WEST MIDLANDS FIRE AND RESCUE AUTHORITY

18th FEBRUARY 2013

1. BRIGADE RESPONSE VEHICLES (BRV)

Report of the Chief Fire Officer.

RECOMMENDED

1.1 THAT the Authority approve the targeted implementation of Brigade Response Vehicles based upon the analysis of the evidence and data outlined in appendix 1 showing that these vehicles are fit for purpose.

1.2 THAT dependant on approval the Authority notes that the vehicles will be implemented in line with the principles outlined in previous presentations at Policy Planning Forum.

2. PURPOSE OF REPORT

Implementation of the BRVs is a key mechanism that enables us to maintain our operational response model and attendance times with the reduction in operational personnel due to natural attrition rates due to the Comprehensive Spending Review. These BRVs will form an integral part of our fleet and will not be restricted by incident type, protecting and supporting Pump Rescue Ladders (PRLs).

This report is submitted to support the recommendation above by providing the following:

- An assessment of the data collected to evaluate the effectiveness of the BRVs currently on trial (appendix 1). This data shows that the BRVs have effectively dealt with medium risk, low risk, 20 minute response type incidents and false alarms incidents protecting our PRL fleet. The data shows that BRVs have effectively supported PRLs at high risk incidents.

3. BACKGROUND

3.1 One of the key aims of the BRV work package is to analyse the effectiveness of the current vehicle fleet and make recommendations for improvements. It is important to seek the most appropriate and versatile fleet which will enable WMFS to assign a proportionate response level to any incident and ensure PRLs are protected for larger and more resource intensive incidents.

3.2 A variety of BRVs have been trialled at Coventry, Dudley and Tipton with these stations currently utilising the latest model. These BRVs have not been restricted by incident type since 1st November 2012.

3.3 As part of managing reducing staffing levels from 1596 to 1236 by 2015, BRVs have been selected as one of several preferred options to deliver a service in line with current standards that accommodate our risk based attendance matrix and a 5 minute target response time to category A incidents including house fires and road traffic collisions.

3.4 One of the aims of the BRV work package is to align the risk of an incident to the appropriate level of response to ensure its effective and safe resolution. The term 'not restricted by incident type' refers to enabling a response vehicle to be mobilised to any incident where the identified risk can be effectively managed by the resources mobilised in terms of personnel and equipment – either in isolation or as a combined mobilisation. Our BRV fleet will not be restricted by incident type.

3.5 The majority of equipment will be taken directly from the PRL that the BRV replaces.

4. EQUALITY IMPACT ASSESSMENT

In preparing this report an initial Equality Impact Assessment is required and has been carried out. The initial Equality Impact Assessment did not raise issues which required a full Equality Impact Assessment to be completed. The initial equality Impact Assessment was completed at the beginning of the BRV work package.

5. LEGAL IMPLICATIONS

The BRV work package examines the way in which the Authority provides its core functions under the Fire and Rescue Services Act 2004. It also takes into account the priorities highlighted in the Fire and Rescue National Framework for England 2012.

6. FINANCIAL IMPLICATIONS

In order to move to a fleet of 25 BRVs it would mean purchasing a further 17 BRVs. These vehicles would be purchased during 2013/14 and 2014/15. The estimated cost for these vehicles are £342,000 in 2013/14 (6 vehicles) and £627,000 in 2014/15 (11 vehicles). These costs have been factored into the proposed Vehicle Replacement Programme. It is anticipated that there would be additional associated equipment costs of £255,000 (£90,000 in 2013/14 and £165,000 in 2014/15).

BACKGROUND PAPERS

Policy Planning Forum Presentations:
5th November 2012
7th January 2013
Executive Committee Minutes 19 December 2012

The contact name for this report is Deputy Chief Fire Officer Loach 0121 380 6909.

VIJ RANDENIYA
CHIEF FIRE OFFICER

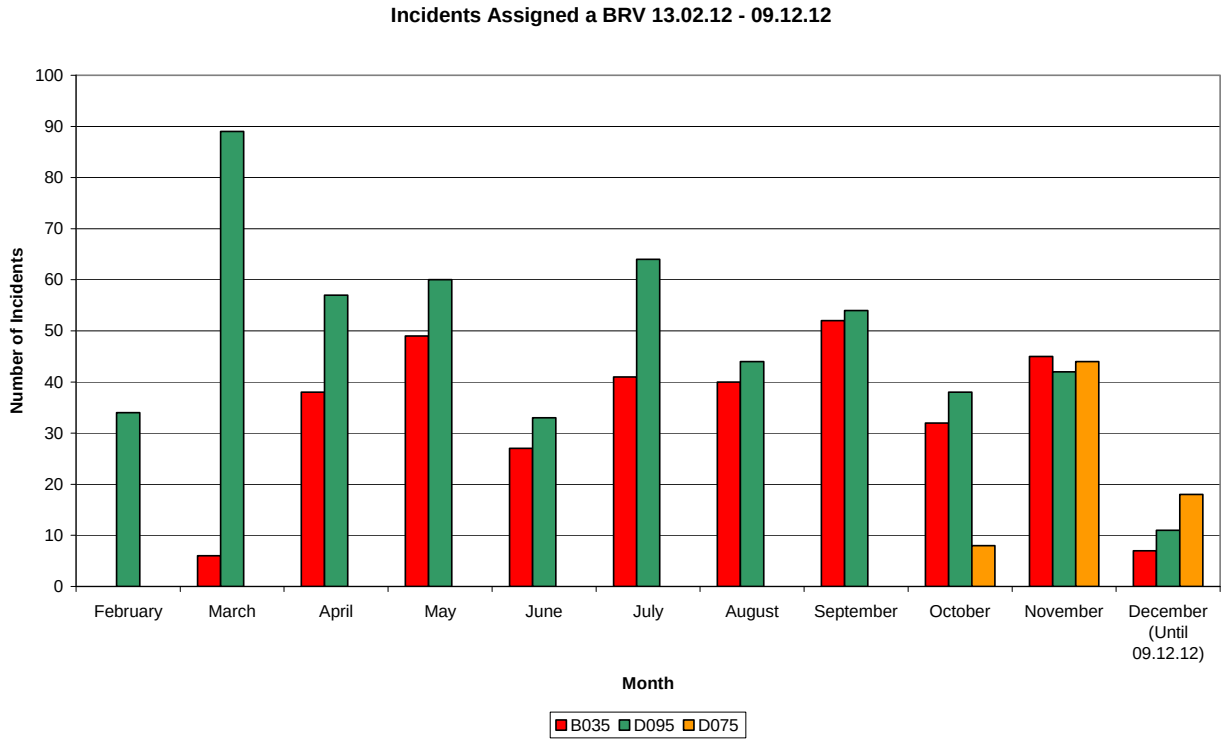
Introduction & Methodology

The purpose of this report is show that BRVs are fit for purpose. This will be evidence by showing that BRVs can be integrated into the fleet to form part of the Level of Response for all incident types dependant upon risk and severity to support and protect PRLs and to be not restricted by incident type.

There are currently 3 Brigade Response Vehicles (BRV) within West Midlands Fire Service. These vehicles replaced the late appliances based at Dudley, Coventry and Tipton Fire Station on the 13th February 2012 (Dudley D095), 30th March 2012 (Coventry B035) and 18th October 2012 (Tipton D075) respectively.

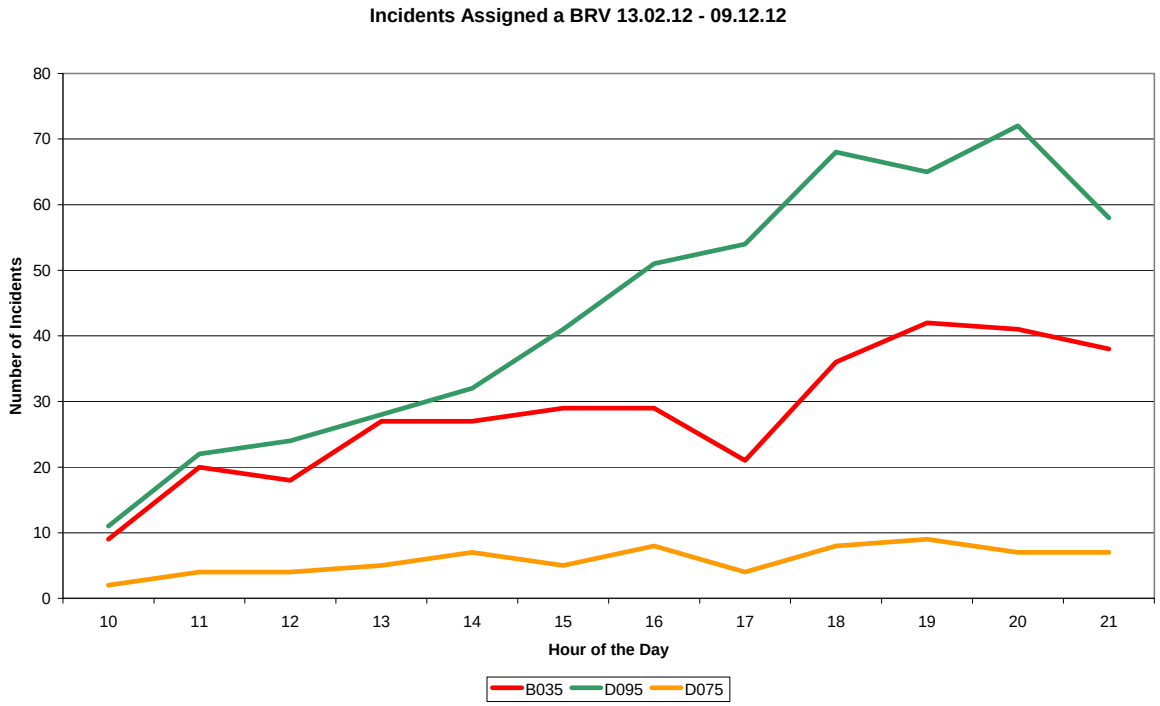
The new BRV vehicles (Toyota Hilux Invisibles) were introduced to the fleet on the 18th October at all three locations. The BRVs were restricted by incident type until the end of October 2012. On the 1st November they were unrestricted by incident type based upon dynamic mobilisation.

Monthly totals of incidents to which a BRV was assigned:



Total monthly utilisation of the BRV vehicles has been sporadic. Analysis shows that November saw the largest number of incidents to which a BRV was assigned. This is not surprising as this is the only month where all 3 BRVs were on the run. D095 had the greatest monthly utilisation overall with 89 incidents in March. Since its introduction, D075 has had good utilisation and has been the busiest BRV as shown in the above chart.

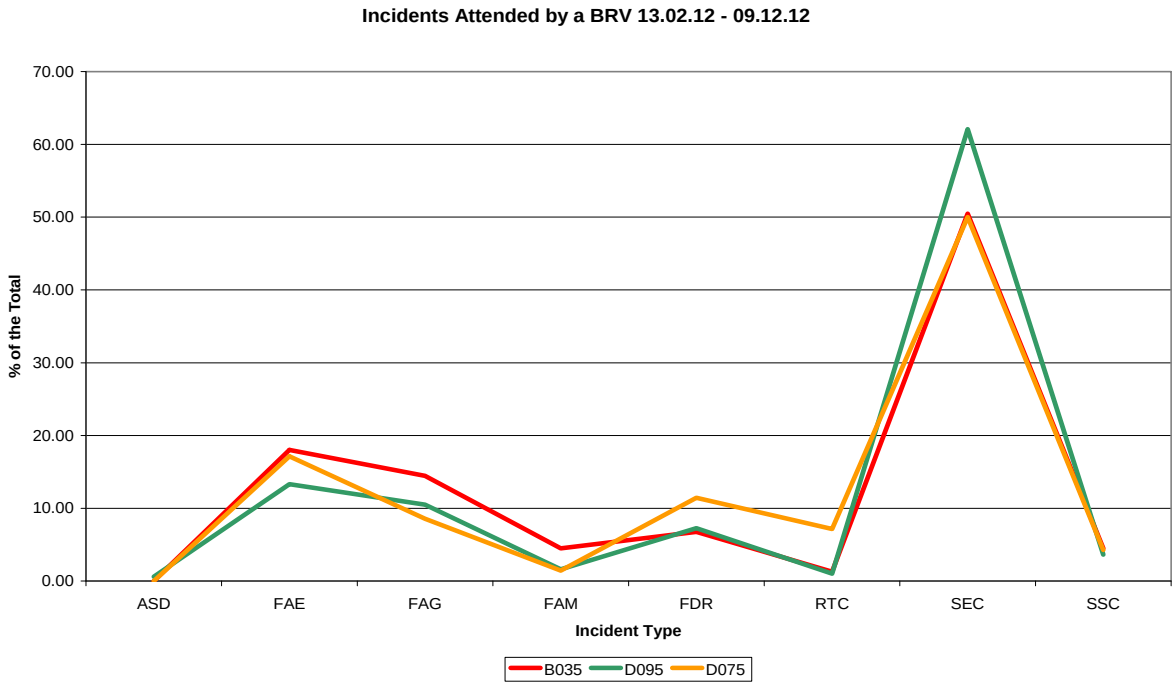
BRV incidents by hour:



The peak number of BRV incidents occurred between 20:00 – 20:59 closely followed by 19:00 – 19:59. Nearly 50% of all BRV activity occurred during 18:00 – 21:59. The BRV's activity was lowest at 10:00. The peaks and troughs of BRV activity emulate the activity we see in all front line appliances.

Although D075 has been introduced at a station in close proximity to D095, incident numbers for D095 do not seem to have decreased suggesting that there are more than enough incidents for both vehicles to attend. However, this point is not conclusive due to the short period that D075 has been on the run.

Incident Types:



The categories of incident types where B035, D095 and D075 booked 'in attendance' were

proportionally similar, however:

- D075 has attended proportionally more Category 1 incidents (RTC and FDR).
- B035 has attended proportionally more False Alarm Incidents (FAE, FAG and FAM).
- D095 has attended proportionally more Secondary (SEC) incidents.

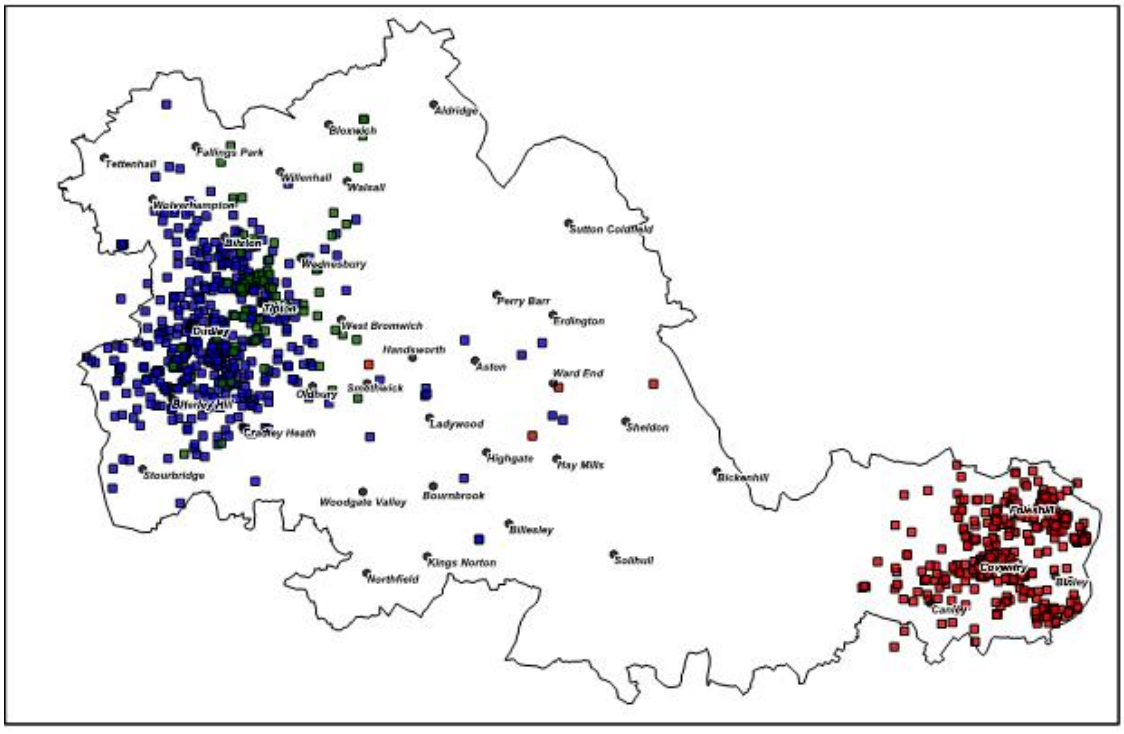
Timings:

CALLSIGN	Average Attendance Time	Average Distance Travelled*
B035	00:08:05	3.123 miles
D095	00:08:17	3.313 miles
D075	00:07:59	2.1217 miles

CALLSIGN	ASD	FAE	FAG	FAM	FDR	RTC	SEC	SSC	All Incidents
B035	00:02:38	00:23:55	00:21:05	00:20:07	00:47:51	00:31:05	00:30:07	00:25:04	00:28:05
D095	00:06:01	00:24:33	00:25:19	00:14:23	00:52:26	00:23:26	00:30:53	00:28:41	00:30:16
D075	00:00:00	00:35:51	00:15:10	00:22:27	01:02:50	00:30:21	00:33:53	00:36:24	00:35:37

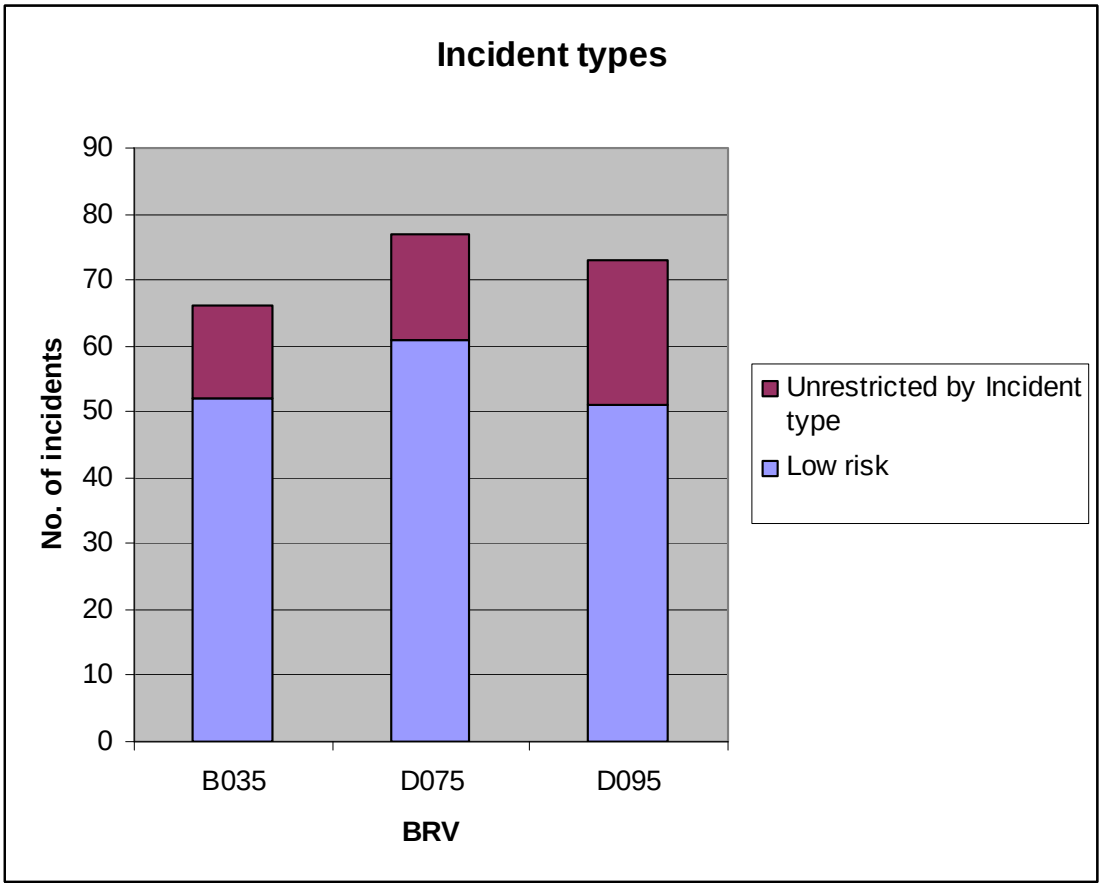
Each BRV spent significantly more time at an FDR incident than any other incident type. The least amount of time was spent at All Stood Down incidents (ASD). On average, each BRV spent just over 20 minutes at each False Alarm incident. This is in line with all other front line appliances (approximately 18 minutes).

BRV Sphere of Influence:



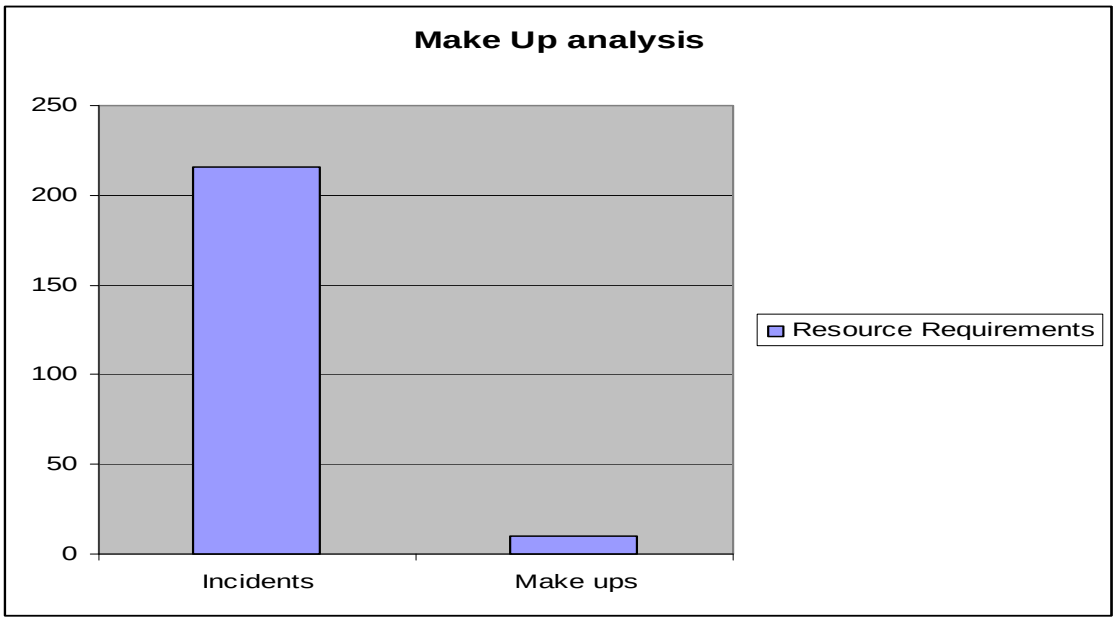
B035's sphere of influence is fairly restricted to the Coventry District. D095 and D075 have also been restricted in their movements around the Black Country area.

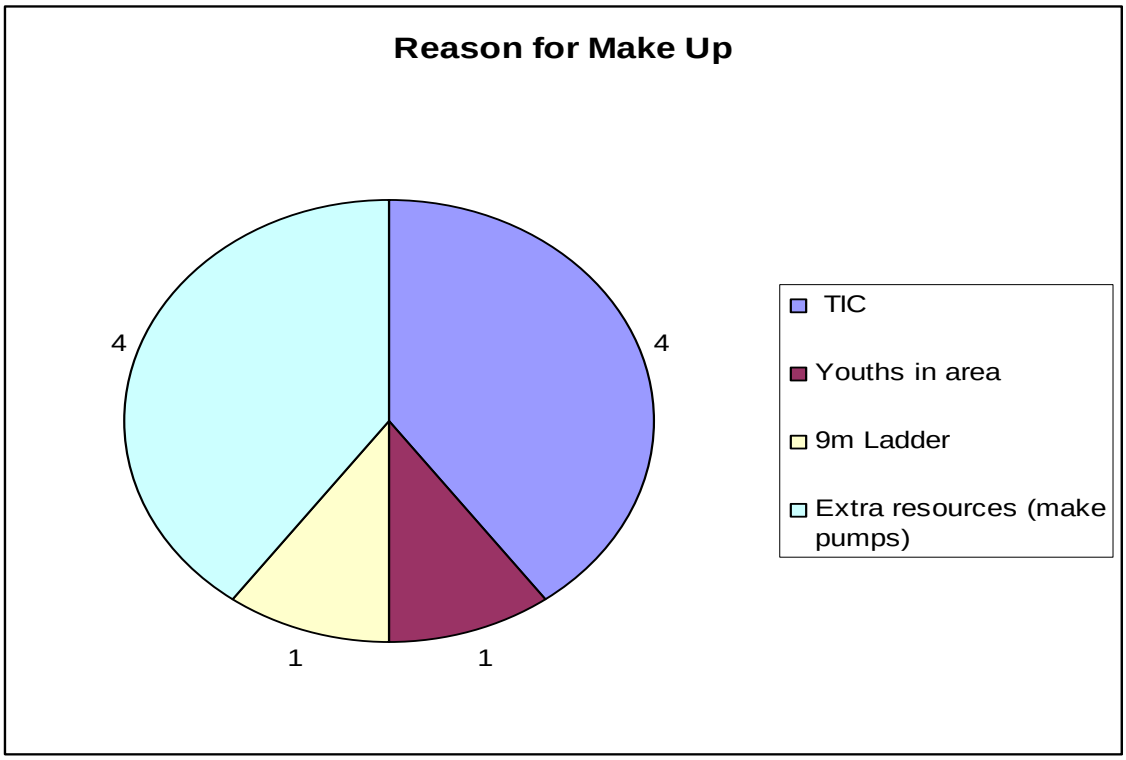
Not restricted by Incident Type:

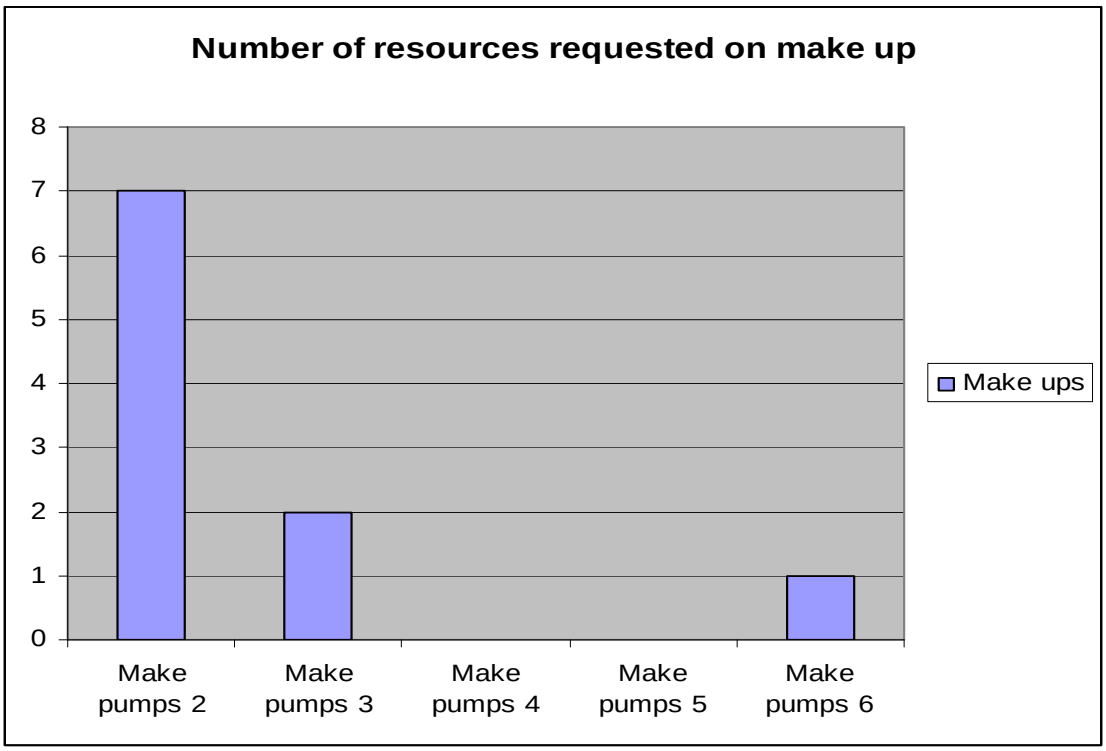


The majority of incidents attended have been low risk incidents protecting our PRL fleet for more serious life critical incidents. They have however supported PRLs at some incidents.

‘Make Ups’ for additional resources:







There have been 10 requests for additional resources when a BRV has been at an incident out of 228 incidents attended between 1000hrs on 18th October to 2200hrs on 19th December. 96% of incidents attended by the BRVs did not require any additional resources. At 4 of the 10 incidents the only reason for the request for additional resources was the requirement for a Thermal Imaging Camera (TIC). This is a piece of equipment that will be carried on the BRV and was not on the vehicles due to being on order from the manufacturers. Now the TIC camera is carried on the BRV vehicles we would anticipate that 97.5% of incidents attended would have required no additional resources.

Crew Feedback

All BRV stations have been visited and their feedback collated. Overall the feedback is positive with some concerns still being shown regarding crews of three personnel due to this being a new method of operation. The following areas are examples of the feedback from the crews and will be looked at on future vehicles and where possible, adaptations made on the current vehicles:

- One additional length of hose stowed on the vehicle
- Wedges and blocks to replace step blocks
- Collecting head permanently mounted to the vehicle
- Brighter wolf lamp
- Less bright LED blue lights on the rear of the vehicle
- Consider a ladder that can be split into two sections
- Improve PPE stowage
- Place the third person on the nearside of the vehicle not offside
- Radio and airwave mounted in the front of the vehicle

We are requesting that the crews make suggestions based upon evidence and professional judgement and we welcome their continued feedback.

Dynamic Mobilisation

Since 22nd October 2012, WMFS Fire Control Team has enhanced and increased the use of dynamic mobilisation protocols when a call is received.

The professional judgement of the Fire Control Operators is used to “achieve the best match between incident needs and resources available at the earliest opportunity to ensure those in need receive a safe and appropriate response”, potentially resulting in an increase or reduction in the level of response (LOR).

Analysis of the data from the first 3 weeks confirms the following:

- Dynamic mobilisation has been used a total of 75 times.
- On 4 occasions the LOR was increased by Fire Control staff before the first appliance booked in attendance
- On 71 occasions the LOR was reduced by Fire Control prior to the initial attendance.
- Of these 71 occasions only one resulted in a further request for resources and this was for a piece of equipment carried on a limited number of vehicles (hydraulic door opener)

The above information equates to the following:

- 71 less ‘blue-light runs’ by WMFS vehicles reducing the risk to our staff and the public
- Cost savings of 71 journeys and associated vehicle depreciation and wear and tear.
- The protection of the associated vehicles to allow continued fire cover at their locations at the time of these incidents
- The reassurance that further resources are mobilised by Fire Control as appropriate to deal with larger incidents
- Acknowledging the skill and professionalism of the Fire Control Operators in exercising their judgement in a supportive environment