AGENDA ITEM:

MERSEYSIDE FIRE & RESCUE AUTHORITY

REPORT TO: MEETING

DATE: 21ST JULY 2011

REPORT NO. CFO/074/11

REPORTING OFFICER: DEPUTY CHIEF EXECUTIVE & DEPUTY CHIEF FIRE

OFFICER

CONTACT OFFICER: AREA MANAGER MOTTRAM, DIRECTOR OF

PERFORMANCE AND VALUES, EXTN. 4501

EXECUTIVE LEADERSHIP TEAM, WATCH MANAGER KELLAWAY

OFFICERS CONSULTED:

SUBJECT: DYNAMIC RESERVE

APPENDIX 1 TITLE: ANALYSIS OF LPI 60 FAILURES 2008/11

APPENDIX 2 TITLE: PROCESS EVOLUTION

APPENDIX 3 TITLE: EQUALITY IMPACT ASSESSMENT

ATTACHED - HARD COPIES

Purpose of Report

1. To detail the Dynamic Reserve strategy and seek Member approval for its continued development.

Recommendation

2. That Members:

- (a) Approve the dynamic management of our operational resources in order to be more efficient whilst continuing to meet the ambitious Authority emergency response targets through the use of the Dynamic Reserve.
- (b) Note how this approach delivers a significant part of the Authority's budget strategy.
- (c) Approve an extended use of the dynamic reserve by two further support appliances to enable flexibility to help the Authority avoid compulsory firefighter redundancies.

Introduction & Background

- 3. The landscape within which MFRA now operates is substantially different to that which existed during the 1980's and 1990's. This has largely been achieved by proactive decisions made by the MFRA across the last decade, changing the way the Service operates. As Members are aware, the number of fire deaths in Merseyside has reduced from 17 in 2000 to just 5 in the last year, accidental dwelling fires have been reduced by half over the same period and 93% of all dwelling fires are confined to the room of origin.
- 4. The Service responded to approximately 37000 incidents in the year 2000 but just 22,000 incidents last year 2010 a reduction of 15,000 (60%).
- 5. MFRA sets and meets one of the most challenging emergency response standards in the UK and MFRA consistently provides one of the highest performing Services in the UK with regard to emergency response. This was specifically highlighted during 2010 when MFRA was audited under a Peer Assessment led by a Chief Fire Officer and a team of Fire Sector competent Councillors and Officers from across the UK. The peer review team said of the Service.

"The service has some of the most challenging response standards in the country and is meeting these standards.

The consistently good response performance is complemented by dedicated Urban Search and Rescue and Marine Rescue teams which are well trained."

"The service also puts the training and safety of its operational crews at the centre of its approach to delivering an operational response.

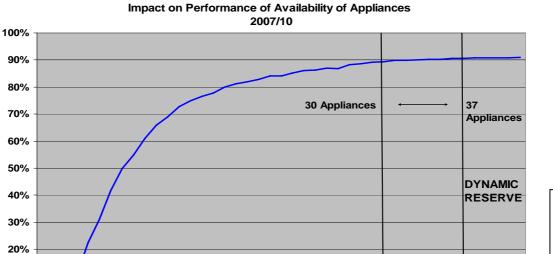
Training is extensive, realistic and well regarded by crews. Health and safety runs through everything the service does.'

- 6. The Operational Assurance Assessment confirmed and assured the Authority that Merseyside Fire and Rescue Authority is a high performing FRA that delivers real improved outcomes to its communities.
- 7. In recent years, the Service has become more efficient with its crewing arrangements and introduced the concept of a 'Dynamic Reserve'. This recognises that there may be occasions due to unexpected/excessive sickness, excessive numbers of firefighters on non operational duties as a result of injury or illness or industrial action such as an overtime ban, where there may not be sufficient crews for all frontline appliances. On a selective basis, one or more (up to 5) fire appliances are placed in a dynamic reserve whereby they remain available on a delayed recall should the Service experience unprecedented demand. This approach has seen no detriment in performance and is well established.

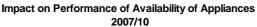
8. In these difficult financial times, however, the Authority has agreed to plan for the use of the dynamic reserve on an increasing basis. The following rationale will demonstrate how that efficiency can be realised whilst still delivering an exceptional standard of service and emergency response to our communities.

Rational for implementation of the Dynamic Reserve

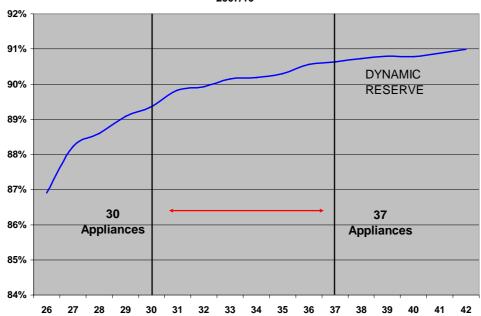
- 9. The Authority sets out its performance standards for response to property fires and expects to meet these standards on 90% of occasions. Over the last three years our combined performance against these standards was 92.8%. It should be made clear that the remaining 7.2% 'failures' to meet the standard are not catastrophic delays. In fact, the average 'failure' was just 87 seconds over the response standard and 75% of failures fall within 1 minute 56 seconds of the standard. An analysis of these incidents is included in Appendix 1.
- 10. MFRA has used its own historical incident data to run a comprehensive number of simulations/scenarios of our response, and the effect that changes to the number of immediately available appliances might have on our achievement of the 90% standard set by the Authority. For a number of years, the Service has been able to run this computer model that has been continuously refined to give a high degree of accuracy (see Appendix 2). These simulations have been extensively run (leading to them encompassing approximately sixty four million permutations) by removing one appliance at a time. The following is an analysis of what performance would have been from April 2007 to March 2010 for a specified number of appliances from 0 42 using the same profile of rescue, support and other types of appliances as we currently use.
- 11. Using the computer simulation model, the graph below shows the number of appliances across the bottom from 0 42 and the percentage of our response along the side from 0% 100%.
- 12. By way of example, if the Service had just 4 appliances it would achieve the Authority's response standard approximately 20% of the time.
- 13. From the graphs it can be seen that the Authority could achieve its 90% response standard with just **32 appliances**. The additional 10 appliances from 32 to 42 contribute just 1% to the overall response performance. The final 5 appliances 37 to 42 show a negligible change in performance.
- 14. The five appliances that constitute the dynamic reserve are clearly indicated and this becomes clearer to see on the second graph which is a zoom in on the dynamic reserve section.



ADD BETWEEN 10 & 30% = eg. 1



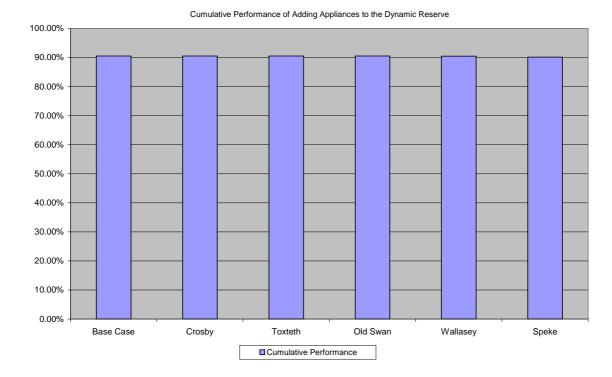
16 18 20 22 24 26 Number of Available Appliances



Dynamic Reserve Proposed Stations

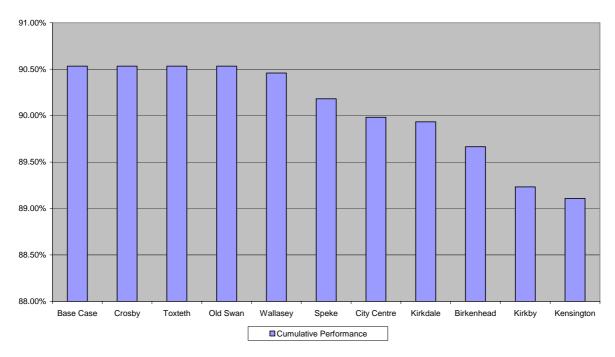
10%

15. The following table demonstrates the predicted cumulative impact of removing support pumps, in accordance with the profile identified through extensive simulation using our commercially available modeling software.



Or since the movements are so small looking detail at the section of the 1st graph between 88-91% shows:-





- 16. Including the first three support appliances in the Dynamic Reserve will have no impact on performance at all. It is only when we make the Dynamic Reserve up to 4 appliances by adding Wallasey that we see any detrimental impact on performance and that is by 0.07%. Then by adding Speke's support pump to make the Dynamic Reserve 5 appliances, the total cumulative impact on performance is a predicted reduction of 0.35%, which at 90.18% is still above our target of 90% attainment.
- 17. Although the model can predict and measure such small deviations, it is highly unlikely that we would be able to identify or measure this impact within actual LPI 60 performance figures in the future.
- 18. As can be seen above, there is little difference when choosing 5 pumps for the Dynamic Reserve but the stations which are predicted to have the least detrimental effect are:
 - Crosby
 - Toxteth
 - Old Swan
 - Wallasey
 - Speke

Staffing

19. The achievement of the dynamic reserve would be managed through natural wastage. There would be ongoing monitoring, audit and review of performance as these changes occur to ensure that this transition is smooth and incremental.

Recall to duty

- 20. The Dynamic Reserve maintains appliances available for deployment through recall to duty.
- 21. Procedures for recall to duty have been tested this year and proven effective. This was a recall of operational firefighters (in line with the Grey Book) and could be employed by the Service if required at very short notice.

Additional measures that contribute to reassurance

22. There are a range of activities that contribute to the decision to implement the Dynamic Reserve. For example the implementation of the Small Fires Unit has allowed rescue appliances to be available more of the time as secondary / small fires are dealt with by these dedicated units at identified peak periods. The introduction of the fire bikes is innovative and groundbreaking development building upon the idea of the SFU and again will increase the availability of rescue appliances. The Authority will also be asked to consider in the near future a progressive Automatic Fire Alarm Policy. The Service is in the process of fundamentally reviewing the way it responds to AFA incidents that has the potential to significantly reduce the disruption to both businesses and the community. This more progressive approach to AFAs could offset the estimated fall in performance of 0.35%.

- 23. By the Authority investing in one of the most modern mobilising systems in the country, Mobilising and Communications Centre (MACC) is able to identify the location of an appliance within a metre of its location through Automatic Vehicle Locating System (AVLS). MACC is also able through our Vision Boss system to dispatch the closest appropriate appliance to any incident and allows the Service to ensure dynamic movement of appliances to ensure fire cover is appropriate to maintain our response times across the Service.
- 24. We maintain our traditional cross border agreements with neighbouring Fire & Rescue Authorities (as required in sections 13, 16 of the Fire & Rescue Services Act 2004) should the operational need for supporting appliances be required.
- 25. Members will appreciate that there can be fluctuations in staffing even within the most sophisticated plans. They will also be aware of the Authority's ambition to do all it can to prevent compulsory redundancies which is why it has instructed the Chief Fire Officer to halt the filling of vacancies except in exceptional circumstances. There is also flexibility provided by part time Firefighters and those agreeing to work bank hours. Members are asked, therefore, to approve the extension of the dynamic reserve by a further two support appliances for those occasions of unusual staffing shortfall and note the limited impact on Authority performance against its response standard.
- 26. The groundbreaking proactive work that MFRA has pioneered in its community fire safety initiatives has resulted in the Authority in the last twelve months having the lowest numbers of fires and fire deaths on record. During the same period we have also seen injuries to staff fall to a record low level which is a testament to the preparation and skills of our operational crews.

Conclusions

- 27. The proposal for the dynamic reserve is a significant step towards realising efficiencies at a time of Government austerity with a negligible impact in frontline response.
- 28. The Dynamic Reserve helps to ensure that firefighters positions are removed and not replaced whilst the opportunity exists through retirements - therefore potentially preventing or reducing the need for compulsory firefighter redundancies in the future.
- 29. The Dynamic Reserve allows the Authority to keep pumping appliances available for deployment on a standby basis should they ever be required and maintain flexibility for crewing.

Equality & Diversity Implications

30. A full Equality Impact Assessment has been completed and is attached as Appendix 3 for Members to consider in making their decision.

Financial Implications & Value for Money

31. The implementation of the dynamic reserve will deliver the budget savings of £2.95 million. It should be noted this saving will not be fully delivered until 2013/14 by natural turnover rates.

Health & Safety and Environmental Implications

32. Health & Safety to comment.

Contribution to Achieving Our Purpose:

"To Make Merseyside a Safer, Stronger, Healthier Community"

33. "To Make Merseyside a Safer, Stronger, Healthier Community" by continuing to deliver an excellent Service to our communities in a more efficient manner.