Data from analysis

The following graphs show the call profile over the last 5 years. The call are broken into 6 types:

- Primary Fires are generally more serious fires that harm people or cause damage to property.
- RTC, Road Traffic Collision's
- Chimney fires are fires in buildings where the flame was contained within the chimney structure and did not involve casualties.
- SSC, Special Service Call's are incidents other than fire-fighting, they may be emergency or non-emergency.
- Secondary Fires are generally small outdoor fires, not involving people or property.
 These include refuse fires, grassland fires and fires in derelict buildings or vehicles
- False Alarms are incidents where the Service attends a location believing there to be an incident, but on arrival, discovers that no such incident exists. These may be well intended, malicious, or caused by faulty equipment.

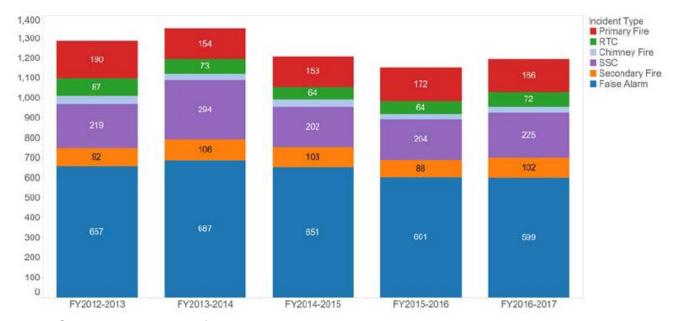


Figure One, Total number of calls over the last 5 years

This shows calls have generally been consistent over the last 5 years. The slight downward trend has been broken last year. This reflects call profiles across the country.

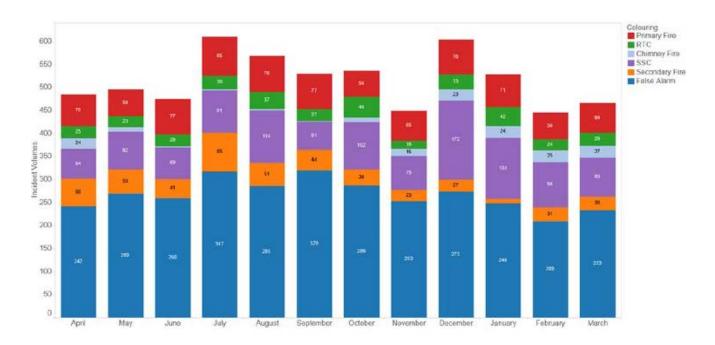


Figure Two, Incident volume by seasonality.

This shows a peak in calls in July and December but no significant change due to the tourist season.

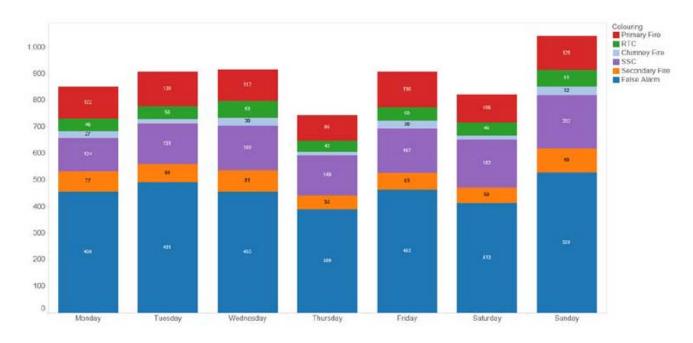


Figure Three, Incident volume by days of the week.

This demonstrates that calls do not drop over the weekend, and that Sunday is the busiest day.

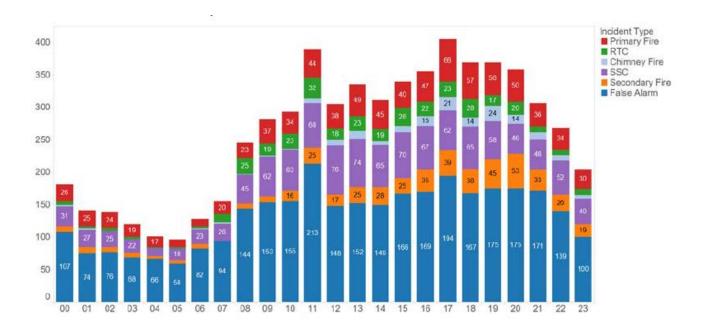


Figure Four, Incidents by time of day.

This shows that calls drop during the night. The busiest hour, 11:00 to 12:00, is 4 times as busy as the quietest hour, 05:00 to 06:00. The busiest 8-hour period is 13:00 to 21:00, while the busiest 12-hour period is 10:00 to 22:00.

The number Primary calls (the more serious fires) drops between 10pm and 9am. This is demonstrated with the heat map below.

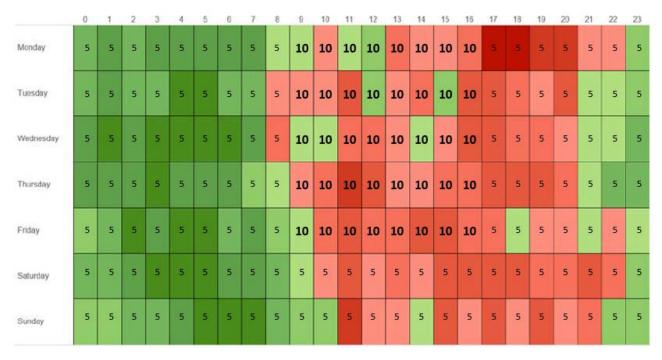


Figure Five, Heat Map depicting the relative volume of incidents that occur in each hour of the week. The numbers indicate the current minimum number of immediately available firefighters crewing fire engines.

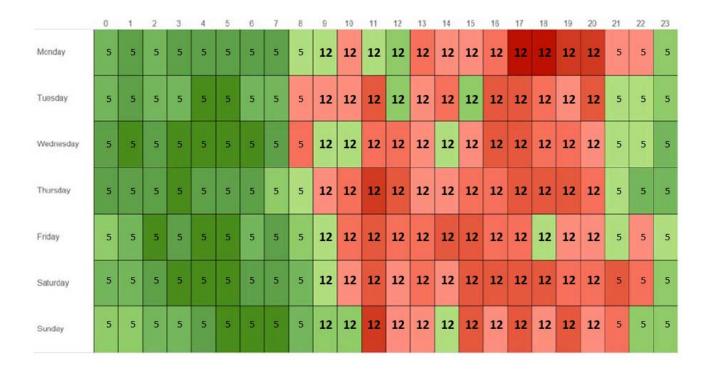


Figure Five b, Showing the numbers of immediately available firefighters with a modified shift system. Note: As discussed in the paper, on occasions there may be four fighters available rather than five.

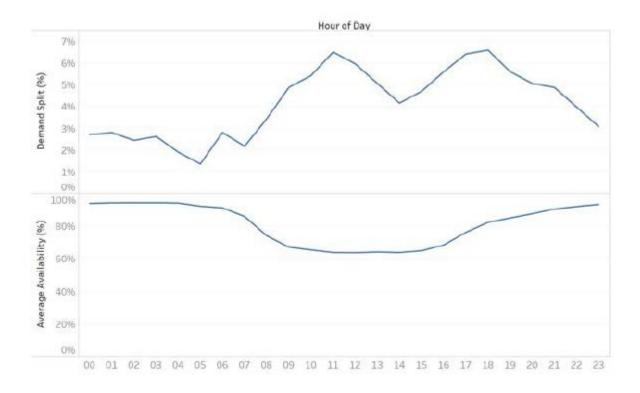


Figure Six, On-Call firefighter availability shown against average critical incident demand.

This shows that On-Call availability is lower between 0900 and 1700, this is when demand for critical incidents is highest.