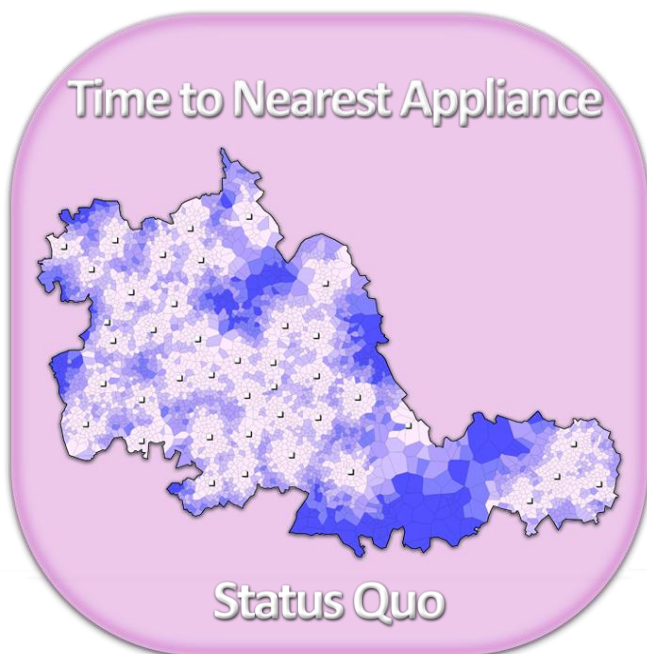
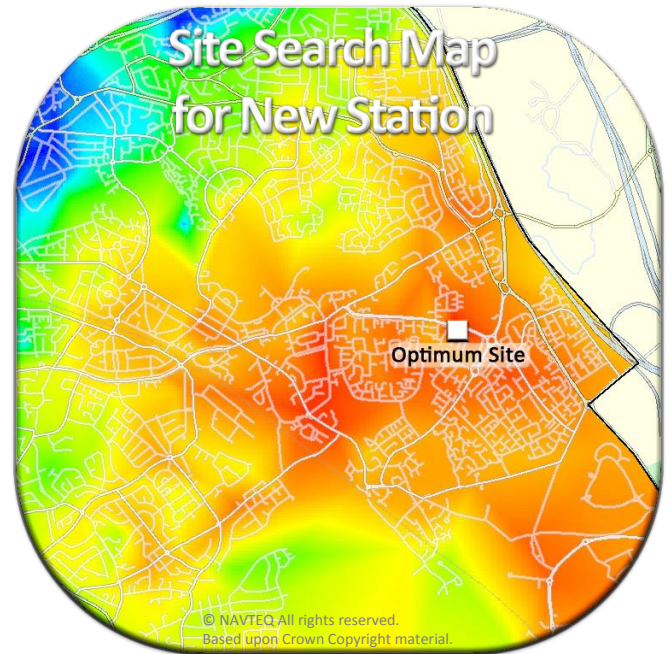


Developing an Estate Strategy for the West Midlands

The Challenge

- The West Midlands Fire Service (WMFS) provides firefighting and rescue capabilities to 2.6 million people from around 1,600 staff and 100 operational vehicles across 39 whole-time stations.
- A need was identified to support the development of long-term plans for appliance deployments across a network of stations to provide better coverage of risk.



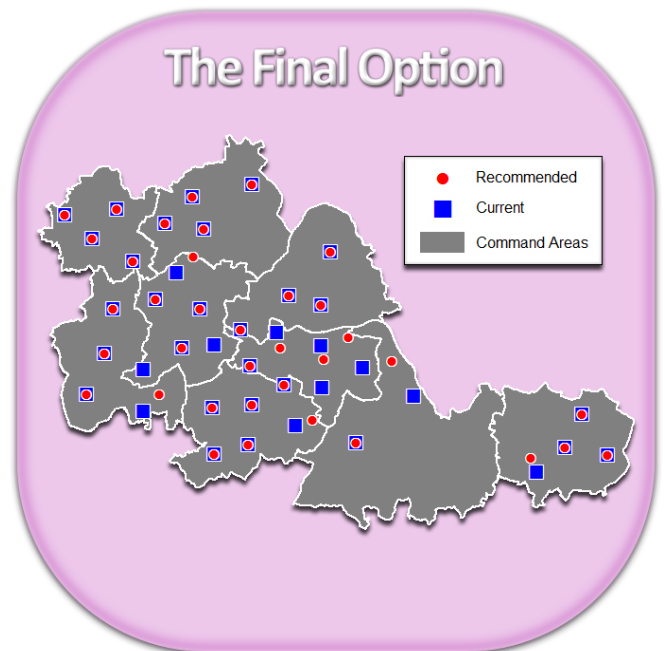
Approach

- ORH's unique modelling capabilities provided the framework for identifying and evaluating a long list of options.
- Optimisation techniques were used to generate optimum deployment options, before applying simulation techniques to test the robustness of these options and refine them in consultation with WMFS.
- Sensitivity analysis was then undertaken to examine the impact of moving towards the final configuration on a range of risk factors and by factoring in future developments and population growth.

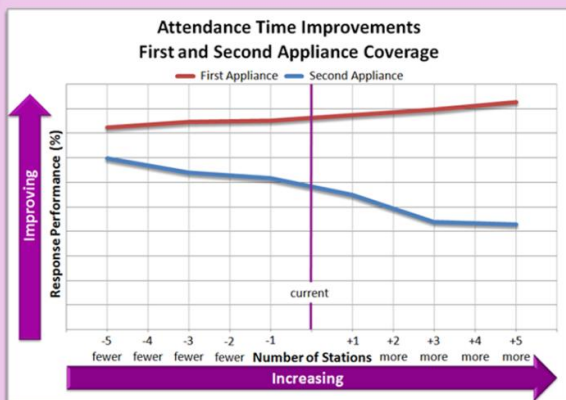


The Solution

- An initial option was identified for an improved configuration that required the building of 8 new fire stations in strategic locations to replace 10 existing stations, whilst maintaining the same number of pumping appliances.
- The initial option formed the basis of a 12-week consultation process, and comments and suggestions received from members of the public, the unions and other stakeholders, were taken into account in developing a final option which was put forward and approved by the Authority.



Risk Cover Impacts



Benefits

- A clear and transparent evidence-based approach was applied that withstood the scrutiny of public consultation.
- A Service-wide assessment of station locations and appliance deployments was undertaken for the first time.
- A flexible approach was used that incorporated consultation feedback.
- The recommended configuration was shown to be robust against projected population growth.

