

MERSEYSIDE FIRE AND RESCUE AUTHORITY

MEETING OF THE

SCRUTINY RAPID REVIEW – OPERATIONAL RESPONSE

9 MAY 2019

MINUTES

Present: Cllr Sharon Connor (Chair) Councillors Anthony Boyle, Peter Brennan, Janet Grace, Andrew Makinson, Lisa Preston, Lesley Rennie and Paul Tweed

Also Present:

Apologies of absence were received from: Cllr Roy Gladden and Cllr Steff O'Keeffe

1. Operational Response Scrutiny Review - Use of FIRS Software in the Decision Making Process

Members were provided with a detailed presentation in response to a request from Members to scrutinise the use of Fire Incident Response Simulator (FIRS) Software, in the decision making process around Operational Response matters.

The Area Manager for Operational Response – James Berry, informed Members that the request for this scrutiny review had come out of the presentation previously provided to the Scrutiny Committee, around an overview of the Operational Response function and discussion around why our fire appliances and Community Fire Stations are where they are.

They were advised that the purpose of this review, is to provide Members with re-assurance that the decisions made with regards to operational response matters, are based on robust data; and to provide Members with an opportunity to probe further into how response proposals are devised.

Members were informed that many Fire & Rescue Services often make decisions and changes; and then reflect on those changes after implementation, to determine if they were good decisions or poor decisions. However, by using the FIRS Software, MFRA are able to use modelling to predict the potential impact of a proposed change before it is made. They were also advised that for nearly every change made, when the predicted results are compared to the actual results following implementation, we are usually in a better position than predicted.

Members were introduced to Paul Terry and Rob Hanson from the Strategy & Performance Directorate, who manage and use the system on a daily basis.

Members were provided with some background information regarding Process Evolution – the company who designed Fire Incident Response Simulator (FIRS) and a range of other systems utilised by MFRA; and used to formulate proposals for the IRMP. Members were informed that MFRA were Process Evolution's first customers back in 2004; and we have continued to work with them ever since. They were also advised that the vast majority of emergency services, now utilise systems provided by Process Evolution.

Members were informed of the range of evidence based tools, provided by Process Evolution, which are used to help MFRA optimise where, when and how resources are deployed.

With regards to FIRS, Members were informed that it is loaded with 3 years' worth of data, including data for when appliances were not available. It is also loaded with the locations of stations and appliances, information regarding shift patterns, boundaries; and response standards.

Members were advised that FIRS also integrates with Maptitude mapping software; and Simul8 – which is the tool that runs simulations using the historical data, to predict future performance.

The presentation provided Members with an example of outputs from the software, demonstrating that the outputs can be displayed in graphical format that is easy to interpret.

The presentation then went on to explain the maintenance process for the FIRS system. Members were informed that at the start of each financial year, the system is loaded with the previous years' data; and the oldest data set is removed. A data cleansing process is also undertaken and data sets updated where required, for example to capture any station duty system changes.

Members were advised that following this process, Process Evolution will update the mapping and simulation software and calibrate FIRS to produce a base-case model, which can then be used for comparison purposes. This enables changes to stations, appliances, shift patterns etc.... to be made in a virtual environment; and simulations run to create predictions, with five simulations run to obtain averages.

Members were also informed that incident categories are set in the system, along with an attendance standard for each incident type. They were advised that at present, these are only set as either life risk, or non – life risk incidents.

The presentation explained that appliance details are also contained within the system, including the average mobilisation times for each appliance, along with information regarding shift patterns for each station/ appliance. Members were advised that the shift patterns page within the system, enables changes to be made to shift patterns in a virtual environment, for example for appliances to be converted to retained appliances with a delayed response, or for changes to shift times to be made; and the potential impact of changes to be identified.

Members were informed that with regards to the 10 key stations, when an appliance from a key station is mobilised, standby moves are undertaken to

backfill those key stations, following an ordered process, which is also reflected within the system.

The presentation also highlighted the reserve groups; and reserve pattern pages within FIRS, which enable for example, a 30 minute delay to be set for retained appliances, which are recalled once the number of available appliances drop below 13; and also set the appliances which can be recalled and when.

Members were shown an example of a simulation being run; and were informed that each simulation takes approximately 5 minutes to complete.

With regards to appliance utilisation, Members were informed that the system also shows the amount of time appliances are available, the amount of time they have spent at incidents; and the number of times appliances have been recalled during retained periods.

Members were advised that officers have been looking in detail at the number of standby moves, in an effort to try and reduce the number required. To this end, they have been trialling HALO software, which provides a way of Control staff being able to see resources dynamically on a map, which will hopefully help to reduce the number of standby moves implemented.

A further area highlighted to Members was how the system can be used to provide information regarding response performance, overall and broken down for each station, including average response times and predicted response times based on simulations.

Following the presentation, it was clarified to Members that when consideration is being given to potential changes to the status or location of stations, the relevant information can be put into the system and simulations run, to identify if the changes would be beneficial or not, prior to any physical changes being made.

They were informed that the Authority has set a challenging response standard, which it aims to achieve on over 90% of occasions. Therefore, even minor tweaks can have a significant impact on performance. The system therefore provides assurance that changes proposed represent the optimal disposition of resources.

Questions were raised by Members regarding in year changes within the system, should there be a change to the shift system at a station, or to account for spate conditions, such as the wildfires last summer. Members were informed that officers are mindful of making knee jerk changes in year; and were re-assured that officers have been managing the system in this way for the past 14 years and are entirely comfortable that it operates effectively.

Members were also advised that a record of all simulations is retained, so that there is a comprehensive record of what has been considered, should there ever be a challenge.

Further questions were raised by Members regarding the new Community Fire Station at Saughall Massie; and how Members can be re-assured regarding the

impact of the changes, given that the station has not been open for 3 years, therefore, there is not 3 years' worth of data within the system.

Members were re-assured that when the new station was being considered, a "virtual" station was created within the system, using the geographic location of the site. This virtual station was then used to run a raft of simulations to identify what the impact of the station closures and re-location was likely to be. Mapping software was also utilised to measure the potential impact.

Members were further informed that when looking to build new stations, officers will always seek to find the optimal location in terms of response, however we are restricted regarding the availability of suitable land.

Questions were also raised around EMR and whether data regarding response to EMR incidents is included within the system. Members were informed that at present, the information is captured within the system, but has been deactivated. They were advised that when EMR incidents are included, the demand curve moves forward by approximately one hour, but has no real impact on optimal shift start and finish times. Members were advised that although it has been deactivated within the system at present, it can be re-activated at any time and looked into, if considered necessary.

A further question was raised around the extent to which a significant incident, such as the arena carpark fire, can skew performance results.

Members were advised that the impact on overall performance is usually minimal, as in the case of the arena carpark fire, the peak of activity took place over a period of approximately 12 hours; and 12 hours across a reference period of around 1,000 days, has a minimal impact statistically.

Members thanked officers for the informative presentation and assurance provided.

Members resolved that:

The content of the presentation, be noted.

Close

Date of next meeting Date Not Specified