



# ***Rural Review***

## ***East Sussex Fire & Rescue Service***

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# ***Executive Summary***

***(inc. Conclusions & Recommendations)***



# Executive Summary

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East Sussex Fire Authority provides fire and rescue services, in terms of prevention, protection and response, to the County of East Sussex and the City of Brighton and Hove. The Authority's vision is to achieve safer and more sustainable communities for all individuals who live in, work in or visit East Sussex and the City of Brighton & Hove.

The community expectations and financial pressures on the Fire Authority mean that we must continuously review the service we deliver to meet future needs. The Authority is committed to allocating resources and delivering services that are tailored to our communities' needs in order to increase efficiency and deliver value for money.

This approach has become even more important since the new arrangements for Integrated Risk Management Planning were introduced. The last review of fire cover, based on property loss, was carried out in the late 1990s and much has changed with the establishment of flexible, locally assessed and determined risk based standards that are tailored to mitigate the risks in local communities. The environment in which the Service operates has evolved as a result of the potential impact of climate change, the threat of terrorism and increasing levels of partnership working (shared services) all affecting how the Service allocates its resources.

In January 2009, the Fire Authority agreed a number of review areas that should be considered as specified in the 2009/10 – 2011/12 Integrated Risk Management Plan.

One of these reviews was that of the Fire Cover and Resilience arrangements in the rural areas, to consider a wide range of factors including community needs and operational response requirements, whether there are any alternative arrangements or methods of service delivery to meet prioritised, changed and emerging needs and communities' expectations of the Service in the medium term.

East Sussex Fire Authority can only effectively plan for its future service provision if it is aware of general trends and potential issues arising from the communities that it serves. This planning process is comprehensive and involves an understanding of potential risks including:

- Geographical / topographical risks including flooding, animal rescues and maritime services
- Road infrastructure, traffic speed, volumes and management
- Non-residential populations including day visitors (both business and pleasure) and through-visitors
- Commercial & business risks
- Economic factors
- Other environmental conditions

Firstly, this review describes the socio-demographic profile of East Sussex and identifies future population projections. The economy, employment, geography, topography and infrastructure of East Sussex are all considered, allowing for a more comprehensive understanding of the people that live, work, visit and travel within the County.

- The geography of East Sussex is unique resulting in a significant proportion of its population being found along the coastline, particularly in the towns of Eastbourne and Hastings. To the north lie smaller market towns and expanses of countryside. There is almost every aspect of community risk to be found in East Sussex, from oil terminals and multiple harbours with the inherent risk of ship fires to the influence of the landscape and the risk of wildfire and significant coastal and inland flooding. East Sussex is one of the most wooded counties in England with 65% of its area designated as 'an area of outstanding natural beauty' and 47 miles of coastline, some of which is designated 'heritage coast'. It also has many picturesque villages and remote households, each with their own risks due to increased travel distances from the nearest community fire station. Addressing these rural needs (often referred to as 'rurality') is an important consideration for us in undertaking Equality Impact Assessments and helping increase safety.
- Within the whole of East Sussex, there are no motorways and fewer than 50 miles of dual carriageway. Consequently, the road infrastructure is poor. Even the geographically separate coastal urban areas (Brighton & Hove, Eastbourne and Hastings) have poor road connectivity, yet contain a significant proportion of the total population. In terms of total road traffic collisions attended, there are higher numbers in our rural areas than in our coastal towns and the City and these also tend to be of a more serious nature.
- In general, elderly people make up a significant percentage of the population in East Sussex. The Black and Minority Ethnic (BME) population only represents 3.9% of the total population in East Sussex while 'white other groups', particularly from Eastern Europe have been growing in certain areas.
- Levels of deprivation in East Sussex vary widely, ranging from some of the most affluent to some of the most deprived areas in the Country. As a result, the affluent areas of Rother and Wealden can potentially conceal the risk associated with the more deprived areas.
- The population of East Sussex is currently predicted to increase, on average, by only 3,900 people a year and will be heavily concentrated among people in the older age groups. The number of people living alone is also likely to increase, more so than any other category of household. Conversely, the numbers of married couples and single parent households are likely to reduce.
- The number of households in East Sussex is set to increase by nearly 12% over the next 20 years. This is much faster than the expected growth of the population as a whole of just over 3% for the same period.

The review then goes on to define the area classed as 'rural', which is the area that is covered by the 18 fire stations within the Lewes, Rother & Wealden boundaries.

The communities within the rural area were then analysed and segmented into distinct classifications based on their socio-demographic, cultural and behavioural lifestyles. This allowed a comprehensive community profile to be created and, coupled with analysis of historical fire risk in the rural area, provided valuable insight into the communities' needs and potential risks. This community profile was analysed from a number of different viewpoints:

1. Identify the type of people in the rural area that are having the most fires
2. Identify the type of people in the rural area who were more susceptible to having a fire
3. Disseminate the above points into a station specific community risk profile

By obtaining this greater understanding of our rural communities the report then seeks to address a number of questions relating to the allocation of East Sussex Fire & Rescue Service (ESFRS) resources in order to mitigate the risks identified in the rural communities.

The areas of analysis include:

#### ***ESFRS Vulnerable Individuals / Communities***

- Geography & topography
- Infrastructure
- Socio-demographics
- Population projection
- Economy & employment
- Community profiling

#### ***ESFRS Resources – Fire Stations & Station Administration Areas***

- Location of existing fire stations in relation to risk
- Service resilience

### ***ESFRS Resources – Fire Appliances***

- Service response times
- Average time taken for an appliance to mobilise to an incident (turnout time)
- Attendance times of first and second appliances including phased arrival time (time period between the arrival of first and second appliances)
- Appliance availability
- Pre-determined attendances

### ***ESFRS – Staff***

- Shift systems
- Method of alerting staff on Retained Duty System

### ***ESFRS Incidents***

- Type & frequency of incidents within each fire station administration area

### ***ESFRS Special Risks***

- High risk premises within each station administration area
- Housing development projects
- Wildfire, animal rescue, flooding, maritime

### ***ESFRS Financial***

- Finance provision across the three boroughs and districts that make up the rural area
- Station costs
- Efficiency savings

### ***ESFRS Investment***

- Future developments in housing / infrastructure
- Re-investment on risk-priority basis

### ***ESFRS Monitoring Change***

- Review of Performance Indicators

The following conclusions of the review highlight the fact that the majority of ESFRS resources are allocated effectively and efficiently i.e. they are in the right place, at the right time and at an appropriate cost to the taxpayer. The review further highlights some areas where ESFRS can increase efficiency with no loss of service delivery or negative impact on the communities' expectations and needs. A number of recommendations have been drawn out from these conclusions for consideration by the Fire Authority.

Individual reports providing tailored, station specific profiles for each station in the rural area have also been created. Incorporated into these station profiles are the conclusions and resulting recommendations that relate directly to each station.

The proposed changes that potentially impact on staff, public, businesses and the environment will be considered carefully by the Fire Authority and comprehensive consultation will be undertaken in line with current ESFRS good practice to ensure the Fire Authority is offered a complete picture of the impact of the recommendations for change. In support of this plan a communications strategy has been developed and a staff impact assessment conducted covering the potential outcomes of the review. An Equality Impact Assessment has also been undertaken for the recommendations proposed. The Fire Authority will meet in September 2010 to agree which recommendations should be implemented and any relevant timescales.

# Conclusions

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## *General*

1. This Review has provided evidence to indicate that the allocation of resources, in relation to community risk, is both effective and efficient, although there are a number of opportunities to allocate resources in a different way to either enhance the service provided or deliver the same level of service in a more cost effective way.

## *ESFRS Vulnerable Individuals / Communities*

2. Through the use of enhanced community data (Mosaic), the process for allocating resources on the basis of risk can be further improved. For example, a more robust and comprehensive risk evaluation can now be considered in targeting those most vulnerable in the community through home safety visits (HSVs).
3. There are communities in our rural areas which, as a whole, are deemed to be at a far lower risk from fire than other areas based on their collective socio-demographics, behaviour and lifestyle. However, these communities may contain vulnerable individuals. This is comprehensively addressed within the Community Fire Safety Strategy and must continue to feature if the rural communities are to be served on a tailored risk basis where the level of community safety input must be at household level as opposed to community level. This outcome further supports the need for investing in key partnerships which allow the identification of and access to vulnerable individuals in the rural communities of East Sussex.

**See recommendations 1 & 2**

## *ESFRS Resources – Fire Stations & Fire Station Administration Areas*

4. There is no evidence of the need for additional community fire stations to be built.
5. There is no immediate requirement to change a day crewed fire station to a wholetime fire station in the short to medium term, although potential developments around the Bexhill and Hastings area should be kept under review.
6. There is no evidence to change any of the retained fire stations to a day crewed fire station at this time although this should be kept under review.
7. There are a small number of fire stations that could be positioned more effectively on the basis of risk. 'Risk' in this context has been determined by analysing the:
  - Community profile
  - Incident history
  - Travel distances (infrastructure evaluation)

**See recommendations 3 & 4**

## **ESFRS Resources – Fire Appliances**

8. Larger incidents (above six appliances) tend to take place as frequently in the rural communities as they do in the urban communities. The number of fire appliances is generally satisfactory in order to meet our overall Service resilience needs across our area but there is the potential to change their type and location to provide better coverage and response options.
  
9. There is an opportunity to review the current Service attendance standards. Over the last 5 years ESFRS has achieved the following attendance standards across the whole Service in respect to life threatening incidents which include road traffic collisions and dwelling fires:

First fire appliance to a life threatening incident: 74% of calls in 8 minutes

First fire appliance to a life threatening incident: 95% of calls in 13 minutes

Second fire appliance to a life threatening incident: 61% of calls in 8 minutes

Second fire appliance to a life threatening incident: 89% of calls in 13 minutes

Current Service attendance standards relate to the time in which the first appliance arrives at the incident and there is currently no standard set for the arrival of the second appliance, although it is accepted that a safe system of work can be initially set up by the crew of the first appliance at both dwelling fires and road traffic collisions.

There is an opportunity to further scrutinise our performance in respect of responding to life threatening incidents by considering a further standard based on the second appliance speed of response to life threatening incidents.

Over the last 5 years ESFRS has attended 99% of all incidents within its Service boundary within 20 minutes. In recognising the potential for spate conditions, there is an opportunity to set further attendance standards to all incidents within the Service boundary.

**See recommendation 5**

10. There is an opportunity to improve the sequence in which we mobilise appliances in an effort to ensure the most appropriate appliance is sent, by using average turnout times to calculate the quickest appliance likely to arrive at an incident address, instead of using generic times based on shift type. Currently ESFRS mobilises appliances on the basis of:

- 1) Nearest fire station then
- 2) The fire station in whose station area the incident occurred then
- 3) Wholetime crewed appliance over a retained crewed appliance

It is accepted that the differences in turn out times related to shift system (retained, day crewed, and shift) are fully accounted for within existing mobilisation arrangements.

**See recommendation 6**

## **ESFRS Staff**

11. The current Day Crewed Duty System creates a disincentive to day crewed staff pursuing transfers to wholetime shift or specialist roles and promotion to supervisory and middle manager roles, as this would, in many cases, result in a reduction in overall remuneration. This has the effect of reducing opportunities for organisational learning through development of staff into different roles and reduces opportunities for individuals to gain further experiences i.e. the current system significantly limits the opportunity for staff at other locations transferring to any of the 6 day crewed stations, as they would be required to live close to the fire station.

The rural review has concluded that consideration should be given to different crewing arrangements from those currently in place, which would not require Service housing or allowances to be provided. Alongside the significant benefits that would come about through greater employee flexibility, there would be annual revenue savings as a result of no longer having to pay allowances to staff and capital assets will also be released through no longer providing Service houses. These changes can be achieved with no impact upon overall service delivery and attendance standards.

**See recommendation 7**

12. There are three Retained Duty System stations which have been identified as having extremely low response activity. Each of these stations has been assessed on the basis of:

- Their contribution to overall Service resilience
- The availability of the appliance(s)
- The risk profile of the communities within the fire station ground
- Incident history
- Neighbouring fire station and appliance capability

If these stations were to be closed, current Service attendance standards would continue to be met. However, keeping these stations and appliances operational at certain times during the 24 hour period would be beneficial to the overall resilience of the Service. Recruiting sufficient personnel to crew appliances at these stations during the day continues to be a significant challenge and, therefore, the available resources should be used more effectively. This can be achieved by setting a more appropriate period during which crew members are required to provide cover, therefore increasing the likelihood of enough crew being available. This will benefit those RDS personnel who make themselves available but are unable to respond to incidents due to there being insufficient staff available to fully crew the appliance. Analysis suggests that this period is likely to be during the evening / night time.

**See recommendation 8**

13. The findings within the rural review do not negatively impact on or contradict the work that has already been undertaken in respect of selective alerting.

### *ESFRS Incidents*

14. There is a need to reduce the number of unwanted activations of fire detection systems in the rural area and it is acknowledged that this requirement is being comprehensively addressed through the development of the Arson and Incident Reduction team (AIRT) and investment in an Automatic False Alarm (AFA) Manager. Persistent offenders still account for a significant percentage of total false alarms.

**See recommendation 9**

15. The type and frequency of incidents vary significantly across the rural area. Station specific profiles have been created for each fire station to provide information on these differences and highlight the risks associated with the different communities in each area.

### *ESFRS Special Risks*

16. There are a small number of high risk commercial premises within the rural areas and those that are present are well known to the Service and are subject to the appropriate information collection, dissemination and access systems that are now embedded within the organisation.

17. Although there are some potential housing development projects proposed within East Sussex, it is envisaged none of these will significantly increase the risk profile of the fire station areas in providing a response to those developments. It can be concluded that these proposed developments would not require a redistribution of ESFRS resources on the basis of addressing an enhanced risk.

18. Wildfire, Sites of Special Scientific Interest (SSIs) and animal rescues do not represent a high risk to the community with most of the open air fires being heath and grassland and incidents involving animals being relatively few and evenly spread throughout the rural area. Flooding incidents pose a higher risk in terms of implications on service delivery in the event of wide-scale flooding. ESFRS has a dedicated Emergency Planning Officer who continuously reviews the threat of flooding and the associated risks and the Service has a number of business continuity plans and policies in place to ensure service delivery is maintained. Flooding incidents are likely to continue with an increase both in frequency and scale as climate change leads to more extreme weather conditions.

### *ESFRS Financial Issues*

19. The finance provision in the rural area, in proportion to the population, is broadly equitable, even though service provision is not solely based upon population served but covers risk as well as overall Service resilience.
  
20. There are significant variations between the costs of retained fire stations compared with day crewed fire stations, although it is likely that a mixed provision will always be needed to meet the demands of particular localities for the foreseeable future.
  
21. Efficiency savings continue to be made right across the Service but the costs identified do not present any particular cause for concern.
  
22. The cost savings that could be realised through allocating current ESFRS resources more effectively in the areas identified as a result of this review will not serve to address the £2 million savings that ESFRS may potentially be required to save over the next 3 years.

### *ESFRS Investment*

23. Although this is a rural review it is important to recognise the potential impact any changes may have on the urban area and it is envisaged that further smaller, specifically tailored, reviews will be required. For example, the impact of the potential developments around the proposed Bexhill and Hastings Link Road.

**See recommendation 10**

24. Allocating resources more cost effectively allows any potential savings to be considered for re-investment in the same or different parts of the organisation to provide a net improvement in the service delivered to the public. This reinvestment should be considered on a risk priority basis to achieve the greatest improvement in service delivery.

**See recommendations 11 & 12**

### *ESFRS Monitoring Change*

25. There is now an opportunity to review existing performance indicators to ensure they are still fit for purpose. Any changes following this review may result in additional performance indicators being established to allow the Fire Authority to scrutinise and review the subsequent effect.

# Recommendations

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## ESFRS Vulnerable Individuals / Communities

1. Further develop the Community Safety strategy (as detailed in the Integrated Risk Management annual action plan 2006/07) and adopt a new HSV targeting methodology by combining risk information from a number of sources (FSEC, IMD, Mosaic). Vulnerable people in low risk communities should now be further prioritised by the distance they are from the fire station and, in particular, those that fall outside our current attendance standards should attract prioritised ESFRS prevention support. Through key partnerships the Service should now seek to identify those individuals that are likely to become vulnerable and make a timely intervention with prevention advice and support.
2. Further enhance the ability of fire station personnel to manage and prioritise their community safety activities by developing an interactive system, based on the above methodology.

## ESFRS Resources – Fire Stations & Station Administration Areas

3. Due to the housing developments in the Peacehaven area, the identified flood risk and local demographics, seek to relocate Newhaven community fire station taking account of the risk profile of the locality.
4. Due to the flood risk currently identified, relocate Lewes community fire station taking account of local demographics and risk profiling

## ESFRS Resources – Fire Appliances

5.
  - a. Set a more challenging attendance standard for the first appliance to life threatening incidents as follows:

**Current standard:**            *50% of calls within 8 minutes*  
*90% of calls within 13 minutes*

**Proposed standard:**        *60% of calls within 8 minutes*  
*90% of calls within 13 minutes*

**AND / OR**

- b. Set attendance standards for the second appliance attending life threatening incidents as follows:

**Proposed standard:**      *50% of calls within 8 minutes*  
*80% of calls within 13 minutes*

**AND / OR**

- c. Set a further attendance standard for the first appliance to all incidents attended by ESFRS within its service boundary:

**Proposed standard:**      *95% of calls within 20 minutes*

6. Seek to further enhance and optimise attendance times by refining the method of setting pre-determined attendances, basing them on the average turnout time associated with each specific pumping appliance and ensuring that the most timely response is made to all life threatening incidents.

**ESFRS Staff**

7. Amend the current Day Crewed System to a Day Staffed 42-hour Duty System, removing the need for wholetime firefighters to provide the current 96 hours of duty. There is an opportunity to change the current system whilst maintaining operational performance, with no impact upon overall service delivery and attendance standards, allowing more efficient use of resources.
8. Amend the existing Retained Duty System at Burwash, Mayfield and Herstmonceux fire stations in order to offer improvements in appliance availability, maximise service resilience and release staff from the requirement to make themselves available at times when there are insufficient numbers to fully crew the appliance. It is recommended that the appliances at these three fire stations be available during the evening / night time hours with no immediate cover provided from these fire stations during the day. Further consideration should be given to each of these stations to determine the precise hours when the station and appliance would be declared as available. This is appropriate when considering that, during the day, the current appliance availability for these fire stations is already low, the number of incidents occurring in these areas is also low and sufficient cover can be provided by the surrounding fire station appliances.

### *ESFRS Incidents*

9. Monitor the specific impact of the Arson and Incident Reduction team and AFA Manager on the number of automatic false alarms in the rural communities ensuring the targeting of persistent offenders.

### *ESFRS Investment*

10. Following confirmation of the development of the Bexhill and Hastings Link Road a further review should be undertaken that considers the current resource allocation against the potential changes in community risk profiles across the Bexhill, Battle and Hastings area.
11. Consider the introduction of a further response vehicle at Hailsham fire station which will attend small fires, AFAs and other designated special services. This will require capital investment in the fire station to provide an additional appliance bay and potential improvements in the station facilities.
12. If the decision is taken to change from a Day Crewed System to a Day Staffing System, consideration should be given to an increase in training hours to ensure competence in the use of special appliances.

The above recommendations offer a series of steps that constitute an improvement programme for East Sussex Fire Authority which will ensure the efficient use of existing resources whilst maintaining operational service delivery against agreed performance targets. This improvement programme offers a medium to long-term strategy, which allows the Fire Authority to set clear direction and priorities to establish and sustain the appropriate balance of resources, based on the risk identified within the review.