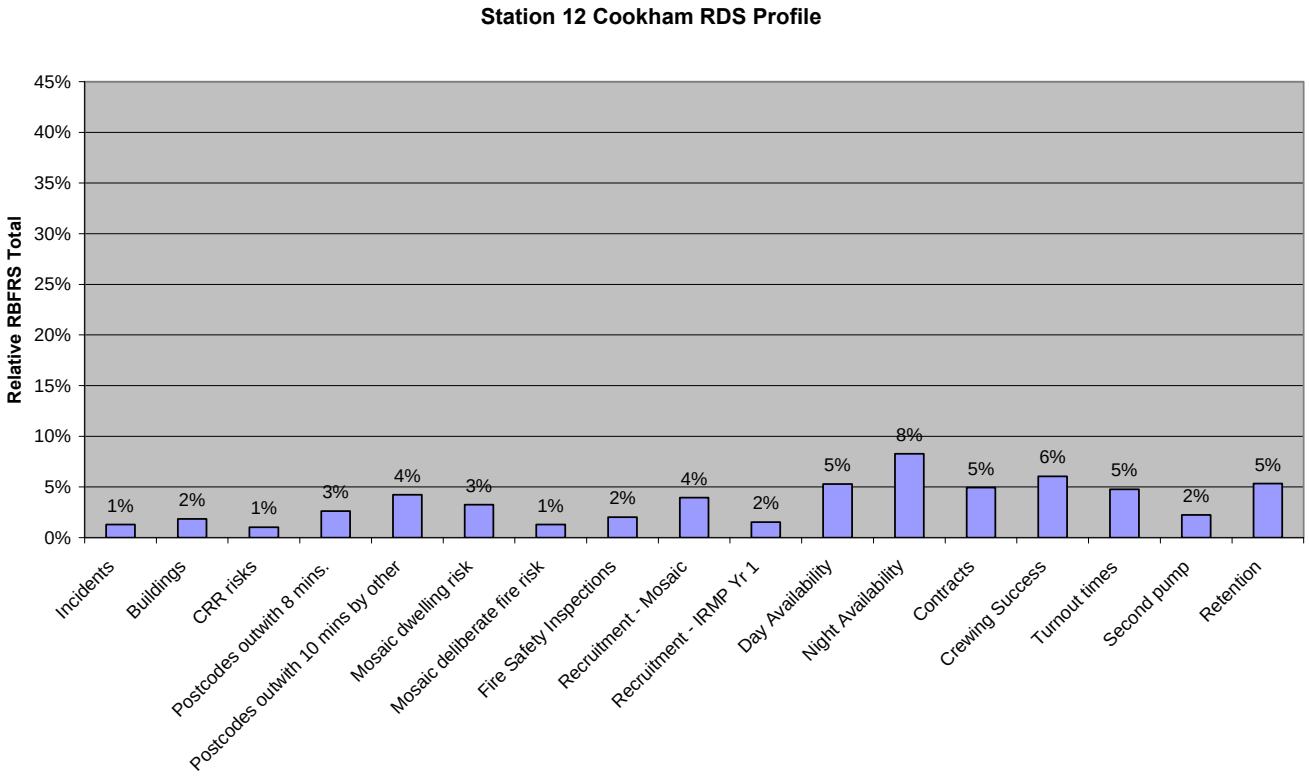
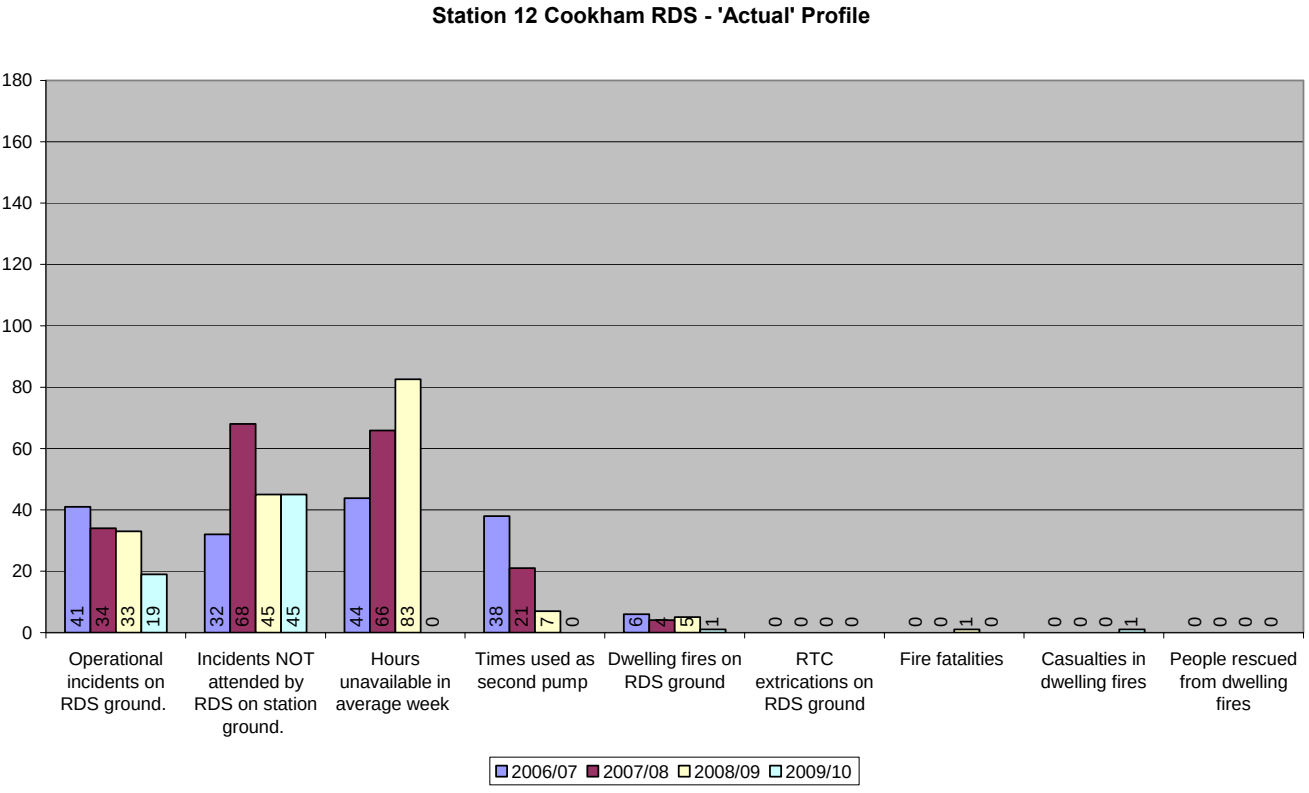


Figure 9 – RDS station response times model and risk critical incidents 2006/07- 2008/09

Station 12 - Cookham



Graph 31 – Relative profile of RDS station



Graph 32 – Actual data profile of RDS station (For 2009/10 the hours unavailable data is shown as zero, due to Cookham not having enough crew to keep it on the run. The last turnout was on 27/9/9).

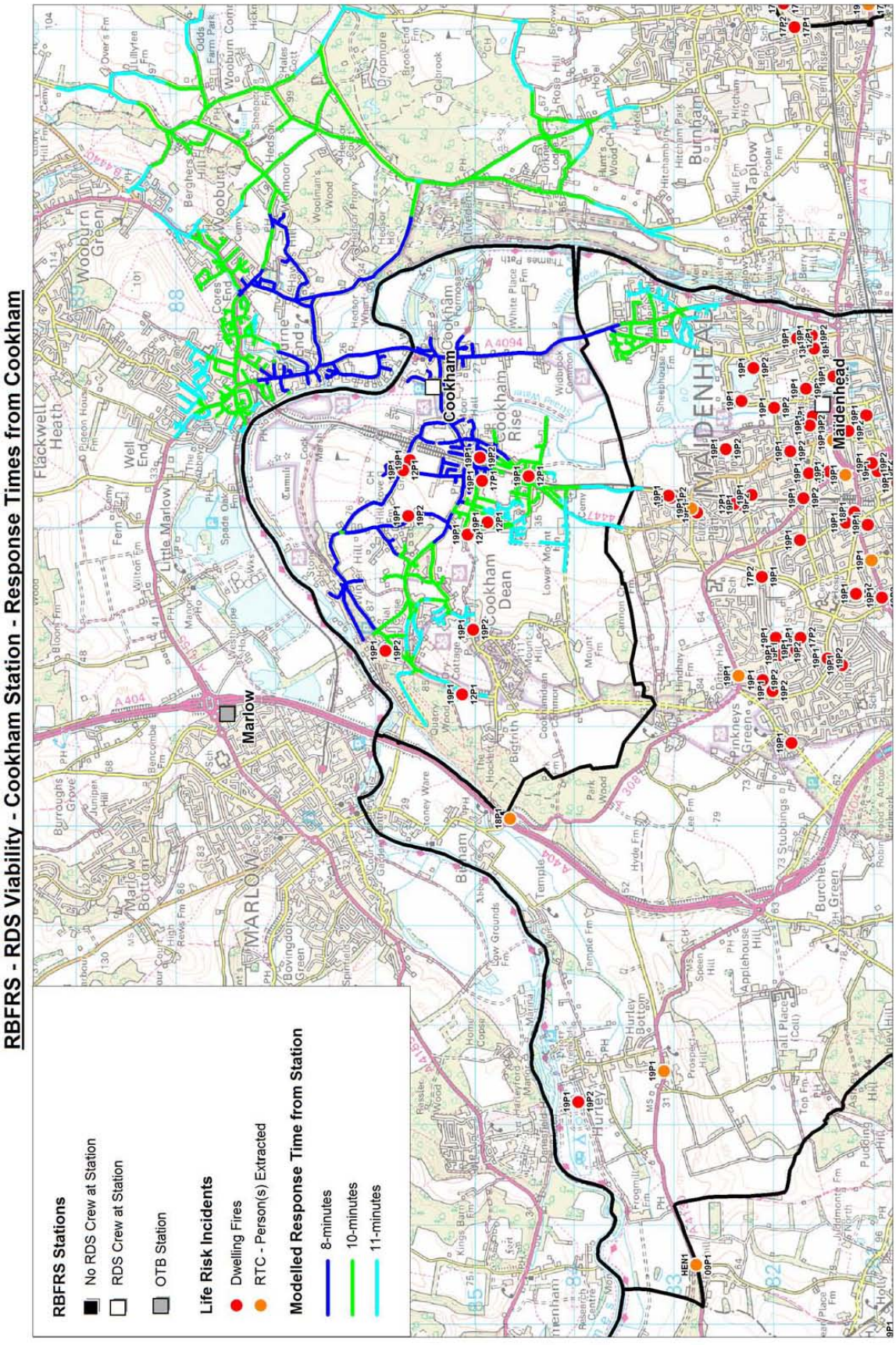
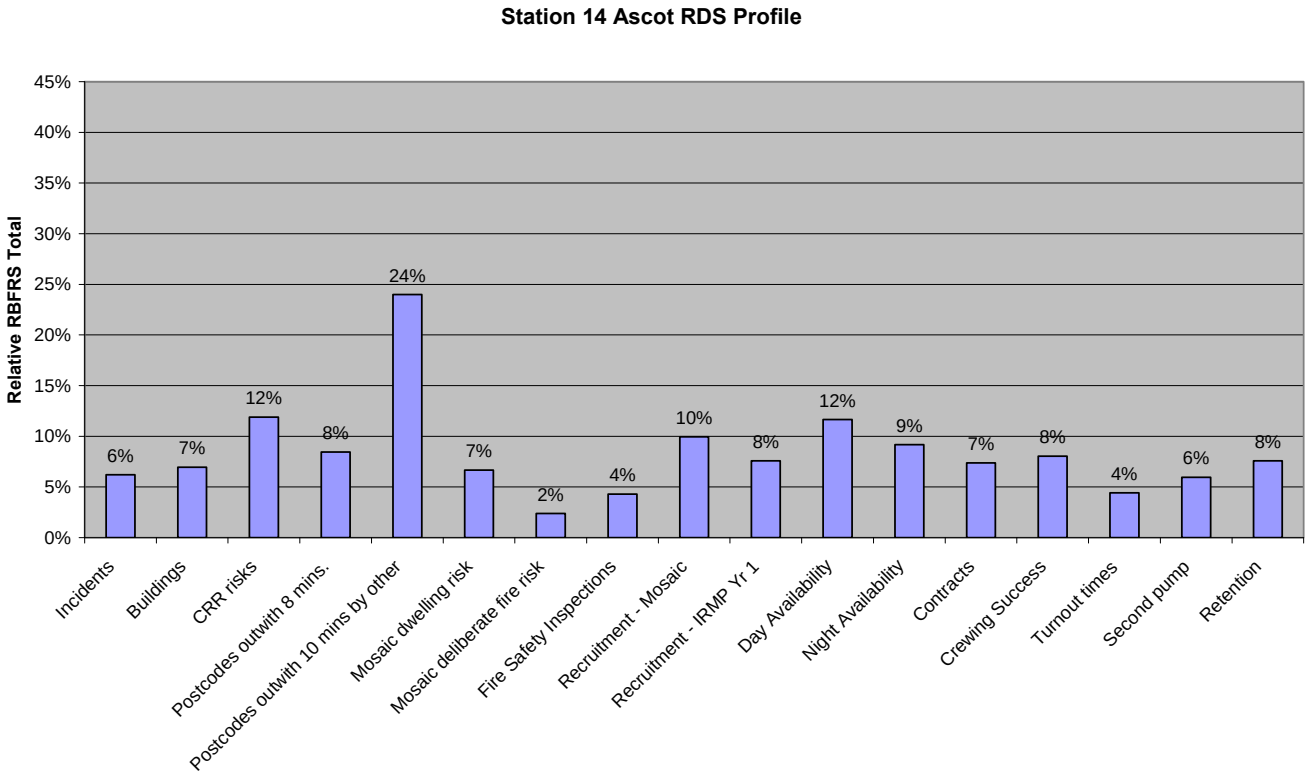
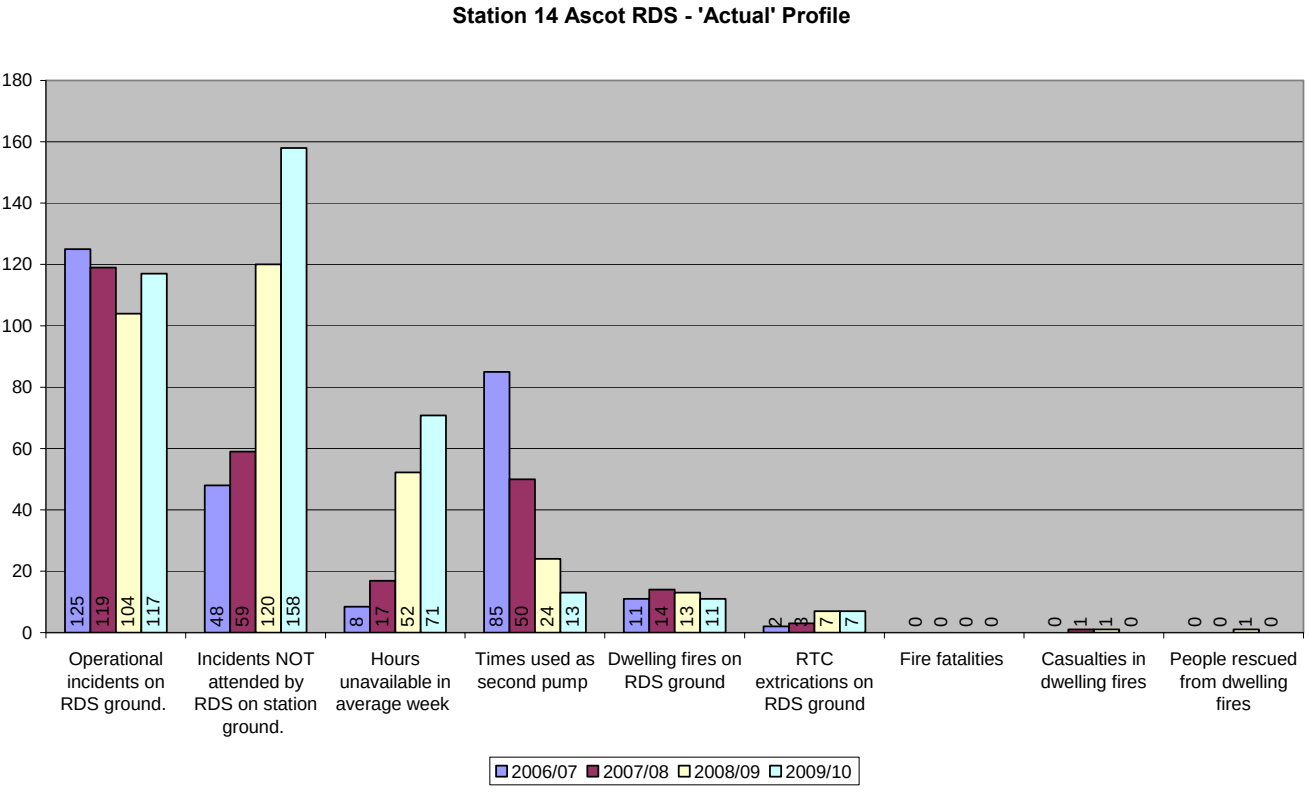


Figure 10 – RDS station response times model and risk critical incidents 2006/07- 2008/09

Station 14 - Ascot



Graph 33 – Relative profile of RDS station



Graph 34 – Actual data profile of RDS station

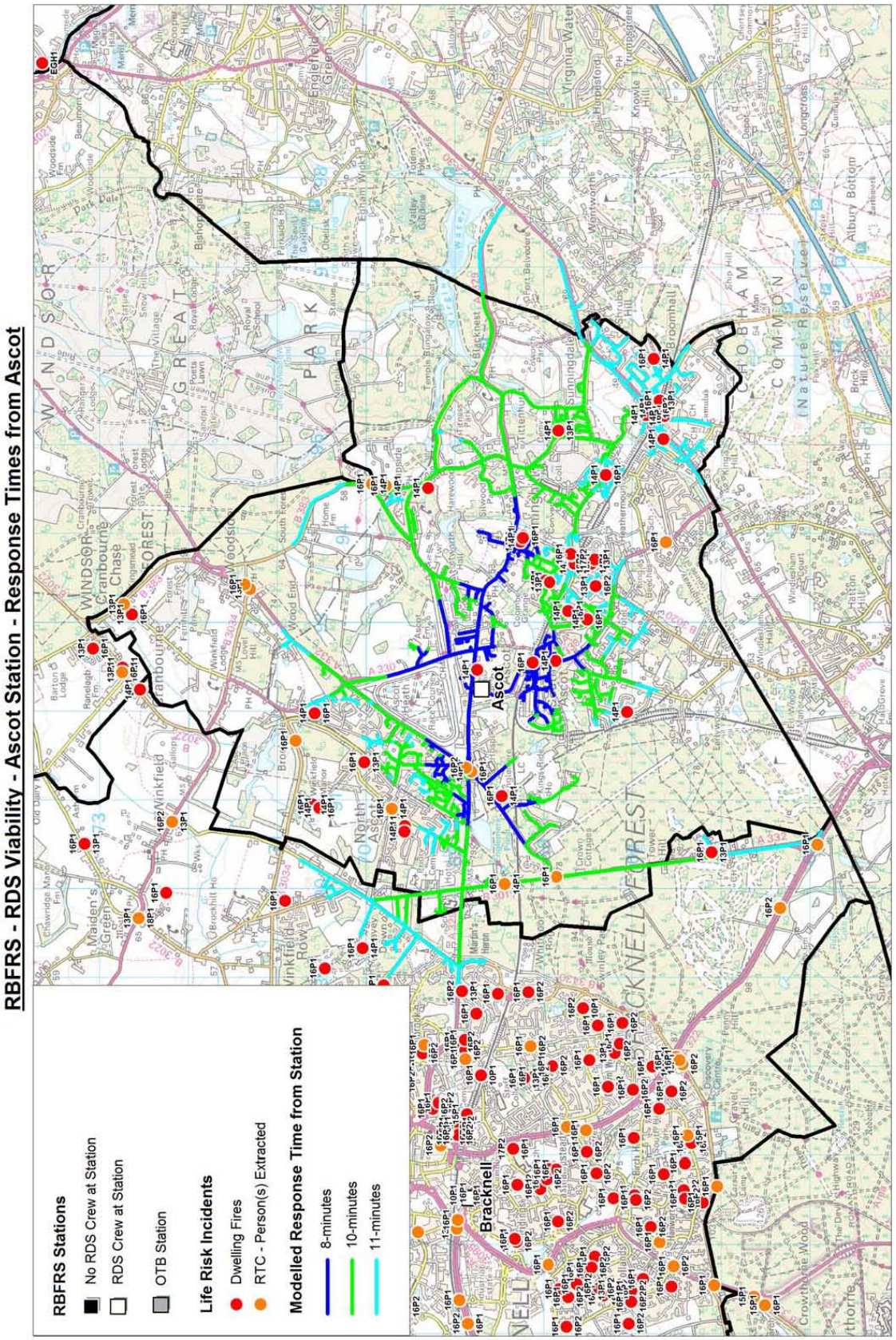
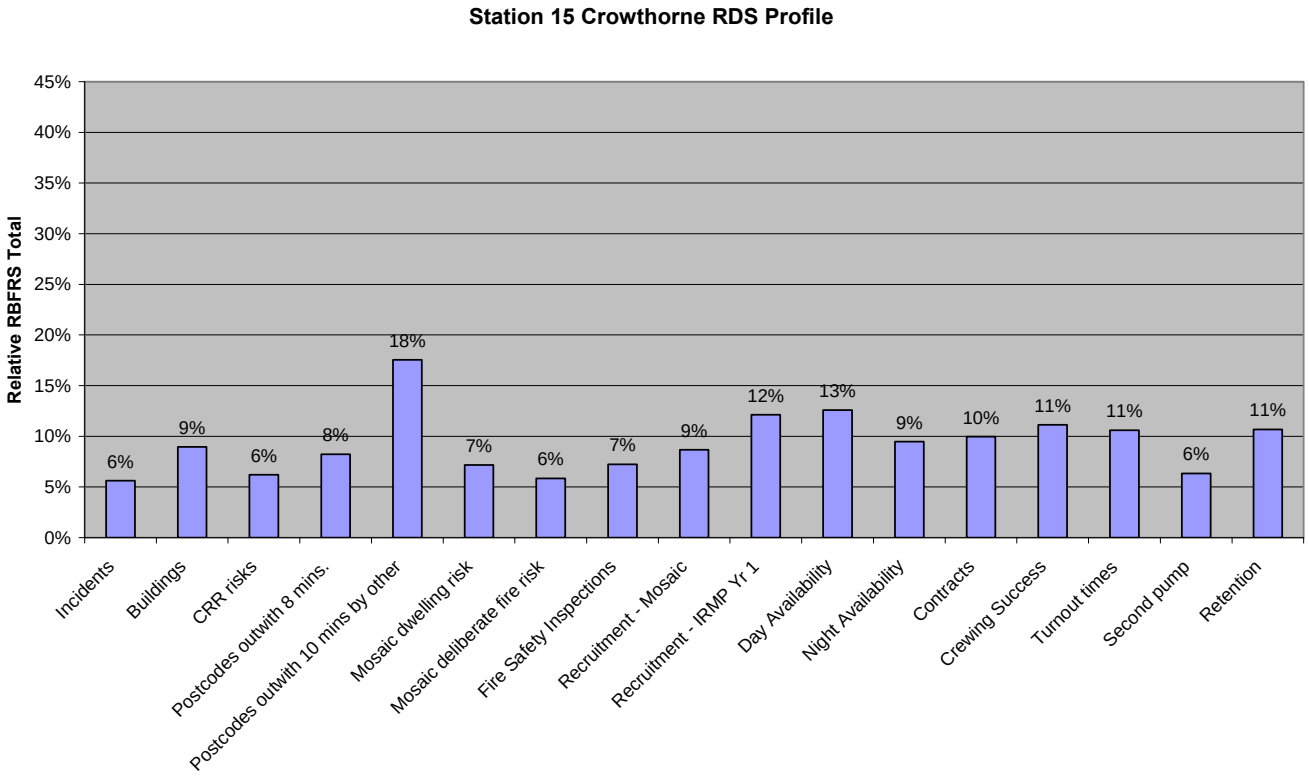
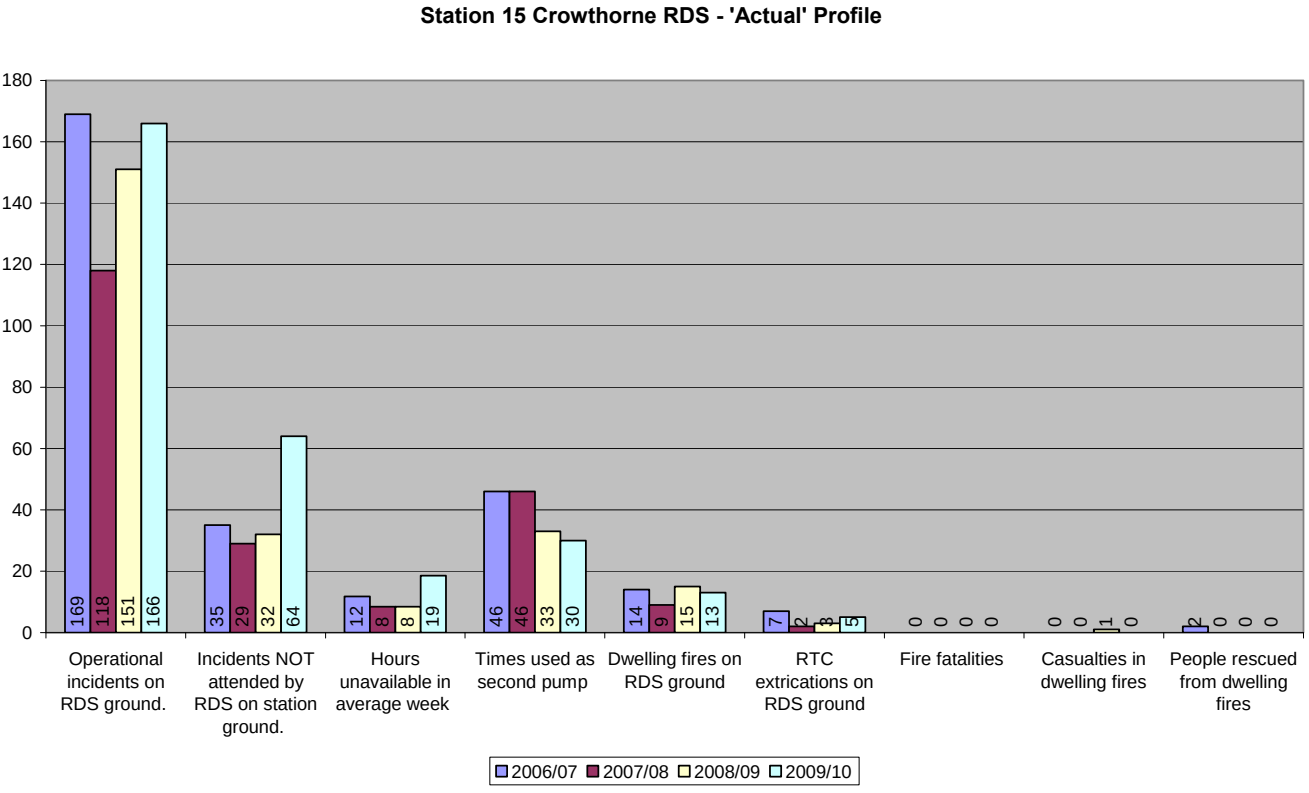


Figure 11 – RDS station response times model and risk critical incidents 2006/07- 2008/09

Station 15 - Crowthorne



Graph 35 – Relative profile of RDS station



Graph 36 – Actual data profile of RDS station

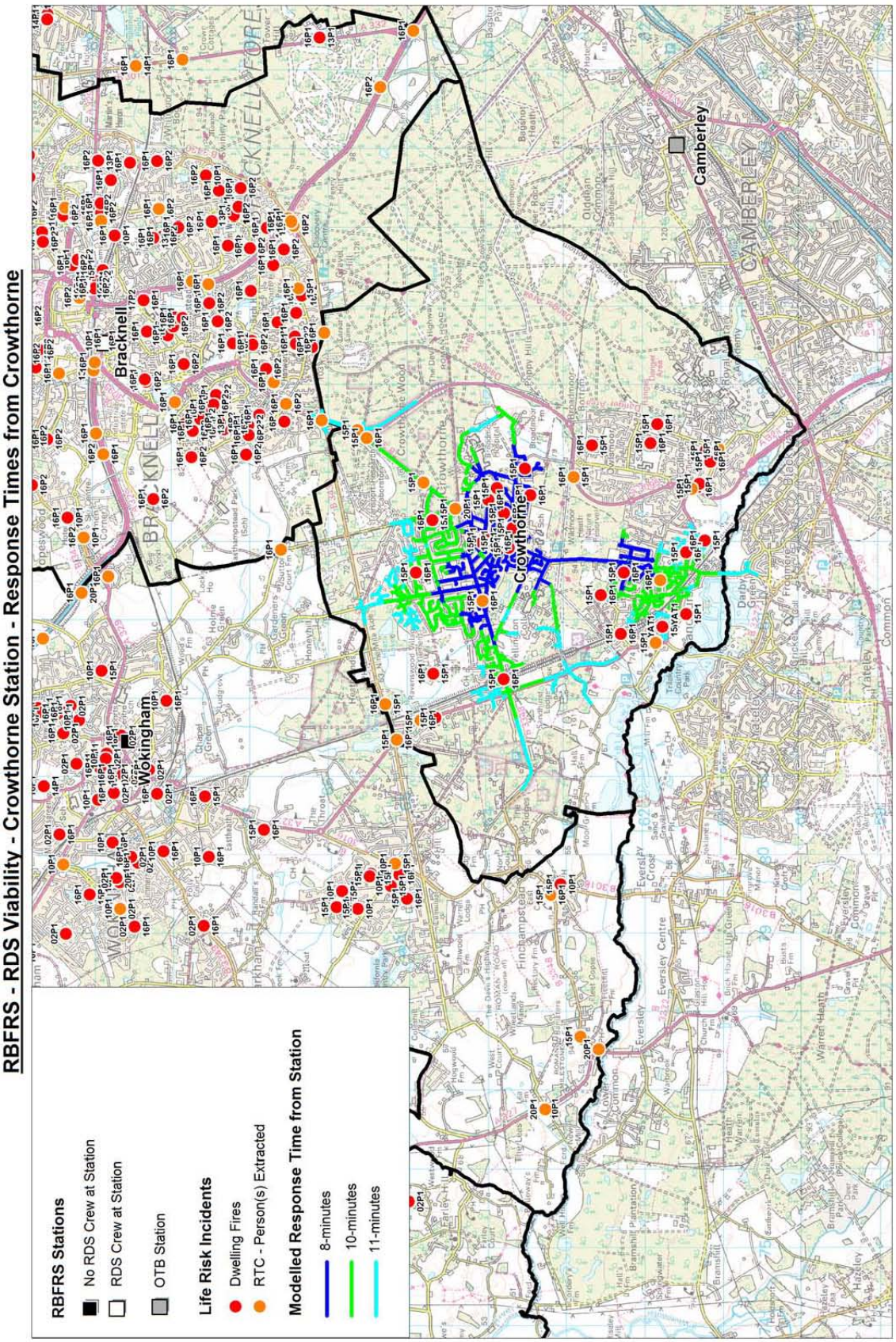
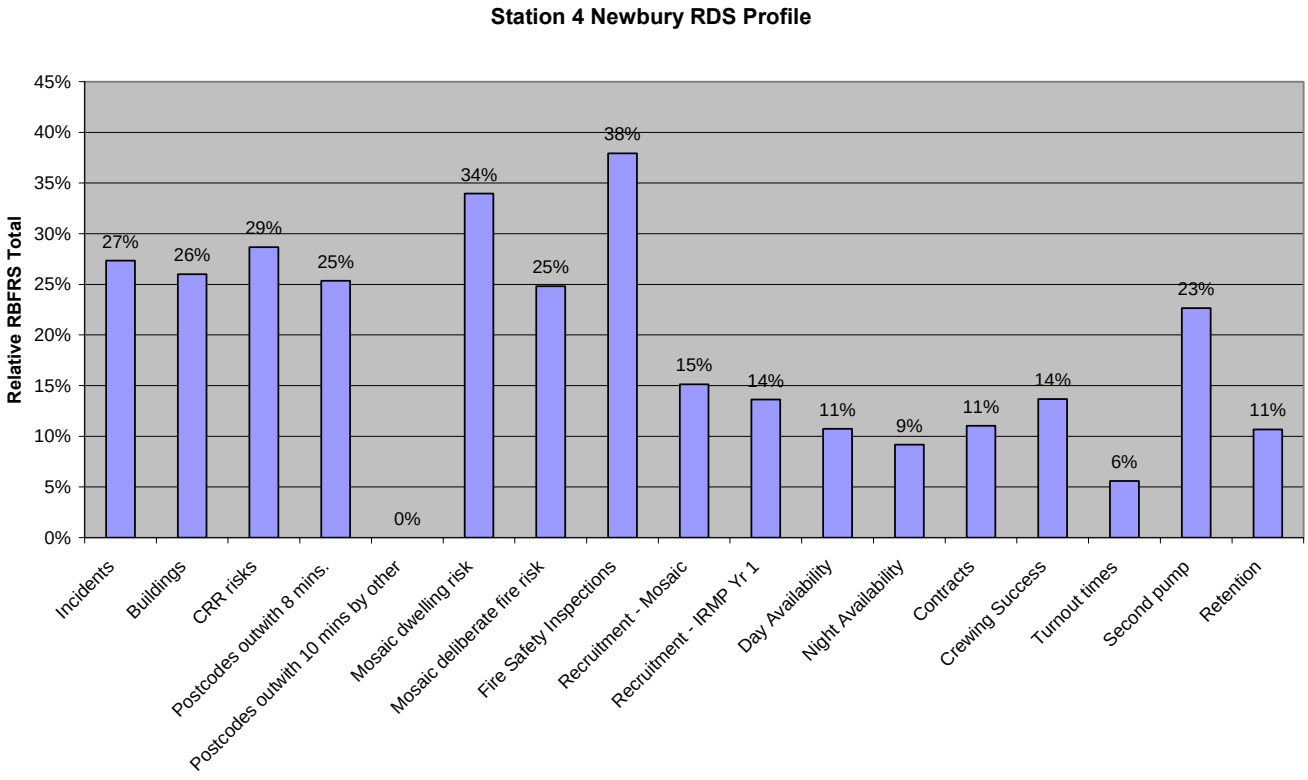
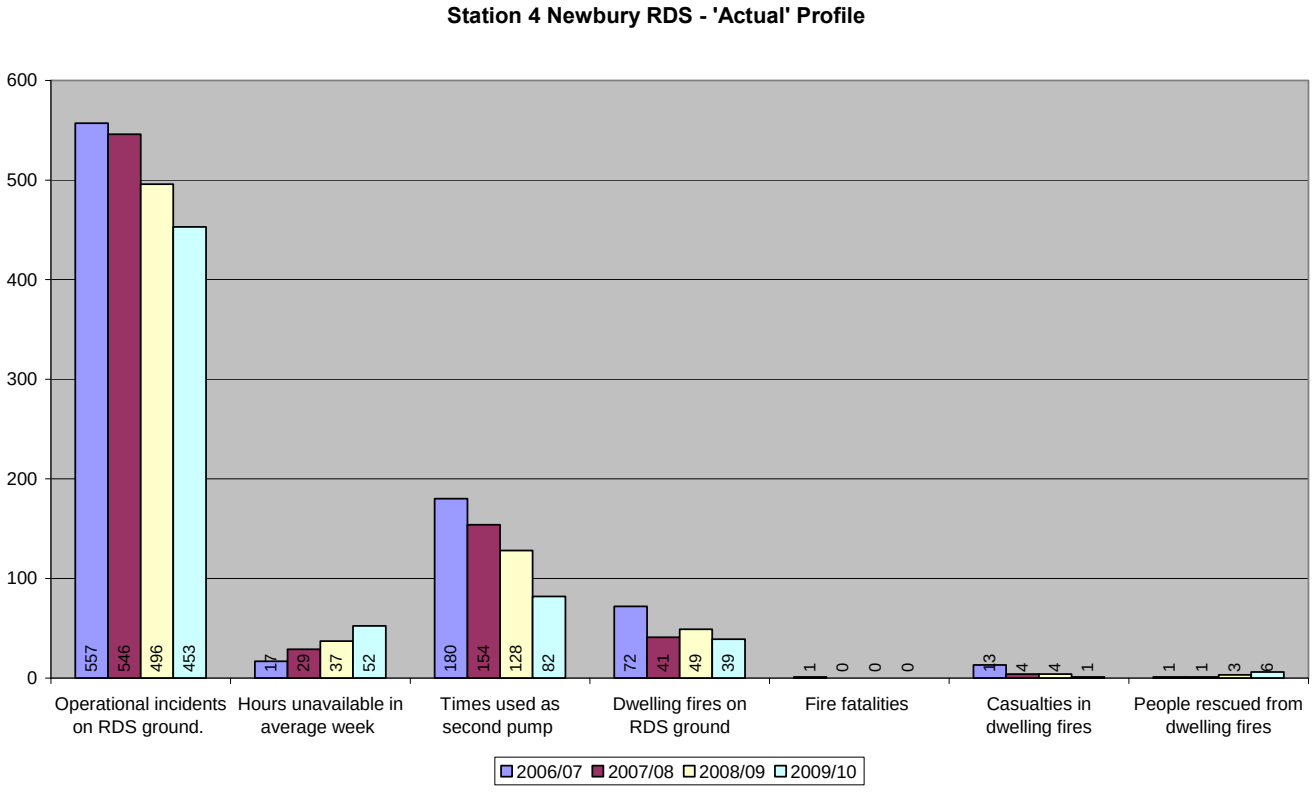


Figure 12 – RDS station response times model and risk critical incidents 2006/07- 2008/09

Station 4 – Newbury RDS

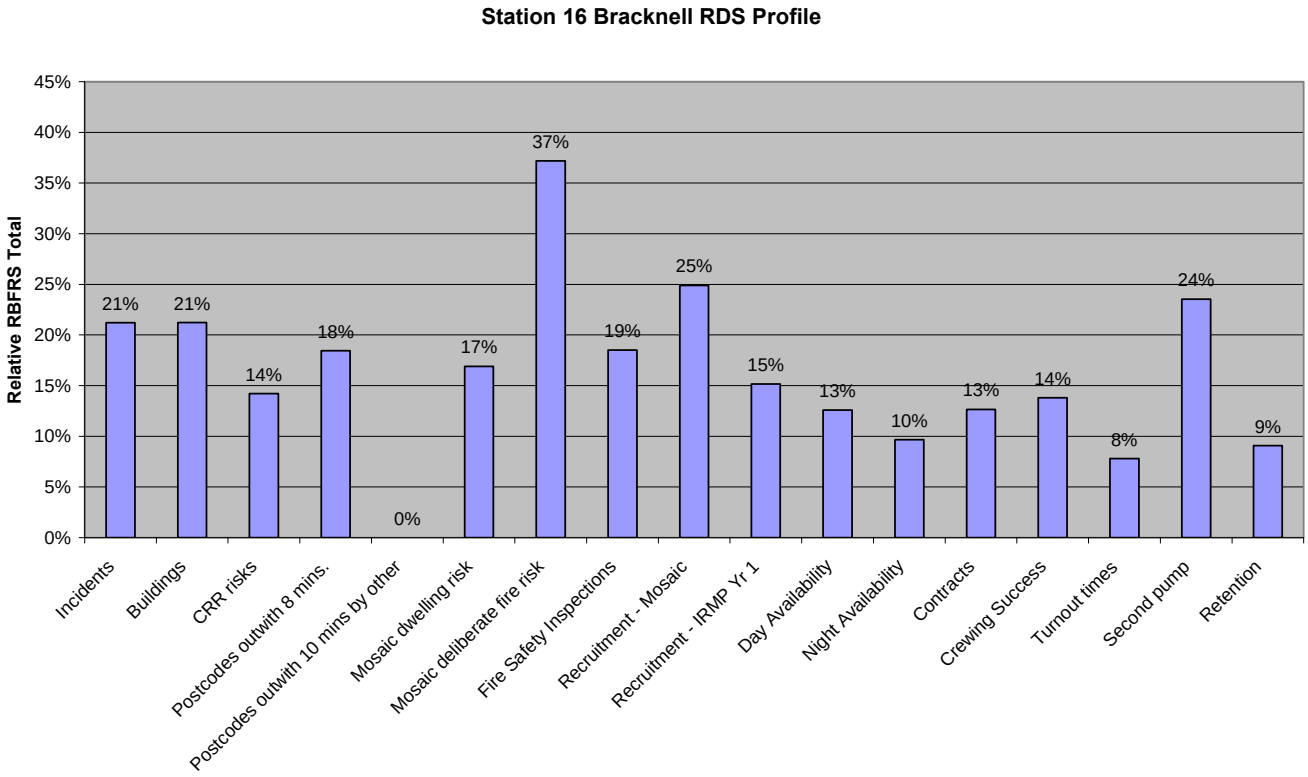


Graph 37 – Relative profile of RDS unit

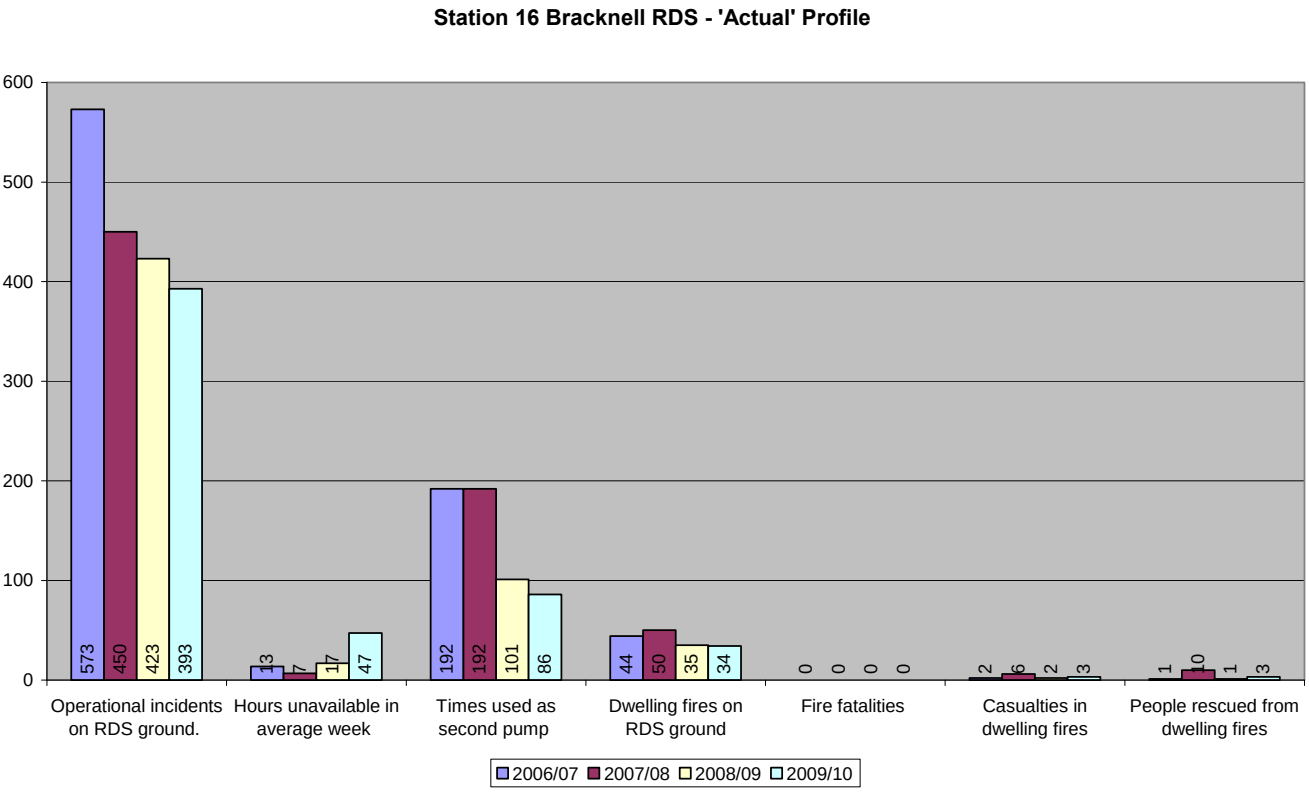


Graph 38 – Actual data profile of RDS unit

Station 16 – Bracknell RDS

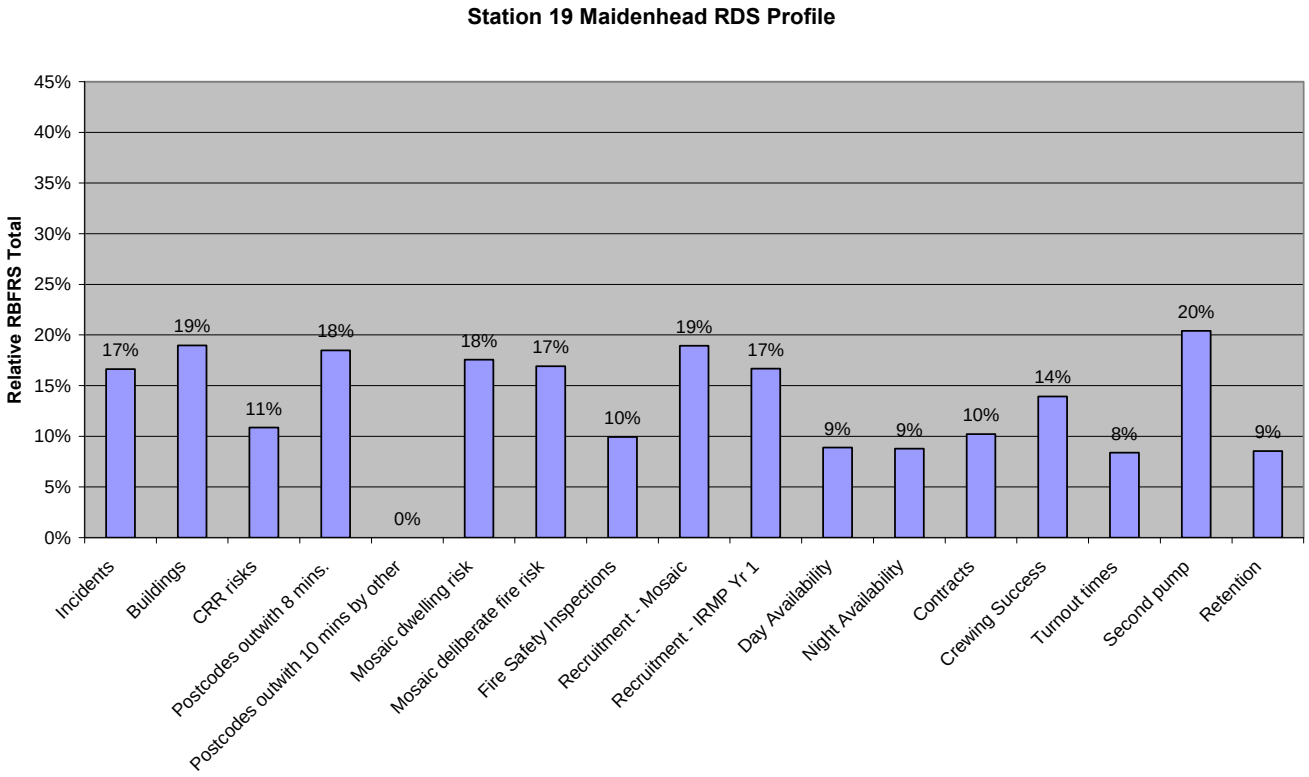


Graph 39 – Relative profile of RDS unit

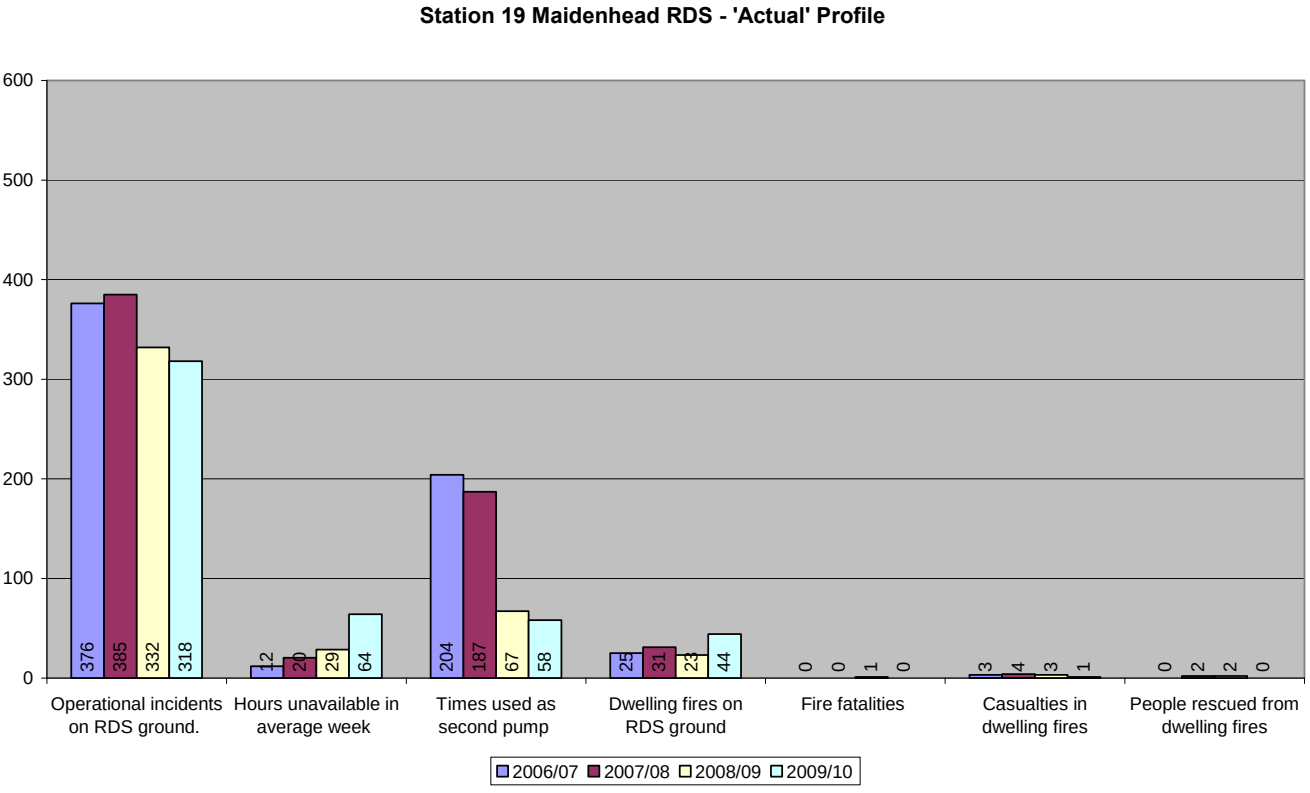


Graph 40 – Actual data profile of RDS unit

Station 19 – Maidenhead RDS



Graph 41 – Relative profile of RDS unit



Graph 42 – Actual data profile of RDS unit

Resilience

A final essential aspect of risk assessment (for the delivery of incident cover in RBFRS) to consider here is resilience. For the purposes of IRMP, a proxy definition is available from the previous 'Major Incident' IRMP project:

> "For the purposes of this project a "Major Incident" is defined as any incident or incidents that have the potential to overstretch (Resilience) any resources both existing and anticipated at the disposal of RBFRS.
>
> Resilience is defined as the ability of RBFRS to sustain the ongoing incident/s and its other **operational** statutory functions." (Support Services 2010)

A resilience exercise was completed with representatives from the FBU, Fire Control, Service Delivery and the project managers. It was completed using actual operational resources available on the day. Two exercises were completed, one involving a ten pump incident the other involving two six pump incidents running concurrently.

It is worth noting some key points from the exercises:

1. There is no number of appliances that will deal with spate conditions and so this was not considered.
2. In the period 2000 to 2009 there has been no occasion when two concurrent 6 pump or more incidents happened in RBFRS. (It has been noted that on 12/9/2009 an 'eight pump' incident occurred in Wraysbury – at the same time as a large 'grass fire' in Sandhurst. This concurrency is excluded by the rules set out, in that the start of the two incidents were greater than 12 hours apart.)
3. It is foreseeable that two 10 pump plus incidents will occur every year.
4. RBFRS has dealt with those incidents that have occurred, despite the lack of availability of RDS pumps.
5. The table top exercises were conducted 'live' in that 7 RDS pumps were unavailable – and yet RBFRS appeared to manage and maintain some cover.

From the various exercises the overall conclusion was:

> "Whilst it was not possible to emulate the confusion that might reign in Control when these incidents have occurred in the past it is possible to say that (as with the real events) RBFRS managed to deal with the incidents and maintain a level of cover for the remainder of Berkshire.
>
> The next step is crucial, the locations of pumps across Berkshire to best meet response standards and will be a continuation of all previous IRMP work. But it is possible to say, following this risk assessment work, that RBFRS has considered overall resilience and that RBFRS has 'enough' pumps, even with 7 RDS pumps being unavailable at the time of the exercises." (Appendix Y).

The full resilience risk assessment methodology and results are at appendix Y and the relevant historical incident data is at appendix Z.

Although it can be assumed that implementation of RSOs must contribute to improved resilience, especially as it relates to day availability, the conclusion from the resilience exercise can also be endorsed here, particularly in that the next important step is to ascertain best pump locations and this was analysed via mapping, using available incident data and the modelling tool developed over many years by ORH for the IRMP process within RBFRS. However, before looking at the technical mapping and modelling and any results, it is useful to ascertain what RDS staff think and feel about the RDS service.

Surveys of current RDS staff

In order to ascertain the feelings and opinions of RBFRS RDS staff, a local survey was commissioned from ORS (Opinion Research Services) who are an approved supplier under the Fire Services Consultation Association agreement (ORS 2010). As the local project and survey got under way, a national survey was also instigated by CLG (the department of Communities & Local Government).

National survey

The national survey, being conducted by Employment Research & Consulting (ERC 2010) on behalf of CLG, was not within the authority of RBFRS but any results are awaited. There were four parts to the survey:

1. All RDS staff.
2. RDS staff who have recently left the service.
3. Local RDS managers.
4. The FRS manager responsible for RDS (organisational questionnaire).

The project team requested an individual service breakdown result but it is possible this will not be forthcoming due to data protection issues (Man L, 2010). The date of publication was also requested and a tentative response was received for report completion in April 2010 but that publication would depend upon CLG (Thewlis M, 2010)[9].

An absolutely key issue is covered at questions 83 and 84 of the organisational survey:

> 83. Has your FRS carried out an assessment of how many hours per week are required for RDS personnel to maintain competence? (Y/N)
>
> 84. If yes, how many hours training per week are needed to maintain competence? (___hours per week).
>
> (ERC 2010a, page 16)

Any firm national answer to this question is likely to give a possible direction for the future viability of the RDS. Any unclear answer will leave the individual Fire & Rescue Services no better off.

Local survey

By its nature, some of the questions were similar to the national survey but the RBFRS survey was more focussed on RBFRS issues including those identified during station visits and by other staff engagement. The results are at appendix AA and the questionnaire is attached there. Simultaneously the partners of RDS personnel were surveyed. The partners' results are at appendix AB, again with questionnaire attached.

Also a graphical report was produced to enhance the textual reports. The graphical report is at appendix AC

Any analysis of these surveys has to be conducted on the understanding that the response rate was not good, at 33%. This return rate is on top of a relatively low number of questionnaire surveys distributed, due to the small number of RDS personnel. The ORS graphical report states:

> 'Given the low number of responses to this survey, caution is advised when interpreting the results' (Appendix AC, page 5)

[9] The understanding was that the results were to be released at the RDS conference in early September 2010. However, in the event, only an indicative summary of the staff survey was produced at the event. The full data will not be released until the end of 2010 and there is not yet any indication of the result for training time (key meeting notes 2010).

Therefore, the results section here will cover some key issues that were highlighted in the report but the results will be amalgamated with other methods of data gathering before any conclusions can be reached.

Local Survey Results

It is disappointing to note that staff do not feel valued, with only 32% expressing an opinion that they feel valued. (Appendix AC, page 11 repeated at figure 13 below.)

To what extent do you agree or disagree that as an RDS crew member, you are a valued member of Royal Berkshire Fire and Rescue Service (RBFRS) staff?
Base: All Firefighter Respondents (34)

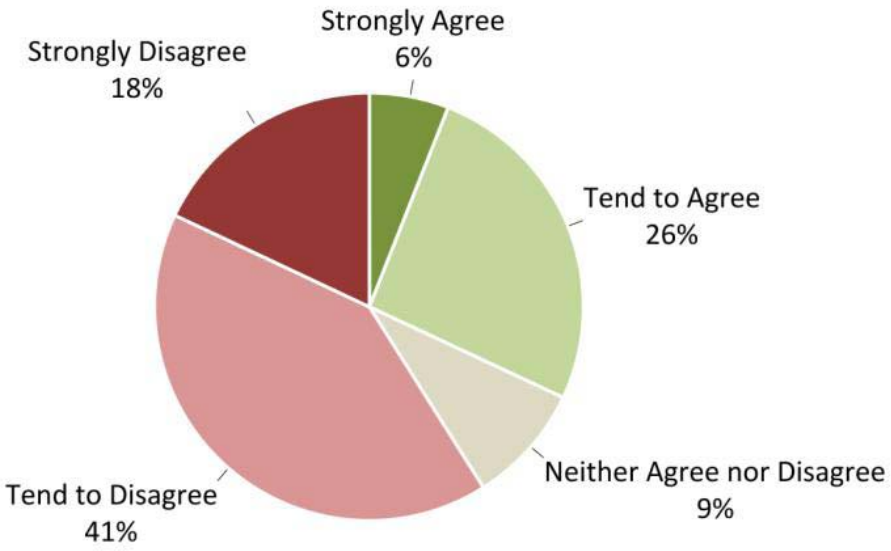


Figure 13 – Do RDS staff feel valued?

A number of comments were given by RDS staff such as:

> ‘feel undervalued, Brigade is not interested in RDS system any more.’
>
> ‘Retained treated as second class service.’
>
> ‘Very little support is given by RBFRS in the way of recruitment, sufficient training time or measures to improve availability.’

(Appendix AA, page 9)

For recruitment a number of options were given within the questionnaire. The favourite option was to ‘relax the 3 minute get-to-the-station time’. The least favourite was ‘positive action for under-represented groups’. Four additional options were suggested:

1. Faster training – ‘to get to ride’.
2. Different [selection] tests for RDS.
3. Guaranteed salary and extra training.
4. Real commitment from managers – no passion shown or imagination.

(Appendix AA, page 11)

Perhaps surprisingly, the current RDS staff tended not to want RBFRS to liaise with their primary employers with 67% saying ‘no’ and only 33% saying ‘yes’ to primary employer engagement. However, this is on a very low number of respondents at fifteen. (Appendix AC, page 13)

In terms of current working hours, 75% do not want to provide fewer hours cover. (Appendix AC page 15).

Although only 20% rated the current ‘pay as you go’ payment system as ‘unfair’ or ‘very unfair’, a majority would prefer a ‘regular salary’. (Appendix AC page 16, repeated at figure 14 below).

Would you prefer to be paid a regular salary or operate the 'pay as you go' system?
Base: All Firefighter Respondents (33)

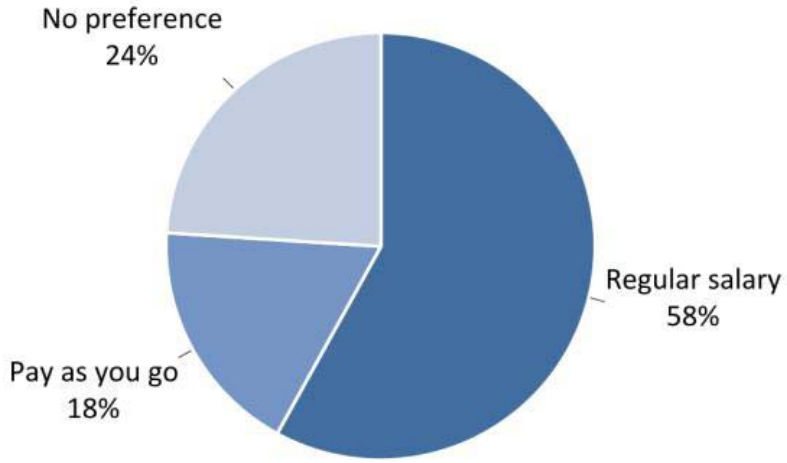


Figure 14 – Do RDS staff want a ‘regular salary?

One of the clearest answers given was for the opportunity of a ‘50% contract option’ with no dissenters. (Appendix AC, page 17, repeated at figure 15 below).

To what extent do you agree or disagree that RBFRS should offer the option of a 50% contract?
Base: All Firefighter Respondents (30)

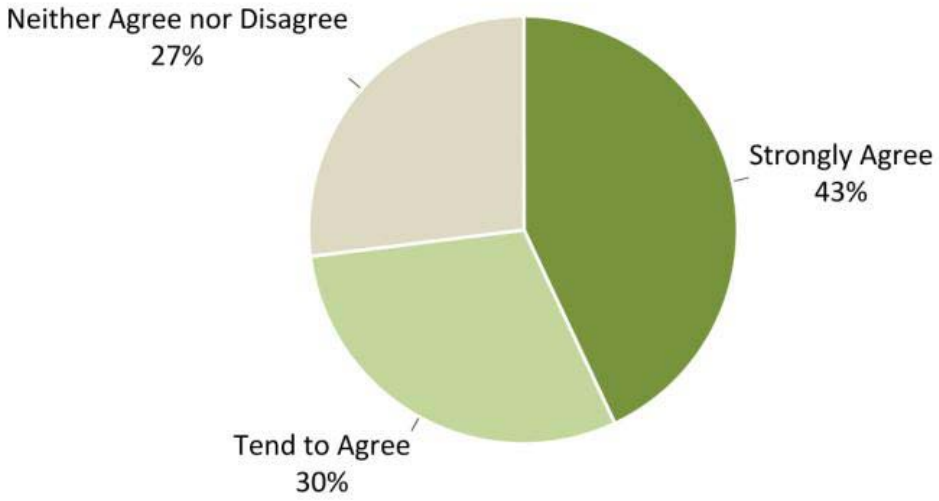
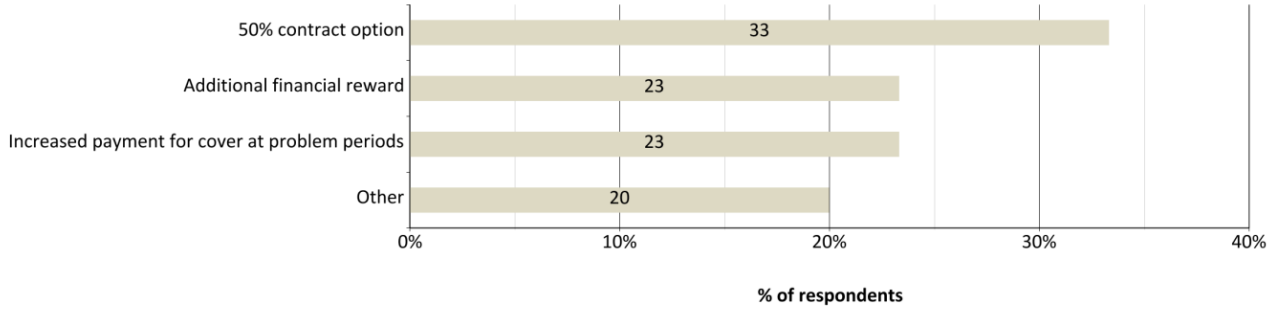


Figure 15 – Do RDS staff want a ‘50% contract option’?

Further, the RDS staff see this as being a good solution to day availability. (Appendix AC, page 17, repeated at graph 43 below).

Which of the following options would do most to encourage cover during periods when your station experiences most difficulty maintaining fire cover?
Base: All Firefighter Respondents (30)



Graph 43 – What would encourage recruitment?

In addition to the possible options presented to improve recruitment at difficult times of availability (graph above), other options were suggested:

> ‘Being used to respond instead of being left to rot’
>
> ‘Encourage more [dual contract] staff.’
>
> ‘Increase area of recruitment to take in local industries…’
>
> ‘More calls.’
>
> ‘More staff.’

(Appendix AA, page 26)

Only 23% of RDS personnel ‘agreed’ or’ tended to agree’ that there was adequate training time. (Appendix AC, page 17, repeated at figure 16 below).

Do you agree or disagree that sufficient time is allocated for you to carry out the on-station training required for your work with RBFRS?
Base: All Firefighter Respondents (35)

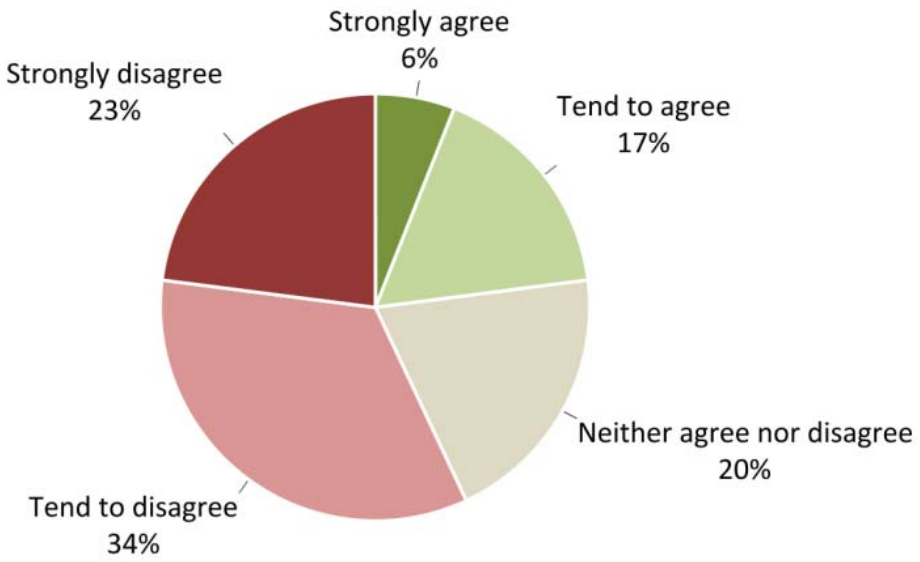
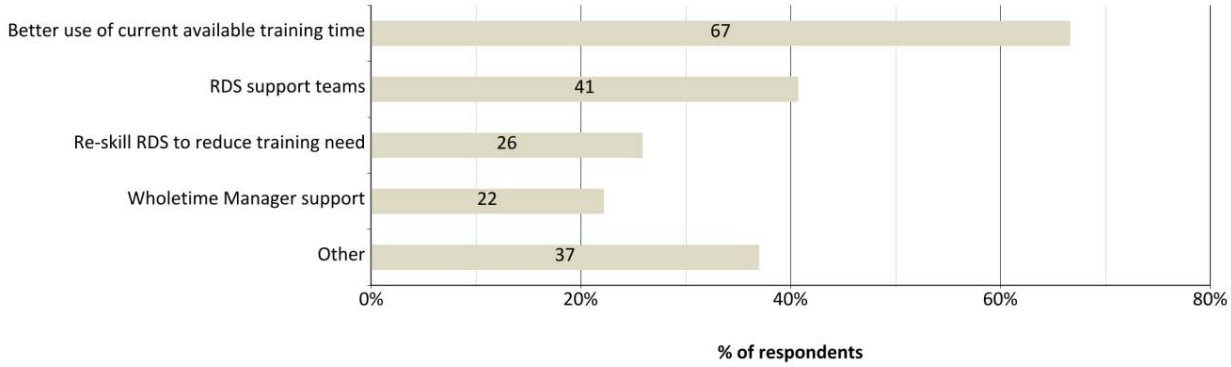


Figure 16 – Do RDS staff receive enough training?

Those who thought more training time was required (18 staff) gave a variety of options for the extra quantity, with the favourite option being 3 hours per week and that it was possible

to give this time (Appendix AC, page 18). Further, when asked how training time could be maximised, the RDS staff gave the following result (Appendix AC, page 20, repeated at graph 44 below):



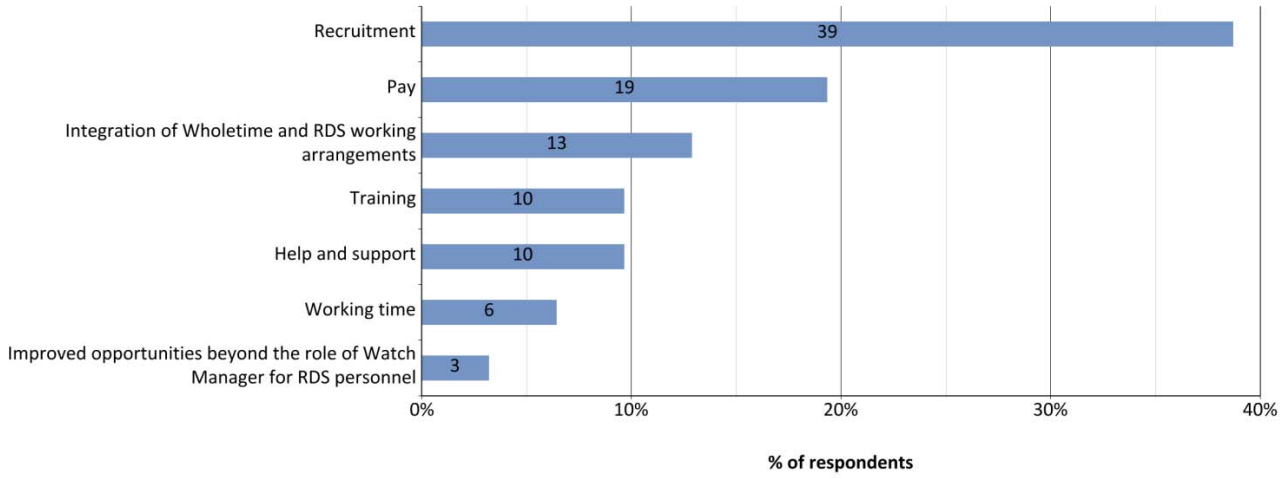
Graph 44 – How should training time be maximised?

Some of the comments received to the open questions regarding training could be grouped into the following:

- Consider an additional drill night - or more hours in other ways.
- Must allow for more administration/training recording time.
- Reduce the extraneous activity that eats into training time.
- Consider intensive full day training, perhaps working with the WDS.
- Concentrate on risk critical or core training, perhaps concentrated on station ground.
- RDS training support and central drill programme.

And, finally, when asked what one issue should be the priority, the answer from the RDS personnel was (Appendix AC, page 22, repeated at graph 45 below):

When considering the issues discussed within this questionnaire, please indicate the ONE issue that you think should be the priority for improvements.
Base: All Firefighter Respondents (31)

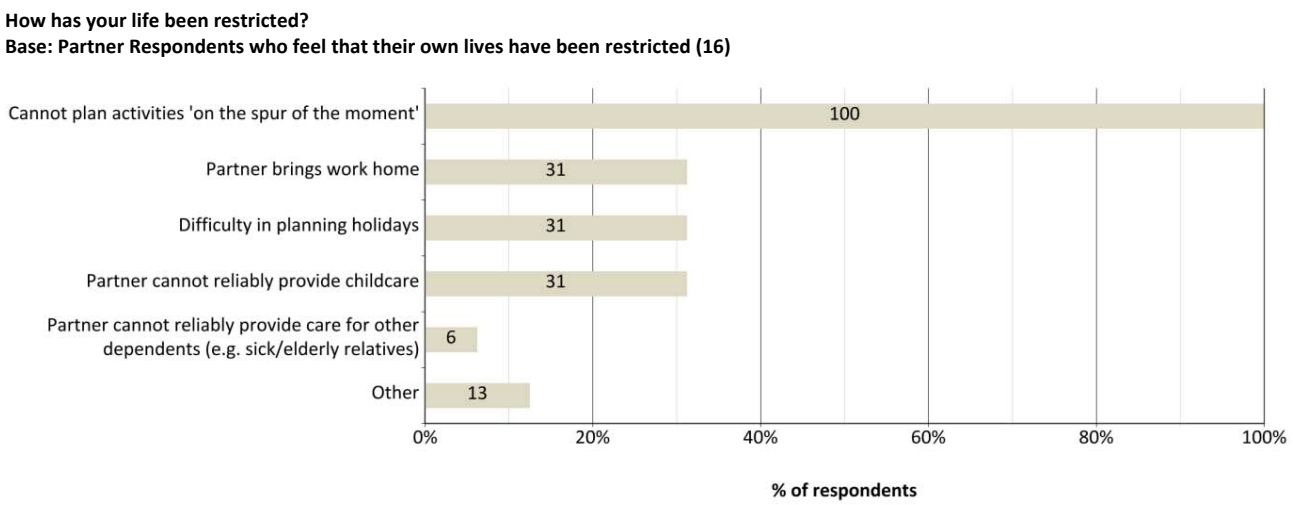


Graph 45 – What is the one priority issue?

This shows that the RDS personnel believe recruitment is by far the most important issue to resolve, followed by pay.

When considering the RDS partner response the same caveat on return numbers applies, in that there were relatively few responses. Never-the-less there are some interesting results from the short survey of partners. Firstly, the RDS restrictively impacts upon 57% of

partners (Appendix AC, page 23) and the main impact is on ‘spur of the moment’ activity (Appendix AC, page 23, repeated at graph 46 below):



Graph 46 – What are the restrictions on the partners of RDS staff?

Partners, on the whole, do not feel that the RDS work is financially ‘worth it’ with only 24% agreeing (strongly agreeing or tending to agree) that the money is worthwhile. On the other hand, partners tend to be content with their partner being a RDS member, with only 8% ‘tending to disagree’ (Appendix AC, pages 23 – 24.)

Interestingly, partners took the opportunity to express their feelings (appendix AB). The comments could again be grouped, into the following areas:

- Greater financial reward required (and consider childcare).
- Employ more RDS
- Make better use of RDS.
- More thanks and recognition.
- RDS give essential service to the community and this is of great value.
- Greater flexibility (including that of 3 minute catchment)
- A great deal of pride in their partners RDS work.

Stations Visits and informal consultation

In addition to the formal surveys, every opportunity was made to gather further evidence by visits to stations and via many formal and informal meetings. At these staff meetings a presentation was usually given, with the intention of garnering the possible problems and solutions from the ‘ground floor’. A short commentary for each RDS station visit was written (RDS meetings 2009/10) and a list of key meetings was created (key meeting notes 2009 and 2010).

Perhaps not surprisingly, the responses given during these visits were in the same areas as given by the local survey above and the following table indicates a collective response for possible solutions from all meetings, with the number of times the suggestion was mentioned.

Improvement Options	Count
More Flexible Availability Contracts	11
Extend 3 mins during the day - can travel further as not getting dressed etc	2
More Response Flexibility - 3 mins too short	7
Reduce Training Need	1

Improvement Options	Count
More Focused Training - Exercise Reduction	7
Extra Training Time	12
Improve Recruitment Process	13
Re-Skilling	4
Salary Scheme	4
Purpose Built Housing	2
Train With WDS Staff	2
Rig en-route to Incidents	1
Change Response Standards	1
Clerks to Assist with Admin	1
IT Training Outside Normal Drill Period	1
Support Training, Admin, Recruitment etc	12
Ownership of RDS & Issues Required	3
Improve Primary Employer Engagement	1
Support potential recruits - form filling	2
Use of RDS Staff - Detach to Other RDS Stn's	2
Complete tests etc another than drill night	1
RDS for Specialist Staff - Crewing Specials etc	1
Selection Process use some evening periods	1
More flexibility for dual contract - more hours	1
Change stand-by policy - train during stand-by	2
Change selection process	1
Use station for private offices - use employees for RDS cover	1
Central training programme	1

Table 13 – Suggested solutions, from the RDS for the RDS

Grouping these suggestions by themes (and colour) gives the following table and figure:

Management	5
Support/Training	45
Role Map change	6
Recruitment	25
Pay/Contracts	16

Table 14 – Suggested solutions, from the RDS for the RDS, grouped

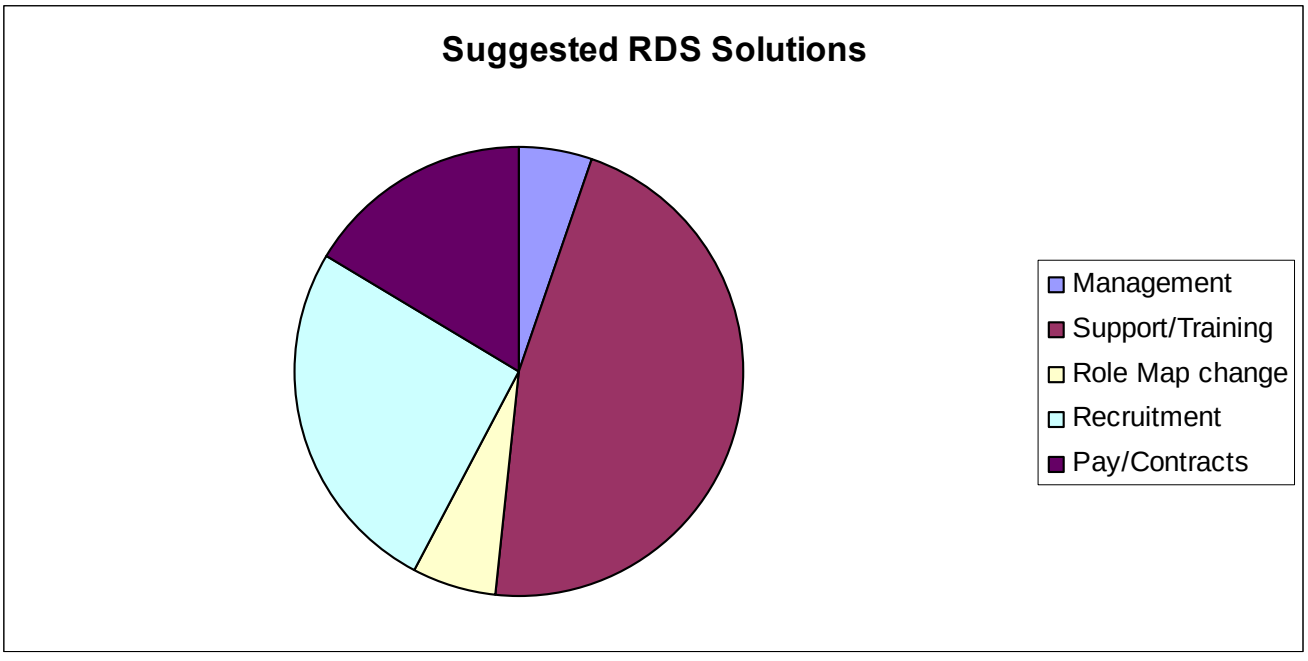


Figure 17 – Suggested solutions, from the RDS for the RDS, grouped

All the responses, particularly the possible solutions, will be discussed in detail later, with a view to reaching options and recommendations for change. However, a key query for a long term project such as this one (looking at a ten to twenty year time frame) is ‘what is RBFRS projected to look like in the long term?’

Any attempt to answer this question requires a technical analysis of modelling and mapping of RBFRS resources across Berkshire, and this now follows.

Deriving the mapping and modelling specifications

Using all the risk assessment data and the concurrent work talking to relevant staff, ORH were contracted to map RDS stations and their possible coverage by surrounding stations and, further, to map for options and 'best' locations, alongside other general modelling work. A brief description of the ORH software and how it works is at appendix AD.

Due to the wide ranging brief for the project team, discussions were held to establish whether or not there was any flexibility in the current RBFRS response standards. After professional debate and also with reference to the 'tolerability of risk' (discussed above) it was decided to analyse the mapping and modelling for the first appliance arrival and then ascertain if there is any negative impact on the second appliance response standard and, if there was, whether this could be borne. But it was decided NOT to do any modelling that required an adjustment to the response standards. The current RBFRS response standards are:

- An optimum response standard of 8 minutes for the first appliance and 10 minutes for the second appliance for dwelling fires.
- A standard response of 10 minutes for the first appliance and 12 minutes for the second appliance for dwelling fires.
- The higher risk localities where it is predicted that appliances will not reach dwelling fires within the standard response will be prioritised for community safety initiatives to drive down the risk.
- To make an initial attendance to Road Traffic Collisions, with the necessary resources to commence extrication of casualties, within 11 minutes.

(IRMP 2010, pages 12 – 13)

The specification for ORH work was then derived (appendix AE) and this was noted by the RDS review project team. For the mapping and modelling work certain assumptions had to be made, such as the possibility of RDS Support Teams. Some of this work was to update other data, for example that data used for unavailability against incident numbers (used in the 'actual' data profile graphs above).

A series of meetings, draft reports and e-mails led to a second mapping and modelling specification (appendix AF). Subsequent work gradually led to a final report from ORH (appendix AG).

It will be clear from the extent and detail within the report that significant interpretation, discussion and judgement are required. To assist this process a mapping sub-team of the project team was set up to consider all the relevant issues. This sub-team membership consisted of the project managers, representatives from the FBU and the RDS staff Service Delivery, Support Services and the Information Systems Manager.

General interpretation of the mapping and modelling data

Referring to the specification it is possible to see that the initial work that was commissioned from ORH involved the establishment of 'green field' locations for fire stations. That is, if there were no fire stations in Berkshire where would they be best located to maintain and improve upon the set response standards. It must be realised that this is, effectively, impossible as the financial implications would be huge. However, the work supports any long term decision making that may be required and assists the avoidance of short term solutions that would not be tenable in the long term. Also, again as

can be seen from the specifications, the green field site work guides which stations should be ‘fixed’ in their current locations for the next set of modelling work.

The change of emphasis for the response standards, to the first appliance, was discussed above. However, an additional factor for interpretation must be noted here, in that the modelling for the locations of the station in the ORH work used a combination of the incident types. Therefore, the station locations identified are in those places best suited to meet the response standards for both dwelling fires and RTCs. Previous work had tended to focus on dwelling fire response standards but the change here is driven by the relatively recent Fire & Rescue Services Act that, amongst other things, gave Fire Authorities a statutory duty to also ‘make provision for RTAs’ (FRS Act 2004, 2(8)1).

A further general finding from ORH was that to model, green field sites particularly, with the 10 minute first response standard gave an overly ‘sensitive’ result in that the station locations would vary in the model results to such an extent so as to give unrealistic outcomes.

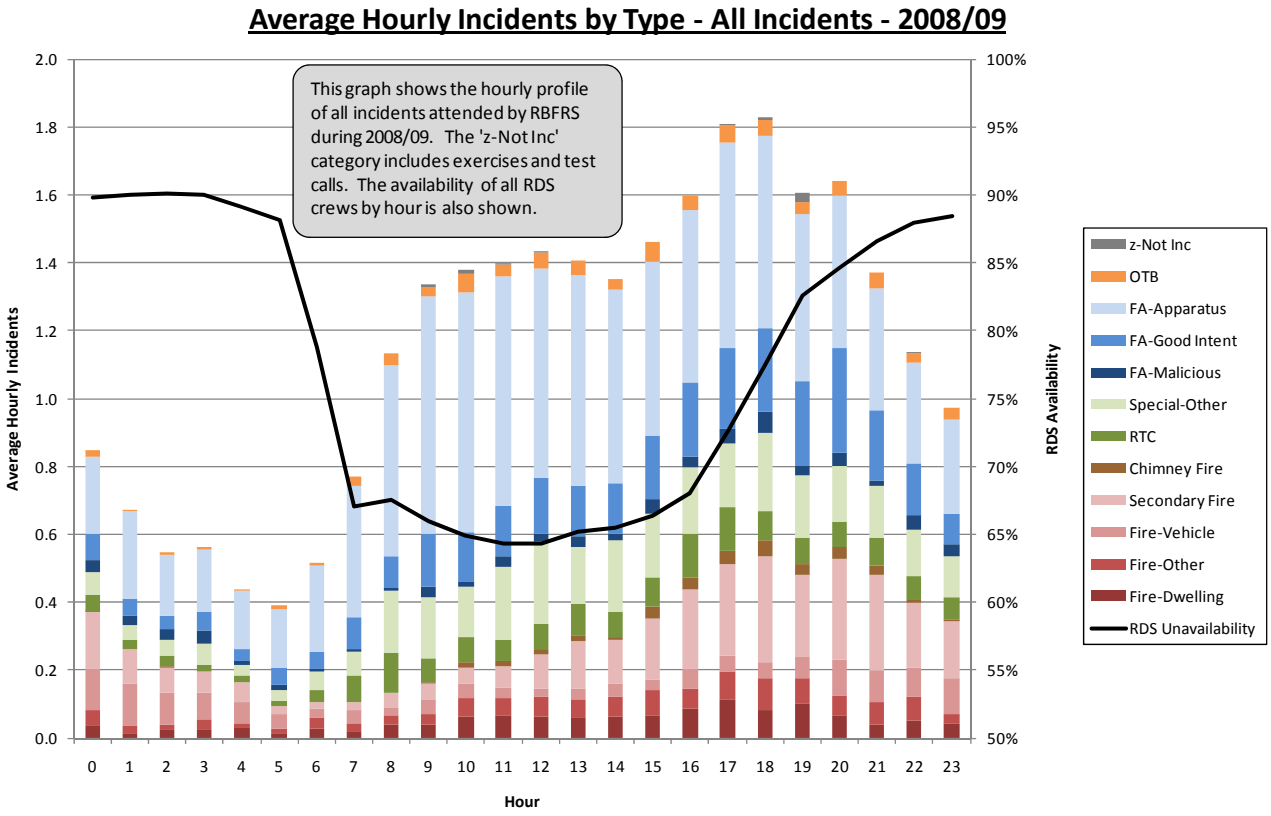
Finally, for this introductory section regarding mapping and modelling, wherever possible the most valid and recent data set was used for any analysis. Complete years of data were used and, if appropriate, the longest time frame was used (bearing in mind that ORH have RBFRS data over nearly ten years). Sometimes it is necessary to select the appropriate data. For example, the few remaining Cookham fire station staff transferred to Maidenhead in mid-2009. To analyse Cookham attendance time data after that, in order to make comparisons with other RDS stations would have made no sense. Another example is given immediately below, in that for an analysis of incident types attended by hour of day it makes more sense to use a single recent year (rather than from, say, 10 years ago) as the incident type profile has changed.

With these general comments in mind, the key data to pick out from the final ORH report (appendix AG) is considered below.

Incidents and RDS availability

A previous IRMP project found that peak RDS unavailability coincided with peak incident numbers, by time of day (IRMP III, page 25).

That earlier work was constrained by the data being in four hourly blocks and a more refined data set is presented at graph 47. (Based on appendix AG, ORH, page A2a. NB – the black line in the graph here gives RDS availability whereas the ORH report uses the inverse – RDS unavailability.)



Graph 47 – Incidents and RDS availability by time of day

The graph confirms the risk data found earlier, in that day time availability is worse than night but that the peak incident numbers are as RDS staff are becoming more available over the early evening (as they return from primary employer work.) This also updates the work presented at appendix B, annex B to the latest full appropriate year and combines all RDS stations availability.

Time trials – checking the model against actual.

At the IRMP RDS project team meeting of 17 February 2010 (IRMP RDS 2009/10, minutes 17/2/10) time trials were discussed as a way to ascertain actual travel times and to validate the ORH model.

Two sets of time trials were conducted by RBFRS Driving School. The first from Dee Road Reading (Station 3) to Pangbourne (Station 7) on February 19th at 1000hrs.

Time Line:

Location at 4 minutes: Oxford Road junction with Roebuck Rise. Berkshire Street Atlas map reference 57 D4.

At 5 minutes: Oxford Road junction with Knowlsey Road.

At 6 minutes: Purley Rise.

Arrival at Station 7 Pangbourne: 7 minutes 35 seconds.

The ORH model gives the times as shown in the following map (figure18).

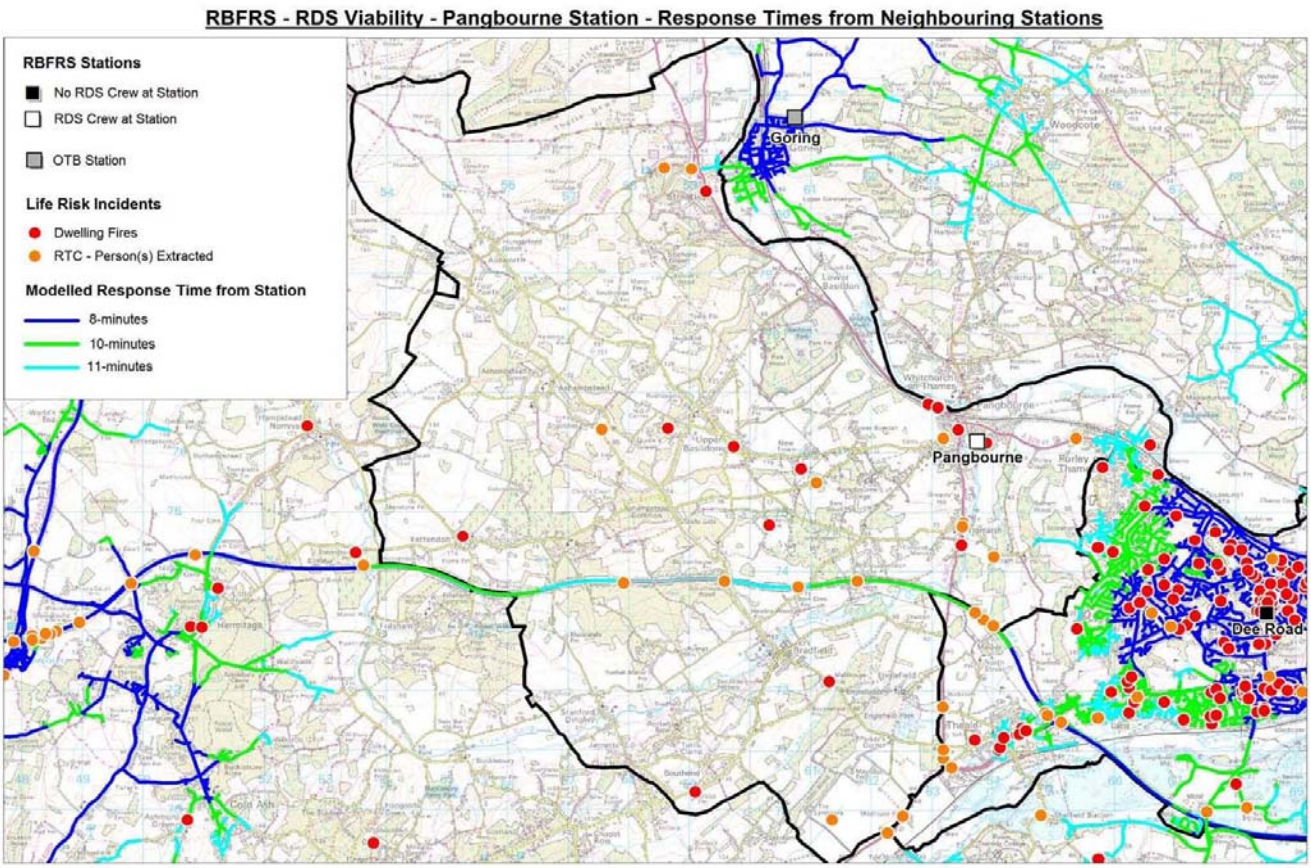


Figure 18 – ORH modelling for Dee Road to Pangbourne

The second time trial was from Maidenhead (Station 19) to Cookham (Station 12). on February 19th at 11.10hrs.

Time Line

At 4 minutes: Sutton Road, White Place Farm Lodge.

At 5 minutes: Sutton Road junction with Cookham High Street.

Arrival at Station 12 Cookham: 5 minutes 40 seconds.

(Foley 2010)

And the ORH model gives the following map (figure 19):

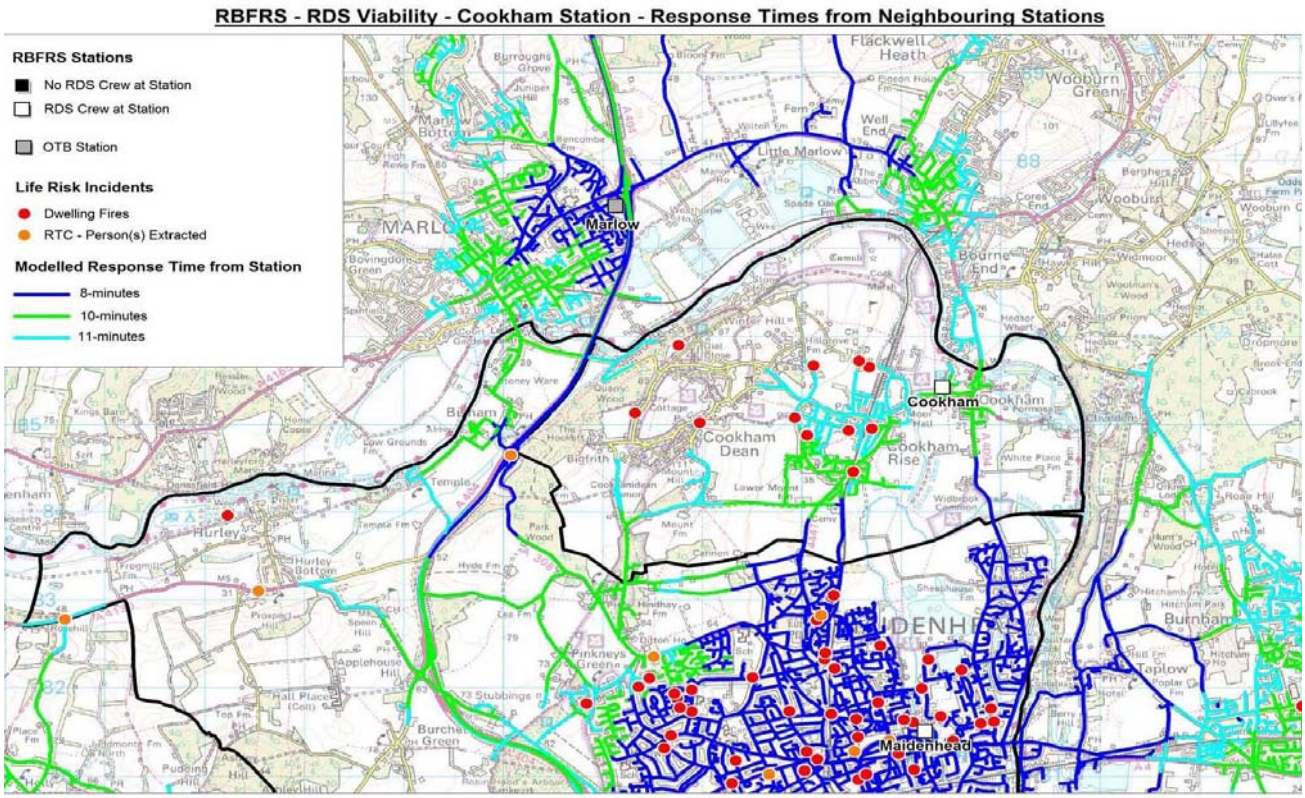
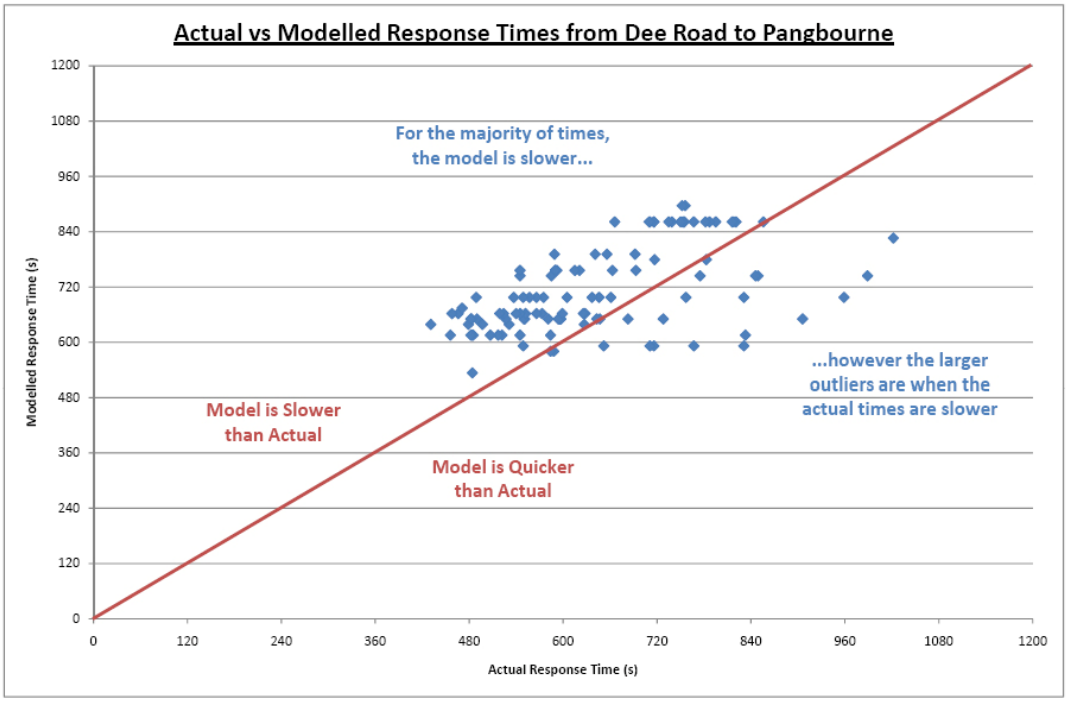


Figure *19 – ORH modelling for Maidenhead to Cookham*

It can be seen when comparing the time trial time line with the modelling maps that both time trials appeared quicker (ORH 2010a). It should be remembered that there will be a difference due to the ORH data having included the call handling and turnout times, for which there are Local Performance Indicator targets, with an expectation that the total for these times should be in the order of two minutes. Even taking this into account there is an apparent discrepancy that led to a discussion with ORH and the following analysis of the model (see graph 48). (ORH 2010b).



Graph 48 – Actual Travel Times compared to ORH model

From graph 48 it is possible to see that the model tends to over-estimate how long it would take for RBFRS to attend an incident in a particular geographical location.

With agreement from the project team, further model analysis gave similar results for Wargrave and Cookham (appendix AH). It can be seen from all three graphs that the majority of incidents (about 66%) were attended quicker than the model predicts but that some were attended slower (about 33%). It was also noted that some incidents (described as ‘outliers’) were well outside any prediction and it is probably the case that these were incidents where, for example, there has been initial confusion of incident location.

On the whole, the analysis shows the model to be robust and, if anything, the model errs on the side of safety.

Over the border

Over the border (OTB) appliances, from other Fire & Rescue Authorities, have been considered in a broad sense as part of the project and potential solutions. However, it must be understood that these appliances are not within the responsibility of RBFA and, therefore cannot be relied upon in all circumstances. There are mutual assistance agreements, made under sections 13 and 16 of the Fire & Rescue Services Act 2004, between RBFRS and all the surrounding Authorities (except London) to assist in the event of any need. Any interpretation of the mapping and modelling conducted has assumed over the border resources are not available so that the picture presented could be seen to be ‘worst case’.

Green field locations.

The ORH report deals primarily with station locations as they would be if it were possible to build new WDS fire stations in ideal locations across Berkshire (appendix AG, ORH appendix C). This is, of course, impossible, but allows for future long term planning, confirmation of existing locations and enables RBFRS to locate appliances in the best places in the event of a diminishment of resources, for example, if there are spate conditions.

Of some interest here is the modelled map for 12 WDS appliances, as this is the nearest number of WDS appliances currently provided by RBFRS.

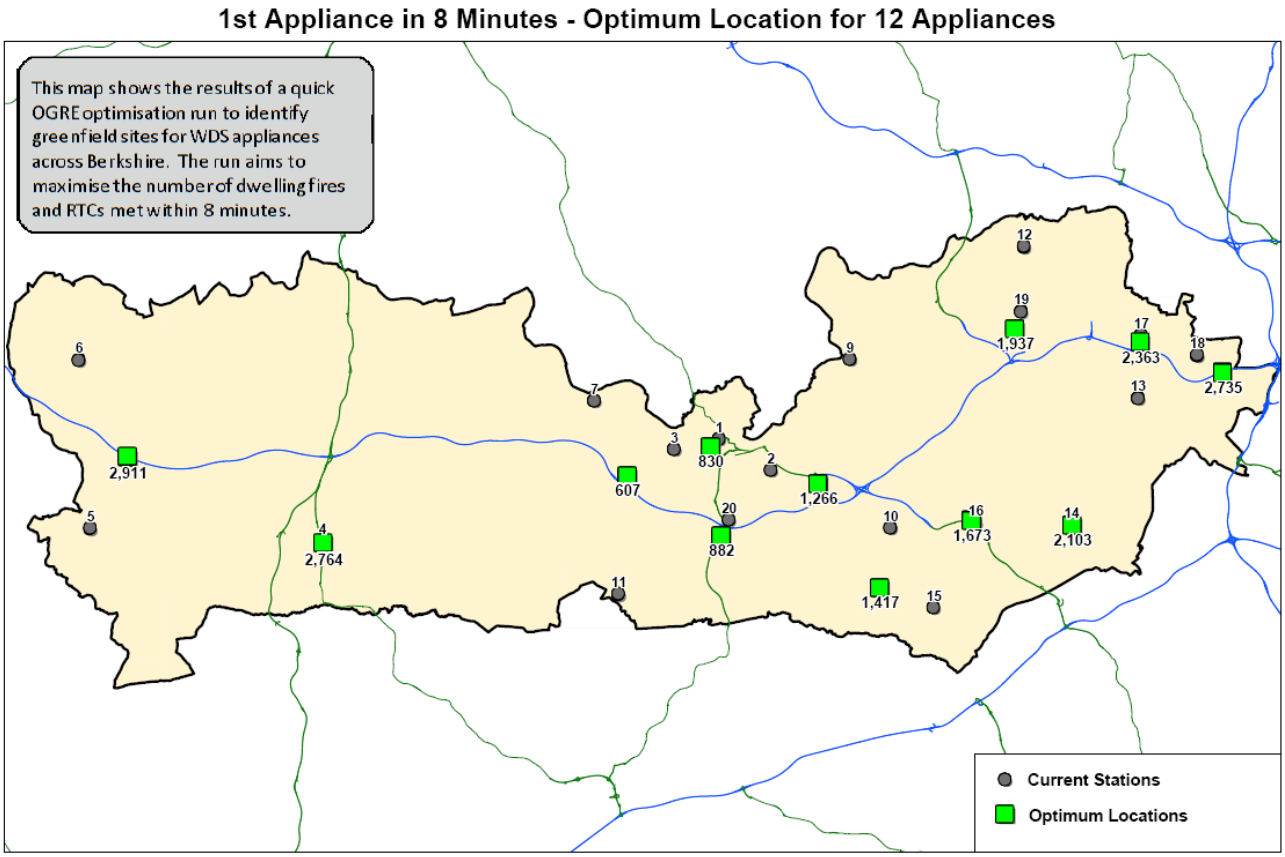


Figure 20 – 'Green field' map with 12 WDS appliances (Appendix AG, ORH, page C1i)

(In the above figure, the number below each green 'optimum location' square is merely a mapping node number used by ORH.)

At first glance it might appear that RBFRS appliances are in the wrong places but it is easy to see how a process of 'fixing' stations in the model can commence, with figure 20 suggesting that (working from West to East) stations 4, 1, 20, 16, 19 and 17 can be 'fixed' as they are fundamentally located in the right place.

It is also possible to see that the relative importance of RDS stations is roughly identified, with Station 14, Ascot, being particularly important in this model.

Further, it is possible to identify that the 'green field' location nodes 607, 1266 1417 and 2735 could be fixed to WDS stations 3, 2 10 and 18 respectively

With these locations determined, it was then possible to map RBFRS with WDS only, and to map the next five most important green field locations. The result is below at figure 21.

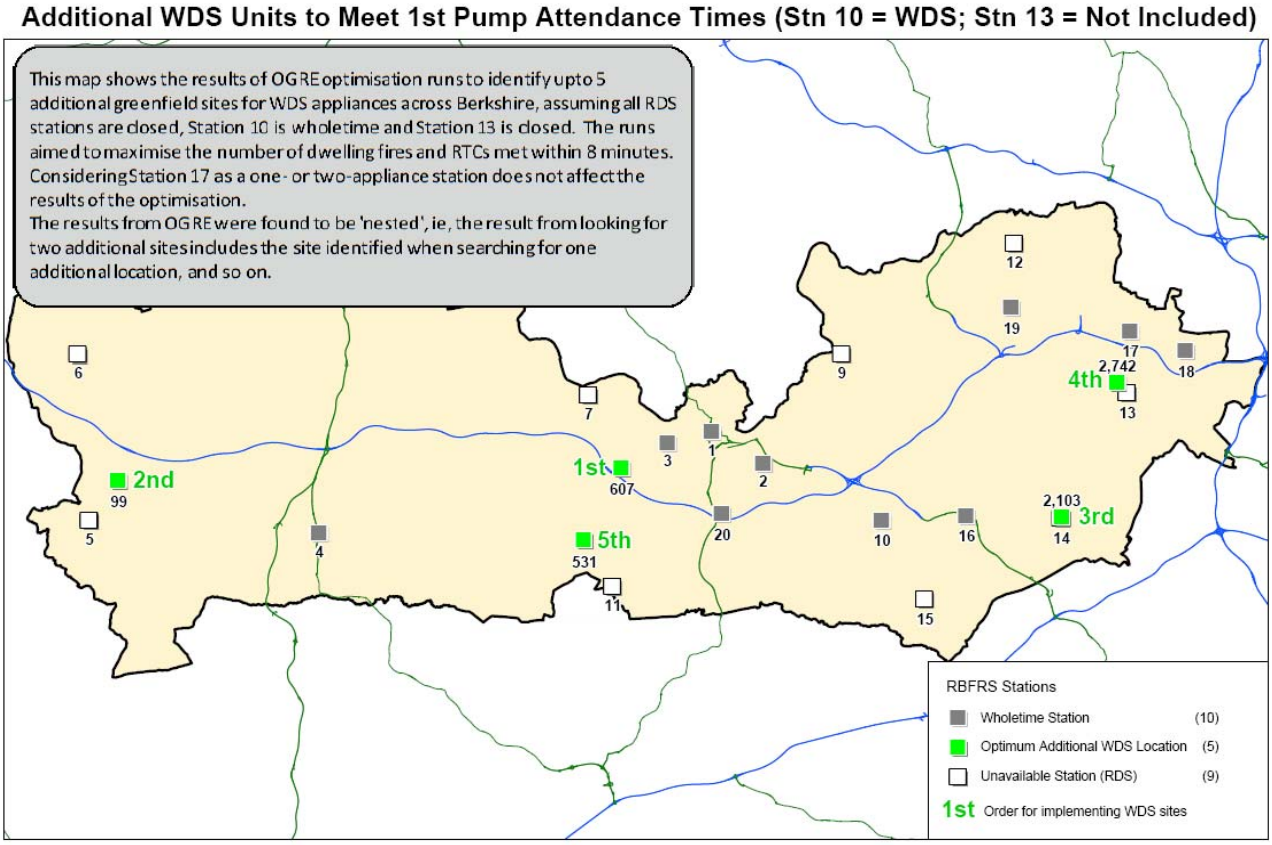


Figure 21 – 'Greenfield' map of next best locations once key locations 'fixed. (Appendix AG, ORH, page D1)

From this it is possible to see the importance of the next 5 approximate WDS station locations being Theale, Hungerford (North), Ascot, Windsor (North) and Aldermaston - in order of priority.

Fixed station locations.

It could be said that the 'WDS only' work completed is not strictly relevant to the RDS project. However, it is important to note that the project definition includes reference to long term planning and it is the intention with this work to ensure that anything that might be recommended for the RDS would not be contrary to long term possibilities. Ideally, any mapping work here would then match to the RBFRS long term strategic plan but it became clear through the project research work that, apart from the current 5 year IRMP for 2007 - 2012, there is no long term strategic document to go up to 2020 or further. This gap in strategic planning should be addressed and include consideration of the RDS as part of the whole Authority.

Having seen how it is possible to determine WDS station locations using the mapping and modelling software it is time to turn to RDS stations. Using the fact that stations 7 (Pangbourne), 9 (Wargrave) and 12 (Cookham) are assessed as being in the lower community risk and less able to deal with the risk (meaning all three are in the bottom left quadrant of the risk assessment graph 17), it is possible to fix all the WDS stations and all other RDS stations. A model of RBFRS with two additional optimal support locations can then be derived (figure 22).

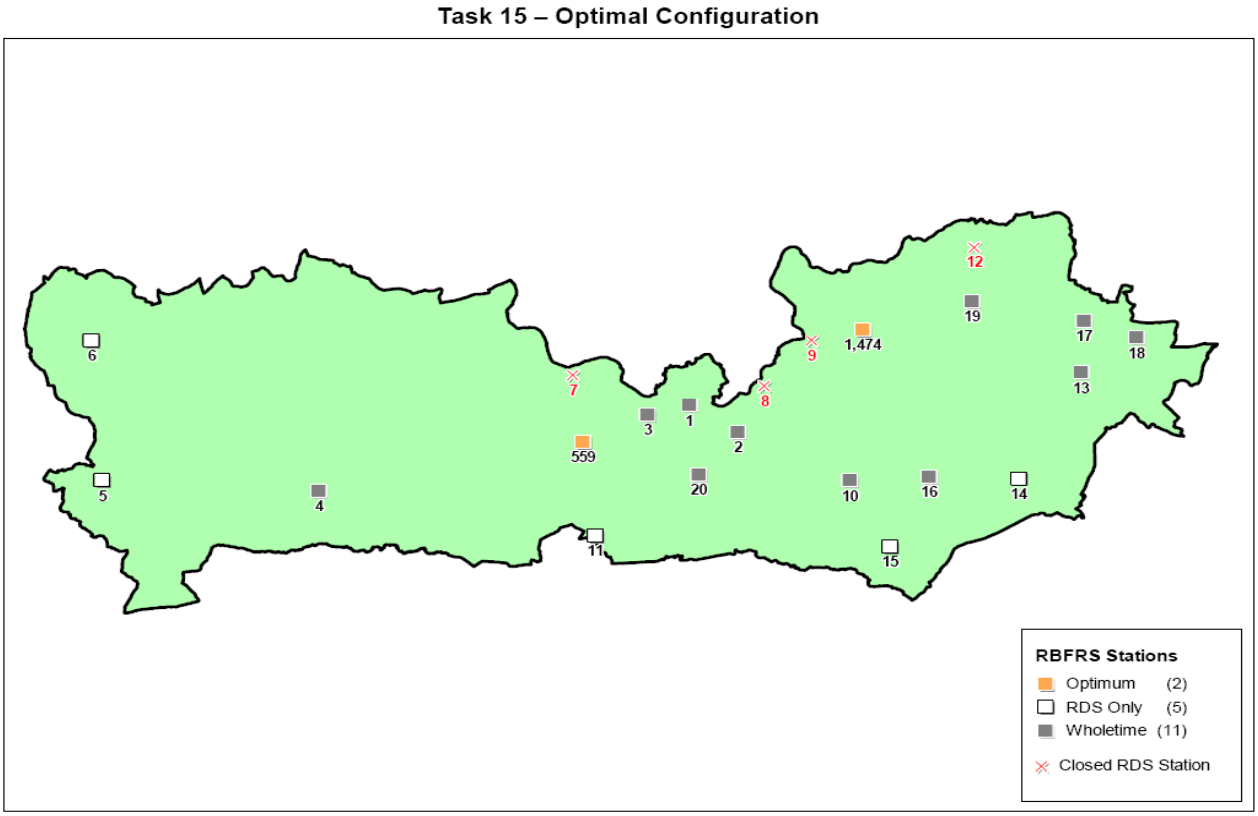


Figure 22 – Optimal locations for 2 additional stations. (Appendix AG, ORH report, page E1a)

(Again, for clarity, note that the numbers under the orange squares are node numbers used by ORH and that station 8 Sonning is already closed.) The optimal location for two additional weekday appliances are shown to be Theale and Twyford/Knowl Hill.

The impact on the community of any changes mapped, particularly as it relates to response standards, will be considered in detail later but, before that, what does the mapping tell us in terms of where the best station locations are in RBFRS for the long term?

Long term station locations.

From all the mapping work conducted by ORH on behalf of RBFRS it is possible to form an 'overview' for best locations. This will, at least in part, be a professional judgement but, overall, it is possible to see the following:

ORH modelling has confirmed that the locations of the following stations are correct:

Station 4 (Newbury)

Station 20 (Whitley Wood)

Station 1 (Caversham Road)

Station 16 (Bracknell)

Station 17 (Slough)

Station 18 (Langley)

Station 19 (Maidenhead)

ORH modelling has confirmed that there is a need for a fire station at the following locations:

Hungerford (North) (no station at present)

Theale (No station at present, possible re-location of station 3 Dee Road)

Reading (East) (Station 2 Wokingham Road located)

Wokingham (South) (Station 10 located)

Ascot (RDS Station 14 located)

ORH Modelling has confirmed that there is limited need for a fire station at the following locations:

Lambourne (RDS Station 6 located)

Aldermaston (Nearest RDS station at Mortimer)

Crowthorne (RDS Station 15 located)

ORH modelling has confirmed that there is a very limited need for a fire station at the following locations:

Pangbourne (RDS Station 7 located)

Dee Road (WDS Station 3 located)

Windsor (WDS Station 13 located - day only projected)

Wargrave (RDS Station 9 located)

And ORH modelling has confirmed there is no need for a station at:

Cookham (RDS Station 12 located)

These station locations were also generally supported by consideration of a second ORH specification (appendix AF). This specification gave the following options and it important to notice that this is with one pumping appliance at Station 17, Slough. The solutions to the specification are all given at the ORH report (appendix AG, appendix F therein) and the 'best fit' RBFRS map for the current situation and from that work is given here:

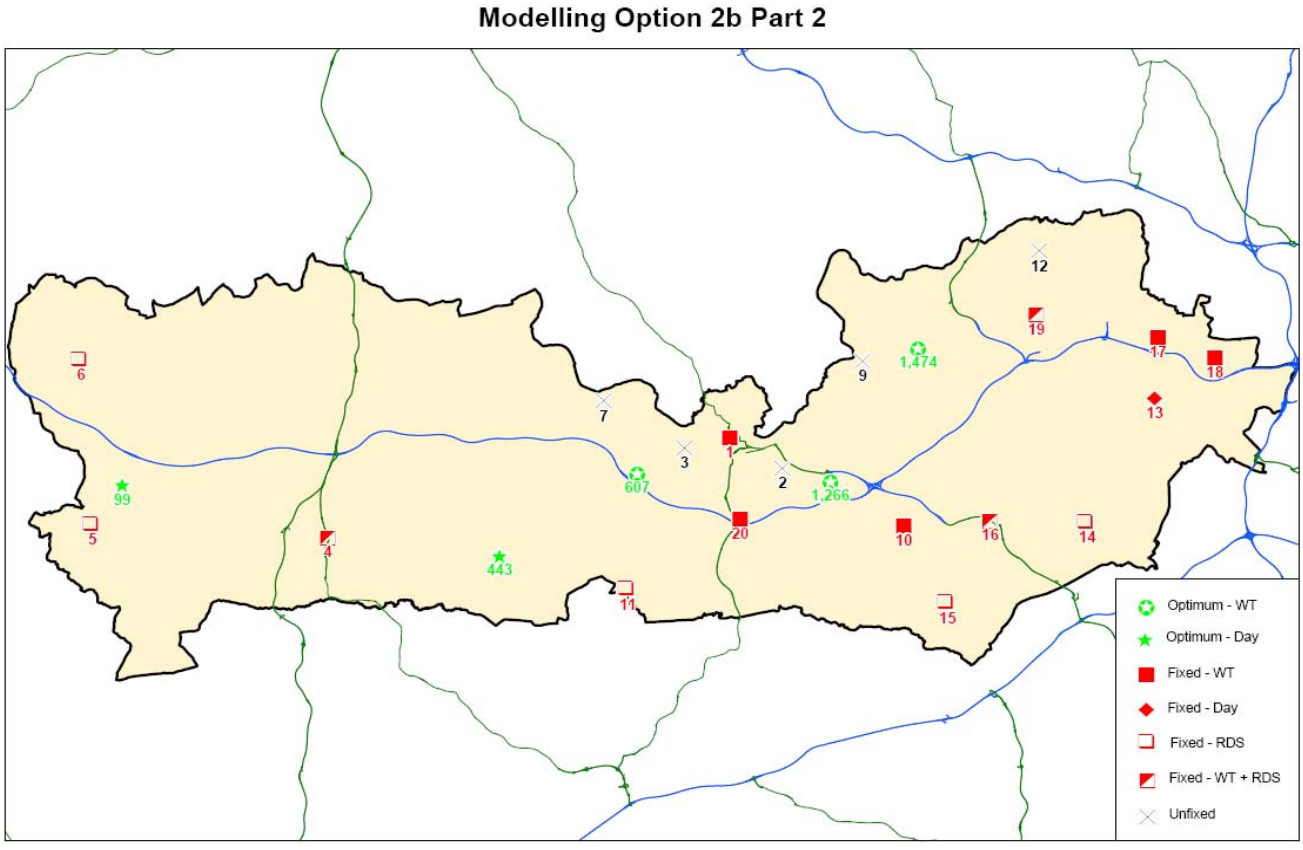


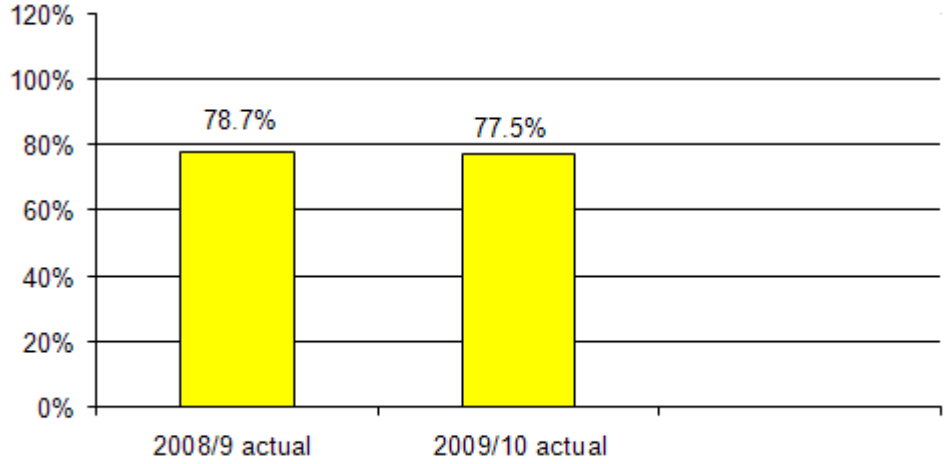
Figure 23 – What RBFRS could look like into the future. (Appendix AG, ORH report page F7a)

Analysis of response standards and incidents.

RBFRS has set stringent response standards and these have been noted above.

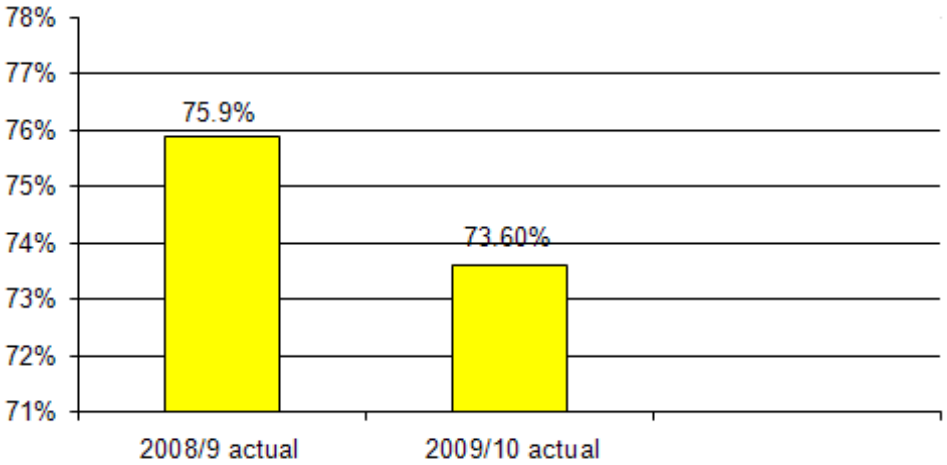
The latest performance of RBFRS against these standards are reported in the 2010 – 2011 Corporate Plan:

The percentage of dwelling fires attended with first appliance in 10 minutes and second in 12 minutes



Graph 49 – dwelling fire response standard performance (Corporate Plan 2010/11, page 10)

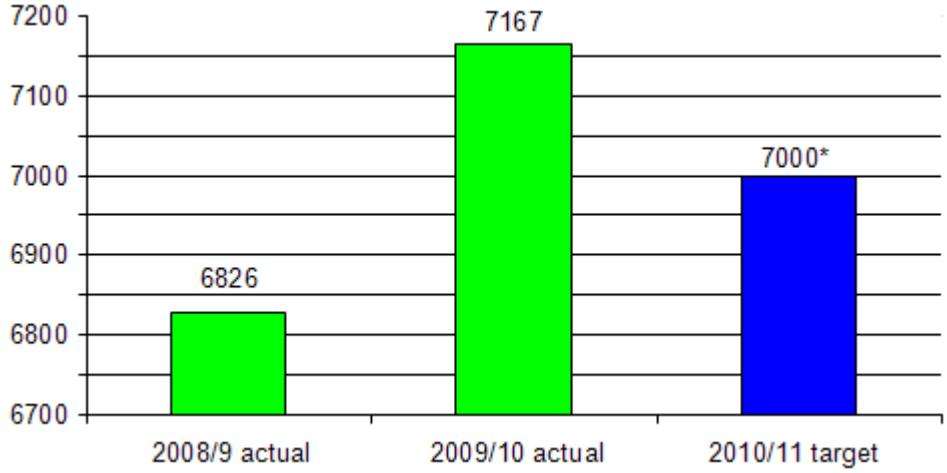
The percentage of road traffic collisions attended within 11 minutes



Graph 50 – Road Traffic Collision response standard performance (Corporate Plan 2010/11, page 10)

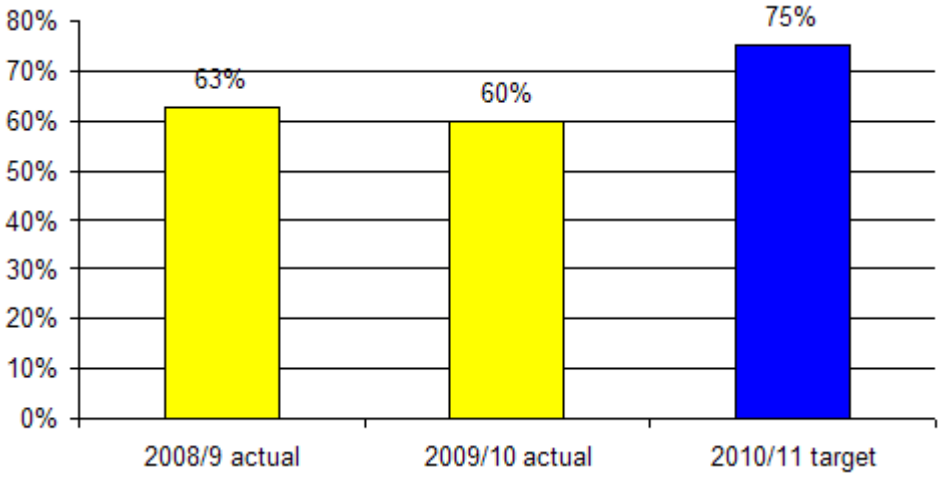
An important aspect of the response standards is that those areas outside 12 minutes will be targeted for fire safety initiatives. The following graphs from the Corporate Plan 2010 - 2011 evidence that this work is ongoing.

The number of Home Fire Safety Checks completed



Graph 51 – Completed Home Fire Safety Checks (Corporate Plan 2010/11, page 17)
** Target is lower as intention is to target vulnerable groups.*

Home Fire Safety Checks completed in designated risk areas



Graph 52 – Designated area Home Fire Safety Checks (Corporate Plan 2010/11, page 20)

(Corporate Plan 2010-2011, pp 10 - 20)

As already noted, this project agreed to change the emphasis in the standards by primarily looking at the first pump response standard. The Corporate Plan accurately reflects the response standards as written in that it refers to first AND second pump. So, even if the first pump arrives well before the 10 minute target, if the second pump does not arrive within 12 minutes the response has 'failed'. It is therefore important to note then that there will be differences in the apparent percentage successes when comparing the RDS project modelling work with current performance.

Assuming all appliances are available, RBFRS can cover Berkshire with a first pump in times according to figure 24.

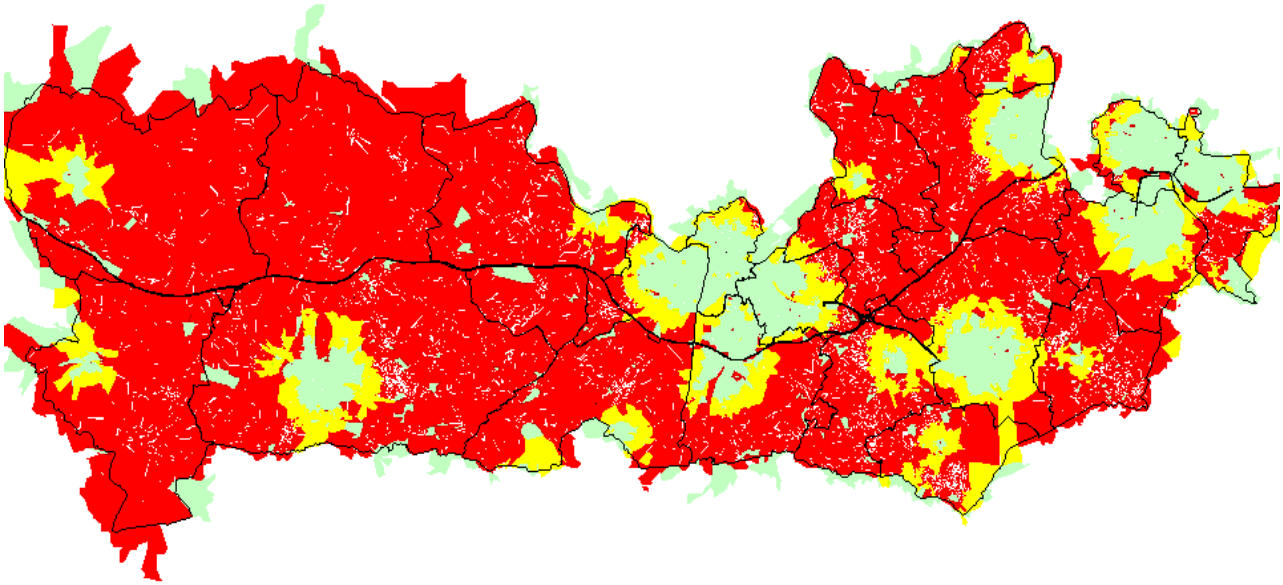


Figure 24 – Current RBFRS coverage within 8 and 10 minutes. (OS Licence 100029145)

Figure 24 shows the predicted attendance times derived from the RBFRS mapping system:

1 pump in 8 minutes – Light Green
1 pump in 10 minutes – Yellow
1 pump in >10 minutes - Red

Whilst noting that large parts of Berkshire are not reached within 10 minutes (an 'eyeball' view of figure 24 suggests that some 80% is outside 10 minutes), actual performance levels (even with a two pump standard) are higher than might be expected and this is due to the majority of incidents being within the urban areas.

To gauge what effect the RDS have, ORH modelled the impact of having no RDS available and having 100% RDS weekday availability across a 24/7 period, the results are shown at table 15 and indicate that having no RDS crews available in the day, when compared to the 2008/09 availability, reduces the performance by about 2% for the first pump.

And having 100% RDS day availability raises the performance across 24/7 by about 0.8% for the first pump.

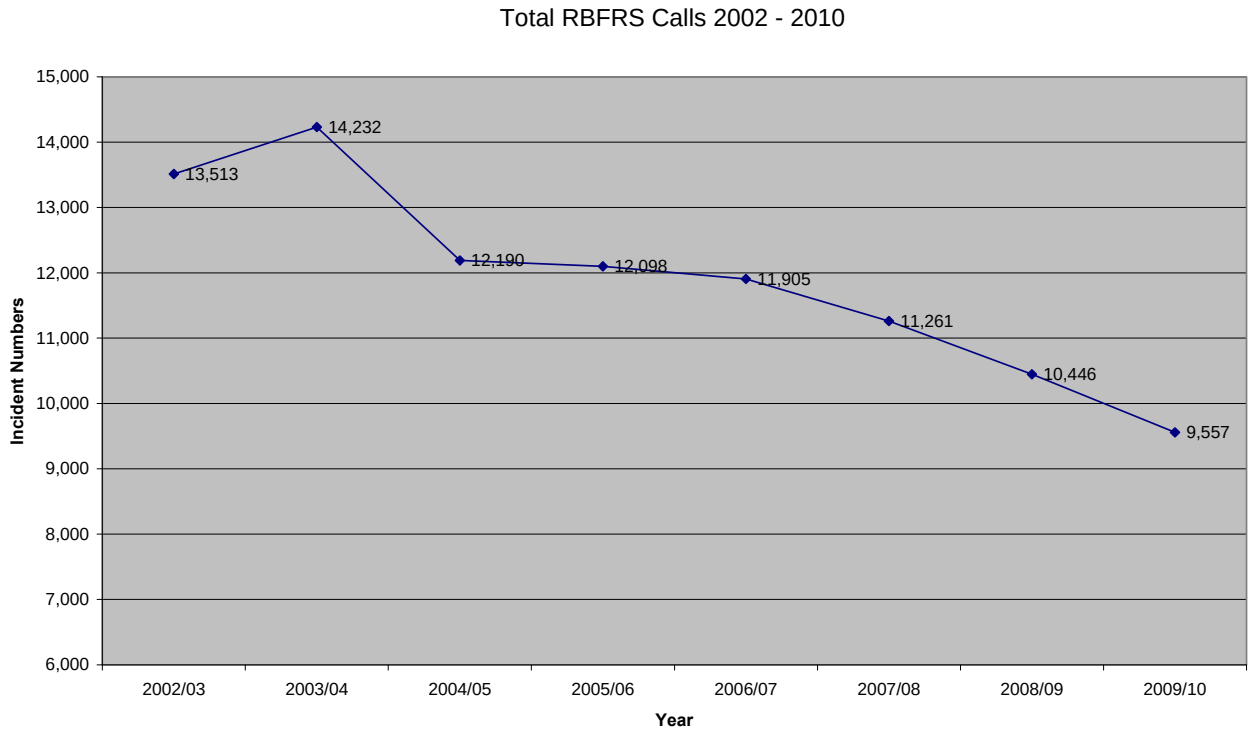
Response Standards			Performance 08/09	Performance with RDS 100% day available	Performance with RDS 0% day available
Dwelling Fires	1st	in 8 minutes	81.9%	82.6%	79.9%
		in 10 minutes	91.3%	92.2%	89.2%
	2nd	in 10 minutes	68.3%	69.6%	65.4%
		in 12 minutes	85.4%	86.8%	82.0%
RTCs	1st	in 11 minutes	79.1%	80.3%	76.3%

Table 15 – Modelled 24/7 impact of variable availability of RDS (Appendix AG, ORH, page B1)

This indicates that the numbers of incidents in which RDS are involved is small and the impact of all RDS is having little overall effect on performance standards.

It was noted by the project team that the pre-determined attendance (PDA) response to RTCs changed in early 2010. The change was to remove the Rescue Support Vehicle from light vehicle RTCs and, to compensate, two pumps are now mobilised. One of the pumps will always be WDS. It was thought possible that this would impact upon the achievement of response standards across RBFRS, as slightly fewer WDS pumps would be available at any one time, having been allocated to more RTCs than previously. The project team has noted that this deals with a 'second call' scenario and that, by convention and by their nature, second calls have not (and indeed cannot) be accounted for. Although it can be seen that there would be some impact from this policy change, it is probably small and, in any case, is not strictly within the remit of this RDS project. However, the possible negative affect on morale of reducing call numbers (from this RTC policy and others) will be dealt with elsewhere.

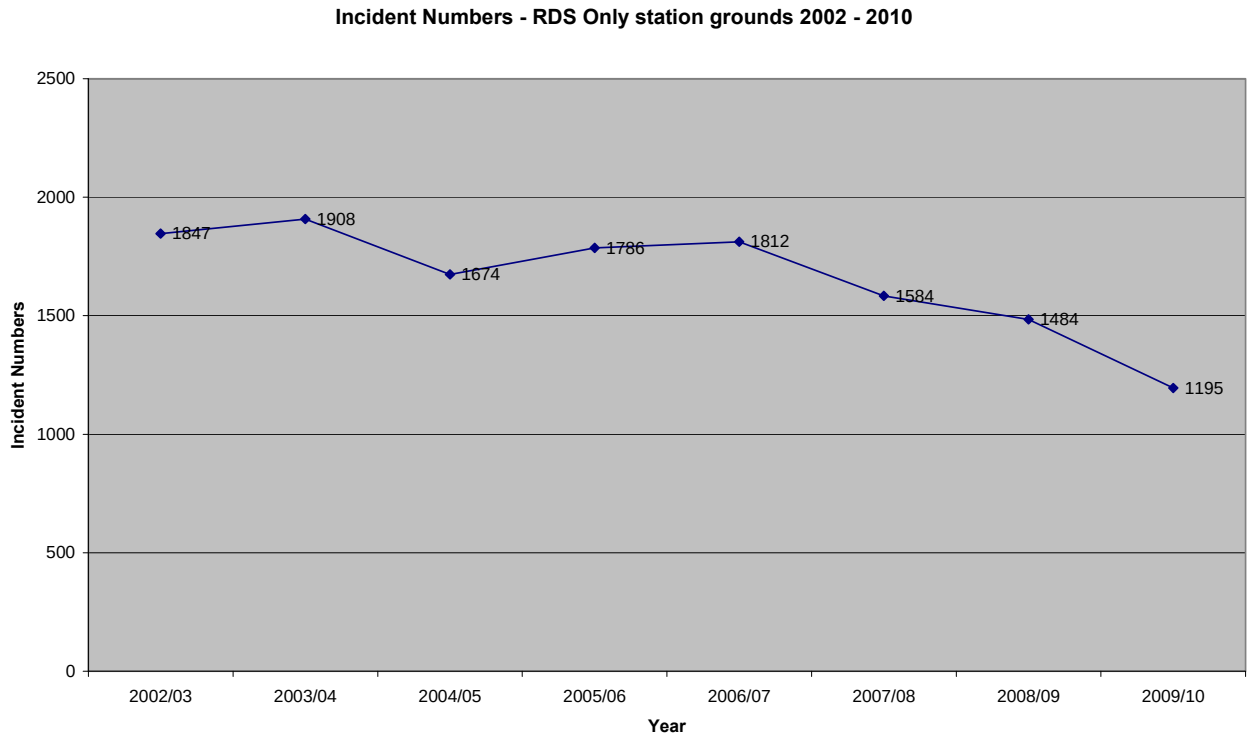
The long term trend in incident numbers is inexorably downward, as noted in the introduction. The total calls for RBFRS (appendix AI) over years is shown:



Graph 53 – Total RBFRS incidents 2002 - 2010

This shows a drop, from a peak of 14232 incidents in 2003/04, of some 33%, down to 9557 in 2009/10.

The situation for RDS only stations is slightly more marked with a drop of some 37%:



Graph 54 – RDS only incidents 2002 - 2010

This downward trend and low numbers can also be seen above in the station profiles and in the national statistics (UK statistics 2010), particularly as it relates to the risk critical incidents of dwelling fires and RTCs.

Mapping and modelling conclusion.

From the mapping and modelling work it has been possible to indicate a number of issues, some of which require professional judgement:

- Peak RDS unavailability coincides in the daytime where there are high incident numbers.
- Time trails completed are quicker than the ORH model in a consistent way, even allowing for the inclusion of call handling and turnout time in the model.
- The ORH modelling process errs on the side of caution, in terms of travel times to incident. This gives an enhanced level of confidence to any decision making that follows.
- Which stations are most important and least important in terms of incident response times.
- Where stations would best be located to reach a combination of dwelling fire and RTC incidents (in terms of timed response standard).
- Where additional daytime RDS support resource could be located.
- Possible locations for new stations in the long term, including if there were a WDS only delivery of service.
- Possible locations for a combination of RDS and WDS stations for delivery of service.
- That there is a difference in the performance standards achieved when comparing first pump only to first and second pump standards.

- With current resource, it is impossible to cover the entire County of Berkshire within 10 minutes, with some 80% of the geographical area outside the 10 minute response standard.
- Overall the RDS has very little impact on performance standards, due to the relatively small numbers of dwelling fires and RTCs involved.
- Incident numbers have reduced significantly over the last seven years.

The mapping can therefore be used to support short, medium and long term recommendations regarding any RDS disposition (and WDS disposition). Options for the RDS are considered later, following a general conclusion.

Conclusions Regarding the RDS

The Retained Duty System is a cost effective and valued service to local communities. RDS staff and their partners are proud of the work they do but there is some de-motivation within this part of the service (particularly with the recent introduction of a number of policies that reduce the call out numbers, such as the RTC and standby policies.) However, the current morale issues may merely be a reflection of the fact that it is clear from the work above that the Retained Duty System has problems and that these are not new.

The evidence above gives a clear view that there are issues related to:

- Legislation and Regulation potentially making the RDS unviable into the future
- Lack of training time heightening risk to employees and employer.
- A drop in the incident call rate (a good thing), unfortunately leads to lack of experience, morale and pay.
- Staff levels are low, leading to a lack of availability, especially during the day.
- Recruitment is difficult with low levels of recruitment opportunity.
- There is an overwhelming need to give support to the RDS and the status quo is not an option.

It is also clear that some of these issues have national implications and, therefore, will require national resolution. Despite this, it is the responsibility of RBFRS and its' Authority to resolve any issues and the discussion below adds to the earlier Learning & Development (L&D) discussion, with a view to reaching overall recommendations.

RDS Options - Discussion

In addition to the L&D options and recommendations above, as the mapping and modelling work was being completed by ORH and the mapping sub-team, consideration of all options was under way. This involved the project managers and the team requesting possible solutions in a number of ways, including two rounds of RDS station visits; a number of discussion forums with, for example RDS Watch Managers, Station Managers and Group Managers; meetings with key individuals and heads of department; surveys.

The conclusion above and the discussions had with stakeholders have shown that doing nothing is not an option. The solutions suggested can be broken down into two key areas where practical solutions may be proposed, these being, firstly, issues related to contracts and crewing and, secondly, issues of management and support. However, before discussing these, the issues that are perhaps most intractable are those related to the feelings and motivation of the RDS staff.

Morale and motivation of the RDS personnel

Two factors stand out from the partners survey responses and these relate to an emotional attachment to the RDS and their role within the community:

- RDS give essential service to the community and this is of great value.
- A great deal of pride in their partners RDS work.

The matter of feelings was (and continues to be) repeated throughout the course of the review from all RDS staff. Although comments within the survey, such as 'being left to rot' and 'second class' may be very individual, perhaps more worrying is the general trend with only 32% expressing an opinion that they feel valued. (Appendix AC, page 11, repeated at figure 13). This is also reflected in a general comment from the survey that there should be

‘real commitment from managers – no passion shown or imagination.’ It could be that the ongoing improvement (modernisation) of the service since the Bain review (Bain 2002) has introduced changes that will take time to embed. Indeed, Bain stated that the suggested changes ‘need not mean the loss of the ethos of the retained service’ but this rather implies there was (and is) a fear that the ethos could be lost (Bain 2002, page 110).

At the commencement of the project a review of relatively recent changes affecting the RDS (and the reasoning behind the changes) was conducted and listed to the Corporate Management Team (CMT 2010) as:

IMPACT	**Reasoning**
Recruitment left to station personnel under pressure little support	Crews on the ground have local knowledge and have key part in attracting potential trainees. Centrally run have a go days and training courses planned to run twice per year – co-ordinated with selection testing days.
Time delays between expression of interest and start of training.	Courses planned twice per year – co-ordinated with advertising and selection. Courses have run with W/T to support as minimal numbers. (Course numbers: Aug 07 – 3; Apr 08 – 3; Aug 08 – 3; Apr 09 – 7; Aug 09 – 5). Only 1 course suspended over last 5 years – been running them by hook or crook.
Failure to appoint RDS Recruitment & Retention Officer.	Didn’t fail – one was appointed but then received a better offer from existing FRS. Re-advertised – for 3rd time – no takers. Then went to IRMP RDS review – to ascertain future direction and requirement to be more focussed.
Selection tests now same as W/T	Same role map as agreed via representative bodies. IPDS is nationally driven and sets out ‘a FF is a FF’. A national guidance for selection has been adopted that is aligned to the role map. This may lead to failures as, you will know, the need to have a high level of physical and intellectual ability is a requirement.
Fitness testing, no time given.	PTI provided. Time is always an issue.
Retained to W/T transfers depleting retained crews	Under employment law it is not wise to prevent an individual taking an opportunity if they wish and have the ability. NB – the need to resign is being reviewed as part of the IRMP RDS project and it is noted that dual contract staff are an asset.
WDS Watch Manager at Station 14 seen as direction for future, restricting promotion opportunities	This was a particular solution to a particular problem. RBFRS feels it has enhanced the line management of RDS stations generally by attaching a Station Manager to each station, in order to provide additional support to the stations.
Reinforcement of attendance times making it more difficult to recruit, with introduction of 3 minute ‘catchment’.	Need to achieve performance standards to match ORH model and provide service. If extend time to station then the station ground gets smaller – reducing calls. Current turnout times are unacceptably long.
Reduction in calls (AFA’s, RTCs, Stand By)	A good thing. Reduces cost and road risk. Reduces life risk as reduction is also related to reduced numbers and severity of fire. Reduces cost to taxpayer.
Closure of Sonning	Part of 5 year IRMP.

IMPACT	Reasoning
Closure of Cookham - perception	Inability to crew.
New RDS review	It could be suggested that this current review is merely a 'hatchet job'. This is not the case and the RDS project manager/s have a wide brief for a fundamental review.

Table 16 – Review of relatively recent changes affecting the RDS

To this list could be added:

- 'Real' incident numbers dropping (it is known that incidents, whilst dreadful for the public, are a chance for firefighters to 'show their worth' – and this is good for teamwork and morale. With fewer calls there is less opportunity for team-working and morale building.)
- Legislation (see discussion above. It is the case that changes in driving regulations and the working time directive have already created inflexibility in the number of hours RDS may work. This is reflected, for example, in the dual contract policy.)

Therefore, it can be seen that the changes are valid and, indeed, justified but, taken together, some might say these are negative impacts that could lead the RDS to believe they are being 'got at'. This is certainly reflected in the responses received, often in emotional terms.

There is probably no way that these feelings can be overcome in the short term but with openness, honesty and by taking a long term view it should be possible (and is essential) that these matters are dealt with.

The emotional issues discussed here are important and noted for all managers within RBFRS. Without attention being paid to these morale factors, practical measures for improvement, to be considered next, will be in vain as the staff will not be taken along.

Contractual issues including salary and crewing

Those issues and suggested solutions found from the surveys and various meetings may be condensed and listed as:

- Employ more RDS
- Make better use of RDS.
- Greater financial reward required
- Guaranteed salary
- Regular salary
- Salary Scheme
- Day crewing
- More flexible crewing
- More Flexible Availability Contracts
- 50% contract option
- More flexibility for dual contract - more hours

Any contractual issues that would be related to Learning & Development have been included in the 'management and support' section below. (There is a need to consider this aspect within 'management and support' as it has already been found in the Learning & Development section that it is necessary to first try training support, before fundamental role map changes are made.)

Additionally, it must be noted that many of the suggestions were made with the intention of making changes to assist with recruitment. Intuitively, it can be said that to improve the contractual arrangements would improve recruitment, as the job itself becomes more attractive. Therefore, support for recruitment will also be considered below.

To the list above, it is prudent to add a recommendation from Bain that might support the views expressed, where the suggestion is that RDS staff:

- 'Should have the opportunity to work on a more consistent part-time basis, with a fixed time commitment.' (Bain 2002, page 109),

Some of these are precluded by, for example, cost or reasonableness. Those that remain are grouped (with a short discussion) as:

Salary

A move away from the current payment system is generally supported by all. The project team found a possible liaison opportunity with Oxfordshire FRS who, although there have been some initial 'hidden cost' issues, are progressing with a trial scheme. The minutes of a project team meeting indicate the potential difficulties in introducing salary schemes:

"The possibility of a salary based pay system was discussed. B Jefferies gave an overview of the problems encountered by other brigade's that had introduced such systems and indicated that there was little evidence that this had improved recruitment or cover."

(IRMP RDS 2009/10, minutes 19/5/10)

However, and although the response rate to the survey was disappointing, given the weight of evidence it is recommended here that further detailed work is undertaken by RBFRS, over 2011/12, to investigate in detail the possibility of introducing a salary scheme. In the time available it has not been possible for the current review to do this detailed work but it should be noted that any introduction of a salary scheme is likely to increase the overall costs of the RDS part of the service.

Day crewing

Although at first sight 'day crewing' (Grey Book 2004, section 4(8)) may seem to offer an opportunity to resolve the issues (especially with regard to Training, as it offers the potential for many more hours 'on duty') the system relies on RDS at night. So the same problems of recruitment apply. Also, it is the case that day crewing will cost more than RDS alone. However, it is possible to see that the higher risk RDS stations could have day crewing - paid for by the introduction of day crewing at some lower risk WDS stations, thereby balancing costs. Overall, at this stage the option is not recommended. However, it is recommended that the situation is monitored as other arrangements are put in place and that day crewing is considered later (say in 3 – 4 years) should it become necessary.

More flexible crewing

This has been interpreted a number of different ways. RBFRS already allows great flexibility in crewing of appliances and this should continue. If the flexibility referred to regards the 3 minute catchment area, it should be noted that the 3 minutes is to meet response standards to the public and, therefore, should not be altered lightly. The discussion under recruitment (in the risk assessment section above) allowed for the possibility of extending catchment areas, should extra support for recruitment not work. This is also discussed further later, as related to recruitment.

More Flexible Availability Contracts

Should the flexibility brought up through the surveys and visits, be about contracts then the project team recommends options for contractual arrangements be examined in detail over

2011/12. In the time available it has not been possible for the current review to do this detailed work but it should be noted that any greater contract flexibility is likely to increase the overall costs of the RDS part of the service but, in this case, it is likely to be within reasonable limits. In particular, the detailed review must engage and negotiate with representative bodies to establish a 50% contract option and, if possible, use any flexibility within the Working Time Directive to adjust the dual contract policy.

Part-time working

Bain found that the South Wales 'experiment deserved watching' (Bain 2002, page 108). The South Wales model was to move to a more part-time approach and it is true that a number of issues are likely to be resolved. The downside is that a South Wales briefing note states:

"There was increase of approximately 30% to the RDS budget when SWFRS introduced the salary scheme…" (South Wales 2009, page 5)[10]

Therefore, in the current economic climate it is not feasible to introduce such a scheme. However, the project team recommends that a medium term examination is made, approximately over the years 2014/15, to consider the option. The team notes that Kent FRS are considering an approach along these lines but that there is little detail yet.

It can be seen that the salary and contractual issues, where they could possibly be considered, will require more detailed work and recommendations are made above as appropriate to conduct this detailed work. In the next section it is thought that more direct action can be recommended.

RDS management and support

Again, those issues and suggested solutions found from the surveys and various meetings may be condensed, grouped and listed under a number of headings. Due to the quantity of issues a brief comment is added to each and later discussion will develop the issues in more detail.

Generic Area	Issue and/or solution	Project review comments
Recruitment	Different [selection] tests for RDS.	RBFRS follows as far as possible the national point of entry selection test. To not do so would expose the organisation to the risk of an employment tribunal. (See also the L&D section above).
	Improve Recruitment Process	*It has been noted that recruitment is managed in 'silos' with stations, personnel, training, central team all assisting and working hard but there is no 'corporate mind' overseeing.*
	Purpose Built Housing	An interesting idea. A recent article in the Fire magazine gives the example of Lancashire (Fire August 2010, page 7) where they have purpose built accommodation for a reduced number of day crewing staff. As RBFRS has no day crewing this is likely to be a more expensive option. Should be considered into the future should day crewing become an option.

[10] At the 2010 RDS conference a South Wales speaker detailed their RDS firefighter salary was £10k pa and £14k for a RDS Watch Manager (key meeting notes 2010).

Generic Area	Issue and/or solution	Project review comments
	Selection Process use some evening periods	*A good idea that requires additional resource and support.*
	Support potential recruits - form filling	*A good idea, not so much just to assist form completion but more generally. Who is it who follows up the non-returned application forms? Who is encouraging and assisting through the extensive selection and training regime? Currently these issues are not picked up in a brigade wide way.*
	Improve Primary Employer Engagement	*It is interesting to note that the current RDS staff did not wish much greater primary employer engagement. This may be as they are already 'in' and don't want to upset the system. It is thought by the project team that, for new employees and their primary employers this would be essential. Support would be required to engage more fully with employers, Further, the team believes that support staff could engage with the community in many others ways, such as with Home Fire Risk Checks and Local Partnership working.*
Management	More thanks and recognition.	*The project team accepts that this must happen and is disappointed if thanks are not tendered in appropriate circumstances.*
	Consider childcare.	*It would require more work to ascertain if this was feasible. With much enhanced support, then it might be possible.*
	Lack of ownership, time taken, cancelled medicals etc.	*Already noted above in recruitment. Must be done but needs resource and support.*
	Support Training, Admin, Recruitment etc	*A crucial area of general need that is recognised by both the project team and RDS personnel.*
	Clerks to Assist with Admin	*A specific example of RDS support that is required.*
	Extend 3 mins during the day - can travel further as not getting dressed etc	*An interesting idea that is designed to improve recruitment, that would be assisted by support. It is argued here that longer response times in the day are restricted by traffic (as found in the CLG research (CLG 2010c)) that would not be present at night. The report deals with extending catchments elsewhere but great care is needed as this is to meet the RBFRS performance standards.*

Generic Area	Issue and/or solution	Project review comments
	Rig en-route to Incidents	Again, designed to improve recruitment. However, this is an issue for Health & Safety as road risk is deemed to be one of the highest risks. Any return to rigging en-route increases risk to personnel.
	Change Response Standards	This could be seen as the ultimate destination for efforts to improve recruitment. However, it is argued here that the response standard times were derived from research into the 'survivability' in fires and RTCs, are for the public served and, furthermore, agreed with the FBU in RBFRS. However, this research has altered the emphasis to consider as more important the first appliance, which the public would tend to support. The second appliance is more about firefighter safety and of importance to the FBU and staff.
	Use station for private offices - use employees for RDS cover	This is an interesting idea not investigated further at this point. It is assumed there will be insurance and security issues to resolve, in addition to the fact that these staff may not be suitable as firefighters.
	RDS crews of Support staff.	*The project team believes support is required. It needs to be robust and permanently on the establishment.*
	RSO teams – WDS in day to support RDS	*The project team believes support is required. It needs to be robust and permanently on the establishment. Whether it is drawn from WDS or RDS staff (or elsewhere) is not so important.*
	WDS detachments or Overtime or Central RDS -WDS pool	*Although a reasonable short term fix, it would only be temporary and would not solve many of the issues. The team, overall, believes a permanent solution is preferable, although the principle of support is agreed.*
	Over-establishment WDS	*Although a reasonable short term fix, it would only be temporary. The team, overall, believes a permanent solution is preferable, although the principle of support is agreed.*
	Mobile stations	*It is important to note that the purpose of the Fire & Rescue service is, primarily, to respond to incidents. If it could be shown that mobile units would enhance performance then it should be investigated. This would apply to both RDS and WDS.*
	Use of RDS Staff - Detach to Other RDS Stn's	*The team feels that there is an opportunity to create a more flexible crewing arrangement that enables individual staff to support others on a day-by-day basis.*

Generic Area	Issue and/or solution	Project review comments
	Close RDS stations	As an idea, if there is a risk inherent within the RDS then it would be possible to reduce the risk by reducing the number of RDS stations and staff. This may not be tolerable to certain sections of the community but may have to be investigated if legislation drives RBFRS that way.
	Regionalise	In itself this would not reduce any risk arising from RDS – and is not within the remit of the project, other than to a need 'to have regard for neighbouring FRSs'. So not considered further here.
Training	Faster training – 'to get to ride'.	*It is important to not 'short change' the RDS initial training. But it is a common complaint that it takes too long. The project team would see RDS support assisting Training Centre delivery as appropriate.*
	Reduced role/re-skilling	Issue dealt with in detail in the L&D section above. Avoid in the first instance – but once support arrangements audited, RBFRS may be required to go this route.
	Increased use of 'lightweight' appliances (and other 'specials')	A specific example of changing the role - that may be supported in the long term. (See above)
	Reduce Training Need	Again, another way to view a change of role map. (see above).
	Concentrate on risk critical or core training, perhaps concentrated on station ground.	Another version of changing the role map. Dealt with above.
	Extra training time.	*The L&D recommendations above suggest an extra 3 hours per month and, with support, and the attendance of RDS staff, should assist.*
	Consider an additional drill night - or more hours in other ways.	*See above. The preference for more training time seemed to be at weekend (Appendix AC, ORS survey graphical report, page 19).*
	Must allow for more administration/training recording time.	*An important aspect of training that must be resolved. As far as HSE is concerned, if it's not recorded, it didn't happen. Support staff would definitely assist.*
	Reduce the extraneous activity that eats into training time.	The project found (at the L&D section above) far too much interference with RDS drill nights. Whilst, on a case by case basis each interruption may be valid, taken together they are not.

Generic Area	Issue and/or solution	Project review comments
	RDS training support and central drill programme.	*A good route to follow that, whilst not allowing for 'pure' IPDS (ownership of development), should enable more robust coverage of risk critical aspects.*
	More Focused Training - Exercise Reduction	*Similarly to the item above, support should assist.*
	Consider intensive full day training, perhaps working with the WDS	*A good idea that can be followed up, given central monitoring and support.*
	Train With WDS Staff	*RDS and WDS should be encouraged to train together and this will be assisted by RDS support staff.*
	IT Training Outside Normal Drill Period	*A specific training requirement that could, with the right skill sets, be picked up by support.*
	Complete tests etc on other than drill night	*Every effort should be made to manage drill nights such that the most 'hands on' training possible is conducted. With an overseeing support team this could happen.*
	Change stand-by policy - train during stand-by	An interesting suggestion that was investigated by the project (appendix AJ). This shows that it takes £40k standby pay to achieve 7 hrs extra training each. This compares to £65k for 36hrs each with weekend training, so the latter is significantly more cost effective.

Table 17 – Management & Support issues, with comments. (Italics = RDS support unit could assist)

Recruitment

The local RDS survey highlighted one key issue that, in the opinion of the RDS staff, should be addressed to give improvement and this was recruitment (Appendix AC, page 22).

The RDS project team noted the lack of success in recruiting a Retained Liaison Officer (also noted in the recruitment risk assessment above) and this has perhaps led to a lack of effective drive in this area. It is important to understand that the principles of selection are clearly laid out in IPDS (and included in the National Framework). The need to follow the IPDS approach was further endorsed by Fire & Rescue Service circular 47/2007 where the supporting research, for example, indicates disappointment that 'only 46% of FRSs currently use the nationally agreed Assessment Development Centre (ADC) process for RDS' (FRS 47/2007, page 5).

With this very clear national steer it would be difficult to, for example, just 'use different selection tests'. The Chief Fire Officer puts it in his initiating report thus:

> "The Authority, together with the Kent and Medway Towns Fire Authority have been involved in a lengthy test case, brought by the FBU on behalf of RDS Firefighters nationally, under the Part Time Workers (Prevention of Less Favourable Treatment) Regulations 2000. The case was finally lost resulting in a further blurring if not removal of boundaries between the Wholetime and RDS personnel.

> "RDS personnel now have to be recruited to the same standards (ability, medical and fitness) as wholetime personnel. These more onerous standards serve to reduce the numbers willing to put themselves forward for testing and reduce the number of applicants that subsequently prove to be suitable for employment as RDS Firefighters." (Appendix B)

However, what is achievable is to offer more support to the recruitment process.

Training

As an issue, Training is dealt with in the Learning & Development section above and it is not necessary to repeat the recommendations here. The continuing findings from the RDS review, as noted in table 17, do nothing other than further support the recommendations that appear, from the survey etc, to be generally agreed by RDS personnel. It should be borne in mind that the suggested extra training time requires yet more commitment from RDS staff and, as noted previously, this is asking a lot. However, the need to satisfy the Health & Safety at Work Act overrides this, as RBFRS is required to ensure the safety of employees, most importantly here in terms of 'suitable and sufficient' training. To assist this commitment, RDS support staff may help.

Management

It can be seen from table 17 that 'management' has indeed created change within the RDS, as it has over recent history for all parts of the Fire & Rescue Service. The RDS cannot be kept apart from these changes that are intended to create an efficient and effective service but, going back over the table, it is possible to see that, given additional management, recruitment and training support a significant dent can be made in the suggestions and solutions. The following discussion considers the possibility in some detail in order to examine if there is a viable option to introduce Retained Support Officers (RSOs) formed into a Retained Support Unit (RSU).

RDS Support Officers as a possible solution

An earlier section considered the effect that RDS support teams had had in Shropshire and also noted that they arose from the ODPM review of RDS recruitment & retention recommends that FRSs engage Retained Liaison Officers (RLOs) (ODPM 2005, recommendation 15, page 9). It can be seen that a team of support officers is an extension to this recommendation and it is a necessary extension as this review has shown that, although important, the problems related to the RDS are not just about 'recruitment and retention' but extend into training, maintenance, administration, monitoring, support and management in all it's forms[11].

An analysis of the positive workload that could be achieved gives the following extensive list:

- Manage RDS availability
- Improve RDS availability
- Recruitment - support and analysis
- Selection testing and encouragement
- Dedicated resource for recruitment

[11] As this report was about to be published a report from West Yorkshire FRS (West Yorkshire 2010) was published on the CFOA website. The findings are very similar in terms of training time problems, administration, recruitment etc. Their solutions equate well to the idea of RSOs, but with W Yorkshire adopting two Crew Managers posted to each RDS station – to perform functions like those listed here.

- Mentoring of new trainees
- Maintaining interest of trainees during training period
- Retention analysis and support
- Delivery of quality training and training support, such as exercise scenarios and a central training programme.
- NVQ assessment & support
- Training audit & recording
- Monitoring systems, especially for capability & competence
- Station administration
- Equipment maintenance
- Community Safety liaison
- Local risk information & visits (Section 7(2)d of the Fire & Rescue Services Act
- Community partnership and liaison

If put in place RSOs must be managed, day-by-day, to give the best service to RBFRS[12]. This will mean that the personnel will be dispersed across RBFRS to perform the functions listed above. However, as the RSO unit improves recruitment and retention, it becomes more and more likely that the RSOs could remain stationed in their best location/s on a more frequent basis. But it must remain the case that the crews will not always be in their designated location. The mapping showed the ideal locations to be Theale and Twyford/Knowl Hill.

Also, for the effectiveness of the RSU to be maintained, staff should be dedicated to supporting RDS service delivery and not used to fill other gaps, such as in the WDS. To disperse the RSOs to other functions would severely weaken their effectiveness in improving the RDS service.

An initial organisational chart for any RSU is given below. It is likely to be WDS Personnel on a day duty (weekdays) system. The closest duty system defined in the Grey Book would be the ‘day duty system’ (Grey Book 2004, section 4 paragraph 9) but it would be expected to be more flexible and with an additional commitment to cover items such as drill night & weekend training.

[12] At the RDS conference of 2&3/9/10 the speakers and informal discussion with other FRSs exemplified the worth of RSOs and the support that is required. For example in relation to North Yorkshire, West Yorkshire, South Wales, Shropshire and as mentioned by Michael Thewlis of ERC and John Barton of the RFU (key meeting notes 2010)

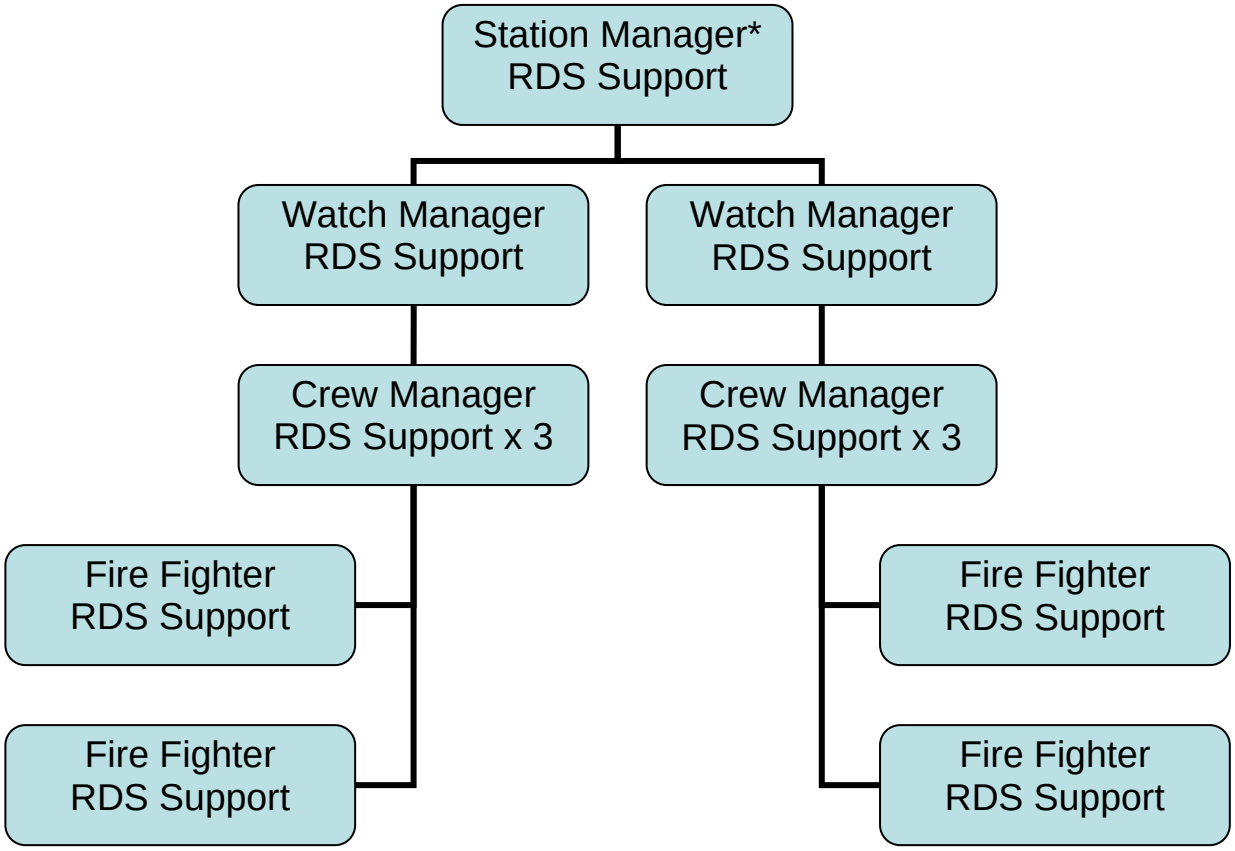


*Figure 25 – possible organisational structure for Retained Support Unit *Subject to organisational structure requirements and finance. Not included in financial analysis but clear management structure will be required.*

An earlier version of this chart gave more firefighters but discussion within RBFRS led to the understanding that greater flexibility would be gained from more crew managers, and this is reflected in the structure above.

In any initial implementation it would be envisaged that there would be 12 staff (plus some clear and robust management to support) to be located in the best place/s to enhance RBFRS ability to meet response standards.

The project team noted that RDS availability is a Service Delivery management issue and that systems need to be in place to accurately record RDS availability. Further, the team noted the systems have sometimes been confused with IT based and paper based systems running concurrently. Ultimately there should only be one system and it should be FireWatch (IRMP RDS 2009/10, minutes 16/12/9).

In order to ascertain how many RSOs may be required an analysis was made (appendix AK) of the daily availability records in Brigade Control. This was conducted as a desktop exercise for RDS gaps. A sample of RDS crewing deficiencies during the day between 0800hrs and 1600hrs over a 31 day period during May 2010 was taken and each day was analysed separately as if RSO Units were available and were managing the RDS availability. RDS stations that were not available and the reason why were identified. The exercise was completed so as to detach members of the proposed RSO Units with the appropriate qualifications to these stations in order to make them available.

The result showed that the required detachments varied from day to day from a worst case of 10 personnel across 7 stations to nil requirements. An average 4.6 detachments were required each day. On all occasions the RDS availability was maintained at 100% by the use of RSO detachments.

Another important aspect is the maintenance of competence of the RSOs themselves. With the level of staffing presumed in the organisational structure it can be seen that, with

management, this aspect may easily be included. Indeed, it is suggested that the RSOs, when RDS availability allowed, would form their own appliance crew and could attend training at any location including the Training Centre as required and in support of other RDS staff.

An analysis of the potential benefits yields the following:

- Retention issues identified at an early stage
- Significantly improves day availability on a more flexible basis.
- Improves response standard performance across the Brigade.
- Improves training time efficiency.
- Improves turn-out success rate.
- Enables more time for training and improves training quality.
- More engagement with local community safety issues.
- Maintains currency of local risk information.
- Improves local liaison with other agencies.
- Contributes to short, medium and long term resilience planning.
- Substantially reduces risk to the Authority and RDS staff.

To progress this as a solution, there would be significant detailed work to be completed, such as the research and agreement into any appropriate duty system. Also, especially in the current economic climate, any possible budget growth bid must be ‘subject to finance’.

Finance

For many of the options considered cost is a disadvantage. Whilst not strictly within the remit of the project[13], the need to consider how any option is paid for comes within the remit to the extent that any recommended proposal should be 'viable and sustainable'. This must include budgetary considerations.

Threaded throughout the possible solutions is the consideration of finance but the relatively recent new coalition Government is in place and the detailed impact of any public expenditure cuts is unknown. Over years the IRMP principle followed in RBFRS is that 'of doing more with the same'. That is to say, making changes to improve the effectiveness of service delivery within the same budget. It is possible that this principle will have to be re-considered by the Authority due to the severity of the economic downturn at this time. However, the project team and this research report works, primarily, under the assumption that greater effectiveness should be achieved by the same budget. This is stated in the RBFRS IRMP document:

> The IRMP process must also be seen within the wider context of the Government's modernisation agenda for the fire and rescue service. A major part of these reforms is the need for fire and rescue services to prove that they are continually improving the service to their local communities but without adding additional burdens to council taxpayers. In short, any improvements must be funded by efficiency savings identified from elsewhere within the service. In essence, 'doing more with the same'. (IRMP 2007 – 2012, page 20).

The budget required for the RSO proposals above are in the order of £680k per year (appendix AL) and it is necessary to identify possible funding sources. The RDS project has no authority over RBFRS budget and, ideally, the RSU funding would come from elsewhere than the RDS part of the service. However, if budget must be found from within the RDS service then the project has clearly identified that Station 12 (Cookham) is unviable. However, closing this one station would not fully fund the RSU required to support the remaining RDS stations. Therefore budget will need to be identified in other areas and the place to start must be with those parts of the service that the risk assessment identifies as low community risk and unable to deal with the risk. From graph 17 it can be seen that, in addition to Station 12 (Cookham), this is Station 7 (Pangbourne) and Station 9 (Wargrave).

Looking at appendix AL and appendix AM, it is necessary to use the budget for salary rather than the actual spend, as this is where the Authority under-spend has consistently come from. What is suggested here is that, effectively, the under-spend is used for the RSU but that, as the RSOs resolve the recruitment and retention issues, it will be required to have the RSO posts on the establishment and, therefore, fully funded.

Appendix AL shows that if station 12 is closed, and the RDS are removed from stations 7 and 9 (but that the premises are maintained as locations for RSOs) then the savings balance the costs.

Furthermore, if a 'value for money' (VFM) approach is taken then it might be possible to see the costs and savings in a different way. In the 'historical performance' section above it was found (approximately) that:

"the WDS [cost] £4000 per incident. For RDS the…cost per incident [is] £1472…"

Through further detailed analysis that includes the relevant costs of an appliance and car, plus the use of the most recent incident data that was not available at the time of the formulation of table 2, it is possible to recalculate the average cost of a RDS station (based

[13] The terms of reference (appendix D) preclude the project from being able to 'vire budgets' so it is not in the gift of the project team to consider all funding. This is, correctly, for the Fire Authority to consider on the basis of risk across the whole organisation

upon RDS stations that are fundamentally working, rather than those that are having severe crewing difficulties):

RDS Station	2009/10 Ops Incidents* (On Stn Ground).		
5	79		
11	104		
15	166	Average budget**	Average cost per incident
Approx Average	116	£226,182	£1950

** - checked on PBViews 6/9/10 ** - from appendix AM (includes pump & car)*

Table 2 adjusted for more recent RDS data.

This shows the average cost on the selected RDS stations is approximately £1950 per RDS operational incident. To give a more complete picture, the data for all RDS only stations (Hungerford, Lambourn, Pangbourne, Wargrave, Mortimer, Cookham, Ascot and Crowthorne) was collected and gives:

RDS Station	2009/10 Ops Incidents* (On Stn Ground).		
5	79		
6	46		
7	69		
9	35		
11	104		
12	19		
14	118		
15	166	Average budget**	Average cost per incident
Approx Average	80	£226,182	£2827

** - checked on PBViews 12/9/10 ** - from appendix AM (includes pump & car)*

Table 2 adjusted for more recent RDS data and to include all RDS only stations.

Comparing this overall RDS operational incident average to the three particular RDS stations highlighted in the mapping gives the following:

Station	Operational incidents* (assumes RDS station attended all ops incidents on station ground)	Actual station cost (assumes full staff of 13 plus pump and car)**	Cost per incident
Pangbourne	69	£224,655	£3,256
Wargrave	35	£213,148	£6,090
Cookham	19	£220,666	£11,614

**Number of Ops incidents on station ground 2009/10 - accessed on PBViews 19/7/10.*

***Appendix AL gives salary+pump+car budget. Appendix AM gives actual premises and misc expenditure*

Table 18 – Value for money calculation for stations 7, 9 & 12

This VFM assessment speaks for itself, in that station 12 becomes even more untenable, with Wargrave also now costing, per incident, significantly more than the average WDS operational incident. Pangbourne, although more costly per incident than the RDS average, is slightly more cost effective, still, than WDS.

With all the above research and discussion it is now possible to make clear recommendations.

RDS Recommendations

This research report is written prior to any agreement from the Royal Berkshire Fire Authority. The intention is that the research forms the basis of a report to the Fire Authority with a view to formal consultation, as part of the general IRMP consultation process and thence to final agreement by the Authority.

Before making recommendations it is worthwhile reviewing the project definition:

> The IRMP Retained Duty System (RDS) project is to risk assess, research, analyse and evidence all issues regarding RDS arrangements within RBFRS but having regard to neighbouring FRS' provisions and report (with all options, implications and appropriate recommendations) on viable and sustainable proposals that plan to deliver Fire Authority duties in the most efficient, resilient, safe and effective way, for the longer term. (IRMP RDS 2009/10, minutes 28/10/09).

The project team believes the overall recommendations below will address this definition and, therefore, the team will have met the project brief.

Recommendation 1

Cookham Fire Station should close.

Recommendation 2

RBFRS should employ 12 weekday staff, as additional to the establishment, to form a Retained Duty System Support Officer (RSO) unit, employed on a flexible WDS contract to manage and support the RDS.

Recommendation 3

If it is not possible to fund the RSO Unit (RSU) from existing resource, the Fire Authority could consider that funding for the RSU may be achieved through alteration to crewing arrangements at Pangbourne and Wargrave, by removing RDS staff and replacing them with RSO weekday cover.

Recommendation 4

The RSO Unit (RSU) should form two teams ideally based in the Theale and Knowl Hill areas but, in the short term and until any new station is built, should be based at Pangbourne and Wargrave.

Recommendation 5

The RSU will be used exclusively to support the RDS and to implement and manage all further relevant priority RDS work, as identified elsewhere in the detailed report.

Recommendation 6

Within three years of any RSU implementation, the effectiveness of all the arrangements, particularly as they relate to maintenance of competence, must be reviewed. This review must be supported by significant interim audit and effective monitoring.

Recommendation 7

The Fire Authority should develop and publish a long term strategic plan for the delivery of the service across RBFRS that should include consideration of the risk of external drivers reducing or removing RDS viability.

It must be mentioned that not all of the team supported all the recommendations in their entirety, with significant opposition being put forward by the FBU representative. This was on the grounds that, whilst the FBU might support the RSU ‘in principle’, it should not be paid for by station closures and that RBFRS should use its’ ‘WDS over-establishment’ and just use this to fund any RSU (IRMP RDS 2009/10, minutes 15/7/10). Whilst this may seem attractive, the risk is that it becomes temporary, as the WDS establishment is to deal with community risks from WDS stations and, if there is over-establishment, in the current climate it will not be there for long.

It is perhaps not surprising that recommendation 3 caused the most discussion and led to the addition of the phrase ‘if it is not possible to fund the RSU from existing resource…’ as none of the project team would necessarily wish to see a reduction in front line services (even with the addition of RDS support at two locations). However, all the evidence above does support the view that it might be possible to use funds for the three stations (Cookham, Wargrave and Pangbourne) in a better way.

Recommendation 5 is to allow for the fact that it is not possible to cover every detailed recommendation, particularly as they relate to Learning & Development, from throughout the report. To give long term support is essential and it is via this management and support that all RDS issues will be resolved for the long term, up to 2020 and beyond.

Recommendation 7 falls out of the fact that the Fire Authority currently has a five year IRMP (due to end in 2012) but there does not appear to be a longer term strategic vision available. It might be that this report could be part of that vision but it is also important that, to deal with the current and any future financial and other circumstances, it is necessary to plan for the long term.

Notwithstanding the discussion immediately above, to even hint at station closures requires that a rigourous impact assessment is conducted for those areas likely to be affected, particularly as it relates to the delivery of service to the public.

Impact Assessment

The impacts of the recommendations are on the whole positive but the negative impacts of recommendation 1 (close Cookham) must be considered. Further, a self funding option with cost neutral impact may be considered which would involve a change to the crewing arrangements at the remaining RDS stations identified as having a lower community risk and less able to deal with the organisational risk. These are Stations 7 (Pangbourne) and Station 9 (Wargrave). It will be for the Fire Authority to establish the funding for the recommendation to introduce a Retained Support Unit (RSU) but, if they were to adopt recommendation 3 (adjust crewing at Pangbourne and Wargrave) an impact assessment is required that covers all three stations.

A first obvious impact, as noted earlier, is that removal of RDS staff and replacement with weekday WDS units to support the remaining RDS stations would potentially mean fewer RBFRS appliances available at night.

The fear is often stated that 'deaths occur at night', but when do fire deaths occur? Fortunately the number of fire deaths is low but the following is extracted from RBFRS data:

4 Hour Blocks	Time of Call	Number of fire fatalities	*RSO Units on duty? Y/N
00.00 – 04.00	01.21, 02.06 02.34, 03.20	4	N
04.00 – 08.00		0	N
08.00 – 12.00	08.36, 09.15 09.24, 09.49	4	Y
12.00 – 16.00	13.22, 13.56 14.30, 15.39	4	Y
16.00 – 20.00	16.02, 8.10	2	N
20.00 – 24.00	20.40, 23.25 23.39	3	N

*Table 20 - Fire Deaths in RBFRS 2005/06 – 2008/09 *The time 'on duty' of any RDS support unit would be subject to negotiation.*

This shows that fire deaths are fairly evenly spread by time of day in RBFRS and that, although there is a potential impact at night, there is not a night-time preponderance of fire deaths. In fact, in the eight hours (a third of the 24 hour day) of a potential RSU, they would have covered nearly half the fire deaths.

Secondly, it was noted earlier that future development would be considered. Although it is very difficult to be certain about any future development, information requests were made to establish if there were any developments likely to impact on the proposals and the following table is a summary of the responses. No request for information was made from Reading, Bracknell Forest or Slough as there are not thought to be major impacts in terms of future development, from the current RDS proposals.

Unitary Authority	**Future development impact on current RDS proposals**
West Berkshire	Substantial FoI response. Main developments: Newbury Racecourse (1500); Theale (350); Sandleford Park (S Newbury) (2000units)
Wokingham	Referred to web site. No substantial developments located there.
Windsor & Maidenhead	Substantial FoI response. Main developments: St Mary's Park (450); M'Head (35 + 207flats and 4200sq.m.); Kidwells M'Head (230); AAP M'Head (300); Ockwells Rd (minor) ; Stafferton Way (minor)

Table 19 – Future development where possible impact on RDS proposals (Speicher J 2010).

From the above information it is deemed there will be no impact on the RDS proposals under consideration here.

Another important impact to be considered is that of the future of staff employed on the three RDS stations. The impact on existing RDS staff of removing them from Station 7 and 9 and the closure of station 12 has been assessed, at the time of writing, as follows:

- Station 7 has 7 staff including 3 with dual contract (4 staff purely RDS)
- Station 9 has 8 staff including 2 with dual contract (6 staff purely RDS)
- Station 12 has 4 staff including 1 with dual contact (3 staff purely RDS)

Therefore, a total of 13 RDS staff on purely RDS contracts would be effected. RBFRS would look to re-deploy these staff on to a WDS contract subject to the individual wishes. The 6 dual contract staff are already employed as WDS personnel and it is unlikely that they could also perform the RSO function, in the time available for one person in a week. Therefore RBFRS could expect some possible redundancy payments but these, it is believed, will be relatively minor.

The modelled impact of closing the three low risk stations is below at table 21 and indicates, compared to an adjusted base position, that the negative affect is about 1%

Modelled Impact of Closing 3 RDS Stations (Pangbourne, Wargrave & Cookham)					
Response Standards			Adjusted Base	Modelled Option	Difference
Dwelling Fires	1st	in 8 minutes	82.38%	81.34%	-1.04%
		in 10 minutes	93.72%	92.98%	-0.74%
	2nd	in 10 minutes	71.62%	70.70%	-0.92%
		in 12 minutes	87.82%	86.85%	-0.98%
	Combined	1st in 8 & 2nd in 10	65.78%	64.94%	-0.84%
		1st in 10 & 2nd in 12	84.43%	83.42%	-1.02%
RTCs	1st	in 11 minutes	82.37%	80.48%	-1.89%
Note:					
'Adjusted Base' assumes 100% availability at RDS stations and new crewing arrangements at Stations 10 & 13					

Table 21 – Modelled impact on performance standards of potential proposals (ORH report, appendix AG, page B3)

Two further model option assumptions were built into the process (such as ‘current + 10&13) and these assumptions are outlined at appendix AG, ORH report, page E1b.

The following maps model task 15 from the first ORH specification (appendix AE) and the second ORH specification (appendix AF) that attempted to show the impact of an additional two weekday only WDS pumps that would effectively be RDS support.

An important point to note is that the two RSO pumps will not necessarily be available, as they will be covering gaps at other RDS stations, at least until the recruitment issues are resolved. And even then, there will be no guarantee of RSO unit location, as they will be engaged in other activities at all RDS stations across Berkshire. However, the long term may include a permanent presence at these two locations and the work below indicates the impact.

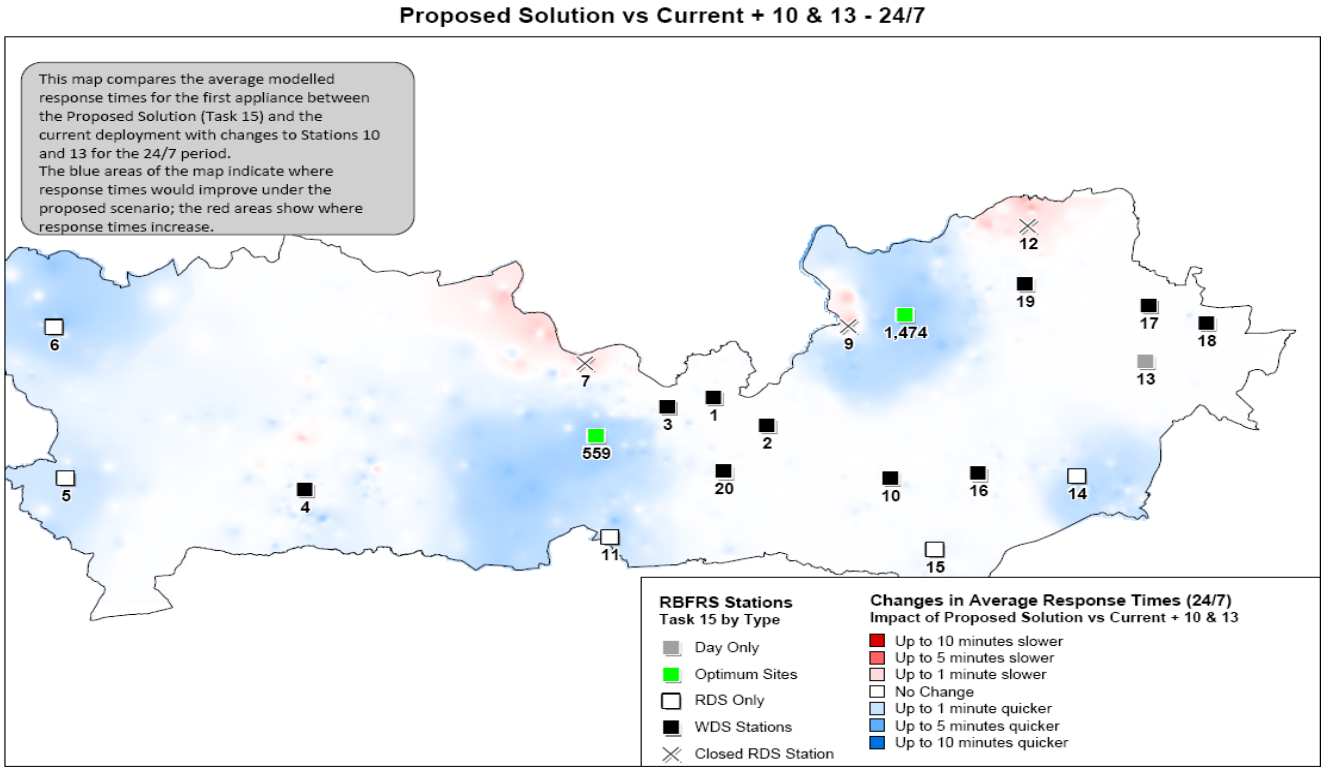


Figure 26 –Areas of Berkshire waiting longer and shorter with 3 closed stations and two RSO units – 24/7 impact (Appendix AG, ORH, page E2e).

The above map gives a 24/7 average picture but breaking down into more detail by time of day we see night impact as:

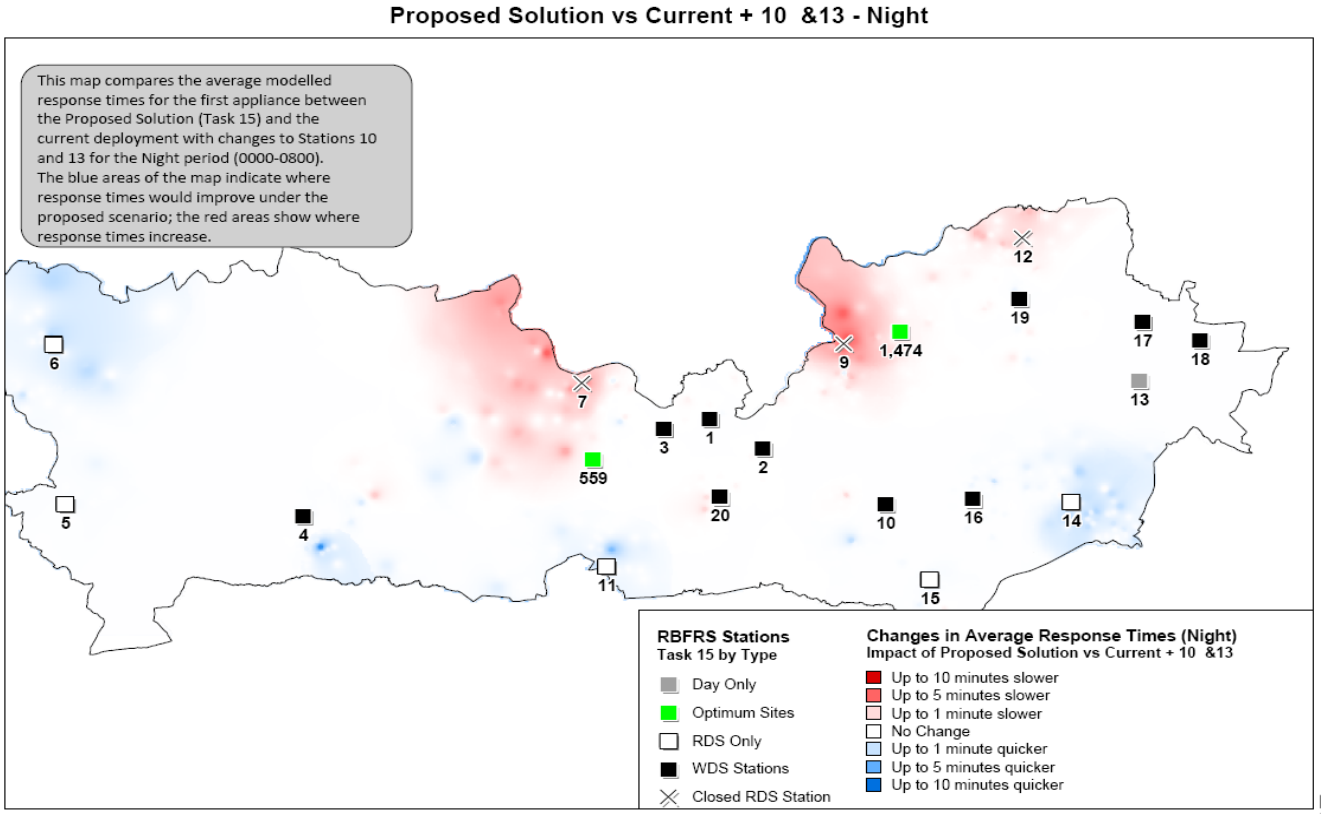


Figure 27 –Areas of Berkshire waiting longer and shorter with 3 closed stations and two RSO units – Night impact. (Appendix AG, ORH, page E5e)

And the evening impact is given:

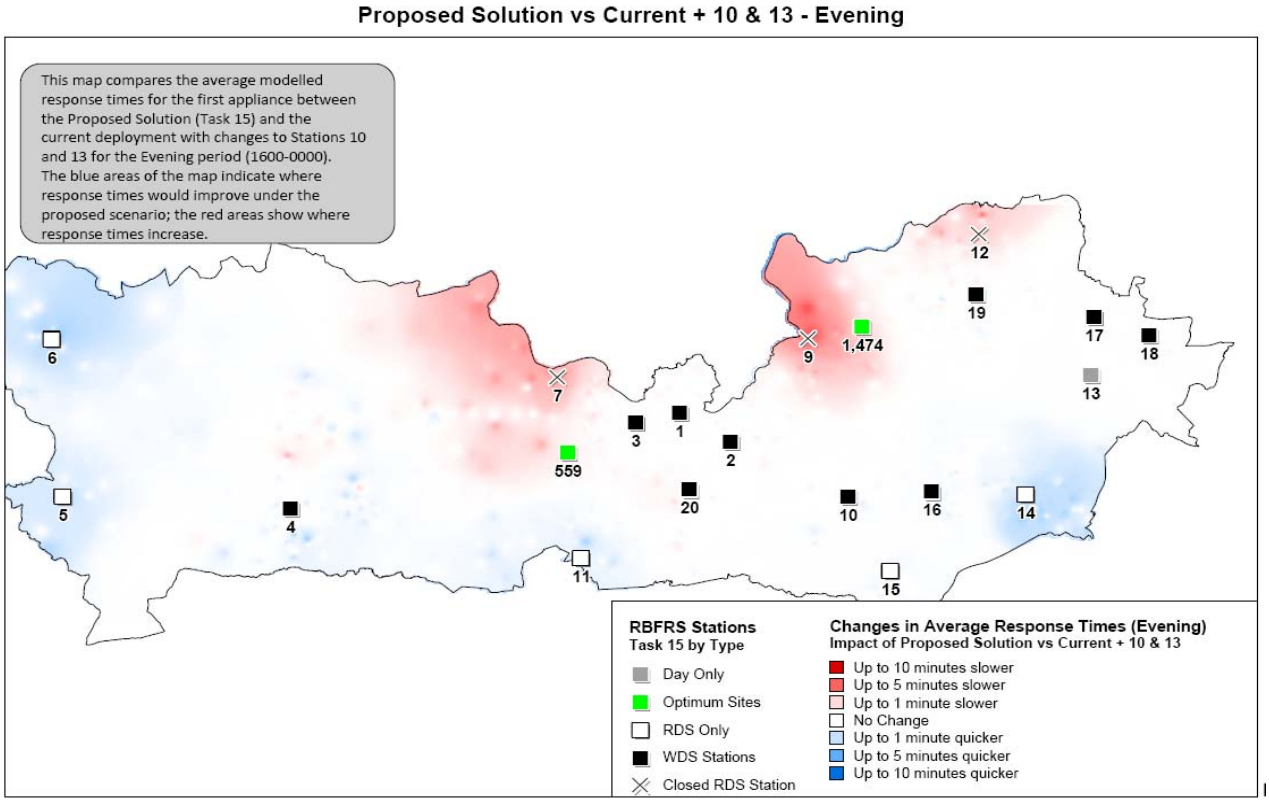


Figure 28 –Areas of Berkshire waiting longer and shorter with 3 closed stations and two RSO units – Evening impact. (Appendix AG, ORH, page E4e)

And, finally, the good affect shown in the day of having full RDS availability at all remaining RDS stations:

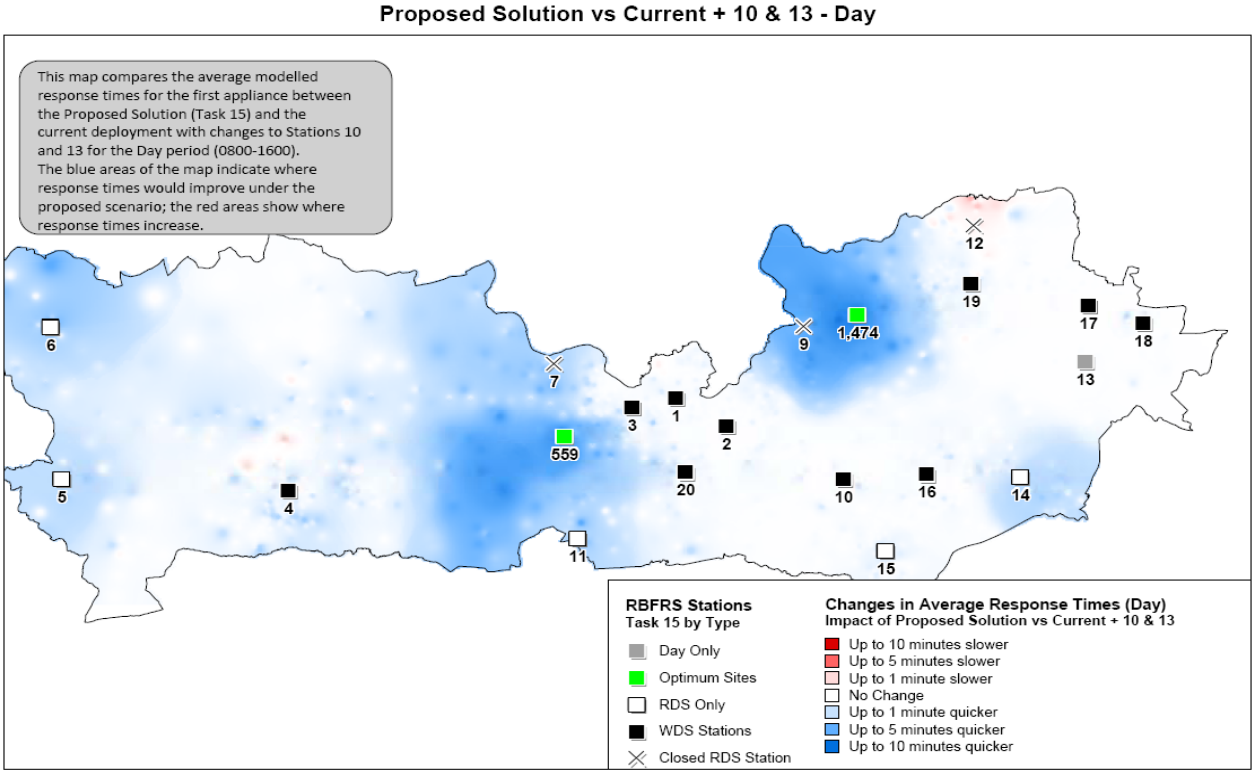


Figure 29 –Areas of Berkshire waiting longer and shorter with 3 closed stations and two RSO units – day impact. (Appendix AG, ORH, page E3e)

Not surprisingly, it is possible to see from the impact maps that, in the three effected villages, the situation is worse, especially at night but that, on the whole across Berkshire (day and night) the situation improves. The other point to note here is that the maps show a worsening position from the current situation for Cookham, Wargrave and Pangbourne but that the maps do not account for the areas of RBFRS that are already receiving a worse service, as indicated by figure 24, where approximately 80% of Berkshire is 'in the red'.

Another aspect to consider is the actual number of incidents involved in the three areas of concern. The number of incidents has already been indicated in the station profiles section but to develop this further the following tables gives a seven year average and another methodology to view the impacts.

Impact on risk critical Pangbourne incidents, by attendance time:

Average Response Times (minutes)					
Current + 10 & 13					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	8.71	7.41	7.64	7.93	*3.6*
RTCs	10.94	10.00	12.05	10.75	*14.9*
Proposed Solution (Task 15)					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	7.00	9.50	10.32	8.72	*3.6*
RTCs	8.15	12.36	14.12	11.03	*14.9*
Difference					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	-1.71	2.08	2.68	0.79	*3.6*
RTCs	-2.79	2.37	2.07	0.29	*14.9*

Table 22 – Risk critical incident response times impact in Pangbourne (Appendix AG, ORH from page E6a)

'No. of Incs' = Average annual number of incidents by type in the Station Ground, based on seven-year sample (2002/03 – 2008/09); DF = Dwelling fire; RTC = Road Traffic Collision.

The table shows that 3.6 dwelling fires, on average, occur on the Pangbourne station ground every year. And that there are 14.9 RTCs.

To give an indication of the impact on the local community, the number of households within three minutes of Pangbourne Fire Station is 1422. Any impact beyond three minutes is limited as other appliances are becoming available in that time.

Impact on risk critical Wargrave incidents, by attendance time:

Average Response Times					
Current + 10 & 13					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	13.41	9.58	9.35	11.06	*3.3*
RTCs	12.14	9.51	10.65	10.75	*6.0*
Proposed Solution (Task 15)					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	7.51	12.34	12.21	10.38	*3.3*
RTCs	6.03	13.46	15.14	10.73	*6.0*
Difference					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	-5.90	2.76	2.86	-0.68	*3.3*
RTCs	-6.11	3.96	4.49	-0.02	*6.0*

Table 23 – Risk critical incident response times impact in Wargrave (Appendix AG, ORH from page E6b)

'No. of Incs' = Average annual number of incidents by type in the Station Ground, based on seven-year sample (2002/03 – 2008/09); DF = Dwelling fire; RTC = Road Traffic Collision.

The table shows that 3.3 dwelling fires, on average, occur on the Wargrave station ground every year. And that there are 6 RTCs.

To give an indication of the impact on the local community, the number of households within three minutes of Wargrave Fire Station is 1251.

Impact on risk critical Cookham incidents, by attendance time:

Average Response Times					
Current + 10 & 13					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	9.06	7.99	8.67	8.53	*3.1*
RTCs	10.22	9.93	13.38	10.64	*2.4*
Proposed Solution (Task 15)					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	9.35	8.51	9.26	8.97	*3.1*
RTCs	10.60	10.95	13.58	11.27	*2.4*
Difference					
Incident	Day	Evening	Night	Overall	*No. of Incs*
DFs	0.29	0.51	0.59	0.44	*3.1*
RTCs	0.38	1.02	0.20	0.63	*2.4*

Table 24 – Risk critical incident response times impact in Cookham (Appendix AG, ORH from page E6c)

'No. of Incs' = Average annual number of incidents by type in the Station Ground, based on seven-year sample (2002/03 – 2008/09); DF = Dwelling fire; RTC = Road Traffic Collision.

The table shows that 3.1 dwelling fires, on average, occur on the Cookham station ground every year. And that there are 2.4 RTCs and the number of households within three minutes of Cookham Fire Station is 1679.

Other incident types, such as car fires, chimney fires, grass fires etc. have no response standard set as they are, whilst important, not as risk critical as dwelling fires and RTCs. However, to give an indication of the impact across the whole of Berkshire for dwelling fires (first and second pump times), RTCs and ‘all other incidents’ the following table shows the number of incidents on each station ground receiving a slower, the same or a quicker response time should the proposals be adopted in full.

Royal Berkshire Fire & Rescue Service

Proposed Solution (Task 15) - Number of Incidents Receiving Quicker Responses by Station Ground

Performance Against Current Deployment with Changes to Stations 10 and 13

Average Annual Incidents

	Number of Dwelling Fire incidents which are receiving a first appliance response in...				Number of Dwelling Fire incidents which are receiving a second appliance response in...				Number of RTC incidents which are receiving a first appliance response in...				Number of all other incidents which are receiving a first appliance response in...			
Station Ground	a slower time	the same time	a quicker time	Total Incidents	a slower time	the same time	a quicker time	Total Incidents	a slower time	the same time	a quicker time	Total Incidents	a slower time	the same time	a quicker time	Total Incidents
Ascot	0.2	7.4	3.1	10.7	0.9	7.1	2.7	10.7	0.3	13.7	3.3	17.3	6.6	251.9	93.7	352.3
Bracknell	0.2	28.3	1.7	30.1	0.6	26.3	3.2	30.1	0.3	46.8	1.4	48.6	2.7	977.5	24.6	1,004.9
Caversham Road	0.2	43.1	0.2	43.6	0.4	42.2	0.9	43.6	0.1	18.4	0.2	18.7	4.2	1,018.4	10.5	1,033.1
Cookham	0.8	2.0	0.3	3.1	1.1	1.0	1.0	3.1	0.5	1.4	0.5	2.4	26.7	55.8	8.0	90.4
Crowthorne		9.0	0.4	9.4	0.4	9.0	0.1	9.4		14.5	0.8	15.3	0.6	268.0	12.5	281.1
Dee Road	0.3	36.5	5.4	42.1	1.4	33.1	7.6	42.1	4.0	28.1	9.1	41.1	23.3	737.4	110.5	871.1
Hungerford		6.3	1.0	7.3	0.1	6.3	0.9	7.3		16.5	1.4	17.9	0.4	113.2	9.9	123.4
Lambourn		1.9		1.9		1.9		1.9	0.1	18.5	2.0	20.6	0.2	81.6	9.5	91.3
Langley		30.8	0.2	31.0	0.1	30.7	0.2	31.0	0.1	40.1	0.1	40.3	0.3	761.1	1.3	762.7
Maidenhead	0.3	17.2	1.5	19.0	1.0	13.1	4.8	19.0	0.7	52.3	6.6	59.6	9.6	785.7	92.7	888.0
Mortimer	0.1	3.3	1.3	4.7		3.2	1.5	4.7	0.6	16.3	5.9	22.9	2.3	126.6	62.2	191.1
Newbury	0.2	32.1	2.3	34.6	1.3	23.4	9.8	34.6	0.4	74.6	5.3	80.3	7.0	866.3	38.0	911.3
Pangbourne	2.0	0.5	1.1	3.6	1.9	1.2	0.5	3.6	4.5	6.2	4.2	14.9	34.5	31.8	32.2	98.6
Slough	0.1	62.2	0.6	62.9		62.5	0.4	62.9		47.0	0.2	47.1	0.2	1,260.0	4.5	1,264.7
Wargrave	1.3	0.8	1.3	3.3	1.6	0.8	0.8	3.3	2.8	0.6	2.6	6.0	41.9	22.7	46.7	111.3
Whitley Wood	0.2	25.2	0.6	26.0	0.5	23.6	1.9	26.0	0.5	34.5	0.9	36.0	6.2	664.2	16.2	686.6
Windsor		22.7		22.7		22.6	0.1	22.7		15.3	0.2	15.4	0.7	497.3	3.7	501.7
Wokingham	0.1	13.8		13.9	0.2	13.5	0.2	13.9	0.2	38.8	0.6	39.6	0.8	363.8	5.3	370.0
Wokingham Road		26.9	0.8	27.7		25.7	2.0	27.7	0.2	41.6	2.0	43.7	5.8	911.1	20.7	937.6
Grand Total	4.4	373.7	19.5	397.6	9.6	353.3	34.6	397.6	15.8	523.5	48.3	587.6	180.4	9,790.4	600.5	10,571.3

Notes:

Station grounds are based on the existing 19 station grounds

Incident numbers are based on the average annual number of incidents by type in the Station Ground, based on a seven-year sample (2002/03-2008/09)

Table 25 – Incidents receiving slower, the same and quicker response times (Appendix AG, ORH page E7a)

Given all the research above and all that is known from the existing five year IRMP plan for 2007/12 and elsewhere, the progression of station development for RBFRS could look like the following maps, over time.

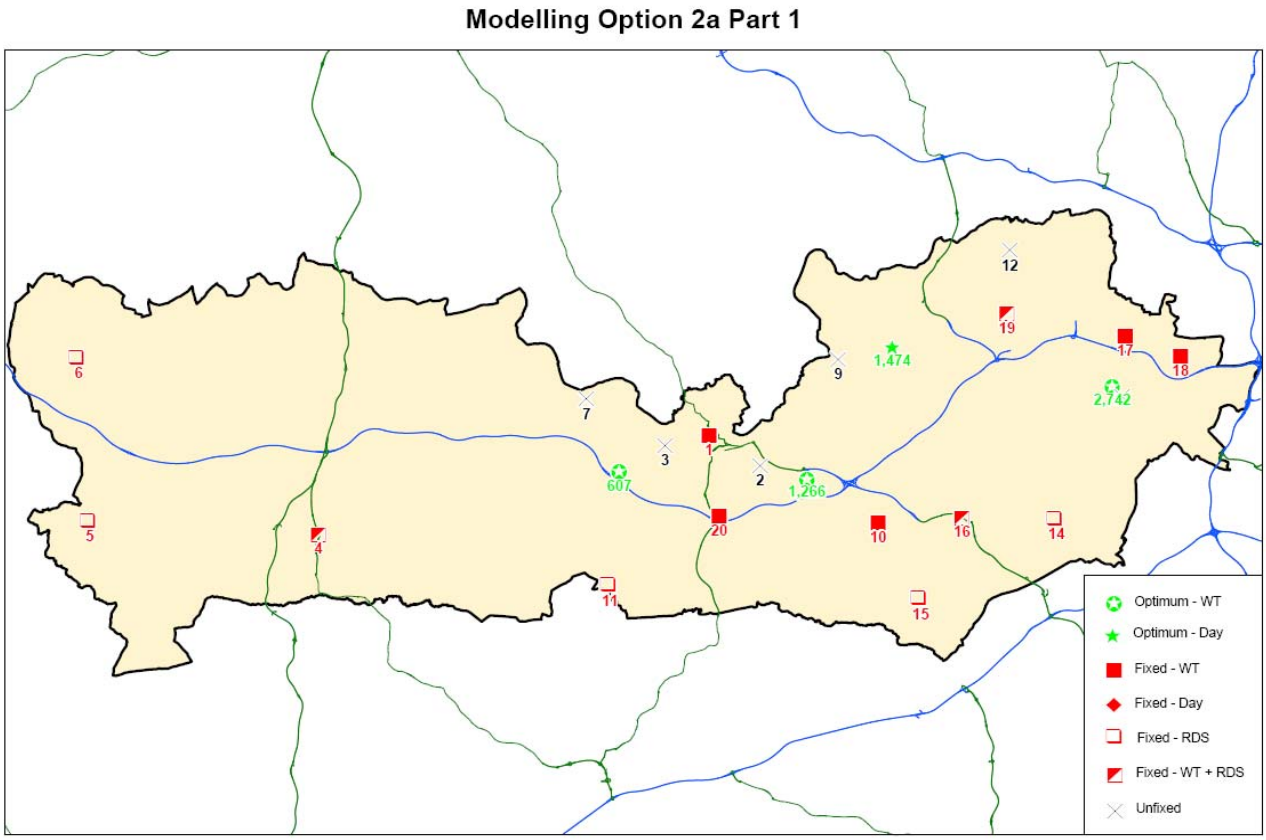


Figure 30 –RBFRS with RSU at Knowl Hill. (AppendixAG, ORH report page F5a)

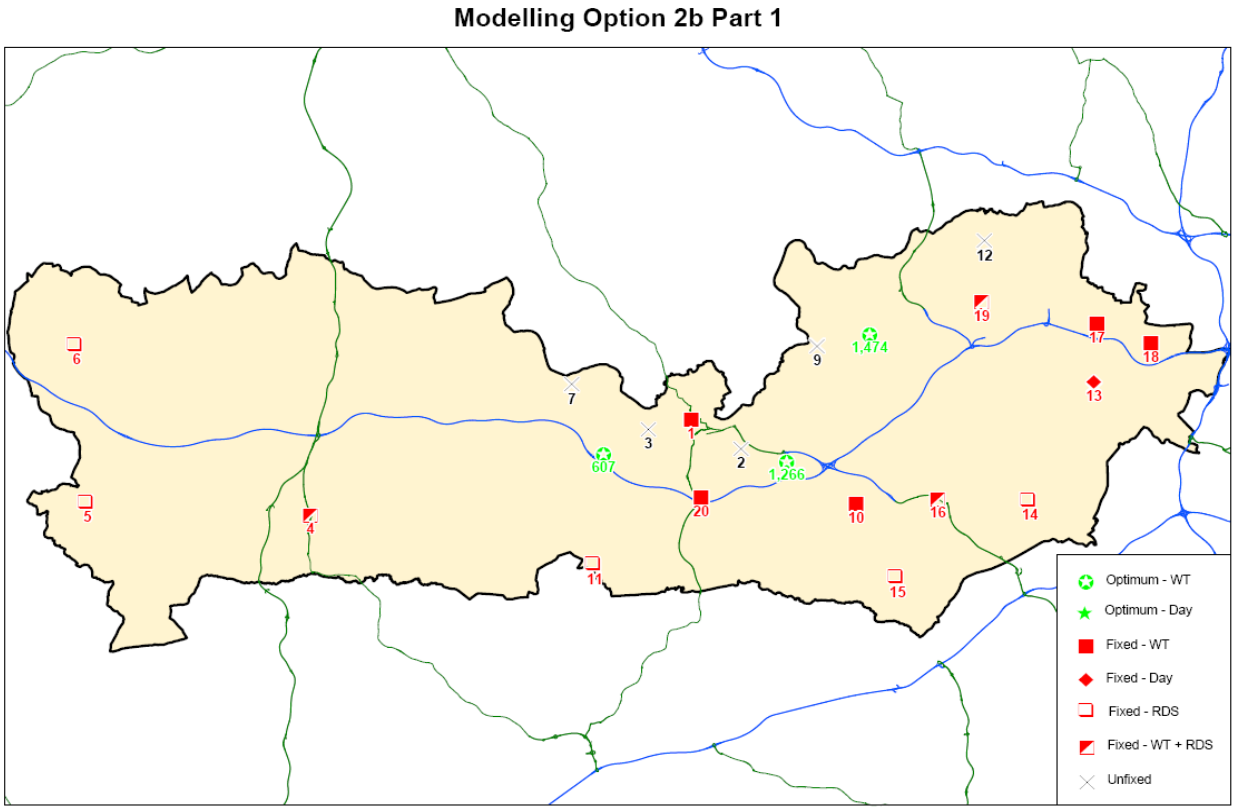


Figure 31 - RSUs at Theale & Knowl Hill developed into WDS. (AppendixAG, ORH report page F6a)

For any option a great deal of judgement is required. For example, it is possible to see that a Retained Support Unit could be established at Theale with the intention that Station 3 (Dee Road Reading) would move there. Also, whether or not Station 2 (Wokingham Road Reading) moves would need to be examined in greater detail before it could be justified. And the RSU at Knowl Hill could become a WDS station in due course.

It must be acknowledged that, particularly in the light of current financial uncertainty, the above pictures are given in the hope rather than expectation but it does lay out possibilities for very long term planning and is to show the potential impact across Berkshire.

In the event of any station changes, mutual assistance agreements with over the border FRSs would need to be reviewed. A letter has been sent to all over the border Chief Fire Officers to gauge their initial, informal reaction to the possible proposals (Cox I 2010)[14].

Finally, another impact from the proposals is that of the attendance time for the second pump. To look at the map related to the ORH specification 2A part 1 (appendix AG) as the most likely case in the shorter term then the impact is to worsen the 2nd pump in 10 minutes performance from 69.2% to 67.9% but that the 2nd pump in 12 minutes improves from 85.1% to 86.2% (appendix AG, ORH report, page F4b). An estimate for the delay in time can be made by looking at the ORH report, page F4d where the graph indicates a maximum time worsening of about 50 seconds but that this is in the 6 to 7 minute range. It is thought that this worsening will be almost entirely due to this model only having 1 pump at Slough. At the 10 – 12 minute response times the maximum worsening is only a few seconds to a betterment of about 20 seconds.

[14] At the time of writing replies were coming in. Buckinghamshire (letter to CFO dated 3/8/10) had previously noted that Cookham was 'downgraded' and that there would be minimal impact. Oxfordshire (letter to CFO dated 21/7/8) have noted the project and are in the process of analysing any impact.

Implementation

The implementation of any recommendation requires the identification of the responsible person with the appropriate authority. As part of the project initiation RBFRS undertook an organisational risk assessment (appendix C) and any control measures identified there will have these persons identified as the Risk Management Group within RBFRS reviews the risk assessment into the future.

Proposed Action and Notes	**Approximate Time Frame**
Improve training efficiency Establish central training programme and ensure 'drill night' time is used for substantive training, rather than other activity.	Now
Establish audit & monitoring systems An auditable system to monitor and record training, particularly as it relates to knowledge, maintenance of competence and risk critical training requirements, should be set up. Also, clear measurement criteria should be established for performance, as changes are introduced.	Immediate
Introduce training support This should be seen as part of the overall solution, alongside the introduction of RSOs.	2011
Review legislation and monitor An analysis of the Part time workers regulations should be conducted to gain a legal opinion upon the legality of the use of primary employed staff. This should then be monitored alongside the law (and any revision/interpretation) as it relates to H&S and Working Time (and opt out)	2011
Close Cookham Fire Station Time will need to be allowed for appropriate consultation, particularly with effected staff and the community.	Early 2011
Introduce an extra 3 hours per month weekend training time. This should be seen as part of the overall solution, alongside the introduction of RSOs who will commence support, releasing funds from the time paid to existing staff for administration.	Early 2011
Establish team to review salary schemes Conduct detailed review and negotiation for a salary scheme and duty system that would, if possible, resolve the training time, part time workers and working time issues.	2011
Introduce Retained Support Officers (group one) Concentrating on management, establish first group of RSOs at Pangbourne.	Spring 2011
Complete Retained Support Officers (group two) Establish second group of RSOs at Wargrave.	Autumn 2011

Proposed Action and Notes	Approximate Time Frame
Build new fire station at Theale Significant premises work and capital budget required. Once built, station 3 Dee Road Reading can move to Theale.	2013
Close Pangbourne Fire Station The RSU would move to Wargrave, premises capacity permitting.	2013
Audit & Review Using the audit and monitoring systems established earlier, measure training, the legal framework, finance and report on suggested improvements and changes.	2013/14
Build new fire station at Knowl Hill. Once built the RSOs could be moved to the new station. At this time, consider day crewing at Knowl Hill.	2014

Table 26 – Outline implementation plan for the proposals

The outline plan is given merely as a suggestion, not least because the project terms of reference state that any implementation will be for 'Service Delivery via CMT' and expressly not in the remit of the project (appendix D). There may be many details that require change and then negotiation that would, undoubtedly, lead to time frame changes[15].

[15] Indeed the FBU has already challenged the possibility of meeting the time frame but it must be noted that the project managers feel the work here is to go to 2020 and beyond. A long term view must be taken.

Glossary

BA	Breathing Apparatus
CFBAC	Central Fire Brigades Advisory Council (disbanded)
CFOA	Chief Fire Officers Association
CLG	The department for Communities and Local Government
CMT	Corporate Management Team (within RBFRS)
FBU	Fire Brigades Union
FRA	Fire & Rescue Authority
FRS	Fire & Rescue Service.
HSE	Health & Safety Executive
IRMP	Integrated Risk Management Plan
LGA	Local Government Association
MOC	Maintenance of Competence (Also seen as MoC)
NVQ	National Vocational Qualification
ORH	Occupational Research in Health (mapping consultancy). ORH Ltd
ORS	Opinion Research Services (consultancy consultants)
OTB	Over The Border – referring to a FRS over the Berkshire border.
PB Views	RBFRS performance management system (recently changed to 'Activate Scorecard')
RBFA	Royal Berkshire Fire Authority
RBFRS	Royal Berkshire Fire & Rescue Service
RDS	Retained Duty System. Sometimes referred to as just 'retained' or part-time'. Recent moves to re-name to 'on-call'.
RFU	Retained Firefighters Union
RLO	Retained Liaison Officer
RMG	Risk Management Group
RSO	Retained Support Officer
RSU	Retained Support Unit (constituted of a number of RSOs)
TAPs	Training & Assessment Plans (It is believed these originated in S Yorkshire FRS but were taken up by Hampshire FRS. Then adopted and adapted into FireWatch by RBFRS.)
TRI	Training Requirements Indicator (Training recording system in Fire Watch)
WDS	Wholetime Duty System. Often referred to as just 'Wholetime' or W/T
WrL	Water Tender Ladder (a pumping appliance)

References

References in italic are IRMP RDS project derived work. Links here may be to internal RBFRS documents.

Bain 2002	The Future of the Fire Service: reducing risk, saving lives. The Independent Review of the Fire Service 2002. Chairman, Professor Sir George Bain.
Barber B 2009	Brendan Barber – TUC Response to failure to agree to amendments to Working Time Directive. 28 April 2009. Accessed on 2/2/10 at: http://www.tuc.org.uk/work_life/tuc-16357-f0.cfm
Burnett G 2010	*Garry Burnett. Area Manager Scottish Fire Services College. Private Communication by e-mail. 19 January 2010.*
CFOA 2008	Report to CFOA HR Strategic Committee 9/9/2008. 'Migration between duty systems and recruitment into Operational Firefighting roles from other fire related backgrounds.' Accessed online on 29/3/10 at: http://www.cfoa.org.uk/10828
CiPFA 2008	Chartered Institute of Public Finance and Accountancy. Fire & Rescue Service Statistics (Statistical Information Service SIS Ref. 01.09.) London December 2008.
CLG 2007	Report on IPDS and RDS (in support of Fire Service Circular 47/2007)
CLG 2009	Communities & Local Government web accessed 29 December 2009. This link gives a number of research reports related to the National Firefighter selection process. http://www.communities.gov.uk/publications/fire/nfsprocessphysicaltests
CLG 2009a	Communities & Local Government. Fire & Rescue Service – Operational Statistics Bulletin for England 2008/09 – November 2009. Accessed on 2/2/10 at: http://www.communities.gov.uk/publications/corporate/statistics/frsoperationalstats2008-09
CLG 2009b	Communities & Local Government. Fire & Rescue Service – Operational Statistics Bulletins 2002 - 2009. Accessed on 2/2/10 at: http://www.communities.gov.uk/fire/researchandstatistics/firestatistics/firerescue/
CLG 2009c	Communities & Local Government. Fire & Rescue Service – Fire research series 1/2009 – Review of FRS response times. Accessed on 22/7/10 at: http://www.communities.gov.uk/documents/fire/pdf/frsresponsetimes.pdf
CLG 2010	The EC Drivers' Hours and Tachograph Rules for Goods Vehicles (Regulation 561/2006) – Fire & Rescue Service Survey and Advice. Department for Communities & Local Government – March 2010.
CLG 2010a	A survey of RDS personnel. Commissioned by CLG from ERC (management & HR consultants). Return date 6/4/10.
CMT Sept 2009	Minutes of Corporate Management Team meeting for 14 September 2009 - on Trove here.
CMT 2010	Table of RDS impact presented to CMT in early 2010.
Comet 2010	Harrow Court: Union claims poor training contributed to fire deaths. Accessed on line at www.herts24.co.uk on 25/2/10.
Corporate Plan 2009	Corporate Plan 2009/10. Accessed on 2/2/10 at: http://www.rbfrs.co.uk/pdfs/cplan-0910.pdf

Corporate Plan 2010-11	Corporate Plan 2010/11. Accessed on 18/7/10 at: http://www.rbfrs.co.uk/pdfs/cplan-1011.pdf
Cox I 2010	Letters to Over the Border FRSs. 15 July 2010.
Cross D 2001	Cross D George – The Response of Firefighters to Learning with Multimedia Training Packages. University of Reading May 2001.
Department Meeting Notes 2009	*All Department meetings were noted by the IRMP RDS project and various contemporaneous notes and summaries are available via the RDS MS Project.*
Document Reference List 2009	*All documents searched for the IRMP RDS project are listed and the list is available via the RDS MS Project.*
DSG 2006	Directors Strategy Group 21 November 2006 (item 12) – minutes in Trove.
Employment Tribunal 2001	Case Number 6100000/2001 heard before employment judge DN Milton. Case finalised in January 2008.
Entec 1997	National Risk Assessment of Dwellings (draft interim report). Entec UK Ltd (for the Home Office – Fire Research & Development Group). 23 May 1997.
Entec 1999	Response time fatality rate relationships for dwelling fires. Entec UK Ltd (for the Home Office – Fire Research & Development Group). October 1999.
ERC 2010	Employment Research and Consulting. Consultants for CLG regarding the RDS. Accessed web on 1/7/10 at: http://www.erandc.com/
ERC 2010a	Employment Research and Consulting. Survey of the Retained Duty System. Organisational Questionnaire, 29 April 2010.
Escudier D 2010	A review of Personal Development Assessments, including hours to maintain competency, in Kent FRS. Received by e-mail 8 July 2010.
FBU 1998	FBU Executive Council's Annual Report to Annual Conference 13 – 15 May 1998.
FBU 2010	HSE Proactive Inspection Reports. Accessed on 22/3/10 on the FBU web site at: http://www.fbu.org.uk/workplace/healthsafety/hs_proactive.php
FBU 2010a	The Fire Brigades Union. IRMP. The Framework Document: How to construct an IRMP/RRP. Accessed on 27/3/10 at: http://www.fbu.org.uk/workplace/irmp/irmpdoc/irmp2009/index.php
FBU In the Line of Duty 2008	The Fire Brigades Union – In the Line of Duty – Firefighter deaths in the UK since 1978. Published by the Labour Research Department for the FBU in November 2008.
Fire August 2010	Fire Magazine July/August 2010. www.fire-magazine.com
FireWatch 2009	Trove FireWatch Maintenance of Competence Recording Policy and Procedure 801/006/001.002. Accessed on RBFRS intranet 14 December 2009. Link here.
Foley 2010	*Personal e-mail from Senior Driving Instructor 19/2/2010*
FRS Act 2004	Fire & Rescue Services Act 2004. Chapter 21 Parts 1 to 7.

FRS Circular 10/2003	Progress and Implementation of IPDS
FRS Circular 11/2003	IPDS: Guidance on IPDS Components
FRS Circular 14/2003	IPDS: Guidance on Workplace Assessment
FRS Circular 15/1997	Training for Competence (The Competence Framework)
FRS Circular 18/2009	Fire & Rescue Service Circular 18/2009 – Firefighter Safety at Operational Incidents. Issued from Communities and Local Government by the Chief Fire & Rescue Adviser on 23 March 2009.
FRS Circular 20/2003	IPDS: Guidance on Personal Development Records, Development Programmes and Development Activities
FRS Circular 22/2009	Changes in the Support Arrangements for IPDS
FRS Circular 47/2007	IPDS and the Retained Duty System (Report on the Findings from the RDS Staff Survey)
FRS Circular 8/1996	Standards of Occupational Competence
FRS Circular 8/1999	Training for Competence and National Occupational Standards
FRS Circular 9/2002	The Integrated Personal Development System
Grey Book 2004	The Scheme of Conditions of Service 6th Edition 2004. Published under National Joint Council Circular NJC/05/04. Updated by NJC Circulars. 2009 update available at: http://www.fbu.org.uk/workplace/resources/greybook/grey_bookview.php?id=20
Hampshire 2010	Hampshire FRS Service Order SO/9/5/1 - regarding workplace assessment and Maintenance of Competence.
Hendry 2009	Kent CFO C Hendry - Letter to J Bonney, president of CFOA, dated 15 November 2009. Circulated by e-mail 16 December 2009.
Howell L 2010	Lee Howell e-mail received 11 May 2010 with attachment from the (Federation of the European Union Fire Officer Associations) where an agreement was reached on 10 May 2010 regarding the position on the Working Time Directive.
HR 2010	*Private Communication by e-mail from HR department. 4 February 2010.*
HR 2010a	*Private Communication by e-mail from HR department. 2 March 2010.*
HSE 1985	Training for hazardous occupations: A case study of the Fire Service. HSE Occasional Paper Series – OP8. London Her Majesties Stationery Office.
HSE 2009	Letter, dated 21 April 2009, to CFO Wilsher (Hertfordshire FRS) with two Improvement Notices, following the deaths of two firefighters.

HSE 2009a	Report of the Health and Safety Executive inspection of 10 – 12 November 2009. The Management of Health & Safety at Oxfordshire FRS.
HSE 2010	Health & Safety Executive – Health & Safety Training guide – what you need to know. Web version of leaflet INDG345, reprinted 06/08. Accessed on 2/2/10 at: http://www.hse.gov.uk/pubns/indg345.pdf
HSE 2010a	Health & Safety Executive letter to CFO, with appended available HSE Improvement Notices for FRS nationally from 1995 to date. Letter dated 1 February 2010
HSW 2009	*Health, Safety and Welfare Committee of RBFRS, dated 16/9/9.*
I&DeA 2009	Improvement & Development Agency – Operational Assessment Peer Review – Royal Berkshire Fire & Rescue Service October 2009 (4/1/10 – only draft report available).
IRMP 2003	IRMP Guidance Note 1 (published under covering letter from ODPM on 28 July 2003). Accessed on 16/2/10 at: http://www.communities.gov.uk/fire/developingfuture/integratedriskmanagement/guidancenote1/
IRMP 2007 – 2012	RBFRS 5 year IRMP 2007 – 2012. Accessed on 18/7/10 at: http://www.rbfrs.co.uk/pdfs/irmp-5yr-plan-2007.pdf
IRMP 2010	RBFRS IRMP 2010-11 action plan consultation document. Accessed on 2/2/10 at: http://www.rbfrs.co.uk/irmp/A4ActionPlan-2010-11-72dpi.pdf
IRMP III	RBFRS - Year three (2005/06) IRMP document accessed online on 6/7/10 at: http://www.rbfrs.co.uk/irmp/irmp_yr3_200506.pdf
IRMP RDS 2009/10	*The IRMP RDS Team meeting agendas and minutes are on the RBFRS document management system.*
IT Data 2009	*Time to RDS stations provided by RBFRS IT department using ITN (Integrated Transport Network) 7/12/9.*
Jefferies B 2009	*Private and confidential e-mail received 20/10/2009.*
Jefferies B 2010	*RDS Recruitment Activities and Training Course Implications. Report to the Corporate Management Team on 23/3/10.*
Key Meeting Notes 2009	*Key meetings were noted by the IRMP RDS project and various contemporaneous notes and summaries are available via the RDS MS Project.*
Key Meeting Notes 2010	*Key meetings were noted by the IRMP RDS project and various contemporaneous notes and summaries are available via the RDS MS Project.*
LGA 2010	LGA consultation for the Working Time Directive. Accessed on 27/4/10 at http://www.lge.gov.uk/lge/core/page.do?pageId=5142732
LGA Briefing 2009a	LGA briefing March 2009 – Working Time Directive. Accessed on 25/9/9 at: http://www.lga.gov.uk/lga/core/page.do?pageId=1686984
LGA Briefing 2009b	LGA briefing 11 February 2009 – Adjournment debate on the European Working Time Directive.
Man L 2010	*Lan-Ho Man of CLG. Personal e-mail received 4/2/10*
Mancey 2010a	*Personal conversation 24/5/2010.*

Mancey A 2010	*E-mail received 16/3/10 – cancellation of April 2010 RDS training course due to only 2 students.*
McGhee J 2010	John McGhee, Fire Brigades Union. Fire Magazine, February 2010.
Mosaic 2009	Accessed 29 December 2009. An overview of Mosaic data is given at: http://www.experian.co.uk/www/pages/what_we_offer/products/mosaic_public_sector.html
National Framework 2008 - 2011	The 2008-2011 National Framework published by the department of Communities & Local Government (CLG) is available at: http://www.communities.gov.uk/documents/fire/pdf/nationalframework200811.pdf
ODPM 2005	The Fire and Rescue Service Retained Duty System A Review of the Recruitment and Retention Challenges. February 2005. A Report by the Retained Review Team on behalf of Office of the Deputy Prime Minister: London. Accessed on-line on 16/2/10 at: http://www.communities.gov.uk/documents/fire/pdf/129687.pdf
One Place Survey 2009	One Place Survey 2009, Organisational Assessment, published by the Audit Commission, for Royal Berkshire Fire Authority dated 9 December 2009. (Accessed on-line 4/1/10).
ORH 2009	*Personal Communication via e-mail 23/10/2009 from ORH Ltd.*
ORH 2009a	*12 June 2009. ORH/BF/5 - Royal Berkshire Fire & Rescue - Analysis and Modelling Support.*
ORH 2010a	*Personal Communication via e-mail 9/2/2010 from ORH Ltd*
ORH 2010b	*Personal Communication via e-mail 29/3/2010 from ORH Ltd*
ORS 2010	Opinion Research Services - approved provider to the UK Fire and Rescue Service under the terms of the Fire Services Consultation Association (FSCA) National Framework Agreement. Web site accessed on 1/7/10 at: http://www.ors.org.uk/research/fire_and_rescue_services.php
Other FRS 2010	*All visits and notes for other Fire & Rescue Services were noted by the IRMP RDS project and various contemporaneous notes and summaries are available via the RDS MS Project.*
Palmer J 2009	*Personal Communication via e-mail 14/12/2009 from RBFRS Assessment Centre Manager.*
Palmer J 2009a	*Personal Communication via e-mail 9/12/2009 from RBFRS Assessment Centre Manager.*
PBViews 2010	*RBFRS performance management system - accessed 1/1/10 for casualty and fatality rate data.*
Rayner M 2009	*Personal Communication via e-mail 9/12/2009 from Hampshire FRS.*
RBFRS 2010	*Report prepared for AM Mancey 1/2/10. Hours required for RDS duties at Stn 14 and Central Team project work.*
RBFRS intranet 2009a	Accessed 6 December 2009. A list of IPDS related Fire Service Circulars at: http://intranet/microsite-ld/ld-ipds.asp
RBFRS intranet 2009b	Accessed 6 December 2009. An overview of the training timeline for RDS and Wholetime duty system (WDS) at: http://intranet/microsite-ld/ld-lj-10-progr-timeline-ff.asp

RBFRS intranet 2009c	Accessed 13 December. A brief explanation of phase 1 of IPDS. http://intranet/microsite-ld/ld-qa-learn.asp
RDS meetings 2009/10	*RDS station visits throughout 2009/10 were noted by the IRMP RDS project and various contemporaneous notes and summaries were made and are available via the RDS MS Project.*
Shakesby V 2009	*Personal Communication via e-mail 7/12/2009 from Humberside FRS.*
Skills for Justice 2009	Skills for Justice is the Learning Skills Council for the Fire & Rescue Service and the NJC National Occupational Standards. Web site accessed on 13 December 2009 at: http://www.skillsforjustice-ipds.com/njc.php
South Wales 2009	*Briefing Document - RDS Salary Within South Wales Fire & Rescue Service. Dated 13/5/2009 V2. Located at:* *S:\IRMP Development\IRMP 5YEAR PLAN 2007-12\IRMP 2010-11\RDS Review\Library\Other FRS Information\South Wales*
Speicher J 2010	*Personal Communication via e-mail 14/7/2010.*
Station Commanders Handbook 2010	*RBFRS Trove documents system accessed 23/2/2010.*
Strategic Plan 2009	RBFRS Support Services strategic plan. Accessed 30/12/2009 at: \\fsbhq\shared\StrategicPlan\Support Services Plan.mpp
Support Services 2010	RBFRS Support Services plan – IRMP Year II – Major incidents. Accessed on 22/2/2010 at: S:\StrategicPlan
Taylor T 2009	Fire magazine October 2009 Journal article. Reducing firefighter fatalities.
Thewlis M, 2010	*Michael Thewlis of ER&C. Personal e-mail received 5/1/10.*
UK Statistics 2010	UK National Statistics publication hub, accessed on-line on 27/3/10 at: http://www.statistics.gov.uk/hub/people-places/fire-and-rescue/fire-and-rescue-services/index.html
Warwickshire 2008	Minutes for the meeting on 22/9/2008 of the Warwickshire Audit and Standards Committee. Accessed online on 8/7/10 at: http://www.warwickshire.gov.uk/corporate/committe.nsf/471ece76d69bff9780256a140057d7f8/25de968057d3f91a802574ce00349330?OpenDocument
West Yorkshire 2010	Report to West Yorkshire FRA Personnel & Training Committee on 25 September 2009. Accessed online on 24/8/10 at: https://www.cfoa-communities.com/conversation/684
Williams N 2005	Travel demand - the influence on commuter distances of Labour supply / demand imbalances. ©Association for European Transport and contributors 2005. Accessed online on 26/3/10 at: http://www.etcproceedings.org/paper/travel-demand-the-influence-on-commuter-distances-of-labour-supply-demand-imba
Young 2010	Lord Young review of Health & Safety as reported in the Telegraph online. Accessed on 21/7/10 at: http://www.telegraph.co.uk/news/uknews/law-and-order/7828902/Danger-Daft-health-and-safety-laws-under-inspection.html

List of Appendices

Some appendices required data extraction and further detail, beyond that in the appendices themselves, may be found from the RDS MS Project within the RBFRS 'S drive' at:

S:\IRMP Development\IRMP 5YEAR PLAN 2007-12\IRMP 2010-11\RDS Review

This link is to an internal RBFRS document.

Appendix A – Average RDS and WDS station costs

Data for average costs of fire stations provided by finance department.

RDS Stations 2008/09

	Stn 5	Stn 11	Stn 15	
Retained Pay	162,000	162,000	162,000	
Maintenance			2,044	
Rates	6,006	6,930	6,352	
Gas	2,676		2,202	
Electricity	996	3,950	1,086	
Water	75	202	197	
Waste	792	627	992	
Contract Cleaning	1,220	1,220	1,220	
Depreciation	6,782	8,261	6,552	
Misc expenditure posted to stations	3,572	933	1,660	
	184,119	184,123	184,305	184,182

Retained pay is based on budgeted costs for 9FF, 3CM and 1WM
Turnout costs are based on total budget apportioned equally across stations
Misc expenditure includes clothing, printing, stationery, office equipment

WDS Stations 2008/09

	Station 2	Station 13	Station 18	
Salary plus on-costs	1,090,000	1,090,000	1,090,000	
Overtime	20,000	20,000	20,000	
ARA	4,000	4,000	4,000	
CPD	6,000	6,000	6,000	
Maintenance	11,585	1,366		
Rates	11,088	14,322	20,328	
Oil		5,381		
Gas	5,692		13,138	
Electricity	4,412	6,892	6,164	
Water	1,931	1,278		
Waste Disposal	1,334	2,287	1,317	
Contact Cleaning	5,442	6,787	7,540	
Depreciation	19,363	25,144	30,819	
Misc expenditure posted to stations	9,852	10,292	12,206	
	1,190,699	1,193,749	1,211,512	1,198,653

Salary based on 20FF, 4CM, 4WM and 1SM
Salary, overtime, ARA and CPD figures are based on budget, other figures are actual.
Misc expenditure includes clothing, printing, stationery, office equipment

Appendix B – Chief Fire Officer RDS viability report

Retained availability and the impact on the viability of providing a Retained service

PRESENTED TO: **FIRE AUTHORITY**

DATE OF MEETING: **11 FEBRUARY 2009**

OFFICER PRESENTING REPORT: **CHIEF FIRE OFFICER**

1. PURPOSE AND SUMMARY OF REPORT

To advise the Fire Authority of the current and foreseeable challenges facing the Authority in providing a Retained Service.

A presentation to support this report will be given by the Chief Fire Officer at the Fire Authority meeting, time allowing. A copy of the presentation is appended to this report.

2. RECOMMENDATIONS

a) That the report be NOTED.

3. BACKGROUND AND SUPPORTING INFORMATION

The purpose of this paper is to highlight the significant challenges facing the Authority in maintaining an effective Retained Service within Berkshire. It is the intention to develop strategies that will ensure the most efficient and cost effective provision of emergency cover proportionate to the risks identified within the Authority's area, both now and in the foreseeable future. There is nothing within this paper that is intended to de-value the work of Retained Firefighters, bring into question their commitment or capability or underestimate the considerable esteem and respect in which they are held.

Royal Berkshire Fire Authority currently maintain eight fire stations crewed entirely by Retained (RDS) personnel, three appliances on wholetime fire stations are crewed by RDS and one station where the Wholetime personnel are supported by RDS crewing at night and weekends. **Annex "A"** provides an overview of costs, staffing and workloads at Retained Stations.

On 31 December 2007 the Authority closed a Retained fire station at Sonning as part of its Integrated Risk Management Plan (IRMP). This station had become increasingly difficult to staff, resulting in the appliance being operationally unavailable for a very significant proportion of the time. This is an increasing problem at many of our retained fire stations. **Annex "B"** graphically illustrates Retained appliance unavailability during the 2007-2008 year.

Over recent years RDS conditions of service have been "modernised", including entitlement to five weeks Annual Leave and pay parity with Wholetime firefighters.

The Authority, together with the Kent and Medway Towns Fire Authority have been involved in a lengthy test case, brought by the FBU on behalf of RDS Firefighters nationally, under the Part Time Workers (Prevention of Less Favourable Treatment)

Regulations 2000. The case was finally lost resulting in a further blurring if not removal of boundaries between the Wholetime and RDS personnel.

RDS personnel now have to be recruited to the same standards (ability, medical and fitness) as wholetime personnel. These more onerous standards serve to reduce the numbers willing to put themselves forward for testing and reduce the number of applicants that subsequently prove to be suitable for employment as RDS Firefighters.

There have been a number of high profile incidents nationally at which RDS Firefighters have been killed whilst on operational duty, the most significant being the incident at Atherstone-on–Stour in Warwickshire on 2 November 2007. Whilst the final report of the investigation into this incident has not yet been published, it is widely predicted that the report will raise serious questions about the ability to develop and maintain the competence of the RDS personnel in the limited (3 hours per week) training opportunity currently available. Any meaningful increase in the time that RDS personnel are required to train is likely to lead to retained personnel leaving the Service, being unable/unwilling to increase their already significant commitment to the Service. It is anticipated that the repercussions from this incident will have major implications for all authorities employing RDS staff.

Undertaking the duties of a RDS Firefighter can be quite onerous on both the Firefighter, their Family and primary employer due to the requirement to be immediately available and fit to respond to emergency calls at all times of day and night for a significant portion of every week. Increasingly it is less common for people to live and work within five minutes of the retained fire station, employers find the disruption to their business increasingly difficult to sustain. Local tradesmen, whom, in the past have provided a reliable source of retained personnel, can now rarely sustain a viable business within a local community and find it necessary to travel to where the work is, often well outside the local community.

A sustained period of recession might provide the motivation and opportunity for some people to consider joining the Retained Service. However, recession is also likely to result in losses from the retained service as employers are unable or unwilling to continue to release staff for RDS duties, existing staff find themselves in a position where they need to relocate or commute in order to find work/business, work longer hours in primary employment or undertake caring responsibilities to allow other family members to seek employment. RDS earnings may disadvantage or disqualify individuals otherwise entitled to Job Seekers Allowance or other benefits.

In order to receive the full Retained availability payment (Retaining fee) RDS Firefighters must provide in excess of 120 hours of availability per week. Retained Firefighters offering less than 120 hours per week but more than 79 hours per week receive 75% of the full availability fee. In addition to the availability fee Retained Firefighters also receive a disturbance allowance and an hourly rate for attending calls as well as a drill payment for weekly training. Retained personnel are entitled to overtime rates if they have worked in excess of 42 hours per week and receive enhanced pay for working on Public Holidays.

In order to retain RDS staff, it is becoming increasingly necessary to be extremely flexible on minimum hours of availability. Whilst this flexibility may result in the retention of staff that might otherwise leave, the consequences of this flexibility is lower than predicted appliance availability.

The Authority allows wholetime firefighters to hold a secondary contract as an RDS Firefighter. However, due to the constraints of the working time regulations, their retained availability is limited to a maximum of 79 hours per week.

The European Parliament is currently considering an amendment to proposals that will end all opt-outs from the full implications of the Working Time Directive. The intention of the amendment is to ensure employees do not work more than 48 hours per week, that they are not encouraged to work long hours and that the perceived 'culture' of long hours in some member states becomes less prevalent. The amendment would encourage employees to have more time with their families and lead to more jobs being created. If this amendment were to be passed without exemptions, it would appear that it will have a significantly detrimental effect on the RDS Service as RDS Firefighters would work most if not all of their 48 hours for their primary employer leaving few, if any hours for RDS duties.

There is no exemption under the EC Road Transport Directive for RDS Firefighters in their primary employment. All RDS duties will be regarded as work for these purposes even though the directive does not apply to the driving of emergency vehicles. This effectively precludes anyone whose primary employment is controlled under this directive from becoming/remaining an RDS Firefighter.

In response to concerns about the recruitment and retention of RDS personnel the Authority have approved the funding to employ a dedicated Retained Recruitment and Retention Coordinator. A recruitment process was undertaken resulting in an offer of employment to a candidate that had been undertaking a similar role for Oxfordshire Fire Service. Unfortunately, the individual failed to take up the offer as a result of a counter offer from his existing employer. Subsequently, it has become clear that the early success of similar initiatives in Oxfordshire and Buckinghamshire have not had a significant medium term effect on RDS staffing numbers. This post remains vacant until a review of the issues under discussion in this paper has been completed.

The significant reduction in operational calls resulting from community safety and education initiatives, hoax call and unwanted fire signal reduction initiatives and efficiency and effectiveness measures together have the effect of reducing the earning potential of RDS personnel. This is compounded by the poor availability at some stations resulting in the appliance being unable to be mobilised to calls due to insufficient personnel.

The Fire and Rescue Service employs approximately 50,000 Firefighters nationally, of which approximately 15,000 are RDS personnel. RDS personnel provide the primary fire and emergency cover to the rural and less urban areas that comprise the great majority of the land mass. This pattern is reflected within Berkshire where there is currently an RDS establishment of 156 full time equivalent personnel. The RDS when working well provides extremely cost effective emergency cover for lower risk areas. Budget allocated to maintaining low availability RDS units do not represent cost effective use of resources. It is currently difficult to envisage a viable alternative emergency cover model that is not in based, at least in part, on the use of RDS personnel.

The current IRMP risk model has been developed on the basis of assumed RDS availability. Consequently, the implication of a significant lack of RDS availability is that the risk model is flawed. It is therefore necessary, as the next stage in developing the IRMP, to re-evaluate the model based on known RDS availability data. A revised risk model will assist in highlighting those areas where RDS is the

only viable means of providing the agreed level of emergency cover and those areas where there might be better alternatives. This approach will enable the Authority to focus resources on RDS recruitment and retention where it will be most effective in the longer term and stimulate the development of options for the most effective use of the available RDS personnel and alternative response options.

Directors have already commenced strategic work on understanding, in detail, the challenges outlined in this paper and identifying appropriate responses to them. Consultants, ORH, who have provided risk and response analysis in support of IRMP, have been commissioned to undertake further modelling to evaluate priorities and the potential for the development of new response strategies. Once complete this work will be taken forward within the next stage of our ongoing IRMP process.

4. FINANCIAL, LEGAL, RISK MANAGEMENT, ENVIRONMENTAL AND EQUALITY IMPLICATIONS

The number, location and staffing of fire stations represents the most significant cost driver influencing budgetary needs. The availability problems being experienced with RDS appliances is a significant cause of the predicted underspend in the current retained salary budget. The options that will be developed in response to these challenges will be designed to ensure the most cost effective matching of resources to risk, inevitably these options will identify both costs and efficiencies. This paper is inextricably linked to the management of corporate, operational, financial and safety risks and lies at the heart of the Authority's statutory functions. Environmental and equality issues will be fully assessed and accounted for in the development of the work identified in and arising from this paper.

5. COMPLIANCE WITH STANDING ORDERS / FINANCIAL REGULATIONS

Not applicable.

6. CONTRIBUTION TO STRATEGIC COMMITMENTS

This paper contributes directly to the following Strategic Commitments of the Authority:

- Minimise loss of life, injury and damage from fire, road traffic collisions and other hazards.
- Improve public and business safety and reduce risk, through targeted education and enforcement of fire safety legislation.
- Demonstrate continuous improvement and efficiencies, ensuring consultation and partnership working.
- Be an employer of choice, offering equality of opportunity and development to all.
- Provide resilient emergency response through risk management and planning.

7. ASSESSMENT AGAINST THE PARTNERSHIP FOR COMMON SENSE

The response to the issues identified in this paper will be taken forward within the partnership environment of the Authority's agreed IRMP process. The Authority's IRMP is subject to rigorous consultation requirements.

8. BACKGROUND PAPERS

Copies of the presentation to be given in support of this paper to be circulated at the meeting.

9. COMMENTS RECEIVED FROM STATUTORY OFFICERS

a) Chief Fire Officer

The Chief Fire Officer supports this report.

b) Fire Authority Treasurer

The Authority Treasurer supports this report.

c) Clerk and Monitoring Officer

The Clerk and Monitoring Officer has noted this report.

Author: Olaf Baars
Deputy Chief Fire Officer
0118 932 2226

Date of report: 27 January 2009

Annex "A"

RETAINED UNIT COMPARATIVE COST/CREWING AND INCIDENT DATA TABLE

STATION ►►		Stn 4	Stn5	Stn 6	Stn 7	Stn 9	Stn 11	Stn 12	Stn 14	Stn 15	Stn 16	Stn 19
Staff Cost		£154,717	£154,596	£130,557	£103,245	£104,501	£118,909	£91,902	£146,615	£175,919	£205,498	£164,911
Establishment (FTE)	**Full Time Equivalent**	13	13	13	13	13	13	13	13	13	13	13
Actual	**FTE**	9	12	11	10	8	10	7	10	11	17	11
Staff No:	**Full Cover**	2	5	9	8	7	8	4	8	8	15	9
Staff No:	**75% Cover**	9	9	2	2	1	3	4	3	4	2	3
Failed to Crew	**2004-2008**	2	1	4	4	4	0	7	4	11	8	2
Average No: Incidents	**2003-2007**		180	119	147	103	489	89	417	369		
Dwelling Fires	**Dwelling Fires**		9	3	6	3	5	4	14	14		
Vehicle Fires	**Vehicle Fires**		15	8	13	8	20	3	9	15		
Other Property Fires	**Other Property Fires**		12	8	11	6	17	5	21	17		
RTC	**RTC**		29	17	10	5	30	3	16	15		
Hazmat	**Hazmat**		0	0	0	0	2	0	1	0		
Other Special Service	**Other Special Service**		39	25	20	15	63	9	44	41		
5 Pump Incidents	**5 Pump Incidents**		1	1	0	0	1	0	0	1		
6-9 Pump Incidents	**6-9 Pump Incidents**		1	0	1	1	1	0	0	1		
≥10 Pump Incidents	**≥10 Pump Incidents**		0	1	1	0	0	0	0	1		

Notes:

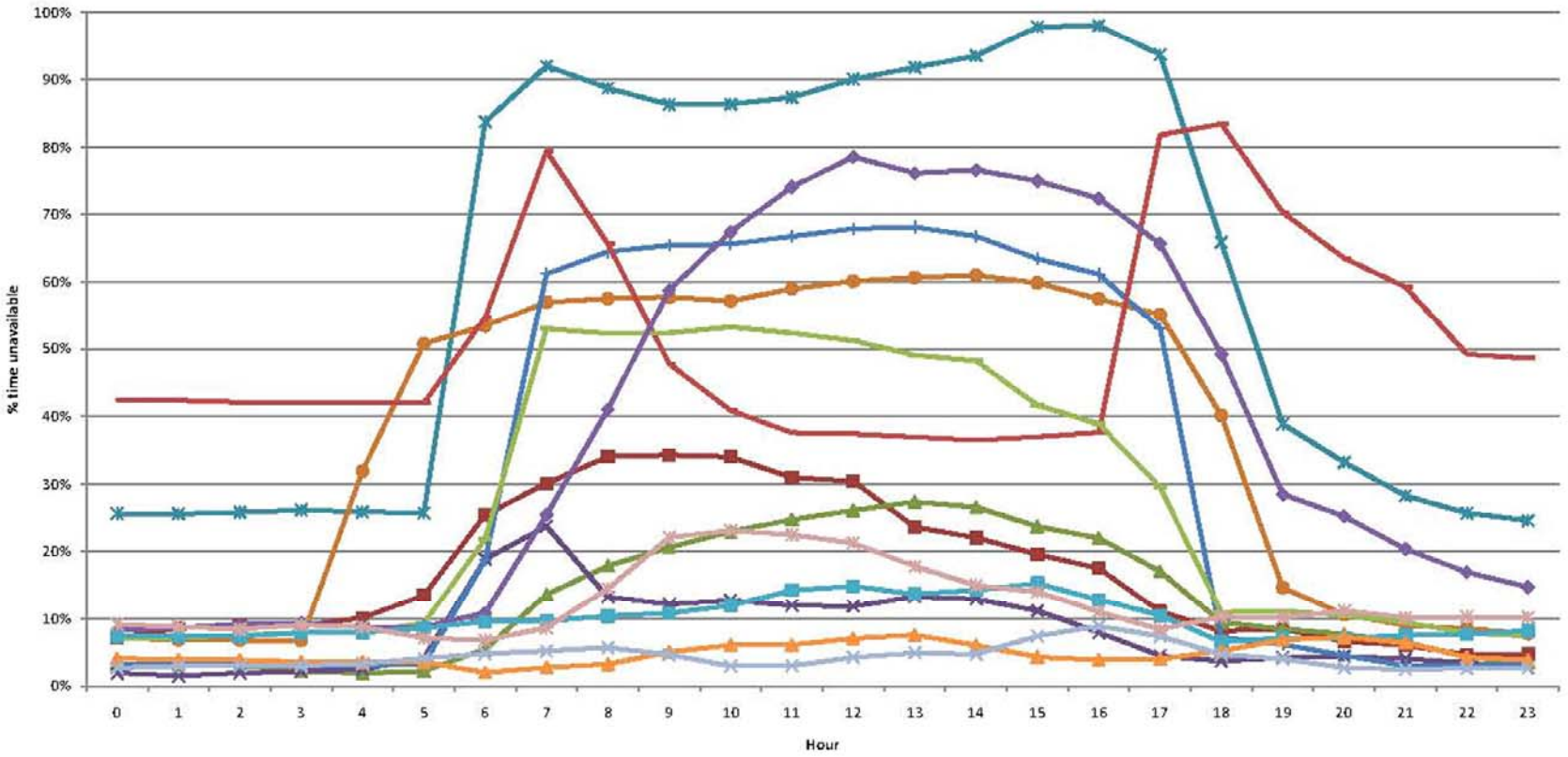
Failed to Crew – The number of incidents over a four year period when the Station declared the appliance to be available but subsequently failed to raise a crew when alerted to an incident.

Station 4, 16 and 19 incident Data – On these Stations the Retained unit provide the second appliance in support of the wholetime crew. In these cases the incident data is irrelevant as the data refers primarily to the wholetime appliance.

The Incident data relates to the average number of incidents in each category occurring on the Retained Station's turnout area, not, the average number of incidents to which that retained station responded.

Annex "B"

Retained Unavailability Analysis 2007/2008 by Station/Hour
(Showing the proportion of hours unavailable as a %)



Appendix C – Organisational Risk Assessment

RISK MANAGEMENT GROUP (RMG) RISK ASSESSMENT FORM

RMG activity: Retained Duty System Viability

Assessors: <Les Gollop, George Cross>	Assessment Date: 2/3/10	Review Date: 2/8/10

Guidance Tables:

Score	Risk level	Assessing the Impact and Control.
1 – 4	Low	Minor injury/ill health. Minimal financial loss of less than £10,000. Minor disruptions to provision of service for short time. Adverse local media coverage. Tolerable risk. Control measures incurring zero or minimal cost need to be implemented as soon as convenient and as resources permit.
5 – 12	Medium	Serious disabling injury/ill health. Financial loss in excess of £100,000. Significant disruption to provision of service. Adverse national media coverage. The risk is probably intolerable and efforts must be made to reduce the risk as far as reasonably practicable.
13 – 25	High	Fatality. Financial loss in excess of £1 million. Non-delivery of emergency service for more than 1 hour. Non-delivery of other key services for more than 1 week. Adverse international media coverage. The risk is intolerable. Immediate action must be taken.

			Severity				
			Very Low/ Minor	Low/ Moderate	Medium/ Major	High/ Fatal	Very High/ Catastrophic
			1	2	3	4	5
Likelihood	Negligible	1	1	2	3	4	5
	Unlikely	2	2	4	6	8	10
	Likely	3	3	6	9	12	15
	Very Likely	4	4	8	12	16	20
	Certain	5	5	10	15	20	25

DEFINITIONS FOR USE IN FORM (AND EXAMPLES)

Risk Area	IOSH Definitions	Examples of typical risks.
Contractual	Failure of contractors to deliver services or products.	Uniform/equipment contracts. Maintenance/services.
Environmental	Associated with policies and practice as well as polluting potential of the day-to-day operations.	RBFRS Environmental policies and procedures. Ops response. MOU with EA.
Financial	Financial planning. Inability to meet financial commitments.	Insurance cover. Reserves. Capital/revenue. CSR. Budget setting. Capping.
Legal	Breach of legislation and risks arising from changing legislation.	FRS Act. RR(FS)O. Environmental. H&S.
Physical	Related to protection of property and assets and H&S&W of people.	Operations. Contract workers. Driving standards. Asbestos register.
Professional	Judgement of RBFRS staff and service.	Media. Public perception. Peer review. CAA. National Framework and PIs.

		Fire Authority
External Stakeholder	Risk to RBFRS of perception of external stakeholders.	Other agencies. Public. Rep Bodies.
Technological	Risks related to IT and equipment.	IT systems. Equipment failure.
Internal Workforce/staff	Risk to RBFRS of perception of internal stakeholders/staff.	Welfare. Partnership. Conditions of Service

Risk Area: **Risk**	**Existing Control Measures**	**L**	**S**	**L x S**	**Additional Control Measures:**	**Who**	**When**	**Review Date**
Contractual:								
1.1: Equal rights (leave, paternity, sickness) leading to lessening availability and reduction in service.	RBFRS complies with legislation.	5	4	20	Analysis on availability impact over time.	RDS Project Manager	Initially over 12 month	4/3/10 for all sections
1.2: Working time Directive embedded in RDS employment contracts leading to lessening availability and reduction in service.	RBFRS complies with legislation.	5	4	20	Analysis on availability impact over time.	All sections for RDS Project Manager	For all section	
1.3: Grey book conditions within RDS employment contracts leading to lessening availability and reduction in service.	RBFRS endeavours to flexibly comply with Conditions of Service – in agreement with Rep Bodies	5	4	20	Analysis of Grey Book impact of any potential outcomes and communication with rep bodies.	until implementation phase.		
1.4: Dual contracts (W/T / RDS) leading to lessening availability and reduction in service.	Project research has shown that, in fact, dual contract staff has benefit as they attend proportionately more incidents. RBFRS reached agreement with rep bodies on dual contracts.	0	0	0	Continued analysis on availability impact over time.			
1.5: Geographical limits in contract leading to lessening availability and reduction in service.	Standard was set at 5 minutes and is now 3minutes, potentially increasing risk. Score not yet adjusted	5	4	20	Analysis on availability impact over time and potential for change.			

1.6: Contract with primary employer potentially leading to lessening availability and reduction in service.	RBFRS policy and procedure in place.	4	4	16	Potential change to account for impact on primary employers. Review and enhance communication with primary employers.			
1.7: Inability to fulfil training and other aspects of contract potentially lessening competence.	Flexible expectation set in contract and 3 hrs agreed per week.	4	4	16	Research and analysis of present and future requirements.			
1.8: Inability to fulfil contractual hours leading to lessening availability and reduction in service..	Expectation set in contract.	4	4	16	Research and analysis of present and future requirements.			
1.9: Inability to fully fulfil full role map of Firefighter (eg CS & 7(2)d, equipment use & maintenance) potentially lessening competence.	Role maps set and followed by RBFRS leading to NVQ. Project research shows RDS have huge difficulty achieving NVQ. However, severity is shown to be reduced.	5	3	15	Continued research and analysis of existing arrangements to confirm robustness and safety. (eg for WaH, Water, ND.)			
1.10: Inability to fully fulfil full role map of Firefighter potentially leading to ET challenge from W/T FF	Role maps set and followed by RBFRS leading to NVQ.	4	4	16	Research and analysis of existing and future arrangements to confirm pay parity.			
1.11: Inability to fulfil mutual aid arrangements, either way, OTB leading to service reduction.	Mutual Assistance S13/16 agreements in place.	3	3	9	Note OTB long term plans and factor in potential impacts from and to project.			
Environmental								
2.1: Not competent to use equipment to protect environment leading to litigation.	RBFRS policies and procedures (inc. training and equipment) in place. MOU with Environment Agency. Research indicates at this stage that RDS do nit have sufficient training time – increasing likelihood	4	5	20	Continued research and analysis of existing arrangements to confirm robustness and safety.			

2.2: Limited environmental risk knowledge and understanding leading to litigation.	RBFRS policies and procedures (inc. training and equipment) in place. Research has found that RDS have very limited time for theory training.	4	5	20	Continued research and analysis of existing arrangements to confirm robustness and safety.			
2.3: Inability to keep up with changes to environmental policies & procedures.	Flexible learning and open access to information. Research has found that RDS have very limited time for theory training.	4	4	16	Continued research and analysis of existing arrangements to confirm robustness and safety.			
Financial								
3.1: Un-used facilities not Best Value	Monitor and identify shortfalls.	5	2	10	Review and audit current and future potential arrangements.			
3.2: Equal rights (pensions) leading to extra cost.	Existing financial arrangement support requirements.	3	3	9	Future changes to account for financial impact.			
3.3: Any litigation from failure may lead to fines.	Insurance. Legal Support. Risk assessed based reserves.	3	5	15	Future changes to account for financial impact.			
3.4: Under-spend – leads to Member concern and risk to future budget.	Robust financial audit and monitoring.	5	4	20	Future changes to account for financial impact and for budgetary cycle.			
3.5: Possible expense of potential alternatives.	None identified. Research has shown there will be a need for funding but the project is planning to keep this cost neutral.	4	4	16	Future changes to account for financial impact.			
3.6: Uncertainty for future finance (Grants and budget setting) leading to reduced funding.	Robust financial audit and monitoring. 3 yearly CSR. Reserves.	5	4	20	Future changes to account for financial impact.			
3.7: Uncertainty regarding value for money.	Robust financial audit and monitoring.	4	4	16	Cost Benefit Analysis			
3.9: Potential change leading to Insurance uncertainty.	Robust current insurance arrangements.	2	3	6	Future changes to account for financial impact.			
3.10 Potential cost of pensions (arising from part time workers case)	Robust financial audit and monitoring.	5	4	20	Future changes to account for financial impact.			

Legal								
4.1: Inability to provide duties of FRS Act and Emergencies Order.	RBFRS complies with legislation.	1	5	5	Ensure compliance in any future potential change.			
4.2: Working Time Directive limiting employment pool.	RBFRS complies with legislation and monitors availability. The project has noted the 'opt-out' situation.	4	4	16	Analysis on availability impact over time.			
4.3: Working Time Directive Opt-out removal, preventing RDS employment.	Monitor situation and attempt to influence. The project has noted the 'opt-out' situation.	4	5	20	Have long-term backup plan.			
4.4: Driving Regs limiting driver numbers.	RBFRS complies with legislation and monitors availability. Project notes some 3-6 individuals may be affected.	5	3	15	Ensure compliance in any future potential change. (Continue)			
4.5: Equal treatment of Part time worker regs limiting available employment pool.	RBFRS complies with legislation and monitors availability. Project notes national recognition of issues that may affect future RDS involvement.	4	4	16	Monitor.			
4.6: Equality of opportunity to same job – of FF - (eg POEST) limiting successful candidates.	RBFRS complies with applicable selection tests regardless of duty system - and monitors availability.	5	3	15	Analysis on availability impact over time.			
4.7: Inability to provide functions required of National Framework.	RBFRS complies, within constraints, with the framework.	2	4	8	Ensure compliance, as far as possible, in any future potential change.			
Physical								
5.1: Inability to provide full, expected service to public.	Audit & Monitor	4	4	16	Research and analysis of present and future requirements.			
5.2: Inability to provide safe service.	Audit, risk assessments and training.	4	5	20	Research and analysis of present and future safe systems of work.			

5.3: Inability to safely support other crews.	Monitor, risk assessments and training.	4	4	16	Research and analysis of present and future safe systems of work.			
5.4: Unable to maintain competence.	Monitoring, risk assessments, training, qualification and records. Project research finds very limited training time – confirming risk levels.	5	4	20	Research and analysis of present and future IPDS arrangements.			
5.5: Unable to maintain staff welfare and morale.	Management structure, information, monitoring systems & procedures. Project visits show poor morale	5	3	15	Enhance communication. Project has set up systems to improve communication during life of project.			
5.6: Criminal damage to facilities.	Facilities management monitoring.	2	3	6	Monitor			
5.7: Unable to gain and maintain competence for CM and WM roles (both Ops and Station Management)	Monitoring, risk assessments, training, qualification and records. Project research has focussed on FF - confirming risk levels.	4	5	20	Research and analysis of present and future IPDS arrangements.			
5.8: Inability to maintain strategic reserve for resilience.	Crew availability monitoring. OTB support. Recall. Project research shows lower risk	3	4	12	Research and analysis of present and future requirements.			
5.9: Unable to recruit RDS staff.	Active recruitment in place. Project shows lack of management oversight	5	4	20	More robust recruitment strategy.			
5.10 Unable to retain RDS staff.	Exit interviews. Line management structure enhancing RDS support. Flexibility on contracted hours.	5	4	20	Research and analysis of present and future arrangements.			
5.11 Changing demographics of RDS areas leads to lack of employment pool.	Audit & Monitor. Progression of completed IRMP project. Project confirms, via Mosaic, risk level.	5	4	20	Research and analysis of present and future impacts to demographics.			
Professional								
6.1: Poor service = less credibility on whole service.	Audit & Monitor. BVPI's & LPI's. Customer feedback.	3	3	9	Continued monitoring of action to improve – to include potential for change.			
6.2: Adverse impact on medium/long term IRMPs.	IRMP forward planning.	4	3	12	Identify potential change and integrate into IRMP at earliest time.			

6.3: Less service = less credibility.	Audit & Monitor. BVPI's & LPI's. Customer feedback.	4	3	12	Continued monitoring of action to improve – to include potential for change.			
6.4: Lack of response leading to poor public perception.	Audit & Monitor. BVPI's & LPI's. Customer feedback.	4	4	16	Research and analysis of present and future arrangements.			
6.5: Worsening performance (BVPI's) at audit.	Audit & Monitor.	3	3	9	Research and analysis of present and future arrangements.			
6.6: Unitary Authority funding differences being unfair or perceived to be unfair with potential change leading to resistance and possible CFA conflict.	Regular contact with CFA.	2	4	8	Outcome dependent. Future changes to account for political impact.			
6.7. Regional Control Centre systems leading to reduced effectiveness & flexibility in RDS delivery.	IRMP RCC team in place.	4	4	16	Continue communication. Identify issues to influence RCC systems.			
External Stakeholder								
7.1: Social contract not fulfilled.	Audit & Monitor. BVPI's & LPI's. Customer feedback.	3	4	12	Research and analysis of present and future arrangements.			
7.2: Less opportunity to recruit minority groups.	Recruit methodology complies. Audit and review.	4	2	8	Research and analysis of present and future arrangements.			
7.3: Potential division between FA Members and Officers	Governance arrangements in place.	2	3	6	Continue governance. Member engagement in place.			
7.4: External stakeholder 'rules' limiting employment pool. (Check – military/Police staff disallowed).	Political influence	2	3	6	Continue influence wherever possible.			
Technological								

8.1: Regional Control Centre leading to greater demands in time and technical knowledge.	IRMP RCC team in place.	4	4	16	Continue communication. Identify training needs and implement.			
8.2: Increasing technological (IT) advancement requiring time, training & expertise.	Communication and IT training	4	4	16	Continue communication. Identify training needs and implement.			
8.3: Inability to work with restricted functionality of IT at RDS stations.	Monitor IT usage and problems.	4	3	12	Continue improvements to IT systems.			
8.4: Increasing technological (equipment) advancement requiring time, training & expertise.	Information, instruction and supervision. Research finds very limited training time, confirming risk level.	5	4	20	Research and analysis of present and future arrangements.			
Internal Workforce/staff								
9.1: RDS – W/T transfers reducing RDS numbers and/or availability.	Managed process	5	4	20	Research and analysis of present and future arrangements.			
9.2: Driving to station on calls giving risk of RTC.	Guidance and policies and procedures.	4	4	16	Research and analysis of present and future arrangements.			
9.3: Unable to complete NVQ even with extra hrs.	Managed process. Project research shows RDS have huge difficulty achieving NVQ, confirming level.	5	3	15	Research and analysis of present and future arrangements.			
9.4: Uncontrolled extra hrs volunteering, outside contracted hrs.	Management structure and monitoring.	5	2	10	Research and analysis of present and future arrangements.			
9.5: Time demands of new and changing policies & procedures.	Management structure and monitoring. Trove document management.	5	4	20	Research and analysis of present and future arrangements.			
9.6: New fitness testing regime leading to lessening availability and reduction in service.	Policies and procedures. Management monitoring.	4	3	12	Research and analysis of present and future arrangements.			

9.7: RDS to W/T transferee unable to prove competence (leading to ET).	Transfer process individualised. Management policies & procedures.	4	4	16	Research and analysis of present and future arrangements.			

Total Score = 168/225

Transferring data to PBViews

On completion of the RMG Risk Assessment, RMG will decide on future action and ensure the data is added to the PBViews Risk Map.

If there is more than one risk identified for a risk area (Contractual, Environmental etc), then the highest risk calculated for that area will be used to populate PBViews.

PBViews will be populated with the Likelihood x Severity data (L x S) for each risk area with existing control measures (not with the residual risk).

The residual risk will become the risk with ‘existing control measures’ only when the activity has been later reviewed and it is confirmed that the ‘additional control measure’ actions have been completed.

Appendix D – Terms of Reference (TOR) for IRMP Project

Retained Duty System project 2010/11

Link to Corporate Aims and Objectives

Royal Berkshire Fire & Rescue Service (RBFRS) is 'Making Berkshire Safer' by following six strategic commitments. Those relevant here are:

1. Minimise loss of life, injury and damage from fire, road traffic collisions and other hazards
2. Improve public and business safety and reduce risk through targeted education and enforcement of fire safety legislation.
3. Demonstrate continuous improvement and efficiencies, ensuring consultation and partnership working
4. Be an employer of choice, offering equality of opportunity and development to all
5. Provide resilient emergency response through risk management and planning
6. Conduct activities in an environmentally sustainable way

Project Background

RBFRS are experiencing difficulties in recruiting and retaining Retained staff. An increasing lack of availability and difficulties in achieving training aims have highlighted the need for a fundamental review of the Retained response options within RBFRS.

Project Benefits

1. To ensure RBFRS continues to meet it's strategic commitments and to maximise response options within Berkshire.
2. To identify the required development needs of Retained staff and to ensure a safe and robust system of work.
3. To optimise response times within RBFRS

Project Objectives

1. To review current response options within RBFRS and to make recommendations for improvements or alternatives to the Retained Duty System
2. To analyse current, required and possible future Retained Duty System provision.
3. To conduct stakeholder analysis as it relates to Retained Duty System activities
4. To consider and report on budgetary implications.
5. To follow the nine phases for IRMP projects.
6. To provide effective and deliverable recommendations to Senior RBFRS managers and Fire Authority members

Project Deliverables

To report to the Corporate Management Team and Fire Authority members, via the Area Manager (Support Services), on the project findings. This report is to include recommendations and an outline implementation plan.

Project Boundaries

The project will include	The project will **not** include
Analysis of current ways of working Consideration of the implications arising at	Any implementation. (Implementation will be for Service Delivery via CMT.)

local, regional and national levels Assessment of emerging issues from investigations and reports Consideration of IPDS principles and the maintenance of competence All relevant historical and potential future incidents. All relevant staff members and all required and likely to be required qualifications. All relevant legislation. Eg: working time directives, drivers hours regs etc Liaison with external contractors for cover modelling forecasts and analysis Co operation with National or local working groups. Eg: CFOA, OTB Brigades All relevant current policies and procedures with recommendations for the future. Over the Border (OTB) and other potential partnership arrangements. Consideration of costs. Consideration of remuneration packages. Consideration of the crewing and location of relevant appliances. Consideration of both the minimum statutory level and the ideal level of resource requirement. Consideration of the measurements required to gauge success. Consultation with all relevant stakeholders.	Virement of budgets.
<u>Project assumptions</u>	<u>Project Constraints</u> Initially a one year timeline for reporting.

Measurement of Success

Delivery of an agreed report, on time.

Clear, robust, resilient and achievable recommendations.

Agreed implementation of a clear project plan

Identifiable improvements in Appliance availability throughout RBFRS

Acquisition and maintenance of competence for RDS staff.

Improved recruitment and retention of RDS staff

Innovative ways of working for all operational staff within RBFRS

Maintain and improve the delivery of service.

Successful implementation of any outcomes of people impact assessments.

Project Team

Role	Name
Sponsor	P Southern
Strategic lead	B Morgan
Project leaders	G Cross / L Gollop
Perf. Review	N Oxborough
FBU Rep	Mark Jones
FBU Rep	Maurice Whyte
RDS rep	Matt Clark
RDS rep	Pete Rackham
RDS rep	Robert Overall
RDS rep	Owen O'Rourke

Role	Name
H&S Team member	Tracy Hawkins
CS Team member	Paul Jacques
IT Team member	Jon Ball
SD (Response) Team member	Andy Mancey
CC Team member	Nicole Targett
HR Team Member	Becci Jefferies
L&D Team Member	Simon Jefferies

Time Management

Start Date: 24 August 2009

Completion Date: 23 August 2010

Time Recording:

The project leader will co-ordinate the time management record for all team members.

Appendix E - HSE Freedom of Information Request

From: George Cross [mailto:crossg@RBFRS.co.uk]
Sent: 13 January 2010 16:53
To: Lisa Bolger
Cc: Les Gollop
Subject: FW: Freedom of Information Request (Ref: 2010010012) - Mr.Iain Cox, Royal Berkshire Fire & Rescue Service

Dear Lisa

Your reference – 2010010012
Previous reference given (in attached e-mail response) – HPHS-7YCEM4

I have been passed your reply to Iain Cox, below. The text of our original request was something like:
"We are undertaking a fundamental review of the Retained Duty System (RDS) in Royal Berkshire Fire & Rescue Service. As part of this project we wish to review all Improvement Notices served on any Fire & Rescue Service. We have accessed your database online but it only seems to link to document reference numbers – not the actual document. Please provide all the Improvement Notices (electronic versions best if possible.) We would particularly welcome any information as to the status of the investigation surrounding the Warwickshire incident where four firefighters lost their lives. Also, our research found the document 'Training for Hazardous Occupations – a case study of the Fire Service', an HSE occasional paper OP8. Please inform us if this is still current or superseded by a further document. I no to both, is their any other equivalent guidance?"

Four matters arise:

1. Please confirm the reference number you wish us to use. (I am assuming the two references are the same 'case'?)
2. We are surprised that the number of Fire & Rescue Service Improvement Notices may cause a 'significant diversion of resource' as we are unaware of there being a large number. However, to try and limit the search as you request, is it possible to provide us with all improvement notices issued to Fire & Rescue Services since, say 1995. Or, alternatively, if there is an easier search methodology for you to source the data, please suggest this (I'm happy to be contacted on my mobile number below.)
3. Please provide information regarding the current status of the Warwickshire incident. We are interested to know which current Court, Tribunal or other enquiry format is dealing and, if there is no such delay, the current status of any HSE report on that incident.
4. Is the HSE occasional paper OP8 extant? If not, has it been replaced by anything else?

Thank you for any assistance you can afford us.
Regards

Appendix F – Time Required for Maintenance of Competence Modules

Explanatory notes are in the Excel Spreadsheet within the RDS *MS Project*

Module code	Module description	Frequency	NVQ/NOS	Time to complete module (hours)	Total hours for module per year
z-1stAidP	procedure - treatment of casualty	6	FF3.3 provide treatment to casualties	3	6
z-Acet-P	procedure - Acetylene	6	FF4.1 Control and Extinguish fire	1.5	3
z-Acet-P	procedure - Acetylene	6	FF5.1 Mitigate Damage to the Environment	0	0
z-AFA P	procedure - AFA	6	FF4.1 Control and Extinguish Fire	1	2
z-airP	procedure - Aircraft incident	12	FF 3.2 Rescue Life involved in incidents	2	2
z-airP	procedure - Aircraft incident	12	FF 4.1 Control an Extinguish Fire	0	0
z-animalP	procedure - Animal incident	12	FF 3.2 Rescue Life involved in incidents	2	2
z-BA confi	procedure - BA confined space	12	FF 3.2 Rescue Life involved in incidents	1	1
z-BackP	procedure - Backdraught	3	FF4.1 Control and extinguish fire	1	4
z-Bacomm	procedure - BA radio communications	6	FF3.1 Conduct serarch to rescue life	0.5	1
z-BAcomp-P	procedure - BA compartment firefighting	3	FF4.1 Control and extinguish fire	2	8
z-BAcser	procedure - BA contact searching	3		2	8
z-BAECO-P	procedure - BA ECO	3	FF 3.1 Conduct search to save life	2	8
z-BAentra	procedure - BA entrapment	12	FF 3.1 Conduct search to save life	1	1
z-Baguide	procedure - BA guideline	6	FF 3.1 Conduct search to save life	1	2
z-BAhaz-P	procedure - BA hazmat	6	FF 3.1 Conduct search to save life	1.5	3
z-BAopen	procedure - BA open air firefighting	3	FF4.1 Control and extinguish fire	1	4
z-BApat	procedure - BA pattern searching	3	FF 3.1 Conduct search to save life	1	4
z-BARapid	procedure - BA rapid deployment	6	FF 3.1 Conduct search to save life	1	2
z-base-P	procedure - basements	12		0.5	0.5
z-BOMB-P	procedure - bomb incidents	12	FF4.1 Control and extinguish fire	1	1
z-CarF	procedure - Car Fire	6	FF4.1 Control and extinguish fire	0.5	1
z-CIVILd-P	procedure - Civil disturbance	12	ff4.2 Resolve incidents other than fire or hazmat	1	1
z-Colla-P	procedure - collapsed buildings/structures	6	FF 3.2 Rescue Life involved in incidents	2	4
z-Colla-P	procedure - collapsed buildings/structures	6	FF3.1 conduct search to locate life	0	0
z-confinP	procedure - confined space	12	FF 3.1 conduct search to locate life	1	1
z-cyls-P	procedure - pressurised cylinders	6	FF4.2 Resolve incidents other than fire or hazmat	1	2
z-EFAD-P	procedure - EFAD to incident	3	FF09 Drive fire service vehicles	0	0
z-elec-P	procedure - electrical apparatus	12		1	1
z-explodP	procedure - Explosives	12	FF4.1 Control and extinguish fire	2	2
z-extract	procedure - extrication other	6	FF 3.2 Rescue Life involved in incidents	1	2

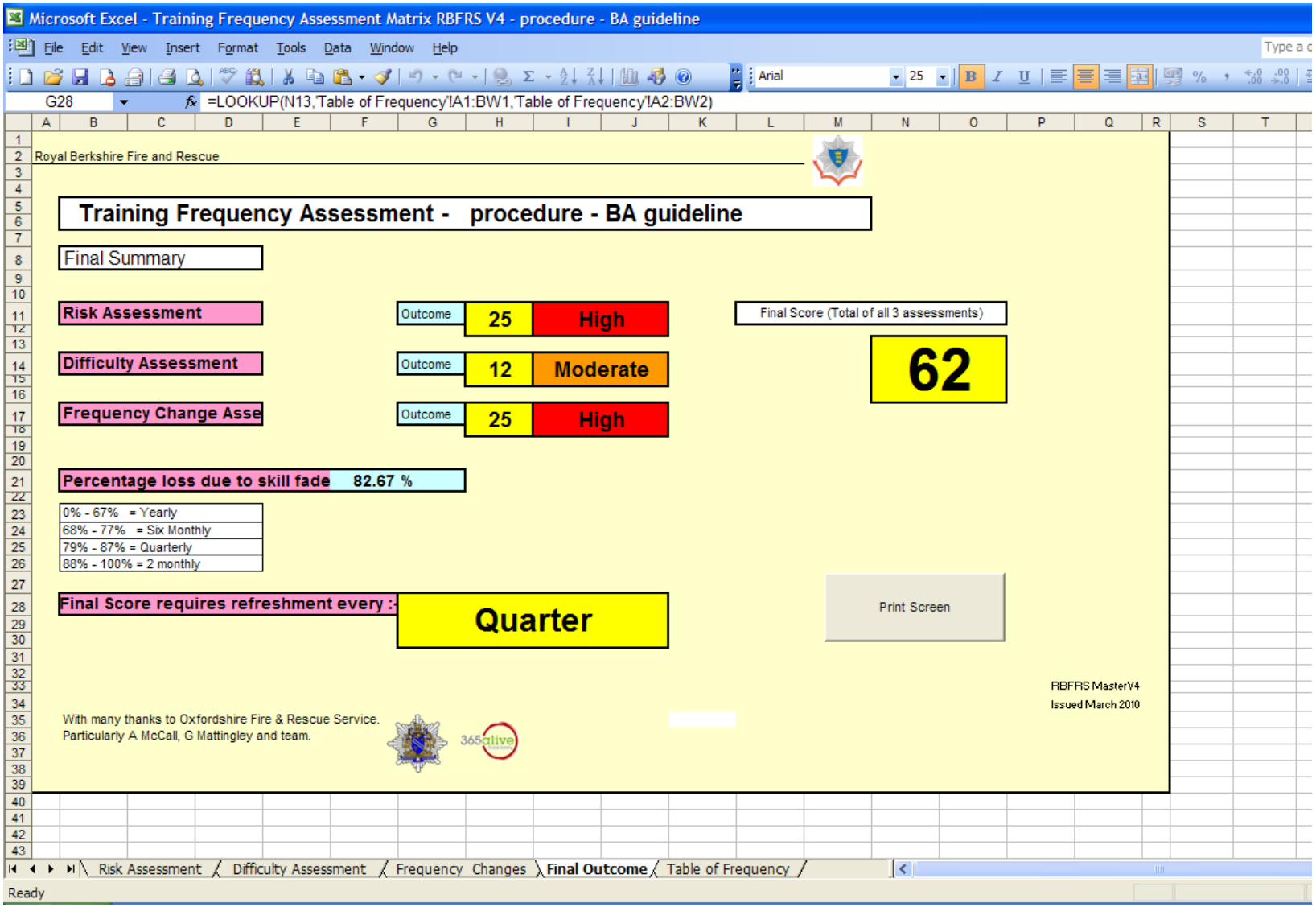
Module code	Module description	Frequency	NVQ/NOS	Time to complete module (hours)	Total hours for module per year
z-FBoots	procedure - PPE fire boots	3		0	0
z-FGloves	procedure - PPE fire gloves	3		0	0
z-Fhelmet	procedure - PPE fire helmet	3		0	0
z-FI-S	procedure - Fixed Installation - Sprinkler	12	FF4.1 Control and extinguish fire	1	1
z-flashovr	procedure - Flashover	3	FF4.1 Control and extinguish fire	1	4
z-flood	procedure - flooding	6	FF3.2 Rescue life involved in incidents	3	6
z-foamP	procedure - Foam application	12	FF4.1 Control and extinguish fire	1	1
z-FTunic	procedure - PPE fire tunic and over trousers	3		0	0
z-gas P	procedure - piped gas	12	FF 4.1 Control and extinguish fire	0.5	0.5
z-hazardP	procedure - Hazmat	6	FF5 mitigate damage to the environment	3	6
z-hiriseP	procedure - high rise building	6	FF 4.1 Control and extinguish fire	3	6
z-liftsP	procedure - lifts and escalators	12	FF 3.2 Rescue Life involved in incidents	0.5	0.5
z-MdecomP	procedure - Mass decontamination	12		2	2
z-MotWay	procedure - motorway	6	FF 3.2 Rescue Life involved in incidents	1	2
z-openP	procedure - firefighting in the open	6	FF4.1 Control and extinguish fire	1	2
z-PETROL-P	procedure - fire in petroleum installation	12	FF4.1 Control and extinguish fire	1	1
z-PIPE-P	procedure - pipelines	12		1	1
z-Poll	procedure - pollution	12		2	2
z-Prison	procedure - Prison	12	FF 3.2 Rescue Life involved in incidents	0.5	0.5
z-RAD -P	procedure - Radiation	6		1	2
z-rail-P	procedure - rail incident	12	FF 3.2 Rescue Life involved in incidents	2	2
z-REFUSE-P	procedure - refuse and subterranean fires	12	FF4.1 Control and extinguish fire	1	1
z-Road S	procedure - road safety	6	FF 3.2 Rescue Life involved in incidents	1	2
z-RPE	procedure - RPE respiratory protection /dust /half masks	6		0.5	1
z-RSVtrnch	procedure - RSV Trench and shoring	6		1	2
z-RTC Ex	procedure - RTC Extrication	3	FF 3.2 Rescue Life involved in incidents	2	8
z-RTC GM	procedure - RTC glass management/trim removal	3	FF 3.2 Rescue Life involved in incidents	1	4
z-RTC Stab	procedure - RTC stabilisation	3	FF 3.2 Rescue Life involved in incidents	1	4
z-RTC sup	procedure - RTC support	3	FF 3.2 Rescue Life involved in incidents	1	4
z-salvagP	procedure - salvage	12	FF4.2 Resolve other than Fire or Hazmat	1	1
z-silo P	procedure - silo incident	12	FF 3.2 Rescue Life involved in incidents	0.5	0.5
z-SPanels	procedure - Sandwich	6		1	2

Module code	Module description	Frequency	NVQ/NOS	Time to complete module (hours)	Total hours for module per year
	panels				
z-thatch	procedure - thatch roof	12	FF4.1 Control and extinguish fire	2	2
z-trenchP	procedure - trench incidents	6	FF 3.2 Rescue Life involved in incidents	1	2
z-UNSTAB	procedure - unstable ground	12	FF 3.2 Rescue Life involved in incidents	1	1
z-VENT -P	procedure - PPV	3	FF4.1 Control and extinguish fire	1.5	6
z-VO2	Fitness Test VO2	6		0	0
z-WaH 1	procedure - Rescue from height WaH Stage 1	3	FF3.2 Rescue life invoved in incidents	2	8
z-WaH 1	procedure - Rescue from height WaH Stage 1	3	FF4.2 Resolve incidents other than fire + hazmat	0	0
z-WaH 2	procedure - Rescue from height WaH stage 2	3	FF3.2 Rescue life invoved in incidents	2	8
z-WaH 2	procedure - Rescue from height WaH stage 2	3	FF 4.2 Resolve incidents other than fire / hazmat	0	0
z-WaH FA	procedure - WaH Fall arrest	3	FF3.2 Rescue life invoved in incidents	2	8
z-WaH pos	procedure - WaH work positioning	3	FF3.2 Rescue life invoved in incidents	2	8
z-WaH res	procedure - WaH work restraint	3	FF3.2 Rescue life invoved in incidents	2	8
z-wat rela	procedure - Water relay	12		1	1
z-waterP	procedure - water incidents	6		3	6
z-WHouse	procedure - High Bay Warehouse	12		0.5	0.5
zz-1st aid	First aid equipment	6	FF3.3 Provide treat to casualties	0	0
zz-1st aid	First aid equipment	6	FF6.3 Maintain internal resources	0	0
zz-ADSU	Automatic Ditress Signal Unit	3	FF3.1 Conduct a search to save life	0	0
zz-ADSU	Automatic Ditress Signal Unit	3	FF6.3 Maintain internal resources	0	0
zz-airb R	Airbag restraint device	3		0	0
zz-airbagL	Air lifting low pressure units	6	FF 3.2 Rescue life	0.5	1
zz-Airsaw	Air saw	6	FF 3.2 Rescue Life	0.5	1
zz-AspVit	Aspirator [Vitalgraph]	12	FF 3.3 Provide treatment to casualties	0	0
zz-Axe	Axes	12		0	0
zz-B extin	Back pack extinguisher	12	FF4.1 Control and extinguish fire	0	0
zz-BACom	BA communication equipment	6		1	2
zz-BAECO	BA board	3		0.5	2
zz-BAguide	BA Guidelines	6		0.5	1
zz-BApers	BA personal line	3		0	0
zz-BAset	Breathing Apparatus set	2		0.5	3
zz-boltc	Bolt croppers	12	FF3.2 Rescue life invoved in incidents	0	0
zz-Casshie	Casualty protection shield	6	FF3.2 Rescue life invoved in incidents	0	0
zz-Chim	Chimney equipment and stirrup pump	12	FF4.1 Control and extinguish fire	0.5	0.5
zz-CPS	Tychem chemical protection suit	6		1	2
zz-cut&bre	Cutting and breaking in tools	12	FF3.2 Rescue life invoved in incidents	0	0
zz-decon	Decontamination equipment	12		1	1
zz-Dosim	Dosimeters	6		0.25	0.5

Module code	Module description	Frequency	NVQ/NOS	Time to complete module (hours)	Total hours for module per year
zz-DrySu	Dry suits	6		1	2
zz-E Glove	Electrical safety gloves	12		0	0
zz-Elecsaw	Electric saw	12	FF3.2 Rescue life invoved in incidents	0.5	0.5
zz-extingu	Extinguishers	12	FF4.1 Control and extinguish fire	0	0
zz-Fire Bl	Fire blanket	12	FF4.1 Control and extinguish fire	0	0
zz-foam	Foam making equipment	6		0.5	1
zz-Glass	RTC Glass management equipment	3	FF3.2 Rescue life invoved in incidents	0	0
zz-grab	Grab pack and EA spill control equipment	12		0.5	0.5
zz-HiVisJ	PPE high visibility jackets	12	FF3.2 Rescue life invoved in incidents	0	0
zz-hose+	Hose and associated equipment	12	FF4.1 Control and extinguish fire	0	0
zz-HRBran	Hosereel branch	3		1	4
zz-HydC	Hydraulic Cutters	3	FF3.2 Rescue life invoved in incidents	0	0
zz-HydR	Hydraulic Ram	3	FF3.2 Rescue life invoved in incidents	0	0
zz-hydrant	Hydrant equipment	12	FF3.2 Rescue life invoved in incidents	0	0
zz-HydrG	Hydraulic Generator	3	FF3.2 Rescue life invoved in incidents	0	0
zz-HydS	Hydraulic Spreaders	3	FF3.2 Rescue life invoved in incidents	0	0
zz-ICSPack	Incident command pack	4		1	3
zz-inflatH	Inflatable hoseline	6	FF3.2 Rescue life invoved in incidents	1	2
zz-ladder	135/150 ladder	3	FF3.2 Rescue life invoved in incidents	1	4
zz-ladderE	Extension Ladder	3	FF3.2 Rescue life invoved in incidents	0.5	2
zz-ladderR	Roof ladder	6	FF3.2 Rescue life invoved in incidents	0.5	1
zz-LifeJac	Lifejackets crewfit	6	FF3.2 Rescue life invoved in incidents	0	0
zz-Line F	Floating lines	6	FF3.2 Rescue life invoved in incidents	0	0
zz-ORIS eq	ORIS	3		1	4
zz-Oxy ad	Oxygen administration equipment	6	FF3.3 Provide treatment to casualties	1	2
zz-Oxy ad	Oxygen administration equipment	6	FF3.2 Rescue life invoved in incidents	0	0
zz-PPV	PPV equipment	3	FF4.1 Control and extinguish fire	0	0
zz-PUMP	Main Fire pump	3	FF 4.2 Resolve incidents other than fire	2	8
zz-PUMP	Main Fire pump	3	FF6.3 Maintain internal resources	0	0
zz-PUMP	Main Fire pump	3	FF4.1 Control and extinguish fire	0	0
zz-PumpLP	Light Portable pump	3	FF4.1 Control and Extinguish Fire	2	8
zz-PumpLP	Light Portable pump	3	FF 6.3 Maintain internal resources	0	0
zz-PumpLP	Light Portable pump	3	FF 4.2 support operational incidents other than fire or hazmat	0	0
zz-Radio A	Main scheme radio	3		0	0
zz-Radio P	Portable radios	3		0	0
zz-RSV4Pal	RSV Palfinger	6		2	4
zz-RSV4pl	RSV LGV rescue platform	6		0.5	1
zz-RSVBhwk	RSV Blackhawk Hydraulic equipment	6		0.5	1

Module code	Module description	Frequency	NVQ/NOS	Time to complete module (hours)	Total hours for module per year
zz-RSVdcut	RSV Disc Cutter	6		0.5	1
zz-RSVGen	RSV Portable & Fixed generators	6		0.5	1
zz-RSVKan	RSV Kango	6		0.5	1
zz-RSVpara	RSV Paratech	6		0.5	1
zz-RSVQpod	RSV Quadpod	6		1	2
zz-RSVwin	RSV Winch	6		1	2
zz-RTCbelt	RTC tool belt & tools	3	FF3.2 Rescue life invoved in incidents	0	0
zz-salvage	Salvage equipment	12		1	1
zz-Stabil	RTC Paratech vehicle stabilization equipment	3	FF3.2 Rescue life invoved in incidents	0.5	2
zz-stabl	RTC stabilzation Step chocks	3	FF3.2 Rescue life invoved in incidents	0.5	2
zz-strop	Nylon strops and slings	12	FF3.2 Rescue life invoved in incidents	0.5	0.5
zz-TIC	Thermal Image Camera Equipment	12	FF4.1 Control and extinguish fire	1	1
zz-tirfor	Tirfor winch	6	FF3.2 Rescue life invoved in incidents	1	2
zz-V p she	Visual protection sheets	12	FF3.2 Rescue life invoved in incidents	0	0
zz-WaH CH	WaH Casualty Harness	3	FF3.2 Rescue life invoved in incidents	0	0
zz-WaH DSL	WaH Double slinging lanyard	3	FF3.2 Rescue life invoved in incidents	0.5	2
zz-WaH Har	WaH Personal Harness	3	FF3.2 Rescue life invoved in incidents	0	0
zz-WaH L	WaH Lines	3	FF3.2 Rescue life invoved in incidents	0	0
zz-WaH Q	WaH Quadra	3	FF3.2 Rescue life invoved in incidents	1	4
zz-WaH R	WaH Rockers	3	FF3.2 Rescue life invoved in incidents	1	4
zz-WaH RH	WaH Rescue Hauler	4		0	0
zz-WireR	wire ropes and strops	12	FF3.2 Rescue life invoved in incidents	0.5	0.5
				TOTAL Time to Maintain Competence in one year	293

Appendix G – Training Frequency Analytical Tool



Appendix H – Maintenance of Competence Modules for 'Basic FF'

Extracted from Excel Spreadsheet within the RDS *MS Project*

Module code	Module description	Frequency	Time to complete module (in hours)	Total hours per year	RDS - basic	RDS - basic with RTC
z-1stAidP	procedure - treatment of casualty	6	3	6	6	6
z-Acet-P	procedure - Acetylene	6	1.5	3	3	3
z-AFA P	procedure - AFA	12	1	1		
z-airP	procedure - Aircraft incident	6	2	4		
z-animalP	procedure - Animal incident	12	2	2		
z-BA confi	procedure - BA confined space	6	1	2	1	1
z-BackP	procedure - Backdraught	2	1	6	4	4
z-Bacomm	procedure - BA radio communications	12	0.5	0.5	1	1
z-BAcomp-P	procedure - BA compartment firefighting	3	2	8	8	8
z-BAcser	procedure - BA contact searching	3	2	8	8	8
z-BAECO-P	procedure - BA ECO	3	2	8	8	8
z-BAentra	procedure - BA entrapment	6	1	2	1	1
z-Baguide	procedure - BA guideline	3	1	4		
z-BAhaz-P	procedure - BA hazmat	3	1.5	6		
z-BAopen	procedure - BA open air firefighting	12	1	1	4	4
z-BApat	procedure - BA pattern searching	3	1	4	4	4
z-BARapid	procedure - BA rapid deployment	6	1	2	2	2
z-base-P	procedure - basements	3	0.5	2	0.5	0.5
z-BOMB-P	procedure - bomb incidents	12	1	1		
z-CarF	procedure - Road vehicle fire	12	0.5	0.5	1	1
z-CIVILd-P	procedure - Civil disturbance	12	1	1		
z-Colla-P	procedure - collapsed buildings/structures	3	2	8		
z-confinP	procedure - confined space	3	1	4	1	1
z-cyls-P	procedure - pressurised cylinders	12	1	1	2	2
z-elec-P	procedure - electrical apparatus	12	1	1	1	1
z-explodP	procedure - Explosives	3	2	8		
z-extract	procedure - extrication from machinery	6	1	2		
z-FI-S	procedure - Fixed Installation - Sprinkler	12	1	1		
z-flashovr	procedure - Flashover	2	1	6	4	4
z-flood	procedure - flooding	6	3	6	6	6
z-foamP	procedure - Foam application	12	1	1	1	1
z-gas P	procedure - piped gas	12	0.5	0.5		
z-hazardP	procedure - Hazmat	3	3	12		
z-hiriseP	procedure - high rise building	3	3	12	6	6
z-liftsP	procedure - lifts and escalators	12	0.5	0.5		
z-MdecomP	procedure - Mass decontamination	12	2	2		
z-MotWay	procedure - motorway	12	1	1	2	2
z-openP	procedure - firefighting in the open	12	1	1	2	2
z-PETROL-P	procedure - fire in petroleum installation	6	1	2		
z-PIPE-P	procedure - pipelines	12	1	1		
z-Poll	procedure - pollution	12	2	2	2	2

Module code	Module description	Frequency	Time to complete module (in hours)	Total hours per year	RDS - basic	RDS - basic with RTC
z-Prison	procedure - Prison	12	0.5	0.5		
z-RAD -P	procedure - Radiation	6	1	2		
z-rail-P	procedure - rail incident	3	2	8		
z-REFUSE-P	procedure - refuse and subterranean fires	12	1	1	1	1
z-Road S	procedure - road safety	12	1	1	2	2
z-RPE	procedure - RPE respiratory protection /dust /half masks	12	0.5	0.5	1	1
z-RTC Ex	procedure - RTC Extrication	6	2	4		8
z-RTC GM	procedure - RTC glass management/trim removal	12	1	1		4
z-RTC Stab	procedure - RTC stabilisation	6	1	2		4
z-RTC sup	procedure - RTC support	12	1	1		4
z-salvagP	procedure - salvage	12	1	1		
z-silo P	procedure - silo incident	3	0.5	2		
z-SPanels	procedure - Sandwich panels	6	1	2	2	2
z-thatch	procedure - thatch roof	12	2	2	2	2
z-trenchP	procedure - trench incidents	3	1	4		
z-UNSTAB	procedure - ice & unstable ground	6	1	2	1	1
z-VENT -P	procedure - tactical ventilation & PPV	6	1.5	3		
z-WaH 1	procedure - Rescue from height WaH Stage 1	12	2	2	8	8
z-WaH 2	procedure - Rescue from height WaH stage 2	3	2	8		
z-WaH FA	procedure - WaH Fall arrest	3	2	8		
z-WaH pos	procedure - WaH work positioning	3	2	8		
z-WaH res	procedure - WaH work restraint	3	2	8		
z-wat rela	procedure - Water relay	12	1	1	1	1
z-waterP	procedure - water incidents	3	3	12		
z-WHouse	procedure - High Bay Warehouse	12	0.5	0.5		
zz-airbagL	equipment - Air lifting low pressure units	6	0.5	1		1
zz-BACom	equipment - BA communication	12	1	1	2	2
zz-BAECO	equipment - BA board	6	0.5	1	2	2
zz-BAguide	equipment - BA Guidelines	3	0.5	2		
zz-BAset	equipment - Breathing Apparatus set	12	0.5	0.5	3	3
zz-Chim	equipment - Chimney and stirrup pump	12	0.5	0.5	0.5	0.5
zz-CPS	equipment - Tychem chemical protection suit	6	1	2		
zz-decon	procedure - Decontamination	12	1	1		
zz-Dosim	equipment - Dosimeters	12	0.25	0.25		
zz-DrySu	equipment - Dry suits	12	1	1	2	2
zz-Elecsaw	equipment - Electric saw	12	0.5	0.5		0.5
zz-foam	equipment - Foam making	12	0.5	0.5	1	1
zz-grab	equipment - Grab pack and EA spill control	12	0.5	0.5	0.5	0.5
zz-HRBran	equipment - Hosereel branch	6	1	2	4	4
zz-ICSPack	equipment - Incident command pack	12	1	1	3	3
zz-inflatH	equipment - Inflatable hoseline	12	1	1	2	2
zz-ladder	equipment - main ladder	6	1	2	4	4
zz-ladderE	equipment - Triple Extension	12	0.5	0.5	2	2
zz-ladderR	equipment - Roof ladder	6	0.5	1	1	1

Module code	Module description	Frequency	Time to complete module (in hours)	Total hours per year	RDS - basic	RDS - basic with RTC
zz-LifeJac	equipment - Lifejackets crewfit	12	0	1	1	1
zz-ORIS eq	equipment - ORIS	6	1	2	4	4
zz-Oxy ad	equipment - Oxygen administration	6	1	2	2	2
zz-PUMP	equipment - Main Fire pump	6	2	4	8	8
zz-PumpLP	equipment - light portable pump	6	2	4	8	8
zz-salvage	equipment - salvage	12	1	1		
zz-Stabil	equipment - RTC vehicle stabilization	6	0.5	1		2
zz-stabl	equipment - RTC stabilization Step chocks	12	0.5	0.5		2
zz-strop	equipment - strops and slings (all wire & nylon)	12	0.5	0.5		0.5
zz-TIC	equipment - Thermal Image Camera	6	1	2	1	1
zz-tirfor	equipment - Tirfor winch	6	1	2		2
zz-WaH DSL	equipment - WaH Double slinging lanyard	3	0.5	2		
zz-WaH Q	equipment - WaH Quadra	2	1	6		
zz-WaH R	equipment - WaH Rockers	3	1	4		
			TOTAL Time in hours to Maintain Competence in one year	**283.75**	**151.5**	**179.5**

Key:

Green = adjusted module following use of Oxfordshire analytical tool.

Yellow = Oxfordshire FRS has same module (or very similar)

Orange = Oxfordshire FRS has module but it requires combination or adjustment to fit RBFRS module/s.

White = Oxfordshire FRS does not have the module.

Appendix I – Number of Weeks Training in a Year

Explanatory notes are in the Excel Spreadsheet within the RDS *MS Project*

RDS Activity Analysis (each event that substantially impacts on the drill night)

	Stn										
Activity	4	5	6	7	9	11	12	14	15	16	19
Principal Officer Visits	0		2	0	0	2		1	1	1	1
Exercises	5	1	8	8	13	9		8	9	5	6
IRMP consultation	1		1	1	2	1		1	1	1	1
Training (not core)						3			4	3	2
Other HQ visits										1	1
FBU Input									1		
Risk visits	0		0	0		0		0	0	0	0
Hose test night	0	1	1	1	1	1		1	1	0	1
Equipment change over	2	1	0		2	0		1	2		0
Recruitment	0	0	0		0	0		0			0
Community Safety	0	1	0	0	0	0		0	0		0
RDS IRMP Project	1	1	1	1	1	1		1	1	1	1
Fitness test	2	2	2	2	2	2		2	2	2	2
FF Charity talk	1	1	1		0	1					
FS talk	0	1	0		0	0					
Trauma support event	0	1	0		0	0					
Interviews	0	1	0		0	0					
PO Presentation	0	1	0		0	0			1		
Misc eg Drivers hrs talk	1		1		0					1	
Std test	0		1		0	0		0			
Total number of drill nights affected	13	12	18	13	21	20	0	15	23	15	10

Average No. Monday nights Substantially affected =	16
Leave	5
Total weeks unavailable	21
Weeks available for training	**31**

Appendix J – Training Time on Training Night

Explanatory notes are in the Excel Spreadsheet within the RDS *MS Project*

Training Time Management

	Stn (Average time in minutes per station)										
Activity	4	5	6	7	9	11	12	14	15	16	19
Initial Routines	30		30	30	30	Y		Y	Y	30	10
Standard tests	0		10	30	10	Y		N	Y	0	0
Vehicle checks	30	20	30	30	10	Y		Y	Y	30	0
BA set testing	30	20	30	30	10	Y		Y	Y	30	5
Standby/Shouts	10	15	5	10	10	Y		Y	Y	15	0
Equipment maintenance	30	20	15	10	0	Y		N	Y	0	0
Record keeping	0		0	0	15	Y		Y	Y	30	60
Station Routines	0		0	0	0	Y		Y	Y	0	0
PPE maintenance	5	10	30	5	0	Y		Y	Y	30	0
NVQ administration	0		0	0	0	Y		Y	N	0	0
Cup of Tea	0	10	10	0	0	Y		Y	Y	0	0
Trove document reading.	15	30	10	30	15	Y		Y	Y	30	10
Parade	5	5	5	5	0	Y		Y	N	30	0
Comfort breaks			10		0	Y		Y		0	10
Total (hrs)	2.6	2.2	3.1	3	1.7	0	0	0	0	3.8	1.6
Estimated total hrs trng (allows for concurrent activity)	1.5	1.5	1.3	1.3	1.5	1.5		2	1.5	2.3	1.5

Average time used for training. **1.6**

Appendix K - Analysis of Command & Tactical Incident De-Briefs

The following analysis is based on training or competency needs for RDS personnel that have been identified during the exercise and incident de-brief process.

Exercise Number	Recommendations
00675 (2007)	None Identified
02005 (2007)	None Identified
01637 (2008)	None Identified
8343 (2008)	None Identified
04808 (2008)	None Identified
11127 (2009)	None Identified
11566 (2009)	None Identified
12285 (2009)	None Identified
06883 (2009)	None Identified
Incident Number	
00491 (2008)	ICS Training for Stn15
00667 (2008)	None Identified
04636 (2008)	None Identified
11548 (2008)	None Identified
01623 (2009)	Additional training need for ICU crew. Review HVP training
03700 (2009)	None Identified
04049 (2009)	None Identified
09664 (2009)	None Identified
10593 (2009)	None Identified
11040 (2009)	None Identified
11251 (2009)	None Identified

Summary

A total of 9 exercise and 11 incident de-briefs were analysed. Three recommendations for additional training were specifically identified for RDS personnel involving specialist appliances. No other training or competence issues were identified.

Appendix L - Summary and Analysis of Accident and Near Miss Data

The following summary and analysis is based on the last three years data comparing RDS and WDS information on frequency and incident rates of accident and near misses.

2006/07 (Injuries/near misses)

Whole-time		Frequency rate	Incidence rate	RDS		Frequency rate	Incidence rate
Number of injuries	23	156	5324	Number of injuries	6	154	3947
Number of near misses	11	75	2546	Number of near misses	5	128	3289

2007/08 (Injuries/near misses)

Whole-time		Frequency rate	Incidence rate	RDS		Frequency rate	Incidence rate
Number of injuries	14	98	3175	Number of injuries	2	58	1459
Number of near misses	12	84	730	Number of near misses	1	29	730

2008/09 (Injuries/near misses)

Whole-time		Frequency rate	Incidence rate	RDS		Frequency rate	Incidence rate
Number of injuries	15	130	3480	Number of injuries	1	39	800
Number of near misses	13	112	2439	Number of near misses	3	116	2439

A further analysis was completed on those RDS injuries and near misses that may be attributed to competence issues. A total of 6 near misses and 1 injury were analysed.

Conclusions

Based on the available information covering the three year period there are no identified major RDS competence issues that indicate either a better or worse accident or near miss rate for RDS compared with WDS.

There is statistical evidence of some under reporting of accidents and near misses which may effect the overall outcome of the analysis. This should be considered in forming a final conclusion which, in this case, leads to an inconclusive outcome.

Appendix M - RDS to WDS Transfers - Analysis of Central Team information

The following analysis is based on RDS to WDS transfer course reports and information supplied by Service Delivery Response for the courses commencing January, May and June 2009.

The following is an extract of the final report of the January course produced for AM Mancey by WM Cardoso and WM Watson that outlines the background to this and subsequent courses:

This is the third transfer process undertaken by RBFRS. Previous processes have been ad-hoc and have led to issues surrounding capabilities and the demonstration of competencies.

No practical tests have previously been undertaken and any development plans previously produced have been of a poor quality and very generic. Attempts were made to secure previous course documentation but these were unsuccessful resulting in us both having to design a two week course from scratch.

To our knowledge no gap analysis has ever been carried out and if so, then there is no record of such happening. We did not have the time, nor the experience, to carry out a gap analysis so effectively, the whole process was designed based on previous personal experience and professional judgement.

RDS personnel are by nature limited on the amount of training they receive and this report should not be read as a criticism on the individuals which participated in the course, on the contrary, the report reflects a very positive light on those RDS personnel.

Course Element	Analysis
General Observations during training sessions and Initial One Day Operational Assessments	**Extracts taken from report by Stn Manager James dated 11 December 2008;** *Following all exercises undertaken, both GM Kevin Clarke and I agreed that all candidates demonstrated a sufficient competency level to undertake development.* *At no time during the assessments did any candidate display any inherent unsafe practises or actions and with the proposed two week training course in January, this should result in further development of competencies and confidence for all the candidates in preparation for whole time operational deployment at Wokingham. These two weeks will also highlight any areas of concern that were not witnessed during this limited day and scope of assessments.* **Extracts taken from report by D Group Manager R Kilpatrick dated 20 January 2009;** *On the whole the group worked relatively well as a team. They demonstrated an ability to carry-out the tasks relatively safely and in line with the fire services training manual. The whole group will need to demonstrate a greater confidence when carrying out operational tasks. This may be put down to being under scrutiny. That said, I believe that the group*

	does have the capacity to 'sharpen up their act' and demonstrate a higher level of professionalism. **Extracts taken from report by Group Manager Palmer dated 26 January 2009;** *Firstly, overall I was impressed by the positive attitude demonstrated by all personnel and thought that the effort displayed by each individual was excellent. Learning points and comments made by observers was well received, will all individuals showing willingness to learn and develop.* *Once again I would like to applaud the positive approach demonstrated by all individuals on the day and believe that a good skill and knowledge level already exists, which can now only be built upon with a continued and structured training programme.* **Extracts taken from report by Watch Manager Watson May 2009;** *Good efforts given by candidates but on a whole they understood what the gaps were between wholetime and retained.* *Time needed to stop drills to explain aspects of operational requirements.* *Core skills were of a poor standard due to lack of competency training within their own stations.* *Knowledge on requirements for reading ops bulletins were of a poor standard.* *Poor knowledge from transferees on equipment and procedures that they should have known.* *Time needed to stop drills to explain aspects of operational requirements.* *Core skills were of a poor standard due to a lack of competency training within their own stations.* **SUMMARY** Although some training issues were identified during this process the reports did not indicate that the students were unsafe but appears to indicate further training is required to improve confidence and competence.
Initial One Day BA Skills Set Assessment	**Extracts taken from report by SMD Michael Fulwell dated 29 January 2009;** *With reference to Flashover, most of the group did not appear to understand the relationship between the heat and fire development, as this was the question most frequently answered incorrectly.* *The group with the exception of one appeared to display a clearer knowledge of the backdraught phenomenon.* *Instructors were satisfied that each member of the group was familiar with running a BA Entry Control Board.* *It was disappointing to see how many wearers did not pay sufficient attention to their PPE* *Working in larger BA teams accentuates the problem of poor communication, and I recommend that drills involving larger teams/multiple teams of BA wearers become a regular occurrence.*

	SUMMARY Although some training issues were identified during this process the report did not indicate that the students were not competent or unsafe.
Two Day Working At Height Conversion Course	**Extracts taken from report by WM Dave Hawkins dated 27/28 January 2009;** During the 2 days the students worked extremely hard demonstrating there keenness in satisfying the expectations of the Instructors. They all worked well as a team which is essential in achieving a successful outcome especially in Rescue and Recovery. It became evident that all the students had studied the pre-course literature thoroughly which allowed the course to start at a higher level, saving valuable time, which allowed more hands on experience over the 2 days. The students were then questioned on there theoretical knowledge of the equipment. This included there understanding of application of various types of systems, how equipment is tested their personal responsibilities. All students demonstrated a good level of knowledge. **SUMMARY** Although some training issues were identified during this process the report did not indicate that the students were not competent or unsafe.
One Day Hazmat Training	**Extracts taken from report by CM Burleigh dated 1 February 2009;** *All those transferees that took part in the morning scenario worked at an appropriate pace and showed familiarity and competence with their tasks.* *During the course of the hazmat scenario there were no observed dangerous practices or overt training needs from any participant* *During equipment familiarisation sessions all present were forthcoming with questions and pertinent observations of practice and procedure.* **SUMMARY** Although some training issues were identified during this process the report did not indicate that the students were not competent or unsafe.
Two Week Induction Course	**Extracts taken from report by WM Cardoso and WM Watson dated 22 February 2009;** *The operational assessments were carried out at Ascot Fire Station on Monday 8th December by All personnel demonstrated a sufficient competency level to undertake development and at no time during the assessments did any*

	candidate display any inherent unsafe practises or actions. *It must be stressed at the outset that we did not find any major issues with regards to health and safety and that all personnel were extremely enthusiastic and willing (at times demanding) to learn throughout.* *All the transferees were extremely enthusiastic and driven by the will to learn and better themselves. This was a common observation by all who attended on individual days and we believe that this factor was fundamental to the successful outcome of the course. All personnel should be commended for their aptitude, commitment and enthusiasm and a real credit to the RDS service.* *During the two week course, the instructors were approached on numerous occasions either individually or as a group. During these conversations some alarming issues came to our attention which may require future action by RBFRS, namely:* *The perceived operational experience levels of RDS personnel* *A 6 ½ year CM had only ever turned out first in attendance and made to make a safety critical decision on two occasions* *A 4 year fire driver who had never attended as first pump to a significant incident e.g house fire* *Some personnel had never attended an RTC persons trapped as first appliance* *Personal experience is that RDS are always second appliance or are very quickly backed up by another at an incident* *Technical knowledge is very limited including that of those that have/are completing NOS* *Personnel did not pay enough attention to dressing in their PPE especially prior to entering the* fire house *Personnel not familiar with:* *The branch settings location (wide and narrow spray / jet)* *Sequence of pulsing* *RBFRS policy familiarity is very limited* *One individual had been away from the workplace for some 14 months* *Three individuals had not passed the last fitness test* **SUMMARY** Although some training issues were identified during this process the reports did not indicate that the students were

	unsafe but appears to indicate further training is required to improve confidence and competence. The observations arising from conversations with the candidates would indicate that although no inherent unsafe practises or actions were identified during the initial one day assessment or during the induction process there would appear to be fundamental training needs within RDS that need addressing.
End Of Course Reports & Development Plans Course Assessment Feedback (FB 192)	A total of 15 development plans were sampled 6 wholetime transferees to Berkshire and 9 internal RDS to wholetime candidates. There were no development needs identified for the external wholetime transferees. Development needs were identified for all RDS to wholetime candidates the majority of which involved; BA, confined space ladder, hand signals and knots and lines. Two of the candidates were deemed not competent to wear BA and two were deemed competent to ride number two BA only. As a general observation it would appear that development plans were identified for all RDS to wholetime candidates some were risk critical but did not prevent any individuals from being deemed competent to join their wholetime watch. All the responses were positive towards the induction process, most thought the course was about right in length although a minority would have likes an additional week.

Conclusions

This would appear to be the first structured and recorded induction process for transfer from RDS to wholetime.

Throughout the process no unsafe practices were identified that would prevent the candidates from progressing through the course.

The initial one day operational assessment indicated that although safe the candidates were not deemed competent until the induction process was completed.

Observations during the process and training and development needs identified indicated that a straight transfer from RDS to wholetime without a structured induction process may not be appropriate.

Information gained from RDS to wholetime candidates indicated that there were training and competence issues surrounding RDS that may require further investigation.

The course assessment reports from the candidates were very supportive of the induction process indicating the value of the training in obtaining confidence and maintaining competence.

Appendix N – Working at Height Assessment results

Full spreadsheet available within MS Project.

Equipment	Activity	Station/Watch results (Names removed. Yellow = RDS)																				Totals					Percentages			
		Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed	Passed	Failed	RDS Passed	WDS Passed	RDS Failed	WDS Failed	Total assessed	% WDS failed	% RDS failed	WDS sum of % fails	RDS sum of % fails
Generic	Put on Harness	2	3	6		5		6		4		7		5		1	1	4		6		**23**	**23**	**1**	**3**	**50**	12	4	**153**	**294**
	Knowledge of standard tests	5		6		5		6		4		7		5				4		2	3	**18**	**26**	**3**	**0**	**47**	0	14		
	Re-pack bag	5		6		5		6		4		7		5				4		6		**22**	**26**	**0**	**0**	**48**	0	0		
Lanyards	Select Suitable anchors	1	2	3		5		6		2	2	7		5				4		6		**20**	**19**	**2**	**2**	**43**	10	9		
	Attachment to harness	3	1	3		5		6		3	1	7		5			5	4		4	2	**19**	**21**	**8**	**1**	**49**	5	30		
Anchors	Assess strength		3	6		5		6		4		7		5		5		4		6		**27**	**21**	**0**	**3**	**51**	13	0		
	Positioning	3	2	6		5		6		4		7			5	5		4		1		**22**	**19**	**0**	**7**	**48**	27	0		
	Edge awareness	5		6		5		6		4		7		5		2		4		4	2	**22**	**26**	**2**	**0**	**50**	0	8		
	Figure of eight knot	3		6		5		6		3	1	7		5		5		4		6		**26**	**24**	**1**	**0**	**51**	0	4		
	Y anchor	5		6		5		6		4		7		5			5	4		6		**22**	**26**	**5**	**0**	**53**	0	19		
	Remote anchor			6		5		6		4		7		5				4		6		**22**	**21**	**0**	**0**	**43**	0	0		
Rockers	Set up single rocker system	5		6		5		6		4		7		5				4		6		**22**	**26**	**0**	**0**	**48**	0	0		
	Set up Double rocker system	5		6		5		6		4		7		5		5		4		3	3	**24**	**26**	**3**	**0**	**53**	0	11		
	Safe usage of rockers	3	2	6		5		6		4		7		5		1	4	4		3	3	**20**	**24**	**7**	**2**	**53**	8	26		
Lifeline	Attachment to harness	5		2		5		6		4		7		5				4		6		**22**	**22**	**0**	**0**	**44**	0	0		
	Paying out smoothly	1	2	2		5		6		3	1	7		5		1	3	4		1	5	**17**	**18**	**9**	**2**	**46**	10	35		
	Position of device	3		2		5		6		4		7		5		5		4		4	2	**25**	**20**	**2**	**0**	**47**	0	7		
	Position of operative	3		2		5		6		4		7		5		5		4		4	2	**25**	**20**	**2**	**0**	**47**	0	7		
Snatch Rescue	Equipment assembly		5	6		5		6		3	1	7		5			5	4			6	**15**	**21**	**12**	**5**	**53**	19	44		
	Put on Rescue Harness	2		6		5		6		3	1	7		5		5		4			2	**20**	**23**	**3**	**0**	**46**	0	13		
	Control of device	1		6		5		6		3	1	7			5		5	4			4	**15**	**17**	**10**	**5**	**47**	23	40		
Access &	Correct system used	5		6				6							5			4				**0**	**21**	**0**	**5**	**26**	19	N/A		

Recovery	Equipment assembly	5		6		6			5			4			**0**	**26**	**0**	**0**	**26**	0	N/A
	Paying out smoothly	1	2	2		6			5			3	1		**0**	**17**	**0**	**3**	**20**	15	N/A
	Safe Hauler usage	2		2		6			5			3	1		**0**	**18**	**0**	**1**	**19**	5	N/A
	Put on Rescue harness	1		1		6			5			3	1		**0**	**16**	**0**	**1**	**17**	6	N/A
OIC	Select system of work		1	1	3	3	2	3		1		1		1	**8**	**5**	**1**	**2**	**16**	29	11
	Delegation of tasks	2		1	3	3	2	3	1			1		1	**8**	**8**	**1**	**0**	**17**	0	11

Appendix O – Training Requirements Indicator (TRI) Sample Analysis

Station	WDS Green			RDS Yellow					Columns deleted for report. Full data within RDS *MS Project*	Watch or RDS Total	No. of Staff	WT Average	RDS Average
Station 4													
-90.0	-133	-98	-78	-124	-96	-85	-82	-70		-939.2	10.0	-93.9	
-195.8	-281	-216	-236	-349	-269	-227	-407	-263		-2550.9	10.0	-255.1	
-308.9	-299	-462	-401	-747	-340	-447	-314	-358		-4123.2	10.0	-412.3	
-202.4	-131	-73	-99	-146	-102	-106	-82	-128		-1226.3	11.0	-111.5	
-1606.3	-82	-469	-846	-70	-314	-1322	-1772	-1731		-12037.1	13.0		-925.9
Stn 16										0.0	0.0		
-338.3	-186	-220	-186	-262	-439					-1631.0	6.0	-271.8	
-501.4	-551	-360	-522	-793	-308	-881				-3916.0	7.0	-559.4	
-333.4	-583	-376	-316	-598	-309	-327				-2842.1	7.0	-406.0	
-204.6	-501	-229	-237	-234	-302	-201				-1907.5	7.0	-272.5	
-690.9	-902	-1057	-593	-430	-816	-185	-309	-543		-8707.0	13.0		-669.8
Stn 19										0.0	0.0		
-303.8	-290	-329	-386	-1120	-534	-299				-3261.6	7.0	-465.9	
-293.0	-671	-439	-310	-504	-198	-1949				-4365.3	7.0	-623.6	
-371.7	-268	-364	-957	-293	-285	-328	-308			-3174.3	8.0	-396.8	
-388.8	-415	-585	-353	-257	-1223	-854				-4075.4	7.0	-582.2	
-567.1	-325	-582	-352	-269	-949	-271	-468	-634		-7859.0	14.0		-561.4
Stn 2 W										0.0	0.0		
-318.6	-345	-525	-	-361	-350	-531				-3314.8	7.0	-473.5	

			885								
Stn 17											
R									0.0	0.0	
-360.5	-262	-444	-315	-527	-195	-242	-247	-252	-5302.1	15.0	-353.5
Stn 18											
B									0.0	0.0	
-206.6	-249	-245	-239	-325	-287	-646			-2197.3	7.0	-313.9
Stn 1											
G									0.0	0.0	
-306.1	-315	-443	-376	-366	-304	-432			-2542.6	7.0	-363.2
									0.0	0.0	
Stn 6									0.0	0.0	
-772.9	-112	-546	-546	-536	-631	-798	-735		-4677.4	8.0	-584.7
									0.0	0.0	
Stn 9									0.0	0.0	
-549.6	-436	-675	-676	-1090	-679	-518	-423		-5047.3	8.0	-630.9
									0.0	0.0	
Stn 14									0.0	0.0	
-933.1	-1146	-768	-803	-777	-1089	-864	-754		-7134.4	8.0	-891.8
									0.0	0.0	
Stn 15									0.0	0.0	
-1009.0	-182	-825	-406	-526	-456	-458	-514	-503	-4879.5	9.0	-542.2

Total Number of RDS staff	**73.0**		
Total Number of WT staff	**133.0**		
		RDS AVERAGE	**-689.6**
		WT AVERAGE	**-356.2**

Appendix P – Multimedia training package use comparison RDS/WDS

Extracted from Excel Spreadsheet within RDS *MS Project*

20 RDS and 20 WT competent firefighters were selected at random from FireWatch.
The number of multimedia packages recorded for each individual in 2009 was counted and the results given below.

Other watch lectures were given but not included here for the comparison.
It is noted that the RDS record Monday drill nights in a different way but all methodologies allow the recording of the multimedia packages.
The FireWatch maintenance of competence policy gives an annual repeat period for multimedia packages.

It is noted that the multimedia packages do not come up on the TRI.

Dual contract staff were excluded.

No.	WT	RDS
1	9	0
2	4	0
3	2	0
4	15	1
5	6	0
6	13	0
7	15	2
8	4	0
9	17	0
10	8	0
11	6	2
12	13	1
13	0	0
14	11	1
15	9	1
16	6	0
17	1	0
18	1	0
19	3	0
20	15	0
Average	7.9	0.4

Appendix Q – Optivote scoring comparison - RDS / WT

StudentID	FirstName	MiddleName	LastName	PadID	NumberOfQuestions	Attempted	Correct	Points		
WDS Backdraft										
Names & numbers deleted. Most rows deleted				1	9	9	3	3	WDS Backdraft score % =	73.99267
				2	9	9	5	5	RDS Backdraft score % =	65.60847
				3	9	9	6	6	WDS HiRise score % =	78.22278
				4	9	9	5	5	RDS HiRise score % =	74.31193
				5	9	9	7	7		
				6	9	9	7	7		
				7	9	9	8	8	WDS Total score % =	76.10773
				8	9	9	8	8	RDS Total score % =	69.9602
				9	9	9	6	6		
				10	9	9	9	9		
				11	9	9	7	7	WDS better than RDS by % =	8
				13	9	9	3	3		
				14	9	9	8	8		
					Total attempted=	819				
						Total correct=	606			
							%=	73.99267		
WDS HiRise										
				10	16	16	13	13		
				10	16	16	9	9		
					Total attempted=	799				
						Total correct=	625			
							%=	78.22278		

RDS HiRise **(All known dual contract staff removed)**

10	16	16	13	13
11	16	16	13	13
4	16	16	11	11
5	16	16	11	11

Total attempted=	763	
	Total correct=	567
	%=	74.31193

RDS Backdraft **(All known dual contract staff removed)**

4	9	9	5	5
18	9	9	7	7

Total attempted=	378	
	Total correct=	248
	%=	65.60847

Appendix R – RDS Drill Night Costs

Information from Finance Department 3/2/2010:

Retained Firefighters	Hourly	Drills (3 hrs)	Annual Drill Payment	Nat Ins(ERS) 9.10%	Pension (ERS)* 11%	Total Annual Cost
Firefighter						
Trainee	9.66	28.98	1511.10	137.51	166.22	1814.84
Development	10.06	30.18	1573.68	143.20	173.10	1889.98
Competent	12.88	38.64	2014.81	183.35	221.63	2419.78
Crew Manager						
Development	13.69	41.07	2141.51	194.88	235.57	2571.96
Competent	14.28	42.84	2233.81	203.28	245.72	2682.80
Watch Manager						
Development	14.58	43.74	2280.73	207.55	250.88	2739.16
Competent A	14.99	44.97	2344.87	213.38	257.94	2816.19
Competent B	15.96	47.88	2496.61	227.19	274.63	2998.42

* - Not all RDS staff take up the pension option so the calculation will be 'worst case'.

Calculation:

Noting that any calculation depends upon the number of RDS staff employed, for ease, assume that there are 10 x WM(A), 20 x CM and 80 x FF currently, all competent, in RBFRS.

Remembering that the highlighted figure is for one person for one hour, before National Insurance and pension, then:

Every hour of extra training for every member of RDS staff will be:

10 x (£14.99(+9.1%+11%)) + 20 x (£14.28(+9.1%+11%)) + 80 x (£12.88(+9.1%+11%)) = 10 x £18.15 + 20 x £17.30 + 80 x £15.60 = **£1776 per hour**

Therefore, if one hour per week per person extra training were required, it would cost:

52 x £1776 = £92,352 per year.

Appendix S – Incident Numbers and Public Risk Assessment on RDS Station Grounds

Extracted from Excel Spreadsheet within RDS *MS Project*

Risk = Severity X Likelihood

2006/07 data **Station data from PBViews for 2006/07 + 2007/08 + 2008/09**

Type	Description	Public Risk	4	5	6	7	9	11	12	14	15	16	19
RTC	ROAD TRAFFIC COLLISIONS	26.3540825	258	68	41	36	21	79	7	58	48	191	167
FDR1B	DWELLING FIRES	18.3751011	161	27	6	16	12	18	14	37	36	129	79
SN	INDUSTRIAL ACCIDENT	1.61950957	2							1		1	1
FDR1D	OTHER BUILDING FIRES	1.51657235	115	18	18	13	13	35	13	41	34	84	67
SR	RAILWAY ACCIDENT	1.35138777							1			1	
SA	SPILLS AND LEAKS	1.21261116	31	5	6	3	4	13		6	7	40	18
FDR1C	VEHICLE FIRES	0.96523848	188	37	21	40	16	54	13	31	41	173	156
SS	CHEMICAL INCIDENT	0.88493667	8	2		2		4		1	3	2	4
SF	RESCUE/RELEASE OF PEOPLE	0.74481272	40	7		8	5	4	3	4	12	30	16
No incident type	Secondary fires	0.5	309	26	33	27	34	116	17	74	185	458	253
SC	EFFECTING ENTRY	0.43654002	39	11	1	1	6	5	4	15	9	50	44
SD	LIFT RELEASE	0.32497979	50	1			6	5		9	12	80	64
SJ	RECOVERY/RETRIEVAL OF OBJECTS	0.27189437	1	1								1	1
SH	FIRST AID	0.25707357	11	1				3			1	1	5
FDR1A	OTHER PROPERTY FIRES	0.16734034	42	10	8	9	5	7	7	5	4	27	18
SQ	SUICIDE	0.14686068						1	1		2	2	1
T2	GOOD INTENT	0.05200755	31	1	4	5	4	14	1	11	4	37	26
SB	WATER REMOVAL/PROVISION	0.05173808	44	3	3	8	4	8	2	17	8	28	37
SE	ANIMAL RESCUE	0.05173808	30	4	5	10	2	13	1	2	4	18	9
SI	MAKING SAFE	0.04527082	14	4	1	3	2	3	2	1	3	14	20
SG	REMOVAL OF OBJECTS FROM PEOPLE	0.02371328	18				1		2	3	1	10	18

S1	OFFICER AND APP/EQUIP	0.01104823		22	1	1	1				4	1	10	12
SK	STANDBY	0.00808407		6	1	1			3	1	3	1	3	2
ST	OTHER	0.00673673		15		3		2	2	2	3	4	6	8
S2	OFFICER ONLY	0.00485044		19	1	1	2	4	3			2	7	16
SM	ASSIST POLICE	0.00323363		2							1	1	3	2
S3	USE OF APPLIACE EQUIP	0.00026947												
T3	OTHERMECHANICAL FAILURE	0.00026947												
SL	AIRCRAFT	1.35							1					1
SP	FARMING ACCID	0												
SO	SPORTS ACCID	0												
T1	MAILICIOUS	0												
T4	CALL TYPE UNKN	0												
			Stn RISK	**10396**	**2385**	**1265**	**1329**	**841**	**2607**	**490**	**2362**	**2140**	**8062**	**6322**

Appendix T – Relative RDS Station Ground Step 1 Risk Assessment

Extracted from Excel Spreadsheet within RDS *MS Project*

RBFRS - Step 1, Relative Risk Assessment of RDS Station Grounds

Step 1 risks are of primary importance to the public. They are the public risks.

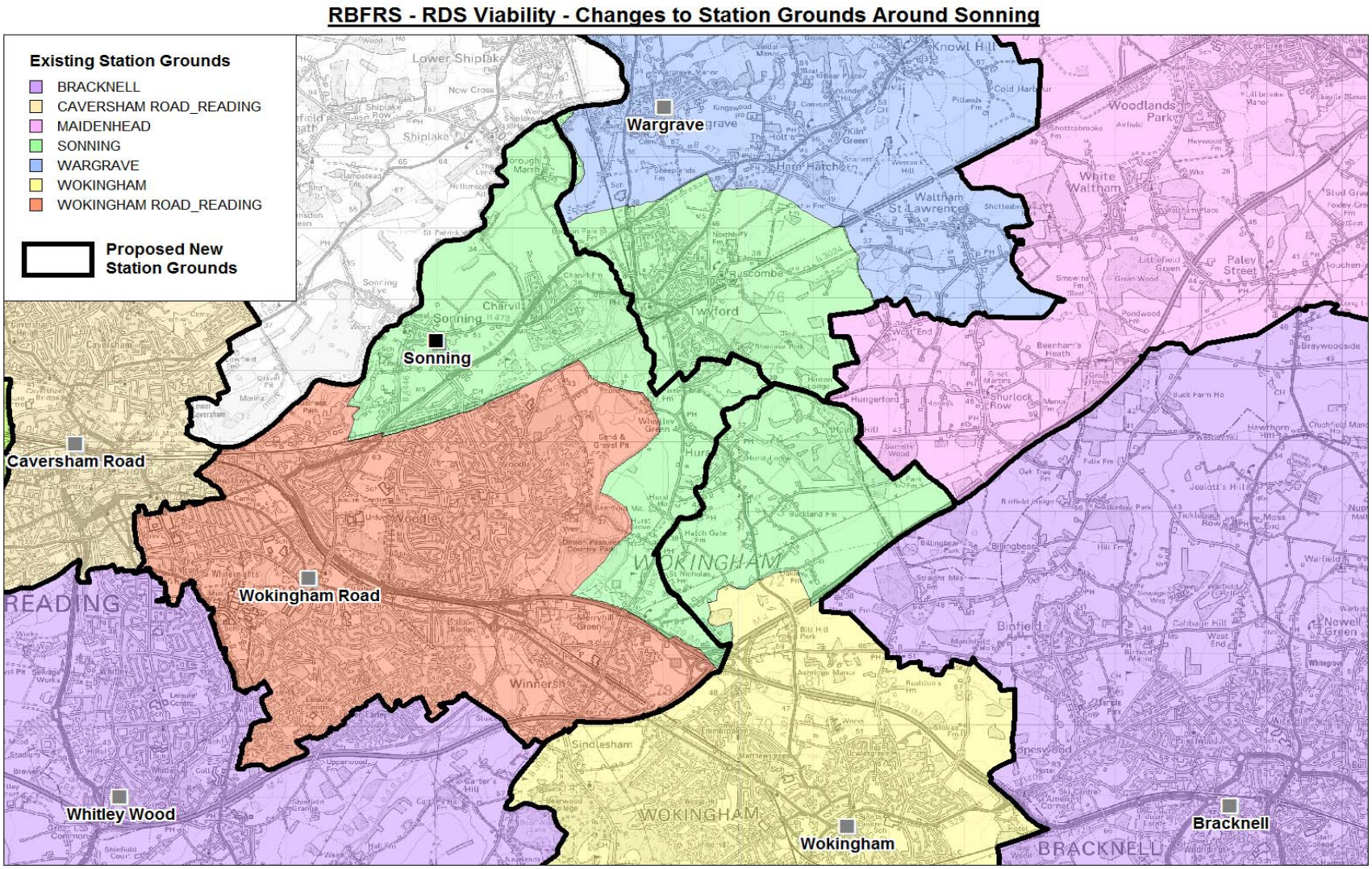
Actual Scores

Importance	1	8	7	N/A	6	4	2	3	5			
Priority	**30%**	**4%**	**6%**	**0%**	**7%**	**10%**	**18%**	***15%***	***10%***	**100%**		
Station	Incident Risk on Stn Ground	NLPG Building Stock on Stn Ground.	CRR risks on Stn Ground	Future Development (Berks structure plan)	Number of postcode areas of Stn Ground not covered by RDS station in 8 mins.	Number of postcode areas of Stn Ground not covered in 10 mins by other pump	Mosaic dwelling fire data risk	*Mosaic deliberate fire data risk*	*Fire Safety Life Risk*	TOTAL	Priority risk factored Total	Rank (1 = 'best' station, 11 = 'worst' station)
4	10396	46507	111	1	2267	0	199	251	168	59900	5235	1
5	2385	5927	9	1	238	200	34	47	16	8857	1005	7
6	1265	4472	32	1	239	222	8	35	10	6284	607	9
7	1329	7078	26	1	469	438	13	5	22	9381	765	8
9	841	6703	2	1	259	407	35	15	36	8299	592	10
11	2607	8098	36	1	448	382	25	22	15	11634	1187	6
12	490	3301	4	1	234	113	19	13	9	4184	313	11
14	2362	12430	46	1	756	643	39	24	19	16320	1338	5
15	2140	16016	24	1	736	470	42	59	32	19520	1402	4
16	8062	37989	55	1	1650	0	99	376	82	48314	4139	2
19	6322	33931	42	1	1653	0	103	171	44	42267	3421	3
Total	38199	182452	387	11	8949	2875	616	*1018*	*453*	234960		

Relative Percentages

Station	Incident Risk on Stn Ground	NLPG Building Stock on Stn Ground.	CRR risks on Stn Ground	Future Development (Berks structure plan)	Number of postcode areas of Stn Ground not covered by RDS station in 8 mins.	Number of postcode areas of Stn Ground not covered in 10 mins by other station.	Mosaic dwelling fire data risk	*Mosaic deliberate fire data risk*	*Fire Safety Life Risk*	TOTAL	**Priority risk factored Total**	**Rank (1 = 'best' station, 11 = 'worst' station)**
4	27.2%	25.5%	28.7%	9.1%	25.3%	0.0%	32.3%	*24.7%*	*37.1%*	209.9%	**25.9%**	**1**
5	6.2%	3.2%	2.3%	9.1%	2.7%	7.0%	5.5%	*4.6%*	*3.5%*	44.2%	**5.1%**	**7**
6	3.3%	2.5%	8.3%	9.1%	2.7%	7.7%	1.3%	*3.4%*	*2.2%*	40.5%	**3.5%**	**10**
7	3.5%	3.9%	6.7%	9.1%	5.2%	15.2%	2.1%	*0.5%*	*4.9%*	51.1%	**4.4%**	**9**
9	2.2%	3.7%	0.5%	9.1%	2.9%	14.2%	5.7%	*1.5%*	*7.9%*	47.6%	**4.5%**	**8**
11	6.8%	4.4%	9.3%	9.1%	5.0%	13.3%	4.1%	*2.2%*	*3.3%*	57.5%	**5.8%**	**6**
12	1.3%	1.8%	1.0%	9.1%	2.6%	3.9%	3.1%	*1.3%*	*2.0%*	26.1%	**2.0%**	**11**
14	6.2%	6.8%	11.9%	9.1%	8.4%	22.4%	6.3%	*2.4%*	*4.2%*	77.7%	**7.6%**	**4**
15	5.6%	8.8%	6.2%	9.1%	8.2%	16.3%	6.8%	*5.8%*	*7.1%*	73.9%	**7.4%**	**5**
16	21.1%	20.8%	14.2%	9.1%	18.4%	0.0%	16.1%	*36.9%*	*18.1%*	154.8%	**19.6%**	**2**
19	16.6%	18.6%	10.9%	9.1%	18.5%	0.0%	16.7%	*16.8%*	*9.7%*	116.8%	**14.2%**	**3**
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	*100.0%*	*100.0%*	700.0%	100.0%	

Appendix U – Map of Sonning Fire Station ground



Appendix V – Relative RDS Station Step 2 Risk Assessments

Extracted from Excel Spreadsheet within RDS *MS Project*

RBFRS - Step 2, Organisational Risk

Assessment of RDS stations

Step 2, or organisational risks, are secondary to the public. They are more about managing the risks for the organisation.

Actual Scores

Priority	15%	12%	8%	10%	10%	10%	25%	*0%*	*5%*	*5%*	100%		
Station	Possibility of Recruitment	Availability of Pump - day	Availability of pump - night	Contract Availability	Crewing Success (Opposite of fail to crew)	Rate of achieving Turnout times	Second pump	*Future Development (Berks structure plan)*	*% Forecast not Retiring*	*IRMP Yr 1*	TOTAL	Priority risk factored Total	Rank (1 = 'best' station, 11 = 'worst' station)
4	318	81	92	136	97	26.5	141	1	100	9	1001.5	131	3
5	106	79	96	134	71	73.1	44.5	1	100	6	710.6	77	6
6	62	87	97	94	67	57	23	1	75	4	567	59	7
7	97	26	75	72	29	39.2	14.5	1	86	3	442.7	46	10
9	51	42	96	99	46	37	13.5	1	100	7	492.5	47	9
11	73	55	92	141	24	70.4	22	1	90	2	570.4	59	8
12	83	40	83	61	43	22.6	14	1	50	1	398.6	43	11
14	209	88	92	91	57	20.9	37	1	71	5	671.9	79	5
15	182	95	95	123	79	50.2	39.5	1	100	8	772.7	87	4
16	523	95	97	156	98	36.9	146.5	1	85	10	1248.4	168	1
19	398	67	88	126	99	39.7	127	1	80	11	1036.7	138	2
Total	2102	755	1003	1233	710	473.5	622.5	*11*	*937*	*66*	7913		

Relative

Percentages

Station	Possibility of Recruitment	Availability of Pump - day	Availability of pump - night	Contract Availability	Crewing Success (Opposite of fail to crew)	Rate of achieving Turnout times	Second pump	*Future Development (Berks structure plan)*	*% Forecast not Retiring*	*IRMP Yr 1*	TOTAL	**Priority risk factored Total**	**Rank (1 = 'best' station, 11 = 'worst' station)**
4	15.1%	10.7%	9.2%	11.0%	13.7%	5.6%	22.7%	*9.1%*	*10.7%*	*13.6%*	121.4%	**14.2%**	**3**
5	5.0%	10.5%	9.6%	10.9%	10.0%	15.4%	7.1%	*9.1%*	*10.7%*	*9.1%*	97.4%	**9.2%**	**5**
6	2.9%	11.5%	9.7%	7.6%	9.4%	12.0%	3.7%	*9.1%*	*8.0%*	*6.1%*	80.1%	**7.1%**	**7**
7	4.6%	3.4%	7.5%	5.8%	4.1%	8.3%	2.3%	*9.1%*	*9.2%*	*4.5%*	58.9%	**4.8%**	**10**
9	2.4%	5.6%	9.6%	8.0%	6.5%	7.8%	2.2%	*9.1%*	*10.7%*	*10.6%*	72.4%	**5.6%**	**9**
11	3.5%	7.3%	9.2%	11.4%	3.4%	14.9%	3.5%	*9.1%*	*9.6%*	*3.0%*	74.9%	**6.6%**	**8**
12	3.9%	5.3%	8.3%	4.9%	6.1%	4.8%	2.2%	*9.1%*	*5.3%*	*1.5%*	51.5%	**4.4%**	**11**
14	9.9%	11.7%	9.2%	7.4%	8.0%	4.4%	5.9%	*9.1%*	*7.6%*	*7.6%*	80.8%	**7.8%**	**6**
15	8.7%	12.6%	9.5%	10.0%	11.1%	10.6%	6.3%	*9.1%*	*10.7%*	*12.1%*	100.6%	**9.5%**	**4**
16	24.9%	12.6%	9.7%	12.7%	13.8%	7.8%	23.5%	*9.1%*	*9.1%*	*15.2%*	138.2%	**16.5%**	**1**
19	18.9%	8.9%	8.8%	10.2%	13.9%	8.4%	20.4%	*9.1%*	*8.5%*	*16.7%*	123.8%	**14.2%**	**2**
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	*100.0%*	*100.0%*	*100.0%*	700.0%	100.0 %	

Appendix W – RDS Recruitment Process 2009/10

NFST	Date	Location
Ability Tests	• Friday 20th November 2009 (0930 and 1330 hours) • Friday 4th December (1330) • Thursday 21st January 2010 (0930 and 1330) • Saturday 23rd Jan 2010 (0930)	MR3 @ BHQ MR3 @ BHQ MR3 @ BHQ MR3 @ BHQ
Physicals	• 27th Jan 2010 • 1st February • 15th February (currently we are running these at 0930, 1100, 1300 and 1500 hours on all 3 days as these are being run the same time as WT physicals)	Training Centre
Interviews	Through Jan / February 2010 with HR & Station Manager	These will be carried out at BHQ as we carry out kit fitting and BA mask fitting at the same time.
Kit Fitting / BA Mask	As above	As above
Medical / Chester Step Test	9th February 2010 23rd February 2010 2nd March 9th March 16th March We carry out a maximum of 6 appointments per day between 0930 and 1700. Please note these dates are also being used for WT recruitment	Occupation Health Offices, Caversham Road
Issue offer and take up references	March 2010	
Commence Training	April 2010	

NB: The last date that we can accept applications is 11th January 2010.

Appendix X – Mosaic Groups and Types

A Symbols of Success
A01 Global Connections
A02 Cultural Leadership
A03 Corporate Chieftains
A04 Golden Empty Nesters
A05 Provincial Privilege
A06 High Technologists
A07 Semi-Rural Seclusion

B Happy Families
B08 Just Moving In
B09 Fledgling Nurseries
B10 Upscale New Owners
B11 Families Making Good
B12 Middle Rung Families
B13 Burdened Optimists
B14 In Military Quarters

C Suburban Comfort
C15 Close to Retirement
C16 Conservative Values
C17 Small Time Business
C18 Sprawling Subtopia
C19 Original Suburbs
C20 Asian Enterprise

D Ties of Community
D21 Respectable Rows
D22 Affluent Blue Collar
D23 Industrial Grit
D24 Coronation Street
D25 Town Centre Refuge
D26 South Asian Industry
D27 Settled Minorities

E Urban Intelligence
E28 Counter Cultural Mix
E29 City Adventurers
E30 New Urban Colonists
E31 Caring Professionals
E32 Dinky Developments
E33 Town Gown Transition
E34 University Challenge

F Welfare Borderline
F35 Bedsit Beneficiaries
F36 Metro Multiculture
F37 Upper Floor Families
F38 Tower Block Living
F39 Dignified Dependency
F40 Sharing a Staircase

G Municipal Dependency
G41 Families on Benefits
G42 Low Horizons
G43 Ex-Industrial Legacy

H Blue Collar Enterprise
H44 Rustbelt Resilience
H45 Older Right to Buy
H46 White Van Culture
H47 New Town Materialism

I Twilight Subsistence
I48 Old People in Flats
I49 Low Income Elderly
I50 Cared For Pensioners

J Grey Perspectives
J51 Sepia Memories
J52 Childfree Serenity
J53 High Spending Elders
J54 Bungalow Retirement
J55 Small Town Seniors
J56 Tourist Attendants

K Rural Isolation
K57 Summer Playgrounds
K58 Greenbelt Guardians
K59 Parochial Villagers
K60 Pastoral Symphony
K61 Upland Hill Farmers

Appendix Y – Resilience Risk Assessment

Question for the IRMP RDS Project is – How many pumps does RBFRS need?

In the time available this cannot be a full IRMP project but enough data and evidence will be provided to give an answer to the above question for the purposes of the RDS project.

Method:

Consideration of the definition of Major incident/resilience. Note the definition from the IRMP Year 1 project was:

> For the purposes of this project a "Major Incident" is defined as any incident or incidents that have the potential to overstretch (Resilience) any resources both existing and anticipated at the disposal of RBFRS.
>
> Resilience is defined as the ability of RBFRS to sustain the ongoing incident/s and its other **operational** statutory functions.

Past information (since 2000) on 10 pumps or more incidents. Data available at meeting.

Past information (since 2000) on two concurrent 6 pump or more incidents. Data available at meeting.

Desk top exercises to overlay existing available resources onto foreseeable incidents, to be agreed at the meeting.

Not to be included:

- Officer numbers
- Spate conditions

To be included

- All available pumping appliances
- Specials as appropriate
- Over the Border support.

For information, please note this previous outline work:

30th November 2009 1600hrs;

Resilience exercise completed by LG & GC based on pump availability on the day which showed 7 RDS pumps unavailable, 12 Wholetime and 4 RDS available.

The exercise scenario involved the possibility of two six pump incidents occurring simultaneously within Berkshire. The outcome was that RBFRS could deal with such an eventuality with the resources available on the day. This outcome will need to be discussed and confirmed as part of the group exercise.

Historical 10 pump analysis – 10/12/9

The Excel spreadsheet from IT contained some 100 incidents that showed as using more than 10 pumps. However, detailed review revealed that 20 incidents were actual ‘make ups’ to 10 pumps or more. 6 of these were ‘woodland’. The other 14 were:

Roof – MP10

Church – MP12

Hotel – MP10

Building – MP10

Shops – MP10

Building – MP10

Cars/sheds – MP10

Retail – MP12

Train – major incident

Commercial – MP12

Thatch – MP10

Shops – MP12

Superstore – MP20

The 20 occurred in the following years:

	Number	Rolling 3 year average
2000	1	
2001	0	
2002	3	4
2003	2	5
2004	4	9
2005	4	10
2006	1	9
2007	2	7
2008	0	3
2009	3	5

Therefore, although there may be a slight downward trend in recent years, a trend is not clear. But it is reasonable to say that it is foreseeable that there will be approximately two incidents per year of 10 pumps or more.

Historical Two concurrent 6 pump analysis – 10/12/9

Of the 100 incidents on the data extracted there were 19 dates on which two ‘make pumps 6’ or more occurred. (One date had three such incidents). Many of these included exercises. Of the 19 occasions none were concurrent incidents. The closest was 9/9/9 where the two incidents were nearly 5 hours apart. Despite this lack of ‘forseeability’ it was agreed that the exercise to test this should be undertaken.

Table Top Exercises – Operations Support Room - 14 December 2009

Present: G Cross, L Gollop, M Whyte, L Palmer, B Marshall, A Mancey (at pre-meeting).

The pre-meeting discussed a number of items and agreed the parameters including:

L Palmer stated 9/9/9 was difficult on day but coped.

A Mancey mentioned MOUs for section 13/16 arrangements and that up to 4 pumps per OTB FRS would be available. M Whyte was concerned that OTB may not be available and that good communications between Controls was required.

L Gollop mentioned the lack of two concurrent 6 pump incidents and that 10 pump incidents foreseeable at about 2 per year. All agreed to run both scenarios. M Whyte mentioned that, in discussion, the CFO was confident RBFRS could manage.

Team agreed that every effort must be made to have pump at key stations (4, 17, 19, 16 and Reading).

Team agreed that peak use of pumps was a key issue.

A Mancey asked that if a pump was on formal training (should be max of 2 per day) it was necessary to be able to use these in any scenario. This was agreed.

It was agreed to run the exercises in the OSR to use, as far as possible, 'live' information and Control systems.

Any OTB pump requested the OTB Control was contacted to confirm availability.

10 Pump Table Top Exercise

Location agreed by random selection of 6th previous 10 pump incident from historical data, which was Easthampstead. Fire in Easthampstead Park mansion house, Peacock Lane.

At the time of the exercise (10.30hrs) 7 RDS pumps were unavailable (04P2, 07P1, 09P1, 12P1, 14P1, 16P2, 19P2).

Therefore there were 12 WDS and 4 RDS available.

10.30 – *alarms operate* – PDA 16P1

10.40 – *MP4 + Aerial 1 – fire in first floor office*. – Mobilised 10, 15, 13, 03C1 and 20A1.

Stn 2 – standby Bracknell.

11.00 – Officer arrives

11.10 – *MP8 – developing fire into roof*. Mobilised 2, 19P1, 20 and Camberley

18P1 standby to Stn19. Yately standby to Stn16. 11P1 standby to Stn16.

Only 3 RDS crew available for 19C1. With BSO agreement, 19C1 mobilised to incident with 3 FF then 2 crew from 19P1 used at incident to crew ICU.

(Control checked – no other incidents on going in RBFRS)

12.00 – *MP10 OSU required for BA and welfare* – Mobilised Yately and 11.

Two crew from 20P1 return to 20 for OSU – arrives 13.00hrs.

14.30 – *Reliefs required* – incident winding down.

Conclusion

Peak use = 8 RBFRS pumps

2 OTB pumps used.

8 RBFRS pumps still free - Key stations maintained.

Issues

Station 20 OSU crew

Stn19 ICU – only 3 RDS crew to get to incident.

Two concurrent 6 Pump Incidents Table Top Exercise

Location agreed by random selection of last two incidents in Control. Bolton Av, Windsor (agreed hazmat) and Chapel Hill Tilehurst (agreed thatch fire).

At the time of the exercise (12.05hrs) 7 RDS pumps were unavailable (04P2, 07P1, 09P1, 12P1, 14P1, 16P2, 19P2).

Therefore there were 12 WDS and 4 RDS available.

12.05 – Hazmat – *drum off lorry – driver shouting at public to keep back* - mobilised PDA 13P1, 17P2, 20H1 (+20P1) and 03C1.

12.20 – *hazmat leak Efforts to block drains MP6 BA and Gas tight suits* – mobilised 17P1, 18P1, 19P1 and Egham.

Gerrards Cross standby to stn 17. 10P1 standby to Stn19.

12.30 – *Thatch fire* – PDA 03P1, 01P1, 02P1, 11P1, 17A1 (MRV already committed to hazmat – see below)

05P1 standby to stn 3. Henley standby to Stn1.

12.40 – *at thatch MP6* – mobilised 05P1 16P1.

15P1 standby to stn16.

BSO agreed recall for 1 person to crew 19C1 – mobilised.

Conclusion

Peak use = 12 RBFRS pumps

3 OTB pumps used.

4 RBFRS pumps still free - Key stations maintained.

Issues

Stn19 ICU – only 3 RDS crew – needed recall for 1 crew member.

Overall Conclusion

Whilst it was not possible to emulate the confusion that might reign in Control when these incidents have occurred in the past it is possible to say that (as with the real events) RBFRS managed to deal with the incidents and maintain a level of cover for the remainder of Berkshire.

The next step is crucial, the locations of pumps across Berkshire to best meet response standards and will be a continuation of all previous IRMP work. But it is possible to say, following this risk assessment work, that RBFRS has considered overall resilience and that RBFRS has ‘enough’ pumps, even with 7 RDS pumps being unavailable at the time of the exercises.

Appendix Z – 6 pump plus incidents for resilience risk assessment

Yellow highlight is when two 6 pumps or more are on same date.
Red highlight when there was a 'MPU 10' or more
Purple highlight when both above apply.

Data for all incidents of 6 pumps or more from 2000 to 2009

StatsYear	Address	ClosureDetails	RDS PROJECT NOTES
	ALL INCIDENTS BUT THOSE HIGHLIGHTED DELETED HERE. FULL DETAILS WITHIN RDS MS PROJECT.		
2000	ASDA SUPASTORE CHALFONT WAY LOWER EARLEY READING	FI - FIRE IN SUPERSTORE - 2HPS 10 JETS 6 HYD 6 BA - DOUBTFUL - MPU 20	
2001	BERKSHIRE CAR SPARES EVERSLEY ROAD (A327) ARBORFIELD	FI - SCRAP CARS,SHEDS & CYLS ALIGHT - 4XGRND MON 2XJET 2XHRS - MPU 10	
2002	CROWN ESTATE WOODLANDS RIDE SOUTH ASCOT ASCOT	FI- 4 HECTATRES WOOD AND UNDERGROWTH.8 JETS WATER RELAY,MPU 10	
2002	TESCO STORES MARSHALL ROAD (A321) COLLEGE TOWN SANDHURST	FI - SINGLE STOREY RETAIL BUILDING 50% DAM MPU 12 2 AA - 8 JETS 6 BA	
2003	C/A NINE MILE RIDE (BETWEEN A322 & EASTHAMPSTEAD)	FI-4XHECTARES WOODLAND,5JETS,7HRJ,WATER BOWSER,L6P,L4P,HYDRANT,MPU10	
2003	WESTERN TOWER STATION HILL READING	EX - EXERCISE	1 incident is exercise - so no clash.
2003	BRITTONS FARM WATERLOO ROAD WOKINGHAM	FI-FIRE 100 TONS BALED HAY IN OPEN BARN 2 G/MONS VIA HYDRANT MPU 5	
2003	ICELAND UNIT 4 THE SQUARE CHALFONT WAY LOWER EARLEY READING	FI-FIRE RETAIL UNIT 100x50M 50% ROOF 10 JETS,8 BA,2 ALPS,BOWSER	
2003	WESTHATCH LANE WARFIELD VILLAGE BRACKNELL	FI - 15 X 10 METERS - BALED HAY - 2 JETS	Incidents separated by 14 hrs - so no clash
2003	PROSPEROUS HOME FARM SALISBURY ROAD (A338) HUNGERFORD	FI - BARN 100 TONNES BAILED STRAW 400 TONNES SILAGE 2 HR 2 BA MPU 4	
2003	ST PAULS CHURCH READING ROAD WOKINGHAM	FI - FIRE IN CHURCH - MPU 12 3 JETS 2 HRS 3 HYDRANTS IN USE	
2004	C/A THE MILLERS ARMS PADDOCK ROAD LOWER CAVERSHAM READING READING	FI - 2 STOREY BUILDING - 2 J AA USED - DOUBTFUL ORIGIN	MP5 and grass MP 12
2004	R/V EDGBARROW WOODS SANDHURST ROAD CROWTHORNE RACKSTRAW ROAD (A3095) OWLSMOOR SANDHURST SANDHURST	FI - FOREST FIRE - MPU 12 - 10 HR 2 JETS - BEATERS AND HYDRANT IN USE	Separated by 9hrs - no clash
2004	BATH ROAD JUNC TUNS LANE SLOUGH SLOUGH	FI - ELECTRICAL JUNCTION BOX - 1JET - 2BA - MP4+CIU+ICU	MP4 and MP3
2004	BERKSHIRE COLLEGE OF AGRICULTURE BURCHETTS	SF - DELTA - THREE - DELIBERATE - MAKE	Separated by 2 hrs. Not 6 pumps.

	GREEN M	PUMPS THREE	
2004	SEEN FROM M4 KNIGHTS FARM C/A BERRYS LANE PINGEWOOD	SF - ALPHA 4 ACCIDENTAL - MPU3	MP3 and MP9
2004	RMA (RIFLE RANGES) SANDHURST COLLEGE TOWN SANDHURS	FI - 120 X 200M OF GRASS AND HEATHLAND - 10XJETS 1XHYDRANT - MPU9	Separated by 8 hrs - no clash
2004	RMA (RIFLE RANGES) SANDHURST COLLEGE TOWN SANDHURS	FI AREA OF HEATHLAND USED AS ARMY TRAINING EIGHT HOSEREELS BEATERS	MP6 grass and barn
2004	OFF CHURCH STREET GREAT SHEFFORD	FI FOUR BAY BARN 19X22M CONTAIN STRAW 2JETS ONE HOSEREEL	Separated by 3.5hrs - no clash
2004	CROSS LANE PIGGERS PHOENIX YARD NELSONS LANE HURST	FI 3X2000L PROPANE CYLINDERS 8 VEHICLES DEST BY FIRE 1 GRD MONITOR	
2004	HARE AND HOUND PH FIFIELD ROAD FIFIELD FIFIELD	SF - ALPHA 4 DELIBERATE - MPU 4	MP4 and barn. Separated by 21hrs - no clash
2004	WEST BROOKE FARM WESTBROOK BOXFORD BOXFORD	FI - BARN STRAW AND SILAGE - 2 J - 1 HR - WATER CURTAIN LPP - DOUBTFUL	
2004	WINNING HAND BATH ROAD UFTON GREEN	SE - MAJOR INC, TRAIN V CAR, 6 X FOXTROT, MULTIPLE CASUALTIES	
2004	18 OXFORD ROAD (WEST ST - HOWARD ST) READING READING	FI - MPU 12 - FIRE - 5 X FLOORS, 30X50M USED AS SHOPS AND OFFICES	
2005	C/A MOTOR WORLD PARK STREET NEWBURY NEWBURY	FI-COMMERCIAL PREMISE-SEVERLEY BY FIRE-4XHR-4XJET-8XBA-3XHYD-2XALP-MP1	
2005	OLD MET OFFICE SITE NINE MILE RIDE (EASTHAMPSTEAD PARK) EASTHAMPSTEAD	FI - FIRE,BUILDING 35M X 100M,MPU10,3 JETS,1 HR,8BA,HYDRANTS,HP MONITR	
2005	KEEPERS COMBE KEEPERS COOMBE CROWN WOOD BRACKNELL CROWN WOOD BRACKNELL	FI TWO STOREY BLOCK OF FLATS 20X10 1JET 3HOSEREEL 8BA FVSU AND FIO	MP5 and building.
2005	ROYAL OAK SCHOOL GREEN ROAD SCHOOLGREEN SHINFIELD READING SHINFIELD READING	FI FIRE IN ROOF 3HRJ 8BA AA FVSU	Separated by 11hrs - no clash
2005	WEST OF THE LOOKOUT NINE MILE RIDE (BETWEEN A322 & A3095 CROWTHORNE RO	FI - 0.5 KM OF UNDERGROWTH DESTROYED BY FIRE 2 JETS 5 HRS - MPU 10	
2005	PEMBROKE GRANGE AMERSHAM ROAD LOWER CAVERSHAM READING	FI THREE STOREY BUILDING UNDER CONSTRUCTION SEVERLEY 3JETS VIA 3 HYD	MP5 and MP3.
2005	CULVER LANE OLD EARLEY READING	FI - HOUSE FIRE SEVERE DAMAGE TO GND FLOOR 6 BA 1 HR 1 JET 1 HYD MPU3	Separated by 5 hrs - no clash
2005	BURGER KING WELLINGTON ROAD WOKINGHAM WOKINGHAM	FI - FIRE BUILDING 15X10M - 3 JETS, 2 HYDRANTS, ALP, MPU 4	MP4 and MP4
2005	ST PETERS CHURCH HATCHET LANE CRANBOURNE ASCOT ASCOT	FI - CHURCH INV IN FIRE 25M X 18M DOUBTFUL - MPU 4 4JETS 4BA ALP USED	Separated by 8 hrs - no clash
2006	MIDDLETON COURT WALLER DRIVE SHAW NEWBURY	FI - FIRE, ROOF, DETATCHED HOUSE, 2XJETS, HYDRANT,HP MONITOR, MPU5	MP5 and MP10
2006	SWAN DIPLOMAT HOTEL HIGH STREET STREATLEY HIGH STREET	FI - HOTEL SPA FACILITIES PLANT RM,MPU10 6JETS 2HR 8BA,2ALP,1FF INJRD	Separated by 9hrs - no clash

2006	85 LANCASTER AVENUE MANOR PARK SLOUGH	FI - 1ST FLOOR MASIONETTE - ROOF VOID 1XJET 4XBA 2XHR - MPU3 + ALP	MP3, then 4 hrs later - two grass.
2006	CARBINS WOOD LOWER COMMON BUCKLEBURY COMMON LOWER COMMON ROAD BUCKLEBURY	SF B4A	Not much data for grass. Re-inspection and 3HR
2006	B4000 ERMIN STREET STOCKCROSS NEWBURY	FI AREA OF WOODLAND THREE HOSEREELS WRC AND L4P USED	No problem?
2007	ULTRASEAL PETERSFIELD AVENUE SLOUGH	FI FACTORY 35MX25M 6BA 2JETS 3 HOSEREELS ALP HYDRANTS	1 Exercise - no clash
2007	GILLETTES UK LTD 452 BASINGSTOKE ROAD READING	EX BRIGADE EXERCISE	
2007	BUDGENS CLIVEDEN VIEW SHOPPING CENTRE SHIFFORD CRESCENT FURZE PLATT MAIDENHEAD	FI - SHOPS AND FLATS 50% DAMAGED BY FIRE 10 BA 3 JETS 1 ALP - MPU 10	
2007	HEATH COTTAGE 124 WICKHAM HEATH B4000 ERMIN STREET WICKHAM HEAT WICKHAM HEATH	FI - FIRE, THATCHED COTTAGE, 5XHR, 2XJETS, 10XBA, ALP MONITOR, MPU10	
2008	RBF&RS (CONTROL) SPEY ROAD TILEHURST READING	EX PRE ARRANGEMENTS FOR EXERCISE WILBUR	Two exercises.
2008	BY THE CHURCH REMENHAM LANE REMENHAM	EX EXERCISE WILBUR	
2008	GARREttS LANE MAIDENHEAD	SF - A4D - 2 BA - HYDRANT IN USE	One exercise - no problem
2008	WINDSOR CASTLE (SPECIAL ADDRESS 1)_WINDSOR	EX - EXERCISE FUMES IN BASEMENT 12BA 2HR PERSONS REPORTED	
2008	DUCO INTERNATIONAL LTD 4 EASTBOURNE ROAD_TRADING E BUCKINGHAM AVEN	FI - FIRE INDUSTRIAL PREMISES - 2BA - 2JETS - MAKE PUMPS SIX	One exercise- no clash
2008	WESTERN TOWER STATION HILL_READING	BRIGADE EXERCISE	
2009	C/A; 5,IAN MIKARDO WAY_LOWER CAVERSHAM_READING	FI - TWO STOREY BUILDING,4XBA,2XJETS,2XHR,2XAA, MAKE PUMPS 4	MP4 and house
2009	113,FAIRWATER DRIVE_WOODLEY_READING WOODLEY_READING	FI - HOUSE FIRE, 4BA 1HR 1JET ALP FESS ATTENDED	Separated by 8 hrs - no clash.
2009	ACCESS VIA, CONES IN ROAD BRACKNELL ROAD_CROWTHORNE	FI - FOREST FIRE MAKE PUMPS 10 WATER BOWSER USED	
2009	AVIATION ENTREPRISES,MEMBURY AIRFIELD; MEMBURY	FI-FACTORY 23M X 40M,USED AS FIBRE GLASS WORKSHOP,4 BA,2HR,2JETS,MPU 6	MP6 and MP4
2009	2, HAZELWOOD LANE, OFF; GOUGHS BARN LANE_JEALOTTS HILL_BRACKNELL	FI - FIRE INVG PREFAB STRUCTURES AND VEHICLES - 12BA 2J 3HR MPU 4	11 hrs apart - no clash
2009	HEATHLANDS RIDING ESTABLISHMENT; HEATHLANDS ROAD_HEATHLANDS_WOKINGHAM	FI-1 LGV HORSEBOX QUANTITY WOOD SHAVINGS AND BALAGE 3HR 2J 6BA 1FB MP6	MP6 and MP10. Separated by
2009	6, COLEY AVENUE_COLEY_READING	FI 3STOREY BLDGFIRE 2NDFLOOR+ROOF 6BA 2JETS 2HR 1ALP MONIT PFI MPU10	5 hrs apart - no problem.
2009	RIFLE RANGE, ROYAL MILITARY ACADEMY (RIFLE RANGES)	FI - LARGE AREA OF UNDERGROWTH INV IN FIRE MPU 10 + SPECIALS	

Appendix AA – Local ORS survey of RDS - Report

This report is only available as a ‘pdf’ file. Paper copies will be restricted but the report is published on line at: www.rbfrs.co.uk (within the IRMP section)

Appendix AB – Local ORS survey report of RDS partners - Report

This report is only available as a ‘pdf’ file. Paper copies will be restricted but the report is published on line at: www.rbfrs.co.uk (within the IRMP section)

Appendix AC – Local ORS survey – Graphical Report

This graphical report is only available as a ‘pdf’ file. Paper copies will be restricted but the report is published on line at: www.rbfrs.co.uk (within the IRMP section)

Appendix AD – Brief Description of ORH Software.

This description is only available as a ‘pdf’ file. Paper copies will be restricted but the details may be found at the ORH website: www.orhltd.com

Appendix AE – ORH Mapping Specification

Agreed at meeting of 1 February 2010 – 15.30hrs @ BHQ

At this stage of the project we need to consider the location of any RDS stations.

And, if we achieve RSO (Retained Support Officer) teams, where should they be located?

RBFRS requires:

1. Assuming there are no decided FRS pump locations, where would the best locations be for WDS unit emergency response to 1st pump in 10 minutes to dwelling fires? (April 2010)
2. Assuming there are no decided FRS pump locations, where would the best locations be for WDS unit emergency response to 1st pump in 8 minutes to dwelling fires? (April 2010)
3. Leaving all WDS units where they are (with Stn 10 as WDS and Stn 13 not included at this time) and removing all RDS units, where would additional WDS units be best located to meet 1st pump attendance times to dwelling fires in 8 minutes. (April 2010)
4. Leaving all WDS units where they are (with Stn 10 as WDS and Stn 13 not included at this time) and removing all RDS units, where would additional WDS units be located to meet 1st pump attendance times to dwelling fires in 10 minutes. (April 2010)
5. What is the affect on the 1st pump 10 minute response standard if Station 7 is closed? (March 2010) (Also model for 8 minutes.)
6. What is the affect on the 1st pump 10 minute response standard if Station 9 is closed? (March 2010) (Also model for 8 minutes.)
7. What is the affect on the 1st pump 10 minute response standard if Station 12 is closed? (March 2010) (Also model for 8 minutes.)
8. What is the affect on the 1st pump, 10 minute response standard if all of RDS stations 7, 9 and 12 are closed? (March 2010)
9. What is the affect on the 1st pump, 8 minute response standard if all of RDS stations 7, 9 and 12 are closed? (March 2010)
10. Table of number of operational incidents by hour of day for 2008/09. (Feb 2010)
11. Table of number of RTC incidents by hour of day for 2008/09. (Feb 2010)
12. Table of number of dwelling fire incidents by hour of day for 2008/09. (Feb 2010)
13. Report the update to the unavailability data for year 2009/10 (May 2010)
14. What would have been the affect on the 1st pump in 10 minute response standard if all RDS units had been available during the weekday (08.00 – 16.00) for 2008/09? (Feb 2010)
15. Where would the best location be for two additional WDS pumps that were available 08.00 – 16.00 (week day only), assuming that RDS stations 7, 9 and 12 are not available and all other existing RDS and WDS units are 100% available? (Stn 13 during day 08.00 – 20.00 and stn 10 WDS) (Feb 2010)

Where appropriate, the 2nd pump impact will be reported as compatible with efficient modelling runs.

ORH to respond with an outline plan of work and costs.

Appendix AF - ORH Mapping Specification 2

Meeting 13 April 2010 in West Group Meeting Room

ORH are requested to model the following:

1 WDS only Solution

a. Having fixed WDS stations 1, 4, 10, 16, 18, 19, 20 and 17 (1 pump only), where would it be best to locate a further 3 WDS pumps plus a further 1 WDS ‘day only’ pump (for 8 minute response to dwelling fires and RTCs).

b. Having fixed WDS stations 1, 4, 10, 16, 18, 19, 20, 17 (1 pump only) and 13 (day only), where would it be best to locate a further 3 WDS pumps (for 8 minute response to dwelling fires and RTCs).

2. Whole RBFRS Solution

a. Having fixed WDS stations 1, 4, 10, 16, 18, 19, 20 and 17 (1 pump only) and RDS units 4, 5, 6, 11, 14, 15, 16, 19, where would it be best to locate (for 8 minute response to dwelling fires and RTCs):

i. A further 3 WDS pumps plus a further 1 WDS ‘day only’ pump, then:

ii. A further 2 WDS ‘day only’ pumps.

b. Having fixed WDS stations 1, 4, 10, 16, 18, 19, 20, 17 (1 pump only) and 13 (day only) and RDS units 4, 5, 6, 11, 14, 15, 16, 19, where would it be best to locate (for 8 minute response to dwelling fires and RTCs):

i. A further 3 WDS pumps, then:

ii. A further 2 WDS ‘day only’ pumps.

Therefore:

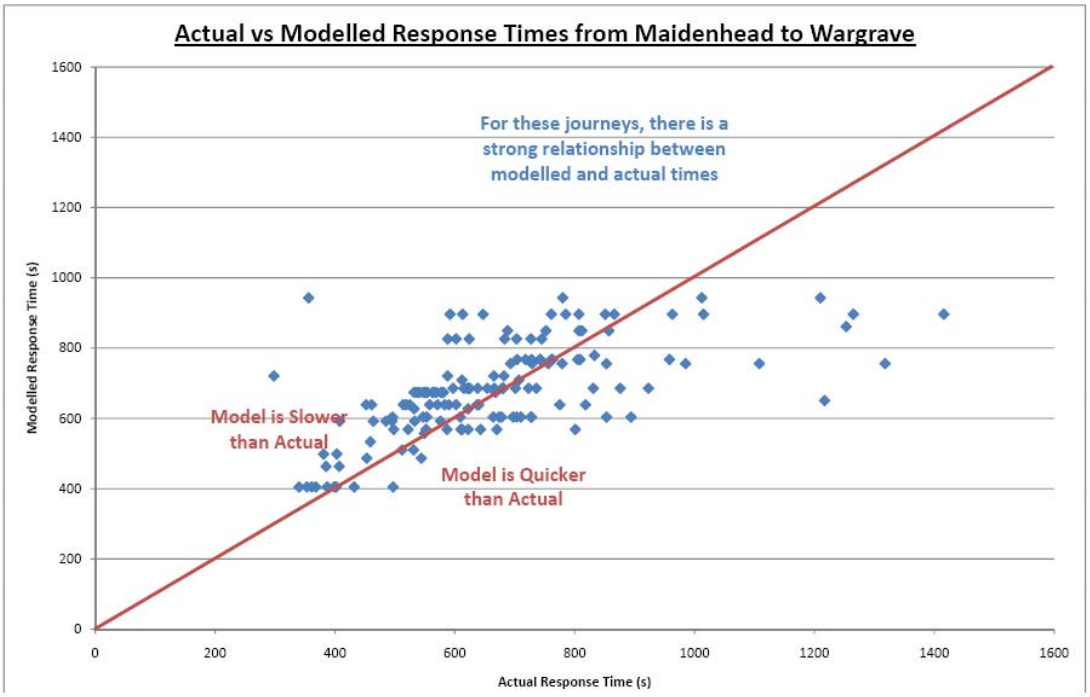
Paragraphs 1a and 1b, above, both model a total of 11 WDS pumps plus ‘day only’ WDS pump and

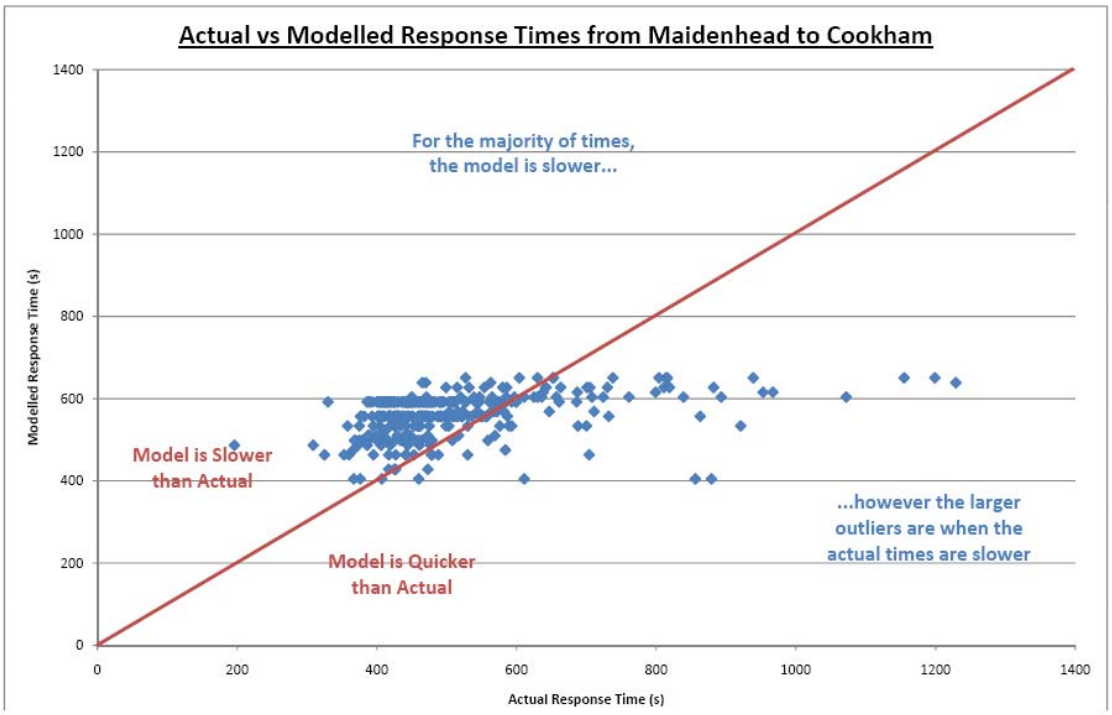
Paragraphs 2a(i), 2a(ii), 2b(i) and 2b(ii), above, all model a total of 11 WDS pumps plus 1 ‘day only’ WDS pump plus 2 further WDS ‘day only’ pumps plus 8 RDS units.

Appendix AG - ORH Mapping and Modelling Report

This report is only available as a ‘pdf’ file. Paper copies will be restricted but the report will be published on line at: www.rbfrs.co.uk (within IRMP section).

Appendix AH – Travel Time Model Analysis for Wargrave and Cookham.





Appendix AI – Total incidents over years.

Total Number of Incidents on station ground

Station	1	2	3	4	5	6	7	9	10	11	12	13	14	15	16	17	18	19	20	Total	TOTAL - RDS Only stations
2002/03	1,271	1,070	1,105	1,117	177	106	126	99	418	456	105	615	438	340	1,153	1,695	1,016	1,158	917	13,513	1847
2003/04	1,325	1,046	1,126	1,265	186	120	149	129	422	456	110	677	391	367	1,395	1,811	1,062	1,119	936	14,232	1908
2004/05	1,167	1,008	955	934	160	102	107	90	381	430	73	563	415	297	1,246	1,385	929	983	871	12,190	1674
2005/06	1,139	1,147	1,017	1,063	183	109	106	82	359	491	110	492	382	323	1,204	1,272	843	956	738	12,098	1786
2006/07	1,077	966	903	1,119	157	98	132	90	398	482	116	512	401	336	1,136	1,345	823	923	801	11,905	1812
2007/08	1,085	859	889	1,064	136	85	115	75	437	460	117	511	333	263	1,021	1,356	661	976	731	11,261	1584
2008/09	1,023	820	820	999	154	97	77	61	381	408	88	518	322	277	921	1,272	705	840	576	10,446	1484
2009/10	952	845	906	893	136	79	100	69	407	180	53	459	300	278	808	1,050	668	745	554	9,557	1195

Data from IT in RBFRS internal document:

S:\IRMP Development\IRMP 5YEAR PLAN 2007-12\IRMP 2010-11\RDS Review\RBFRS Data\Info IT\Total incidents over years.xls

Appendix AJ – Analysis of possible training time on standby

IncidentNo	Stats Year	Callsign	Standby Station	Time Of Alert	Hr	Time Mobile	Time Of Arrival	Time Of Release	Training Time Mins	Total Standby Time Mins	Hrs claimed	
29	2009	10P1	16	01-Apr-09	17	01-Apr-09						
92	2009	04P2	04	02-Apr-09	20		02-Apr-09	02-Apr-09	25	25	1	
94	2009	13P1	16	02-Apr-09	20	02-Apr-09	02-Apr-09	02-Apr-09	5	29	1	
Example rows only. Full spreadsheet attached to MS Project.												
12259	2009	16P2	16	23-Mar-10	20		23-Mar-10	23-Mar-10	10	11	1	
12283	2009	13P1	16	24-Mar-10	18	24-Mar-10		24-Mar-10		7	1	
12284	2009	03P1	04	24-Mar-10	20	24-Mar-10	24-Mar-10	24-Mar-10	83	119	2	
12455	2009	17P1	19	30-Mar-10	19	30-Mar-10	30-Mar-10	30-Mar-10	23	48	1	
12457	2009	13P1	16	30-Mar-10	20	30-Mar-10		30-Mar-10		28	1	
12488	2009	19P2	19	31-Mar-10	19		31-Mar-10	31-Mar-10	60	60	2	
12490	2009	17P2	19	31-Mar-10	20	31-Mar-10	31-Mar-10	31-Mar-10	8	25	1	
12491	2009	03P1	04	31-Mar-10	20	31-Mar-10	31-Mar-10	31-Mar-10	45	77	2	
						TOTAL POSSIBLE TRAINING TIME WHEN ON STANDBY			**180.9**	**307.8**	**589**	**Hours on Standby**
						MULTIPLY BY 5 FOR CREW OF 5			**904.5**	**1539**	**2945**	**Multiply by 5 for crew of 5**
						DIVIDE BY 131 FOR TRAINING HOURS PER RDS			**6.904580153**	**19822.32**	**37931.6**	**Cost of standby (@ FF Competent rate)**

So - for £40,000 RBFRS could train FF an extra 7 hrs per year (average each) when on standbys listed above (useful standbys for training deemed to be 17.00 - 21.00hrs)

For approx £65,000 p.a. RBFRS gets 36 hrs per year per person (with 3hrs one weekend a month).

Appendix AK – Analysis of Control RDS unavailability records

Gaps in day cover (08.00 - 16.00) by station and filled by RSO - for sample month

Judgement was required for some day cover as, from the paper sheets, it was not always clear how many staff were short.

This should be deemed a minimum gap as where sheet noted for example 'no BA' only '1' was entered

If reason for gap was unclear, a default of '1BA' is entered.

NB – Columns deleted. Full spreadsheet at RDS MS Project

	Station 4			Station 5			Station 6			Station 7			Station 9			Station 11			**Total**			
DATE	JO	Dr	BA	JO	Dr	BA	JO	Dr	BA	JO	Dr	BA	JO	Dr	BA	JO	Dr	BA	**JO**	**Dr**	**BA**	
01/03/2010			1							1	1	1		1				1	**2**	**2**	**6**	**10**
02/03/2010			1												1				**0**	**0**	**3**	**3**
03/03/2010															1				**0**	**0**	**3**	**3**
04/03/2010			1									1							**1**	**0**	**4**	**5**
05/03/2010	1									1	1	1			1				**2**	**1**	**3**	**6**
06/03/2010																	1		**1**	**1**	**1**	**3**
07/03/2010						1			1					1					**0**	**1**	**2**	**3**
																			0	**0**	**0**	
08/03/2010															1				**1**	**0**	**2**	**3**
09/03/2010			1							1	1	1		1				1	**2**	**2**	**4**	**8**
10/03/2010			1															1	**1**	**1**	**4**	**6**
11/03/2010		1								1	1	1						1	**2**	**2**	**4**	**8**
12/03/2010										1	1	1						1	**1**	**1**	**4**	**6**
13/03/2010																			**0**	**0**	**0**	**0**
14/03/2010						1													**0**	**0**	**2**	**2**
																			0	**0**	**0**	
15/03/2010															1				**1**	**0**	**3**	**4**
16/03/2010												1			1				**0**	**0**	**5**	**5**
17/03/2010															1				**0**	**0**	**4**	**4**
18/03/2010														1					**0**	**1**	**4**	**5**
19/03/2010										1	1	1			1				**1**	**1**	**4**	**6**
20/03/2010										1	1	1							**1**	**1**	**1**	**3**
21/03/2010	1									1	1	1		1					**2**	**2**	**3**	**7**
																			0	**0**	**0**	
22/03/2010				1								1			1				**2**	**0**	**3**	**5**
23/03/2010										1	1	1							**1**	**1**	**2**	**4**
24/03/2010										1	1	1						1	**1**	**1**	**4**	**6**

25/03/2010	1	1	1		1		**1**	**1**	**6**	**8**
26/03/2010							**1**	**0**	**3**	**4**
27/03/2010						1	**0**	**0**	**1**	**1**
28/03/2010							**0**	**0**	**1**	**1**
							0	**0**	**0**	
29/03/2010	1	1	1		1		**1**	**1**	**2**	**4**
30/03/2010					1		**1**	**0**	**3**	**4**
31/03/2010				1			**1**	**2**	**3**	**6**

Appendix AL – Potential costs and savings of RSU

Retained Station Costs 2008/09

	Average RDS stn
Retained salary cost	**162,000**
Building Maintenance	681
Rates	6,429
Gas	1,626
Electricity	2,011
Water	158
Waste	804
Contract Cleaning	1,220
Depreciation	7,198
Misc expenditure posted to stations	2,055
RDS building cost sub-total	**22,182**
RDS pump cost	**33,000**
Lease car fleet cost	**9,000**

Retained pay is based on budgeted costs for 9FF, 3CM and 1WM

Turnout costs are based on total budget apportioned equally across stations

Misc expenditure includes clothing, printing, stationery, office equipment

Closing RDS stations	**Number**	**sub-total**
Station Salaries	3	486,000
RDS pump cost	3	99,000
Buildings	3	66,546
Car fleet costs	3	27,000
	Total Saving	**678,546**
Project Difference (-ve = saving)	**1,428**	

RSO units	**Enter Number required**	**Cost per item**	**Total cost of item**
Buildings required			
Building Maintenance	2	681	1,362
Rates	2	6,429	12,858
Gas	2	1,626	3,252
Electricity	2	2,011	4,022
Water	2	158	316
Waste	2	804	1,608
Contract Cleaning	2	1,220	2,440
Depreciation	2	7,198	14,396
Misc expenditure posted to stations	2	2,055	4,110
		subtotal	**44,364**
Employment Costs (including on-costs)			
WM (+10% commitment)	2	49,603	99,206
CM (+10% commitment)	6	44,298	265,788
FF (+10%commitment)	4	39,904	159,616
		subtotal	**524,610**
Vehicles required			
RSO Pumps required	2	33,000	66,000
RSO Fleet cars required	5	9,000	45,000
		subtotal	**111,000**
		Total Cost of Project RSOs	**679,974**

TRAINING
Table from Finance (e-mail 3/2/10)

Retained Firefighters	Hourly	Drills (3 hrs)	Annual Drill Payment	Nat Ins(ERS) 9.10%	Pension (ERS) 11%	Total Annual Cost
Firefighter						
Trainee	9.66	28.98	1511.1	137.51	166.22	1814.84
Development	10.06	30.18	1573.68	143.2	173.1	1889.98
Competent	12.88	38.64	2014.81	183.35	221.63	2419.78
Crew Manager						
Development	13.69	41.07	2141.51	194.88	235.57	2571.96
Competent	14.28	42.84	2233.81	203.28	245.72	2682.8
Watch Manager						
Development	14.58	43.74	2280.73	207.55	250.88	2739.16
Competent A	14.99	44.97	2344.87	213.38	257.94	2816.19
Competent B	15.96	47.88	2496.61	227.19	274.63	2998.42

Possible solution - 3 additional hrs per month at weekend

3 hrs * 12 months	Number of staff	Totals
463.68	100	46368
0		0
0		0
492.84		0
514.08	20	10281.6
0		0
0		0
524.88		0
539.64	11	5936.04
574.56		0
0		
	TOTAL	**62585.64**

Administration	Stn Hrs per month	No. RDS stations	RBFRS hrs per month	RBFRS hrs pa	salary estimate (£/hr)	Total admin cost pa
40 hours per month per station	40	11	440	5,280	15	**79,200**

Full spreadsheet available from MS Project.

Appendix AM – Costs of RDS stations

	Average Budget RDS stn		Average Actual RDS stn
Retained salary cost	**162,000**	**Retained salary cost**	**115,771**
Building Maintenance	681	Building Maintenance	935
Rates	6,429	Rates	6,620
Gas	1,626	Gas	1,274
Electricity	2,011	Electricity	1,023
Water	158	Water	191
Waste	804	Waste	663
Contract Cleaning	1,220	Contract Cleaning	1,000
Depreciation	7,198	Depreciation	6,463
Misc expenditure posted to stations	2,055	Misc expenditure posted to stations	2,790
RDS building cost sub-total	**22,182**	**RDS building cost sub-total**	**20,959**
RDS pump cost	**33,000**	**RDS pump cost**	**33,000**
Lease car fleet cost	**9,000**	**Lease car fleet cost**	**9,000**
Totals	**226,182**		**178,730**

Salary Information											**On Costs**			
	Retainer	**Annual Leave**	**ARA**	**CPD**	**Disturbance**	**Loss Earnings**	**Drill & Hourly pay**	**Acting Up**	**Turn-Outs**	**Total**	**Ni**	**Pensions**	**Total**	**Total Salary Cost**
Station 4	27,617	7,831	21	330	6,665	8,965	29,515	196	30,728	111,870	5,855	5684	11540	123,410
Station 5	28,859	10,944	1,008	629	8,951	1,606	34,354	425	46,254	133,029	6,643	10329	16973	150,002
Station 6	22,161	9,164	784	637	5,150	2,423	34,083	132	34,984	109,517	6,872	1274	8146	117,663

Station 7	17,176	4,567	802	560	1,186	683	20,833	247	7,190	53,243	3,742	1432	5174	58,417	
Station 9	17,556	5,772	1,691	741	3,607	672	25,235	412	26,781	82,466	4,563	6345	10908	93,375	
Station 11	24,221	6,591	871	161	4,330	2,481	26,259	1,012	25,472	91,398	3,682	4510	8193	99,591	
Station 12	2,525	566	0	0	179	242	4,746	230	916	9,403	424	301	725	10,128	Leavers only other staff costs transferred to 19
Station 14	21,225	5,561	339	0	4,576	3,120	22,439	132	21,847	79,239	3,983	1976	5958	85,197	
Station 15	24,940	7,827	871	733	8,205	5,704	32,169	169	32,806	113,423	5,191	9940	15131	128,553	
Station 16	30,624	9,345	1,046	1,767	4,318	1,073	36,121	2,219	23,694	110,206	6,350	1167	7516	117,722	
Station 19	34,360	10,740	224	1,263	5,158	6,057	57,286	547	40,296	155,932	10,762	6955	17716	173,648	
	251,262	**78,907**	**7,657**	**6,821**	**52,326**	**33,027**	**323,039**	**5,723**	**290,966**	**1,049,727**	**58,066**	**49,913**	**107,980**	**1,157,707**	

Premises Information

	Buildings	**Rates**	**Gas**	**Elect**	**Water**	**Waste Disposal**	**Contract Clean**	**Depreciation**	**Totals**
Station 4	included in w/t no information available								
Station 5	915	6,305	1,480	884	134	494	1,000	7,126	18,338
Station 6	172	7,518	1,422	546	395	0	1,000	8,005	19,057
Station 7	2,091	5,917	1,903	551	33	418	1,000	7,635	19,548
Station 9		2,304	647	529	204	0	1,000	2,527	7,210
Station 11		7,275	0	3,455	183	640	1,000	8,261	20,814
Station 12		6,305	1,373	403	98	346	1,000	5,721	15,247
Station 14	563	10,670	758	879	188	1,041	1,000	5,876	20,974
Station 15	933	6,669	1,335	936	291	1,041	1,000	6,552	18,756
Station 16	included in w/t no information available								
Station 19	included in w/t no information available								
	4,674	**52,962**	**8,916**	**8,184**	**1,526**	**3,979**	**8,000**	**51,703**	**139,944**

	935	**6,620**	**1,274**	**1,023**	**191**	**663**	**1,000**	**6,463**	**17,493**

Misc Expenditure

Station 4	included in w/t no information available
Station 5	4,002
Station 6	5,593
Station 7	1,107
Station 9	1,938
Station 11	2,334
Station 12	1,419
Station 14	1,573
Station 15	4,353
Station 16	included in w/t no information available
Station 19	included in w/t no information available
	22,320

Full spreadsheet available from RDS MS Project.

Page intentionally blank

Page intentionally blank