



### KEY BENEFITS

- First full review of demand and capacity in four years
- Detailed demand projections based on historical patterns
- Comprehensive benchmarking against other services
- Identified resource requirements under ARP



## Determine underlying capacity required to meet national ambulance targets

### KEY FACTS

**Population = 2.6 million**

**Area Covered = 8,600 km<sup>2</sup>**

**Daily Incidents = 1,100**

**Stations = 61**

### ABOUT NEAS

North East Ambulance Service (NEAS) provides Emergency Care and Patient Transport Services (PTS) across Northumberland, Tyne and Wear, County Durham and Teesside. NEAS handles calls at two Emergency Operations Centres (EOCs) and dispatches front-line resources from 61 stations.

### THE CHALLENGE

In the four years since the previous review, demand levels have grown and geographical and temporal patterns have changed. The introduction of the Ambulance Response Programme (ARP) has changed the measurement of performance standards, potentially altering the level, skill and vehicle mix of resources required. NEAS needed

to quantify anticipated demand levels and expected performance over the next five years.

### ORH'S APPROACH

ORH analysed operational data to exemplify the relationship between demand, resourcing and performance. By benchmarking NEAS against other UK ambulance services, operational efficiencies were identified. ORH projected incident volumes based on expected population changes and demand rates by age group.

To consider deployment options, ORH built a simulation model of NEAS including the demand projections and anticipated ARP changes. ORH's modelling tested scenarios in three key stages:

- With no changes to operations, how does future demand affect performance?
- What is the potential effect of internal and external efficiencies?
- How can re-rostering vehicles improve performance?

Alongside the operational review, ORH examined EOC call handling, clinical triage and dispatch desk jurisdictions.

### RESULTS

ORH quantified the performance achieved, and the resulting staffing implications, at each of the key stages. Projected demand increases could be offset in part if efficiencies were realised. ORH provided NEAS with a deployment plan that aligned with ARP demand profiles and met national standards in the future.



*This work by ORH supports our journey to place NEAS at the heart of the North East urgent and emergency care network and underlines our commitment to ensuring patients can access quickly the healthcare service that best meets their needs.*

Paul Liversidge, Chief Operating Officer, NEAS



## About ORH

# PLAN. PREPARE. PERFORM.

ORH helps emergency services around the world to optimise resource use and respond in the most effective and efficient way.



We have set the benchmark for emergency service planning, with a proven approach combining rigorous scientific analysis with experienced, insightful consultancy. Our expert team uses sophisticated modelling techniques to identify opportunities for improvement and uncover hidden capacity. Simulating future scenarios ensures that solutions are objective, evidence-based and quantified.

Every organisation faces a unique set of challenges, so remaining independent and flexible allows us to deliver an appropriate solution every time. The outputs of our work enable clients to make robust, data-driven decisions and explain them clearly to stakeholders.

ORH's approach is always tailored to the needs of the client. Above all, we are committed to getting it right, for the good of our clients and the people who rely on their services.

### ORH WORKS WITH AMBULANCE SERVICES TO:

- Quantify the impact of changes to response standards
- Optimise response locations
- Evaluate call handling, triage and dispatch arrangements
- Improve response times
- Devise optimal deployments by staff skill and vehicle type
- Identify operational efficiencies

For control rooms, ORH provides its DCT software to support dynamic decision making and enable effective and efficient resource use.



**Emergency  
Service Planning  
Case Study**

[www.orhltd.com](http://www.orhltd.com)  
t.+44 (0)118 959 6623

**ORH**  
PLAN. PREPARE. PERFORM.