



Isle of Wight Fire and Rescue Service

SERVICE REVIEW REPORT APPENDIX

A Safe and Resilient Island





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Table of Contents

Introduction.....	3
What we do.....	4
Strategic Partnership with Hampshire Fire and Rescue Service.....	5
The Island Three-Locality Model.....	5
Our Personnel.....	6
Planning Assumption.....	6
Incident Response.....	7
On-Call Firefighter Availability.....	7
Response Standards.....	8
Scenario Modeling.....	8
Island Risk.....	8
Resource Strategy.....	11
Risk and Demand Based Crewing Levels (RAD).....	11
Option 1.....	12
Option 2.....	13
Option 3.....	14
Option 4.....	15
How will we achieve this?.....	16
Glossary.....	17



Introduction

This appendix document sets out to identify Isle of Wight Fire and Rescue Service (IWFRS) current position and how we utilise our people and our assets, along with some of the issues we face. It details how the IWFRS' Service Review project proposes to deliver improvement by reviewing our resource strategy and the way that we utilise our people and assets to better meet the risks.

This document supports the IWFRS' Service Review report, presented to the Isle of Wight Council Cabinet. It has been produced following a programme of engagement sessions with all our staff and a review of the Island's risk and historical incident data. This will help the service best understand IWFRS' current position and the improvements required to deliver a robust, fit for purpose organisation, serving communities of the Island for the future.

As part of the IRMP 2014 to 2020, the IWC approved that by 2020 the IWFRS would:

- Revise and achieve our risk based response standards
- Match our resources to level of risk
- Create capacity through flexible working arrangements to further improve firefighter and community safety
- Increase the use of volunteers to support our work with communities
- Develop resilient response arrangements
- Improve the provision and use of our assets including property with other partners
- Further develop our working arrangements with other key partners

Below we set out the Service proposals to assist the Isle of Wight Council Cabinet in making recommendations to support our future delivery model. We present four options which are evidence-based, utilising relevant data to support our decision making, as well as the risks of each option and the capacity it provides to meet and reduce risk across the Isle of Wight.

We will continue to provide a service, which directly reflects the needs of the Island. This will be linked to the (IWC) corporate plan objectives ([Click here](#)) and the 'Health and Wellbeing Strategy' to reduce Island risk:

- Vulnerable people are supported and protected
- People take responsibility for their own health and wellbeing
- The community feels safe and the Island is resilient
- A financially balanced and sustainable council
- Community needs are met by the best public Services possible

The Service intends to integrate with our blue light partners at a strategic level. We will also actively collaborate in prevention, protection and response activities with all our partners within the localities identified later in this document.

It is IWFRS' intention that our firefighters will respond to medical incidents in partnership with the Isle of Wight Ambulance Service (IWAS). Responding to immediately life-threatening medical emergency calls will be a core part of our business in the future.



IWFRS has a statutory responsibility to integrate and collaborate under the following legislation, guidance and government initiatives:

- Policing and Crime Act 2017 ([Click here](#))
- Civil Contingencies Act 2004 ([Click here](#))
- Joint Emergency Service Interoperability Programme (JESIP) ([Click here](#))

What we do

IWFRS is currently divided into the following Prevention, Protection, Resilience and Response (PPRR) areas:

Prevention

Our aim is to stop incidents occurring by effective working within our communities, particularly with the vulnerable, and in connection with our partners, to better understand risks and how they occur. We want to improve on our prevention activities by understanding risk and collaborating effectively to further reduce incidents, which will support the people of the Isle of Wight in all areas possible.

Protection

We want to improve partnership working with businesses across the Island to protect people from fires and injuries in their homes, at work and on the roads. With an effective locality based approach we will support local businesses, ensuring premises are safe, legal and compliant.

Response

Our staff respond and train effectively for incident response, protecting people within the community. The skills of our front-line staff and equipment they utilise are of a premium, ensuring the impacts of incidents are minimised.

Resilience

We have planned to ensure IWFRS can respond to all reasonably foreseeable events. Working within our Local and Island Resilience Forums we provide emergency response plans for Island infrastructure as well as working with significant risk owners to minimise the impacts of incidents.



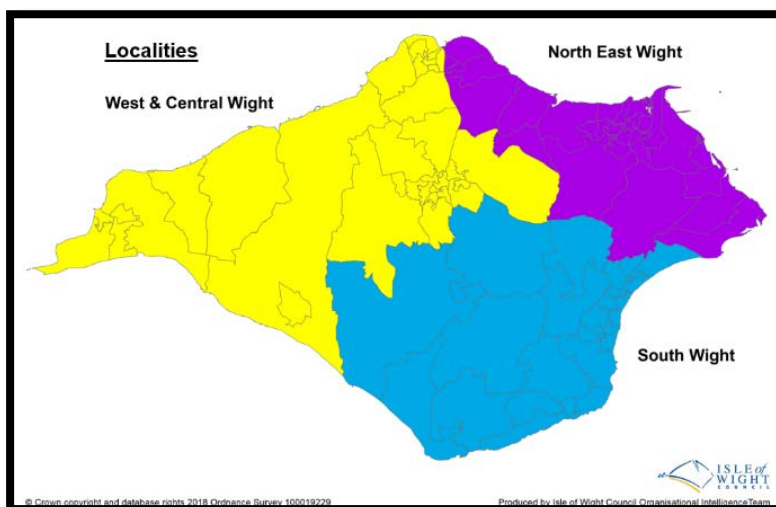
Strategic Partnership with Hampshire Fire and Rescue Service

The proposals for the future delivery model must take into account the current Strategic Partnership Agreement with Hampshire Fire and Rescue Service (HFRS). Any future delivery model will assume that the partnership will continue to be in place for the foreseeable future. The following areas of IWFRS are provided by or managed through the partnership by HFRS:

- Strategic leadership
- Control and mobilisation
- Training delivery and support
- Operational assurance
- Fleet and Equipment
- Health and Safety

A simultaneous strategic project is considering the potential for the extension of the existing Hampshire, Southampton and Portsmouth Combined Fire Authority to include the Isle of Wight. IWFRS Service Review has been conducted independently of the Combined Fire Authority project.

The Island Three-Locality Model



Currently IWFRS operates within two locality areas, those being the East and West Localities. The diagram opposite illustrates the Service's intention to move to a three-locality model:

- West & Central Wight
- North East Wight
- South Wight

This three-locality model assists in collaborating with our partner organisations in the NHS, Public Health, Hampshire Constabulary and the third party sector. Our teams will work within Integrated Locality services to drive down risk across the Isle of Wight. This will further support the IWC 'One Public Service' vision to progress a collaborative approach in accordance with our statutory requirement under the Policing and Crime Act 2017 to further reduce Island risk, now and in the future.



We will adjust our service structure to operate effectively within these three-locality areas and support the future operational response model. Locality working with our partners enables intelligence sharing across organisations. This can be achieved through the Integrated Locality Hubs which are being developed to support the Care “Close to Home” scheme by Adult Social Care. These hubs will also assist with Safeguarding intelligence held by our partners.

Our Personnel

Immediate response firefighters

Immediate response firefighters are employed on a full-time contract at their respective fire station. On activation of the station turn-out system the duty crew will mobilise the fire engine in less than 90 seconds providing an immediate response to any incident. Immediate response stations are therefore situated within areas of greater risk or a higher likelihood of incidents occurring.

On-call firefighters

On-call firefighters are members of their local communities, employed on a retained contract for specified times of the week, who carry an alerter that will notify them of an incident. On activation of the alerter they have six minutes to respond to the appropriate fire station and mobilise the fire engine. As these firefighters respond from their home or workplace, they cannot provide the immediate response detailed above.

Support staff

Frontline crews are supported by our professional team and officers, who play a vital role in service delivery. This includes training, youth and community engagement, fire investigation, as well as fleet and equipment maintenance.

Planning Assumption

Our planning assumption shows what resources we need on the island. It has been developed to ensure we plan for what is perceived through our incident and risk data to be our **minimal operational resilience requirements**. We will plan to enable managing these incidents in a safe and effective manner for a minimum of four hours. When looking at our risk and data it was determined as reasonable to assume that we could expect simultaneous incidents to occur. The details of the simultaneous incidents are as follows:

***Incident 1** - A fire incident which would require a minimum attendance of 26 personnel for four hours*

***Incident 2** - A road traffic collision with persons trapped, involving more than one vehicle or with more than one person to be rescued, requiring a minimum attendance of 11 personnel for two hours*

This assumption should form the minimal requirements in relation to operational response on the Island at any given time.



Incident Response

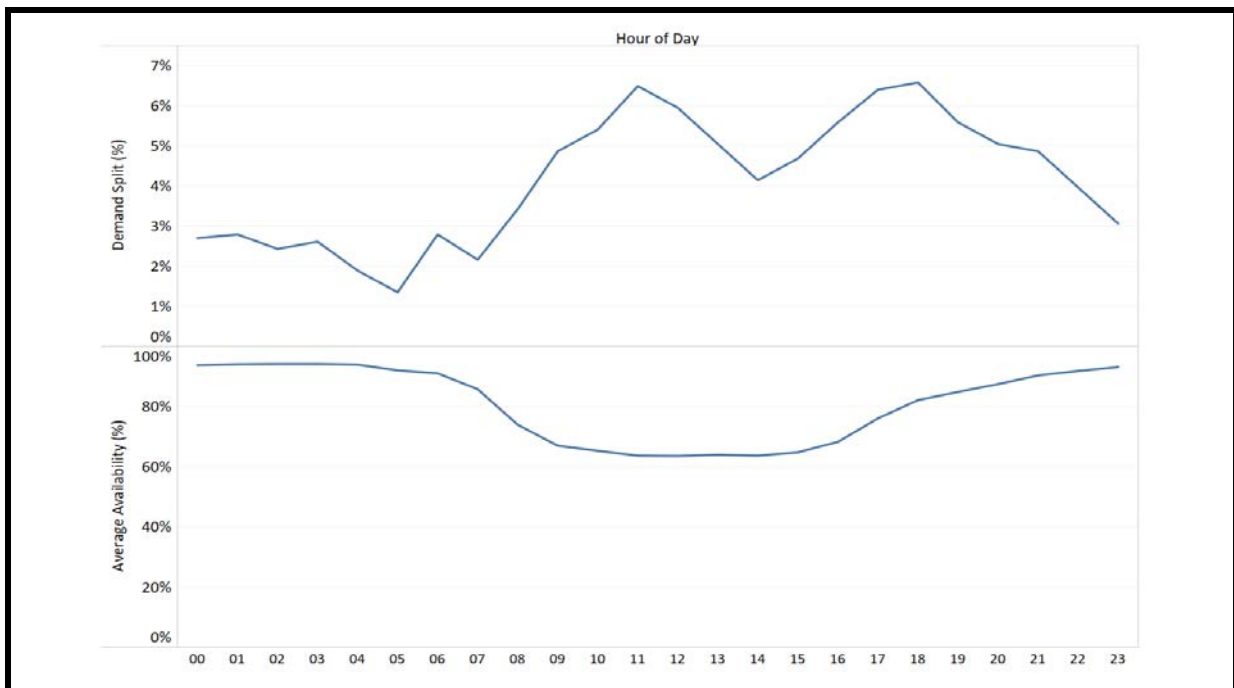
IWFRS call handling and mobilisation function was moved to Hampshire Fire and Rescue Service (HFRS) as part of the Strategic Partnership in April 2017. As part of this move IWFRS aligned the way in which we allocate our resources with the Network Fire Service Partnership, which serves to mobilise fire service resources within the partnership for Devon & Somerset, Dorset & Wiltshire, as well as Hampshire and the Isle of Wight. This means that the response to any incident within the partnership area will be standardised.

Response to incidents is not based on numbers of fire appliances but on numbers of personnel required to resolve each incident. This ensures there are safe systems of work and effective command structures in place at all incidents.

On-Call Firefighter Availability

We are aware that some of our on-call firefighters have difficulty attending calls during the working hours of the day due to primary employment commitments. The Service recognises that we have historically imposed constraints on the workforce through our policies and procedures, restricting their availability.

We will review the on-call system to ensure that we utilise their availability regardless of their location on the Island. We want to utilise technology to better enable the Service to locate, assign and mobilise our on-call firefighters. This work will serve not only to increase the availability of on-call firefighters, but also offer resilience to the Service for larger, more protracted incidents.



The previous diagram shows the average periods of low resilience compared to higher levels of demand on the Service that will be addressed within IWFRS Service Review.



We will better meet the demands on the Service whilst performing effectively against our response standards by making adjustments to our processes for our on-call firefighters. We will also utilise our immediately available firefighters in a more effective way at the times when they are required.

Response Standards

Our response standards dictate how we best position and utilise our resources across the Island. The future delivery model will ensure we continue to meet our current response standards as detailed in the table below.

INCIDENT TYPE	WITHIN	TARGET
Critical Incidents	10 Minutes	80%
Non-Critical Incidents	20 Minutes	95%

Critical Incidents are emergencies where it is believed lives and property are most at risk at the time of call. These are usually building fires or road traffic collisions.

Changes to the delivery model will seek to improve on those response standards. The details of how this will be achieved will form part of our future Integrated Risk Management Plan (IRMP).

Scenario Modelling

IWFRS enlisted an external organisation to complete an independent, evidence-based review of the operational response model for IWFRS. The final report produced contains an analysis of IWFRS current operations including the last full five years of incident data. It also contains the outputs from the scenario evaluation stage of the project which comprised testing a range of operational response situations. This work has helped IWFRS understand its fire risk as well as demand from Incidents.

Island Risk

Island risk has been considered for all options within this document and can be effectively reduced in some of these options by utilising our available resources to support prevention activities. We will use intelligence from our partners and existing Service systems to ensure the future Fire and Rescue Service is not solely based on historical demand.



The IW council's Joint Strategic Needs Assessment (JSNA) ([Click here](#)) paints a picture of local needs so we can work together to improve lives for the residents of the Isle of Wight. It assists the Health and Wellbeing Board to develop an over-arching Health and Wellbeing Strategy for the Island, based on the needs of residents.

Our future prevention and protection work will ensure we focus on intelligence led strategy linking with our partner organisations. It is important that our work to understand and reduce Island risk also prioritises areas such as life risk, local infrastructure and businesses, as well as heritage risk, to support the Island community and business continuity.

Prevention and Protection activities will be delivered through our Community Safety Strategy. Five key areas will form our strategy to reduce Island risk:

- Community Safety
- Road Safety
- Business Fire Safety
- Locality-based partnership working
- Income generation/collaboration opportunities

Fires

Our fire fatality data from 2011 – 2017 indicates that those who died in fires were aged between 67 and 82 years of age. They were living in their own home either alone or with an elderly relative.

The likelihood of an individual becoming a victim of fire and requiring intervention by IWFRS is influenced by key factors. These are:

- Smoking
- Drug and alcohol use
- Age
- Mental health
- Social engagement

The above areas all feature in the public health areas for concern detailed below.

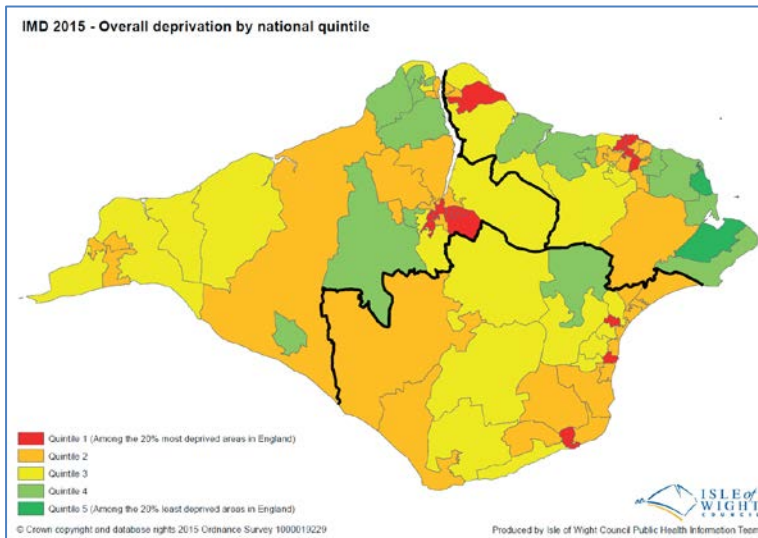
Road Traffic Collisions

One of our key performance measures is to reduce the number of people (including children) killed or seriously injured (KSI) in road traffic accidents. This remains a significant risk to the Island's community. We have therefore considered the need for collaborative prevention and response activities within our locality model to develop a strategy to further reduce this risk.

The Index of Multiple Deprivation (IMD) is an overall relative measure of deprivation constructed by combining subjects of deprivation such as Health, Living Environment, Education and Crime.



Social Deprivation



This map shows the IMD Score for each area – a higher score (represented by red) is a more deprived area.

The Isle of Wight has two areas in the 10% most deprived areas in England and 11 areas in the 20% most deprived areas in England.

Children living in poverty, childhood obesity and inequalities in health are a risk within these areas which require intervention.

The Island Health and Wellbeing Board support a “Happy Island Framework”. Through its prevention activities IWFRS will contribute to delivering its three priorities:

- Start Well
- Live Well
- Age Well

The Island has an aging population with 26% of the total population over 65 years old against a 17% average in England. As people get older, the number of Long Term Conditions they experience is likely to increase. By the time someone reaches 65, they are likely to have at least two conditions, and this increases to three or more by the age of 75.

There are various Public Health ‘areas for concern’ where the Island is measured as significantly lower than the national average (Public Health England-Isle of Wight Health Profile 2017) [Click here](#)

- Killed and seriously injured on roads
- Social isolation
- Excess weight in adults
- Smoking in pregnancy
- Admission episodes for alcohol specific conditions (aged under 18 years)
- Smoking prevalence aged 15 years
- Emergency admissions due to self-harm
- Proportion of adults in the population in contact with Secondary Mental Health Services

IWFRS wish to develop targeted initiatives which address and educate against these behaviours, to reduce the prospect of an individual requiring Fire Service or partnership intervention. Using the IW health profile data, we will identify our target audiences and work collaboratively to deliver credible interventions to those who need it at appropriate locations. Where resources permit we will utilise firefighters to assist with these initiatives and reduce risk within the locality model whilst maintaining operational resilience across the Island.



Resource Strategy

IWFRS want to ensure that the type of vehicle in which our personnel respond is appropriate and equipped to reflect their local risk. We have explored options for IWFRS regarding the type of vehicle in which our personnel respond and will implement change as we replace fire engines (appliances) throughout our ongoing fleet replacement plan as follows:



Rescue Appliance can carry between four to six firefighters and hold modern technologically advanced equipment to deal with a wide range of rescue incidents, water carrying capacity, and large ladders as well as state of the art fire suppression equipment to assist with firefighter safety.



Intermediate Appliance can carry between two to five firefighters. All Intermediate appliances will have a water carrying capacity; as well as state of the art fire suppression equipment to assist with firefighter safety, large ladders and hold equipment relevant to the risk within their station ground. The number of firefighters on board will depend upon the severity of the incident and other resources may be sent to support them as necessary. The more flexible crewing arrangements will enable our on-call stations to provide a much higher level of availability and improve our response times.

Risk and Demand Based Crewing Levels (RAD)

RAD Level 1	24/7 immediate response (90seconds)
RAD Level 2	Specified duration immediate response (90 seconds)
RAD Level 3	24/7 standard on-call response (6 minutes)
RAD Level 4	Community Hub – no response element

It is important that we resource our stations in a way that effectively reflects their call profile, ensuring relevant personnel are available at the most appropriate times of the day. The Service Review has identified four specific crewing levels (RAD Levels 1 - 4) to be implemented across fire stations on the Island.

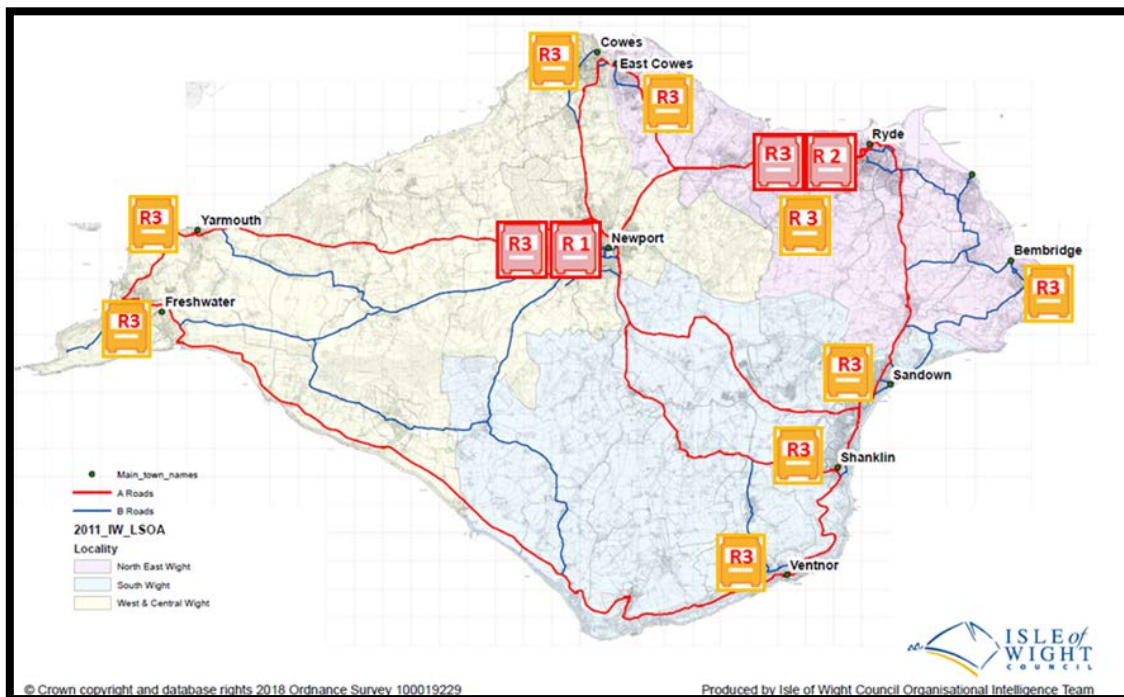
The current and proposed locations of the Rescue and Intermediate Appliances are shown on the maps below with corresponding RAD levels.



The Challenge for IWFRS

- The Island suffers from the inability to rely on immediate cross-border support which is afforded to services in mainland England
- On-call personnel availability – low availability levels during daytime hours
- Immediate response efficiency – current crewing patterns do not fit the demand profile
- Challenge to meet our response standards – the way we currently use our staff makes this difficult to achieve
- Gathering essential risk information – Safety critical information to support our firefighters is not being collated effectively
- Dedicated Community Safety delivery – Resources required to provide this delivery can often affect our operational resilience
- Collaboration – Capacity to fully support collaborative/partnership working does not currently exist

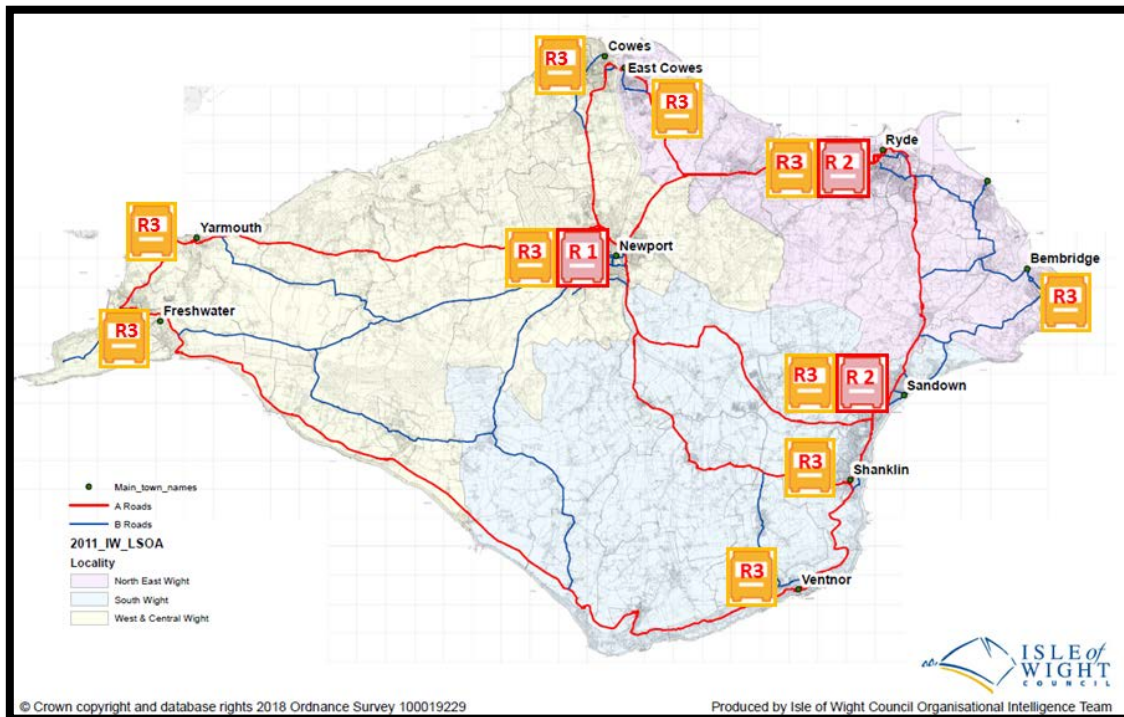
Option 1



- This option reflects a Status Quo
- 13 Fire Appliances positioned across 10 Fire Stations
- 58 immediate response firefighters based at Newport and Ryde
- Newport provide a 24-hour fire appliance and specialist appliance 365 days a year **(RAD Level 1)**.
- Ryde provide a 'Day-Crewed' fire appliance and specialist appliance Mon-Fri 09:00- 17:00 immediate response **(RAD Level 2)**. On-call at all other times **(RAD Level 3)**.
- All 10 fire stations have an on-call capability with a total workforce of 115 staff **(RAD Level 3)**.



Option 2

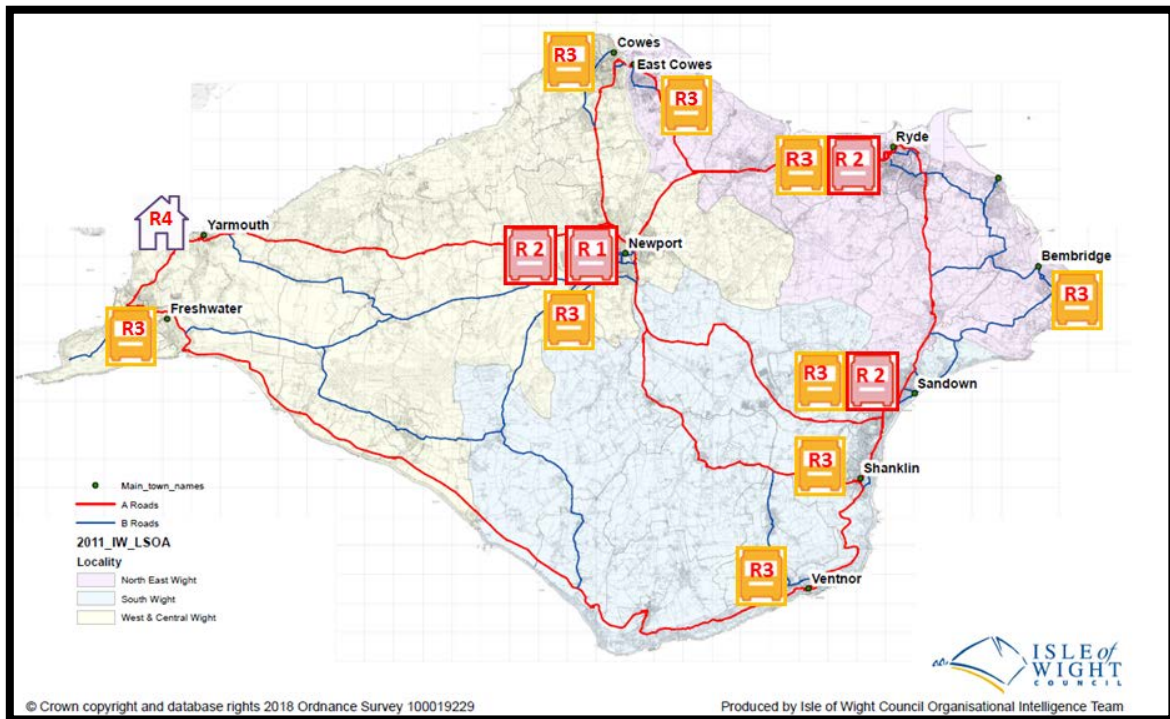


- 58 Immediate response fire fighters based at Newport, Ryde & Sandown
- Newport crew will provide a 24-hour fire appliance 365 days a year (**RAD Level 1**)
- Ryde station will provide a fire appliance 12 hours a day, 7 days a week immediate response (**RAD Level 2**). On-call at all other times (**RAD Level 3**).
- Sandown station will provide a fire appliance 12 hours a day, 7 days a week immediate response (**RAD Level 2**). On-call at all other times (**RAD Level 3**).
- All fire stations will have on-call capability with a total of 115 staff (**RAD Level 3**)

What we will achieve	
No reduction in workforce numbers	Increased fire cover during daytimes
Capacity to cover unexpected crewing shortfalls	Ability to consider revenue streams via community safety work
Appliance disposition fits with Multi-Agency/Public Health working	Potential Capacity to provide a form of medical response in the future.
The risks	
Significant recruitment required for on-call firefighter to replenish current establishment	Additional training required for on-call firefighters
Reliance on on-call firefighters when immediate response firefighters reduce at night	Reduced crewing of four firefighters on RAD Level 2 stations



Option 3

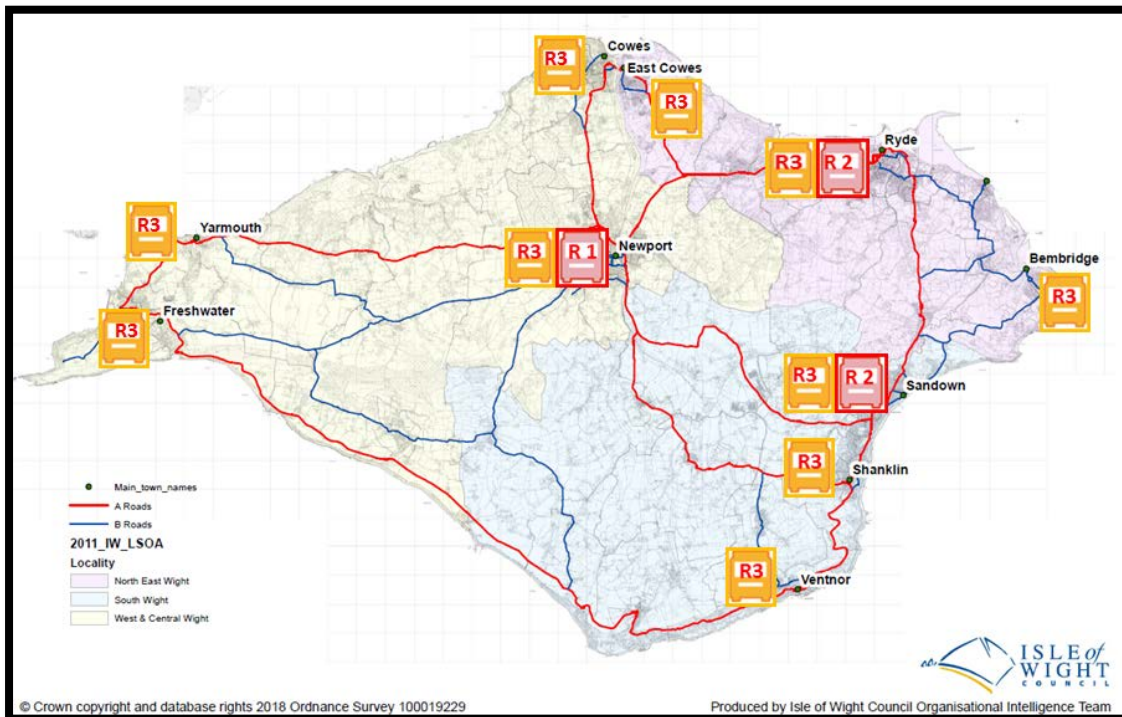


- 13 Fire Appliances positioned across 9 fire stations
- 58 immediate response firefighters based at Newport, Ryde and Sandown
- Newport station will provide a 24-hour fire appliance 365 days a year (RAD Level 1) and an additional fire appliance Mon-Fri 0900-1700 (RAD Level 2)
- Ryde station will provide a fire appliance 12 hours a day, 7 days a week immediate response (RAD Level 2). On-call at all other times (RAD Level 3).
- Sandown station will provide a fire appliance 12 hours a day, 7 days a week immediate response (RAD Level 2). On-call at all other times (RAD Level 3).
- All 9 fire stations will have an on-call capability with a total workforce of 100 staff (RAD Level 3).

What we will achieve	
Locality focussed risk management which will support “One Public Service” vision	Ability to support the delivery of the IWC Health and Wellbeing Strategy and IWC Corporate Plan
Capacity to deliver collaborative partnership schemes within Locality areas	Improvements in fire cover across the Island 7 days a week
Development and support of income generation activities	Ability to provide Medical Response capability
Enhanced capacity to verify legislative compliance and support Island businesses	Establishment levels support operational resilience
The risks	
Reliance on On-call availability when immediate response firefighters reduce at night	Minimum crewing of 4 per appliance at night required to maintain planning assumption
Public concern with no response element from Yarmouth Fire Station	Additional training burden for some on-call firefighters
Single points of failure throughout the Service	



Option 4



- 13 Fire Appliances positioned across 10 fire stations
- 50 immediate response firefighters based at Newport, Ryde and Sandown
- Newport station will provide a 24-hour fire appliance 365 days a year (RAD Level 1)
- Ryde station will provide a fire appliance 12 hours a day, 7 days a week immediate response (RAD Level 2). On-call at all other times (RAD Level 3).
- Sandown station will provide a fire appliance 12 hours a day, 7 days a week immediate response (RAD Level 2). On-call at all other times (RAD Level 3).
- All 10 fire stations will have an on-call capability with a total workforce of 110 staff (RAD Level 3).

What we will achieve	
No Station Closures	Improvements in fire cover across the Island 7 days a week that matches resource to risk
Development of some income generation activities	Establishment levels support operational resilience
Ability to provide medical response	Locality focussed risk management which will support “One Public Service” vision
The risks	
Reliance on on-call firefighters when immediate response firefighters reduce at night	Minimum crewing of 4 per appliance at night required to maintain planning assumption
Reduced capacity relating to option 3 to deliver partnership schemes within Locality areas	Additional training burden for some on-call firefighters
Staff to deliver medical response scheme will be utilised from other department areas	Reduced ability relating to option 3 to support the IWC Health Wellbeing Strategy/Corporate Plan
Single points of failure throughout the Service	Sustaining delivery of income generation activities



How will we achieve this?

The delivery of our service will be re-designed, with staged plans for implementation over the Short, Medium and Long term. The outcomes of these changes will improve our service delivery for the future and ensure a more effective and efficient Fire and Rescue Service, better suited to modern day Island communities.

Short Term (within the first year)

- Service re-structure
- Initial improvements to our on-call firefighter availability
- Develop 'New ways of working' (Paggers, shift patterns, operational response)
- Support and develop Island 'Wellbeing' through prevention

Medium Term (within three years)

- Technology to further support on-call firefighter availability
- Develop and Implement our resource strategy effectively, based on risk
- Understand and effectively reduce Island risk further
- Medical response provision (Option 1)
- Contribute to the 'One-Public Estate' programme
- Development and support for One Public Service
- Consideration for Co-location with other emergency services (Blue Light Hubs)

Long Term (Five years +)

- Contribute to the 'One-Public Estate' programme
- Consideration for Co-location with other emergency services (Blue Light Hubs)
- Development and support for One Public Service



Glossary

24/7	24 hours a day, 7 days a week
AFA	Automatic fire alarm
Appliance	Term for our fire engines
Availability	Term used for on-call firefighters being able to respond to operational incidents
Crew	Team of firefighters
Fire cover	The area where a fire appliance can respond to within our response standards
Full time fire fighter	Fire fighters that are employed on a fulltime basis of 42 hours a week.
HFRS	Hampshire Fire and Rescue Service
Immediately available	A fire engine mobilises to an incident within 90 seconds
IWAS	Isle of Wight Ambulance Service
IWC	Isle of Wight Council
IWFERS	Isle of Wight Fire and Rescue Service
KSI	Killed or seriously injured
On call firefighters	Previously referred to as Retained Duty Firefighter (RDS)
PPRR	Prevention, Protection, Response and Resilience
RAD Level	The level of crewing required based on risk and demand