

## **SURREY FIRE AND RESCUE SERVICE**

### ***Final Results Report: Modelling around Spelthorne***



#### ***Introduction***

1. ORH Limited recently completed a model validation study (ORH reference SuF/15) for Surrey Fire & Rescue Service (SFRS) with a Final Report produced on 19<sup>th</sup> July 2013.
2. This revalidation study updated the ORH simulation and optimisation models with data from 2011/12 and 2012/13. A modelled base position was established to take into account recent changes and expected changes to the deployment of appliances (eg, the redeployment of an appliance from Reigate), as discussed with SFRS.
3. The models are therefore considered up-to-date and ready to use for modelling different options for the deployment of pumping appliances in Surrey.
4. SFRS has specified modelling runs to be undertaken around the deployment of appliances currently located at Sunbury and Staines stations in Spelthorne district. The modelling around these options forms part of wider plans to assess potential deployments changes across Surrey.
5. The general objectives of this work were therefore to assess the performance impacts of potential changes to the modelled base position (using the ORH Fire Simulation Model, FireSim), and to use optimisation modelling to consider the optimum location for a combined site for Sunbury and Staines fire stations (using the ORH Optimisation Model, OGRE).

#### ***Methodology***

6. The work around the potential options involved assessing the closure of Staines and Sunbury stations. Both stations currently have one pump and are wholetime (WT) crewed. The options modelled here involve locating one wholetime appliance within the following configurations:
  - a. Close Sunbury station (1x WT at Staines);
  - b. Close Staines station (1x WT at Sunbury);
  - c. Close Sunbury and Staines, and locate 1x WT at the optimal site.

**FIGURE 1 SUMMARY OF MODELLING RESULTS**

**Surrey-wide**

**Modelled Results**

Deployment Option	Appendix	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
		Average	% in 10 mins	Average	% in 15 mins	% in 16 minutes
Modelled Base		07:28	80.8%	10:27	86.7%	96.8%
Staines Only	A1	07:38	79.2%	10:37	86%	96.6%
Sunbury Only	A2	07:35	79.9%	10:40	86.0%	96.7%
Optimum Location	B2	07:33	80.1%	10:34	86.1%	96.7%

**Impact Versus Modelled Base Position**

Deployment Option	Appendix	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
		Average	% in 10 mins	Average	% in 15 mins	% in 16 minutes
Staines Only	A1	00:10	-1.6%	00:10	-0.8%	-0.2%
Sunbury Only	A2	00:07	-0.9%	00:13	-0.7%	-0.1%
Optimum Location	B2	00:05	-0.6%	00:06	-0.6%	-0.1%

**Spelthorne District**

**Modelled Results**

Deployment Option	Appendix	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
		Average	% in 10 mins	Average	% in 15 mins	% in 16 minutes
Modelled Base		05:44	97.0%	09:13	98.2%	99.8%
Staines Only	A1	07:32	80.5%	10:48	93.0%	98.5%
Sunbury Only	A2	07:05	88.3%	11:03	93.9%	98.8%
Optimum Location	B2	06:42	91.4%	10:24	94.5%	98.9%

**Impact Versus Modelled Base Position**

Deployment Option	Appendix	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
		Average	% in 10 mins	Average	% in 15 mins	% in 16 minutes
Staines Only	A1	01:47	-16.5%	01:35	-5.2%	-1.3%
Sunbury Only	A2	01:21	-8.7%	01:51	-4.3%	-1.0%
Optimum Location	B2	00:58	-5.6%	01:11	-3.7%	-0.8%



7. The optimisation work focused on the production of a 'site-search' map for one new optimal location given the closure of Staines and Sunbury stations. The optimisation fixed all other stations and crewing arrangements as per the modelled base position and sought to find the optimum location based on one wholetime appliance at the site. The optimisation model (OGRE) was used to minimise the SFRS-wide average first and second appliance response to all 2+ appliance incidents.

### **Results**

8. The modelling results for closing Sunbury or Staines are given in Appendices **A1** and **A2** respectively, and the results are shown against the modelled base.
9. The impact of closing Sunbury or Staines (on the average first appliance response performance to all 2+ incidents) would be an increase of 1m 47 s or 1m 21s respectively, in the district of Spelthorne; Surrey-wide performance deteriorates slightly. In addition, the closure of Sunbury results in the workload of the Staines appliance increasing by 159 responses per year, which is less than the impact on the Sunbury appliance when Staines is closed (205 responses per year).
10. The site-search map for the optimal location for a new site at which to merge Staines and Sunbury stations is given in Appendix **B1**. The location is on Ashford Road near to the roundabout with the A308 Staines By-Pass and Fordbridge Road.
11. The modelling results for closing Staines and Sunbury and introducing one appliance at the optimal location are given in Appendix **B2**.
12. Closing Staines and Sunbury and deploying one appliance at the optimal location results in a small Surrey-wide deterioration on the average first appliance response performance to all 2+ incidents (5 seconds) compared to the modelled base. For the Spelthorne district, the impact on average first and second appliance response to all 2+ appliance incidents is 58s and 1m 11s respectively.
13. The Surrey-wide and Spelthorne district results are presented in Figure 1 opposite for all options modelled.

### **Summary**

14. The results for a range of deployment options around relocating Staines and Sunbury stations have been assessed in this paper. A comparison has been made to the modelled base position established in the recent model re-validation study. Modelled response performance and workload by appliance have been presented for all options and are included in the appendices.
15. The optimal location is shown to provide performance benefits in comparison to either of the existing station locations, in terms of all the measures reported against.

## **APPENDICES**

### **A Modelling Results: One Wholetime Appliance at Existing Stations**

#### **A1 Close Sunbury; 1x WT at Staines compared to the Modelled Base**

**A1a** Response Performance by District

**A1b** Appliance Workload

#### **A2 Close Staines; 1x WT at Sunbury compared to the Modelled Base**

**A2a** Response Performance by District

**A2b** Appliance Workload

### **B Optimal Location within Spelthorne District**

#### **B1 Site-Search Map for Optimal Location within Spelthorne District**

#### **B2 Optimal Location compared to the Modelled Base**

**B2a** Response Performance by District

**B2b** Appliance Workload



## Deployment Options

**Close Sunbury; 1 x WT at Staines**

All Periods Combined

**Modelled Base**

Time given in mm:ss

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
	Average	% in 10 mins	Average	% in 15 mins	% in 16 mins
Overall	07:28	80.8%	10:27	86.7%	96.8%
Elmbridge	06:45	89.5%	11:01	95.0%	99.5%
Epsom and Ewell	05:58	89.9%	06:44	95.5%	98.7%
Guildford	07:31	80.9%	08:46	91.3%	96.9%
Mole Valley	08:14	76.2%	13:00	78.4%	97.4%
Reigate and Banstead	08:16	72.2%	11:55	84.4%	96.6%
Runnymede	06:33	90.5%	10:54	94.8%	99.2%
Spelthorne	05:44	97.0%	09:13	98.2%	99.8%
Surrey Heath	07:24	87.0%	08:15	95.9%	98.4%
Tandridge	09:47	59.2%	15:23	51.1%	91.0%
Waverley	10:34	44.1%	15:25	48.2%	88.5%
Woking	06:00	93.7%	06:51	99.1%	99.8%

**Modelled Option - Close Sunbury; 1 x WT at Staines**

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
	Average	% in 10 mins	Average	% in 15 mins	% in 16 mins
Overall	07:38	79.2%	10:37	85.9%	96.6%
Elmbridge	06:49	88.5%	11:15	92.8%	99.3%
Epsom and Ewell	05:59	89.8%	06:45	95.4%	98.7%
Guildford	07:31	80.8%	08:46	91.3%	96.9%
Mole Valley	08:14	76.2%	13:00	78.4%	97.4%
Reigate and Banstead	08:16	72.2%	11:55	84.4%	96.6%
Runnymede	06:40	89.3%	11:00	93.5%	98.7%
Spelthorne	07:32	80.5%	10:48	93.0%	98.5%
Surrey Heath	07:25	87.0%	08:15	95.9%	98.4%
Tandridge	09:47	59.2%	15:23	51.1%	91.0%
Waverley	10:34	44.1%	15:25	48.2%	88.5%
Woking	06:00	93.6%	06:52	99.1%	99.8%

**Impact Versus Modelled Base**

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
	Average	% in 10 mins	Average	% in 15 mins	% in 16 mins
Overall	00:10	-1.6%	00:10	-0.8%	-0.2%
Elmbridge	00:04	-1.0%	00:15	-2.1%	-0.2%
Epsom and Ewell	00:00	0.0%	00:00	0.0%	0.0%
Guildford	00:00	0.0%	00:00	0.0%	0.0%
Mole Valley	00:00	0.0%	00:00	0.0%	0.0%
Reigate and Banstead	00:00	0.0%	00:00	0.0%	0.0%
Runnymede	00:07	-1.1%	00:07	-1.3%	-0.5%
Spelthorne	01:47	-16.5%	01:35	-5.2%	-1.3%
Surrey Heath	00:00	0.0%	00:00	0.0%	0.0%
Tandridge	00:00	0.0%	00:00	0.0%	0.0%
Waverley	00:00	0.0%	00:00	0.0%	0.0%
Woking	00:00	0.0%	00:01	0.0%	0.0%

Response Target	-	80%	-	80%	95%
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Modelled improvement in performance to meet/exceed the standard, where modelled base does not meet the standard

Modelled reduction in performance to below the standard, where modelled base does meet/exceed the standard

Modelled improvement in average response of over 30 seconds or 10% within target

Modelled reduction in average response of over 30 seconds or 10% within target

## Deployment Options

**Close Sunbury; 1 x WT at Staines**Modelled Annual Workload - All Periods Combined

Callsign	Station	Modelled Base Crew Type	Modelled Option Crew Type	Modelled Workload		
				Base Position	Modelled Option	Difference
S30P1	Camberley	WT	WT	460	461	1
S30P2	Camberley	WT	WT	569	570	1
S33P1	Chertsey	WT	WT	818	925	107
S32P1	Chobham	RDS	RDS	170	174	3
S28P1	Cranleigh	RDS	RDS	107	107	0
S28P2	Cranleigh	RDS	RDS	78	78	0
S12P1	Dorking	WT	WT	395	395	0
S27P1	Dunsfold	RDS	RDS	16	16	0
S31P1	Egham	WT	WT	630	744	114
S17P1	Epsom	WT	WT	502	502	1
S17P2	Epsom	WT	WT	882	884	2
S20P1	Esher	WT	WT	523	548	25
S26P1	Farnham	WT	WT	562	562	0
S24P1	Godalming	RDS	RDS	147	147	0
S24P2	Godalming	RDS	RDS	84	84	0
S14P1	Godstone	WT	WT	778	778	0
S22P1	Guildford	WT	WT	1,211	1,213	2
S22P2	Guildford	WT	WT	724	725	1
S22P3	Guildford	RDS	RDS	85	85	0
S25P1	Haslemere	DC	DC	191	191	0
S25P2	Haslemere	RDS	RDS	16	16	0
S13P1	Leatherhead	WT	WT	491	492	1
S16P1	Lingfield	RDS	RDS	97	97	0
S15P1	Oxted	RDS	RDS	181	181	0
S15P2	Oxted	RDS	RDS	61	61	0
S21P1	Painshill	WT	WT	729	770	41
S11P1	Reigate	WT	WT	860	860	0
SAL-P1	Salfords	WT	WT	633	633	0
S10P1	Staines	WT	WT	535	694	159
S19P1	Sunbury	WT	Close	532	0	-532
S18P1	Walton	DC	DC	391	456	64
S18P2	Walton	RDS	RDS	0	0	0
S29P1	Woking	WT	WT	872	879	7
S29P2	Woking	WT	WT	329	333	4
Total				14,659	14,659	0

## Note:

Workload by appliance is the expected number of incidents attended by appliance for the given deployment modelled



## Deployment Options

**Close Staines; 1 x WT at Sunbury**

All Periods Combined

**Modelled Base**

Time given in mm:ss

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
	Average	% in 10 mins	Average	% in 15 mins	% in 16 mins
Overall	07:28	80.8%	10:27	86.7%	96.8%
Elmbridge	06:45	89.5%	11:01	95.0%	99.5%
Epsom and Ewell	05:58	89.9%	06:44	95.5%	98.7%
Guildford	07:31	80.9%	08:46	91.3%	96.9%
Mole Valley	08:14	76.2%	13:00	78.4%	97.4%
Reigate and Banstead	08:16	72.2%	11:55	84.4%	96.6%
Runnymede	06:33	90.5%	10:54	94.8%	99.2%
Spelthorne	05:44	97.0%	09:13	98.2%	99.8%
Surrey Heath	07:24	87.0%	08:15	95.9%	98.4%
Tandridge	09:47	59.2%	15:23	51.1%	91.0%
Waverley	10:34	44.1%	15:25	48.2%	88.5%
Woking	06:00	93.7%	06:51	99.1%	99.8%

**Modelled Option - Close Staines; 1 x WT at Sunbury**

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
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Overall	07:35	79.9%	10:40	86.0%	96.7%
Elmbridge	06:46	89.3%	11:02	94.8%	99.5%
Epsom and Ewell	05:58	89.9%	06:44	95.4%	98.7%
Guildford	07:31	80.8%	08:46	91.3%	96.9%
Mole Valley	08:14	76.2%	13:00	78.4%	97.4%
Reigate and Banstead	08:16	72.2%	11:55	84.4%	96.6%
Runnymede	06:40	89.0%	11:37	91.5%	98.7%
Spelthorne	07:05	88.3%	11:03	93.9%	98.8%
Surrey Heath	07:25	87.0%	08:15	95.9%	98.4%
Tandridge	09:47	59.2%	15:23	51.1%	91.0%
Waverley	10:34	44.1%	15:25	48.2%	88.5%
Woking	06:00	93.6%	06:52	99.1%	99.8%

**Impact Versus Modelled Base**

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
	Average	% in 10 mins	Average	% in 15 mins	% in 16 mins
Overall	00:07	-0.9%	00:13	-0.7%	-0.1%
Elmbridge	00:01	-0.2%	00:01	-0.2%	0.0%
Epsom and Ewell	00:00	0.0%	00:00	0.0%	0.0%
Guildford	00:00	0.0%	00:00	0.0%	0.0%
Mole Valley	00:00	0.0%	00:00	0.0%	0.0%
Reigate and Banstead	00:00	0.0%	00:00	0.0%	0.0%
Runnymede	00:07	-1.4%	00:43	-3.3%	-0.5%
Spelthorne	01:21	-8.7%	01:51	-4.3%	-1.0%
Surrey Heath	00:00	0.0%	00:00	0.0%	0.0%
Tandridge	00:00	0.0%	00:00	0.0%	0.0%
Waverley	00:00	0.0%	00:00	0.0%	0.0%
Woking	00:00	0.0%	00:01	0.0%	0.0%

Response Target	-	80%	-	80%	95%
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Modelled improvement in performance to meet/exceed the standard, where modelled base does not meet the standard

Modelled reduction in performance to below the standard, where modelled base does meet/exceed the standard

Modelled improvement in average response of over 30 seconds or 10% within target

Modelled reduction in average response of over 30 seconds or 10% within target

## Deployment Options

**Close Staines; 1 x WT at Sunbury**Modelled Annual Workload - All Periods Combined

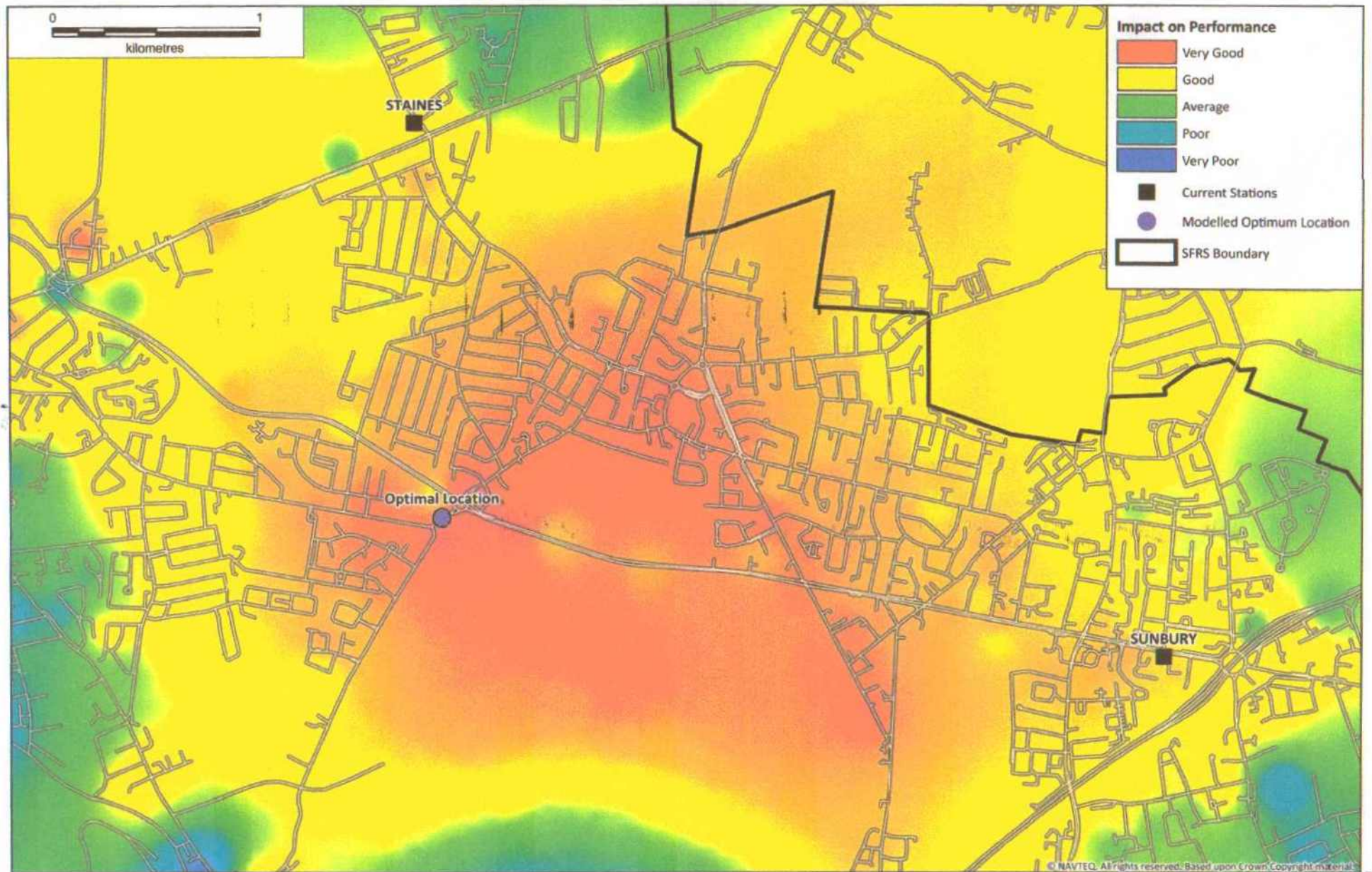
Callsign	Station	Modelled Base Crew Type	Modelled Option Crew Type	Modelled Workload		
				Base Position	Modelled Option	Difference
S30P1	Camberley	WT	WT	460	461	1
S30P2	Camberley	WT	WT	569	570	2
S33P1	Chertsey	WT	WT	818	893	75
S32P1	Chobham	RDS	RDS	170	175	5
S28P1	Cranleigh	RDS	RDS	107	107	0
S28P2	Cranleigh	RDS	RDS	78	78	0
S12P1	Dorking	WT	WT	395	395	0
S27P1	Dunsfold	RDS	RDS	16	16	0
S31P1	Egham	WT	WT	630	827	197
S17P1	Epsom	WT	WT	502	502	0
S17P2	Epsom	WT	WT	882	882	0
S20P1	Esher	WT	WT	523	531	8
S26P1	Farnham	WT	WT	562	562	0
S24P1	Godalming	RDS	RDS	147	147	0
S24P2	Godalming	RDS	RDS	84	84	0
S14P1	Godstone	WT	WT	778	778	0
S22P1	Guildford	WT	WT	1,211	1,212	1
S22P2	Guildford	WT	WT	724	725	0
S22P3	Guildford	RDS	RDS	85	85	0
S25P1	Haslemere	DC	DC	191	191	0
S25P2	Haslemere	RDS	RDS	16	16	0
S13P1	Leatherhead	WT	WT	491	491	0
S16P1	Lingfield	RDS	RDS	97	97	0
S15P1	Oxted	RDS	RDS	181	181	0
S15P2	Oxted	RDS	RDS	61	61	0
S21P1	Painshill	WT	WT	729	741	12
S11P1	Reigate	WT	WT	860	860	0
SAL-P1	Salfords	WT	WT	633	633	0
S10P1	Staines	WT	Close	535	0	-535
S19P1	Sunbury	WT	WT	532	737	205
S18P1	Walton	DC	DC	391	408	16
S18P2	Walton	RDS	RDS	0	0	0
S29P1	Woking	WT	WT	872	880	8
S29P2	Woking	WT	WT	329	333	3
Total				14,659	14,659	0

## Note:

Workload by appliance is the expected number of incidents attended by appliance for the given deployment modelled



## Spelthorne Optimal Location Site Search





## Deployment Options

**Close Sunbury and Staines and Relocate to Optimum Location**

All Periods Combined

**Modelled Base**

Time given in mm:ss

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
	Average	% in 10 mins	Average	% in 15 mins	% in 16 mins
Overall	07:28	80.8%	10:27	86.7%	96.8%
Elmbridge	06:45	89.5%	11:01	95.0%	99.5%
Epsom and Ewell	05:58	89.9%	06:44	95.5%	98.7%
Guildford	07:31	80.9%	08:46	91.3%	96.9%
Mole Valley	08:14	76.2%	13:00	78.4%	97.4%
Reigate and Banstead	08:16	72.2%	11:55	84.4%	96.6%
Runnymede	06:33	90.5%	10:54	94.8%	99.2%
Spelthorne	05:44	97.0%	09:13	98.2%	99.8%
Surrey Heath	07:24	87.0%	08:15	95.9%	98.4%
Tandridge	09:47	59.2%	15:23	51.1%	91.0%
Waverley	10:34	44.1%	15:25	48.2%	88.5%
Woking	06:00	93.7%	06:51	99.1%	99.8%

**Modelled Option - Close Sunbury and Staines and Relocate to Optimum Location**

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
	Average	% in 10 mins	Average	% in 15 mins	% in 16 mins
Overall	07:33	80.1%	10:34	86.1%	96.7%
Elmbridge	06:48	88.6%	11:14	93.0%	99.3%
Epsom and Ewell	05:59	89.9%	06:45	95.4%	98.7%
Guildford	07:31	80.8%	08:46	91.3%	96.9%
Mole Valley	08:14	76.2%	13:00	78.4%	97.4%
Reigate and Banstead	08:16	72.2%	11:55	84.4%	96.6%
Runnymede	06:37	89.7%	10:46	94.0%	98.9%
Spelthorne	06:42	91.4%	10:24	94.5%	98.9%
Surrey Heath	07:25	87.0%	08:15	95.9%	98.4%
Tandridge	09:47	59.2%	15:23	51.1%	91.0%
Waverley	10:34	44.1%	15:25	48.2%	88.5%
Woking	06:00	93.6%	06:52	99.1%	99.8%

**Impact Versus Modelled Base**

District	1st Response to All 2+ Pump Incidents		2nd Response to All 2+ Pump Incidents		1st Response to All Incidents
	Average	% in 10 mins	Average	% in 15 mins	% in 16 mins
Overall	00:05	-0.6%	00:06	-0.6%	-0.1%
Elmbridge	00:03	-1.0%	00:14	-1.9%	-0.2%
Epsom and Ewell	00:00	0.0%	00:00	0.0%	0.0%
Guildford	00:00	0.0%	00:00	0.0%	0.0%
Mole Valley	00:00	0.0%	00:00	0.0%	0.0%
Reigate and Banstead	00:00	0.0%	00:00	0.0%	0.0%
Runnymede	00:04	-0.7%	-00:08	-0.8%	-0.3%
Spelthorne	00:58	-5.6%	01:11	-3.7%	-0.8%
Surrey Heath	00:00	0.0%	00:00	0.0%	0.0%
Tandridge	00:00	0.0%	00:00	0.0%	0.0%
Waverley	00:00	0.0%	00:00	0.0%	0.0%
Woking	00:00	0.0%	00:00	0.0%	0.0%

Response Target	-	80%	-	80%	95%
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Modelled improvement in performance to meet/exceed the standard, where modelled base does not meet the standard

Modelled reduction in performance to below the standard, where modelled base does meet/exceed the standard

Modelled improvement in average response of over 30 seconds or 10% within target

Modelled reduction in average response of over 30 seconds or 10% within target



## Deployment Options

**Close Sunbury and Staines and Relocate to Optimum Location**

Modelled Annual Workload - All Periods Combined

Callsign	Station	Modelled Base Crew Type	Modelled Option Crew Type	Modelled Workload		
				Base Position	Modelled Option	Difference
S30P1	Camberley	WT	WT	460	460	0
S30P2	Camberley	WT	WT	569	569	0
S33P1	Chertsey	WT	WT	818	898	81
S32P1	Chobham	RDS	RDS	170	172	2
S28P1	Cranleigh	RDS	RDS	107	107	0
S28P2	Cranleigh	RDS	RDS	78	78	0
S12P1	Dorking	WT	WT	395	395	0
S27P1	Dunsfold	RDS	RDS	16	16	0
S31P1	Egham	WT	WT	630	726	95
S17P1	Epsom	WT	WT	502	502	0
S17P2	Epsom	WT	WT	882	883	1
S20P1	Esher	WT	WT	523	546	23
S26P1	Farnham	WT	WT	562	562	0
S24P1	Godalming	RDS	RDS	147	147	0
S24P2	Godalming	RDS	RDS	84	84	0
S14P1	Godstone	WT	WT	778	778	0
S22P1	Guildford	WT	WT	1,211	1,213	1
S22P2	Guildford	WT	WT	724	725	1
S22P3	Guildford	RDS	RDS	85	85	0
S25P1	Haslemere	DC	DC	191	191	0
S25P2	Haslemere	RDS	RDS	16	16	0
S13P1	Leatherhead	WT	WT	491	492	1
S16P1	Lingfield	RDS	RDS	97	97	0
S15P1	Oxted	RDS	RDS	181	181	0
S15P2	Oxted	RDS	RDS	61	61	0
S21P1	Painshill	WT	WT	729	763	34
S11P1	Reigate	WT	WT	860	860	0
SAL-P1	Salfords	WT	WT	633	633	0
S10P1	Staines	WT	Close	535	0	-535
S19P1	Sunbury	WT	Close	532	0	-532
S18P1	Walton	DC	DC	391	432	41
S18P2	Walton	RDS	RDS	0	0	0
S29P1	Woking	WT	WT	872	878	6
S29P2	Woking	WT	WT	329	332	3
Spelthorne1	Spelthorne	-	WT	0	776	776
Total				14,659	14,659	0

## Note:

Workload by appliance is the expected number of incidents attended by appliance for the given deployment modelled





**Consultation On Changes To Fire Engine Deployment In The Borough Of Spelthorne**

## What does this mean for Spelthorne?

**The Issue:** Surrey Fire and Rescue Service's Public Safety Plan<sup>1</sup> proposed a change to the way the fire stations in Spelthorne are crewed. Currently there are two fire stations in Spelthorne, at Sunbury and Staines. Each of these stations has one Wholetime fire engine, providing 24 hour emergency response cover. The Plan indicated the longer term intention to rationalise the fire stations in the borough of Spelthorne. To continue to provide an effective service within the resources available, the Service now needs to consider the provision of one fire engine in Spelthorne located more centrally within the Borough.

We value your opinions and would appreciate your views on this proposal. We will provide you with as much information as we can and will listen to your opinions before a decision is made as to whether to implement this proposal.

**The Proposal:** If implemented, there would be a change to the number of fire engines based in Spelthorne. Currently there are two fire engines crewed by staff to provide an immediate response 24 hours a day. Our proposal is to close the two existing stations and base one fire engine at a new, modern fire station located in the Ashford Common area, providing 24 hour emergency response cover. This will mean that some firefighters currently based at Staines or Sunbury will need to work from other locations within Surrey.

**Why are we proposing this change?** The Surrey Fire and Rescue Authority has statutory duties to provide a fire and rescue service for the county with the resources available. This proposal is part of a transformation programme for the Service, designed to meet the challenges we described in our Public Safety Plan. The savings generated by the station rationalisation will enable us to continue to provide a balanced equitable service across the county without the need for a reduction in the response standard.

**Emergency Response:** We have modelled<sup>2</sup> the effects of our proposals and identified their potential impact. In Spelthorne, on average, the first fire engine will attend incidents in less than seven minutes (quicker than the Surrey average) and well within the Surrey response standard of ten minutes. This is sufficient to deal with the emergency safely and effectively in the majority of cases.

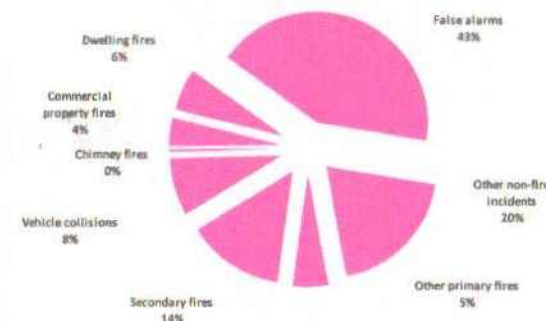
For life and property risk incidents, additional resources will be on their way to provide the required support for the first crew attending. On average this second fire engine will arrive in less than eleven minutes, which is also well within our fire service emergency response standard of 15 minutes.

### Predicted response standard for Spelthorne

	1 <sup>st</sup> fire engine attendance (average)	% attended in 10 mins	2 <sup>nd</sup> fire engine attendance (average)	% attended in 15 mins
Current	5 min 44 secs	97.0	9 min 13 secs	98.2
Proposal	6 min 42 secs	91.4	10 min 24 secs	94.5
Surrey Average	7 min 28 secs	80.8	10 min 27 secs	86.7

### An average week in Spelthorne:

Whilst the demand for emergency response is unpredictable, we are able to identify trends and to recognise the periods that are busier for us. This assists with planning resources and analysing the potential impact of proposals such as this one. Between 2009 and 2013 there was an average of 16 incidents per week in Spelthorne. If there had been such a thing as an average week about 7 of these incidents would have been false alarms. There would have been about one fire in a dwelling, about one in other property and about three non-property (secondary) fires, such as rubbish or grass alight. We would have needed to deal with about one vehicle collision and 3 other incidents (special services), which could be flooding or animals trapped, etc. The fire engines would also have been used as required to standby at other locations to maintain emergency response cover across the county.



<sup>1</sup> Available at [www.surrey-fire.gov.uk/psp](http://www.surrey-fire.gov.uk/psp)

<sup>2</sup> For further information on emergency response modelling, visit [www.surrey-fire.gov.uk/psp](http://www.surrey-fire.gov.uk/psp)



# Surrey Fire and Rescue Authority Public Safety Plan 2011-2020



## Consultation On Changes To Fire Engine Deployment In The Borough Of Spelthorne

### What does this mean for Spelthorne?

**How we respond to emergencies:** We provide emergency response cover across the county with up to 35 fire engines, which are supported by a range of other specialist resources of our own and neighbouring services. Two of these fire engines are currently based in Spelthorne but they are not resources solely dedicated to the Borough. This means that these fire engines will respond to incidents outside of the Spelthorne area. Similarly we can use resources from across the county to deal effectively with emergencies in the Borough, as we did in January 2013 when more than four fire engines attended the fire at the Ashford Cafe.

As stated in our fire service response standard, we will send the quickest appropriate response to an emergency and for you that may not be a fire engine from the fire station in Spelthorne. This current practice will not change under the proposals put forward for consultation.

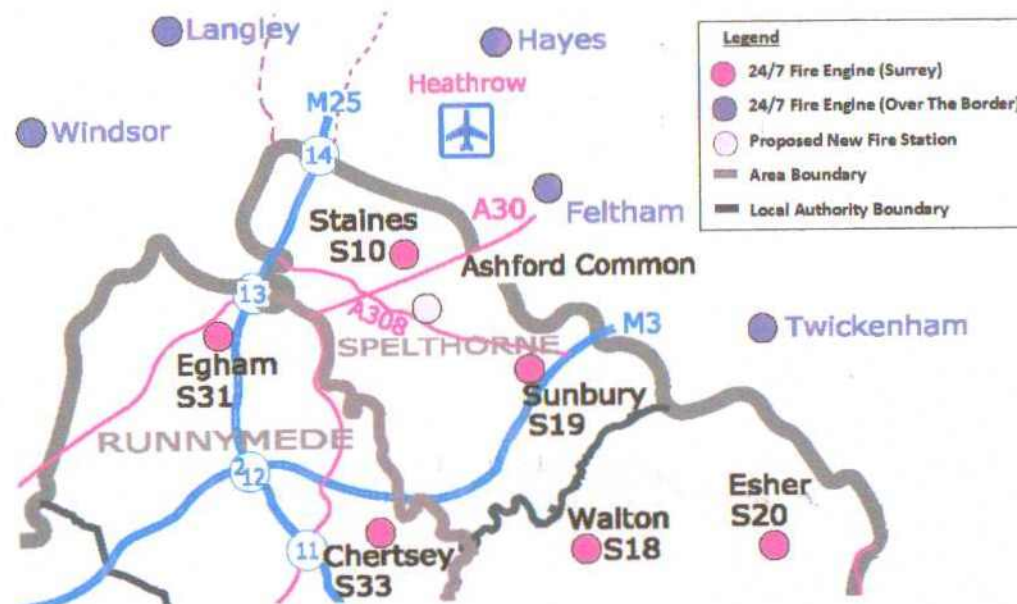
Spelthorne is surrounded by Surrey fire stations in Egham, Chertsey, Walton and Esher plus others based in London. London Fire Brigade have recently published their proposals to make changes to the disposition of fire engines in London, but none of the stations along the border with Surrey are affected by these proposals.

**Making a decision:** After the consultation has closed we will review our proposal in light of the feedback received. We will then present a final proposal for the provision of emergency response cover in Spelthorne to Surrey County Council's Cabinet, as the Fire and Rescue Authority, for decision. If the proposal is supported we will commence implementation during 2014.

**Have your say:** We encourage residents to have their say on how fire and rescue services are provided. These proposals, along with further information, are detailed in an [online questionnaire](#) which is open until 4<sup>th</sup> November 2013. Please contact us if you would like to receive a postal questionnaire.

If you would like this information in large print, Braille, on tape or in another language please contact us.

Map showing current stations and indicative position of proposed station



### How can I take part in the consultation process?

- By completing the online questionnaire at [www.surrey-fire.gov.uk/psp](http://www.surrey-fire.gov.uk/psp)
  - By emailing comments to [psp@surreycc.gov.uk](mailto:psp@surreycc.gov.uk)
  - By writing to: PSP Team, Surrey Fire and Rescue Service, Croydon Road, Reigate, Surrey, RH2 0EJ
  - By telephone: 03456 009 009
  - By fax: 01737 222857
- SMS: 07527 182 861  
Minicom: 020 8541 9698