National Grid MSc Project Proposal

Optimising Gas Engineer Locations

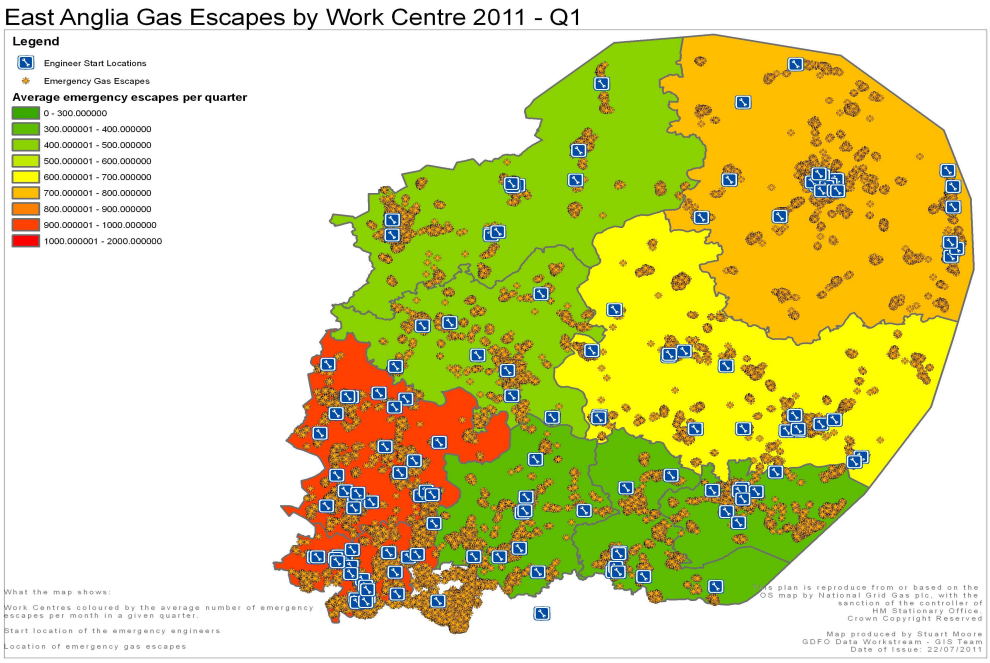
National Grid operates a 24/7 gas emergency service covering a geography including London, East Anglia, East and West Midlands and the North West of England. Our standards of service require us to respond to 97% of uncontrolled[1] escapes within 1 hour of receiving the call and to 97% of controlled[2] gas escapes within 2hours of receiving the call from a member of the public. These are very challenging standards of service and require us to have a footprint of gas engineers situated across the country.

The footprint of our gas engineers has tended to evolve rather than been planned, with numbers being maintained to meet workloads within a set geography (work centre). As our workload and workforce reduces this is giving us challenges with meeting our standards of service. These problems will only increase in the years to come.

The objectives of this project are to:

1. Determine how many gas engineers are required to maintain our gas emergency service standards of service across our Networks – no constraints.
2. Determine the level of current inefficiency or risk to standards of service from our current gas engineer locations and identify any hotspots requiring urgent review.

Information on workload and gas engineer locations will be provided. Some geospatial mapping expertise (using ESRI) will also be available. A successful outcome to this project will earn the student an IPad.



[1] Uncontrolled gas escape – a gas escape where the customer has not been able to turn the gas off at the meter and hence gas is still escaping.

[2] Controlled gas escape – a gas escape where the customer has been able to turn the gas off at the meter and stop the gas escape.