



BLUE LIGHT CLIMATE

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Our Vision

We aim to reduce the carbon impact of Fleet and Transport across the Yorkshire Ambulance Service with a 30% reduction by 2015...



Yorkshire Ambulance Service

- YAS region – 6,000 sq. miles
- Staff – 4,470 people
- Fleet – 1,490 vehicles
510 A&E, 470 PTS, 210 RRV
- Buildings – 65+ ambulance stations
- Travel – 30 million miles pa
- Fuel – 4.5 million litres pa
– £8 million pa

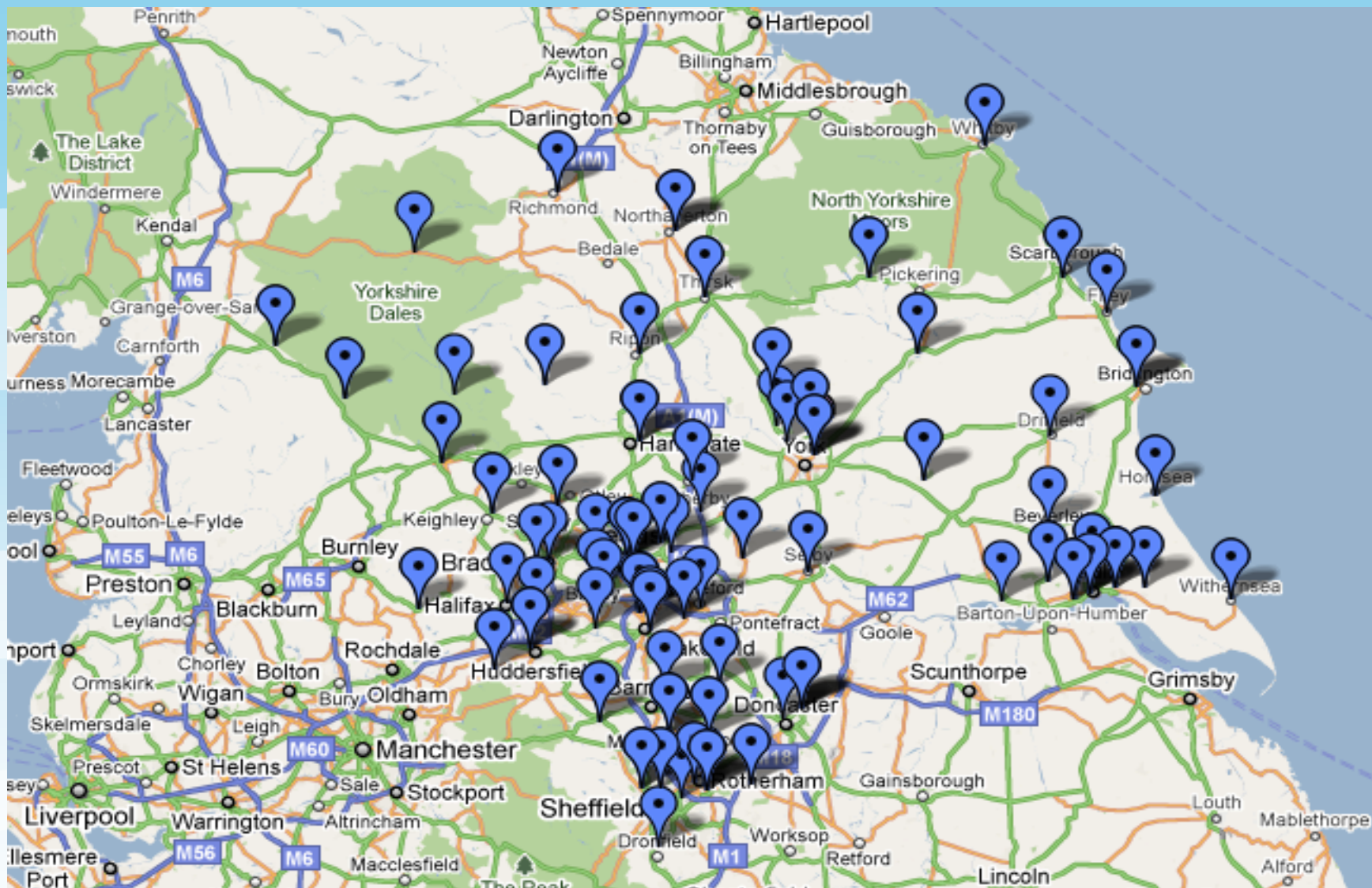


Yorkshire Ambulance Service

Carbon Footprint

- NHS
 - 18 million t of CO₂
 - 3% of UK CO₂
 - 5% UK traffic
- YAS (2012)– 17,500 tonnes of CO₂
 - YAS travel – 12,250 tonnes of CO₂





Location of ambulance stations across the Yorkshire region





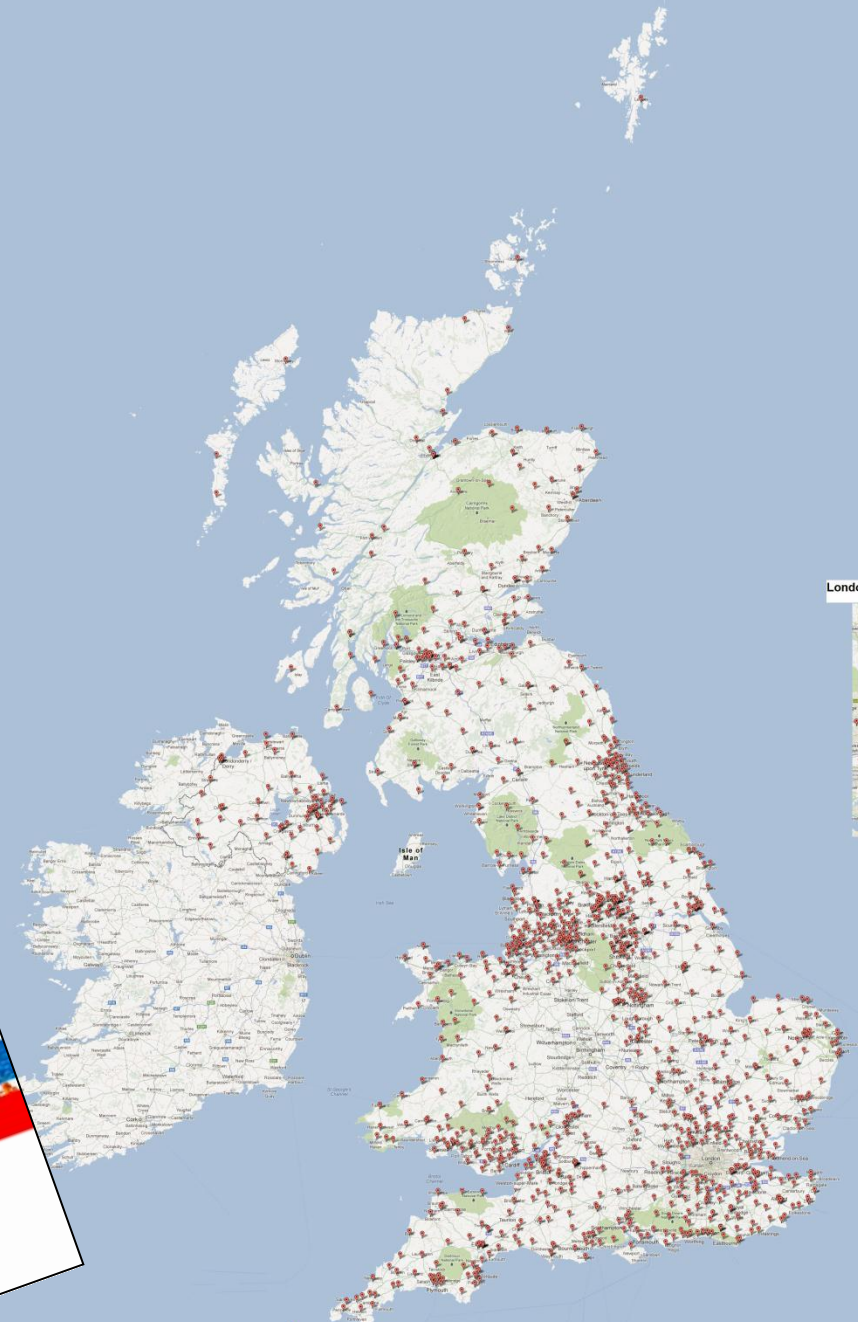
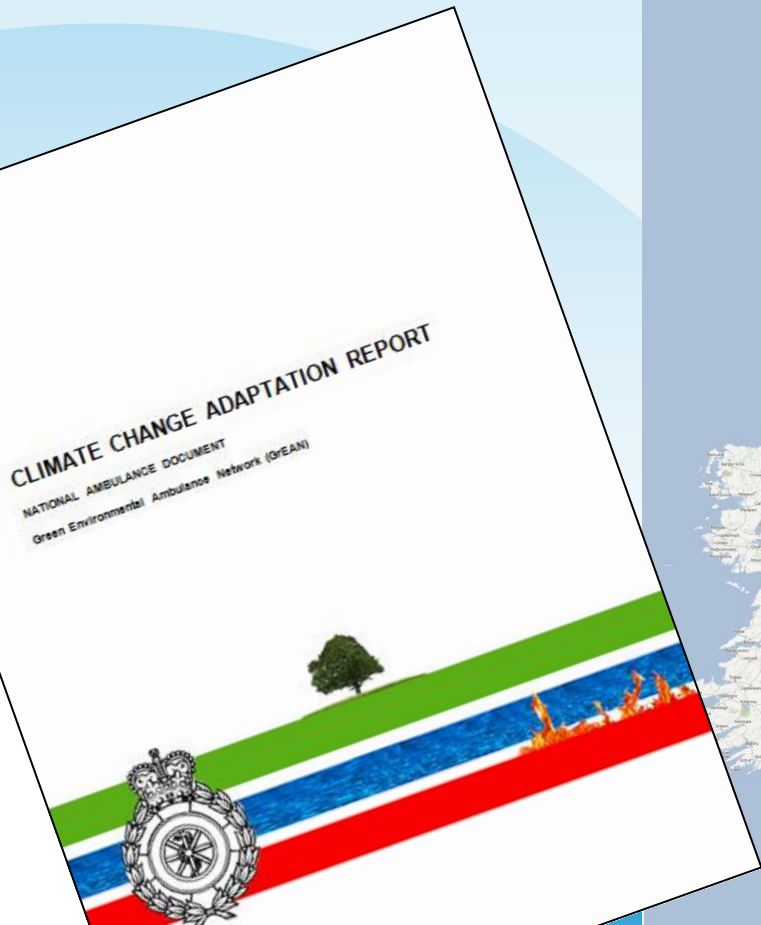
National Mapping Project

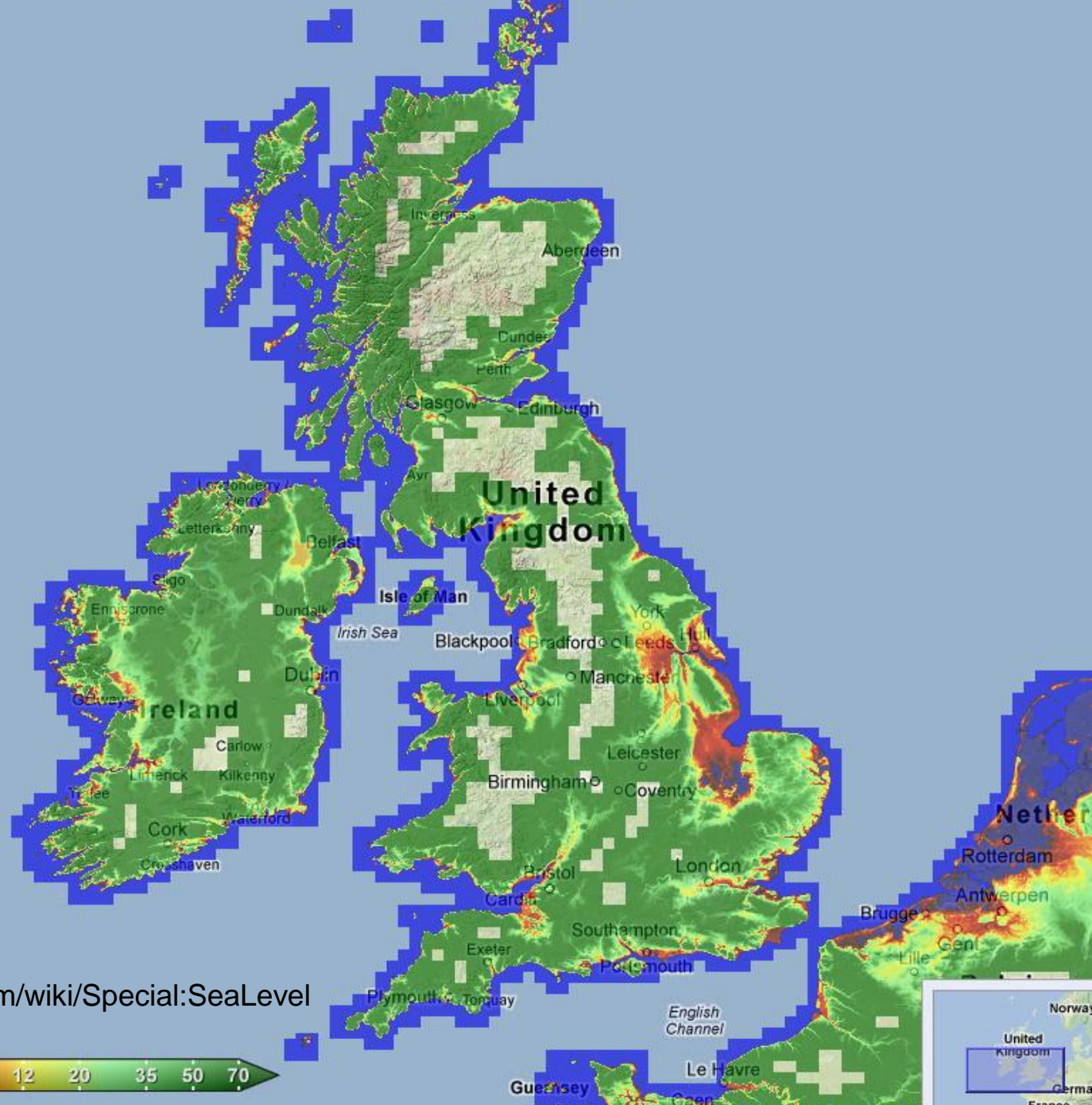
- Working with
 - DEFRA
 - Climate Ready
 - Environment Agency
 - All Ambulance Services



LOCATION OF AMBULANCE SERVICE PROPERTIES

National Mapping Project

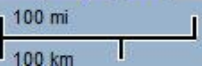




<http://www.globalwarmingart.com/wiki/Special:SeaLevel>



POWERED BY
 Google



Map data ©2012 Geonames DE/BKG (©2009), Google, Tele Atlas, globalwarmingart.com ©2008 - Global Warming Art - Paris, France
Elevation data produced by CGIAR, NASA, and NOAA

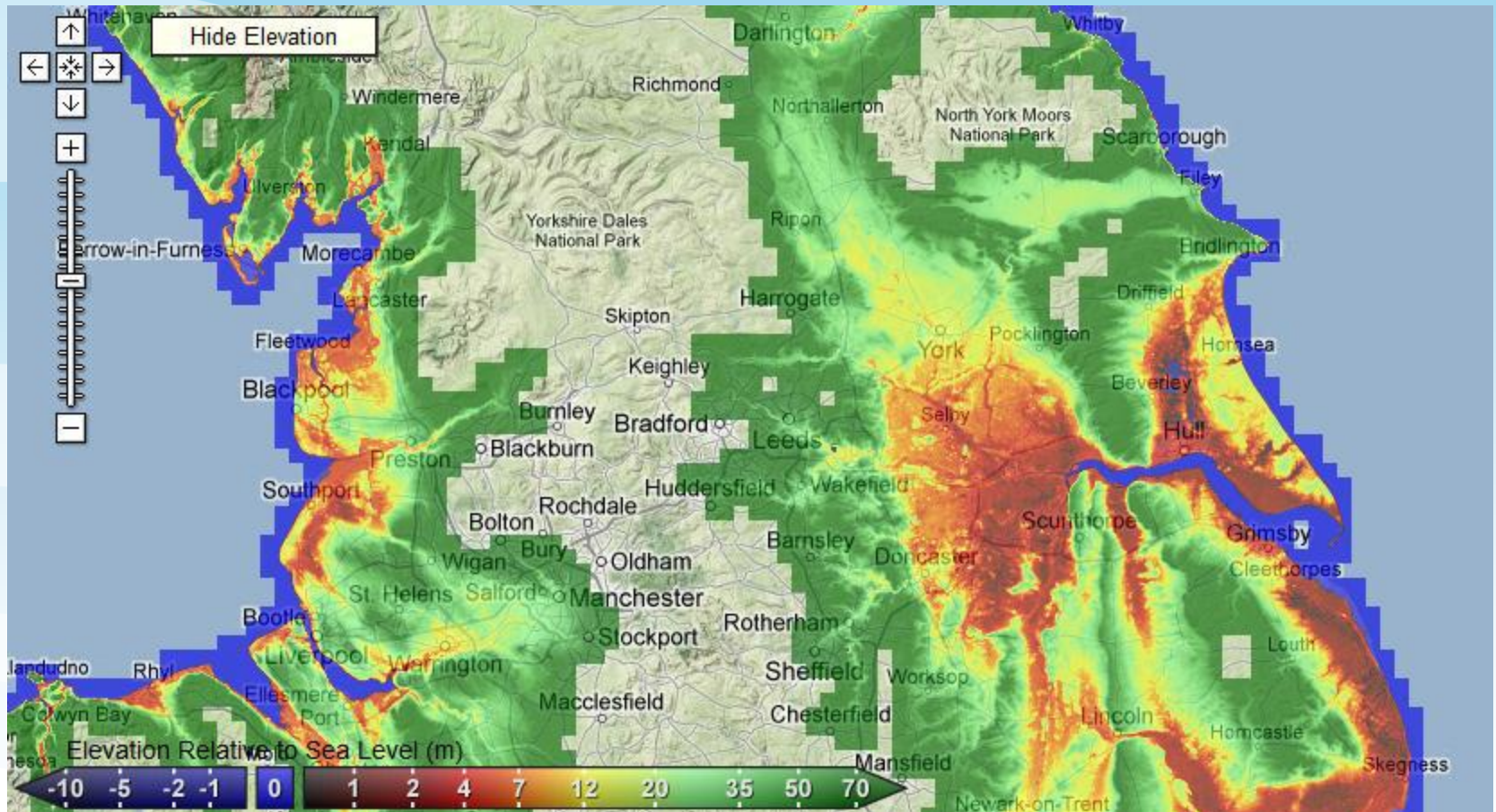


Regional Issues

- Flooding
- Sea Level rise
- Heatwaves
- Drought
- Fuel poverty
- Winter Weather
- Extreme Weather



Regional Flood Mapping



Sea level rise: **+1 m** ▼

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Sea level rise: **+2 m** ▾

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Sea level rise: **+3 m** ▾

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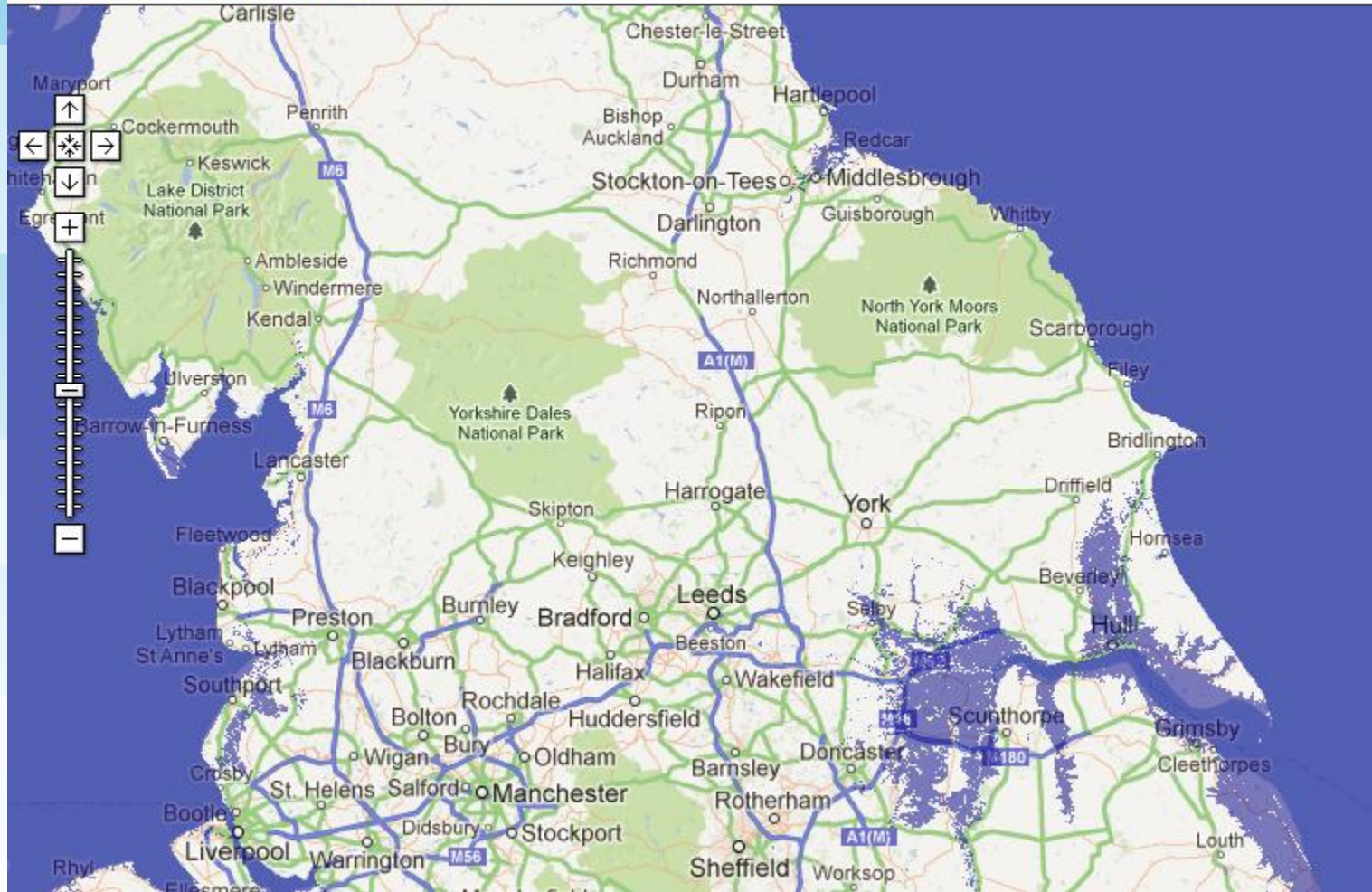
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Sea level rise: **+4 m**

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Sea level rise: **+5 m** ▾

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Sea level rise: **+7 m**

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Sea level rise: **+9 m** ▾

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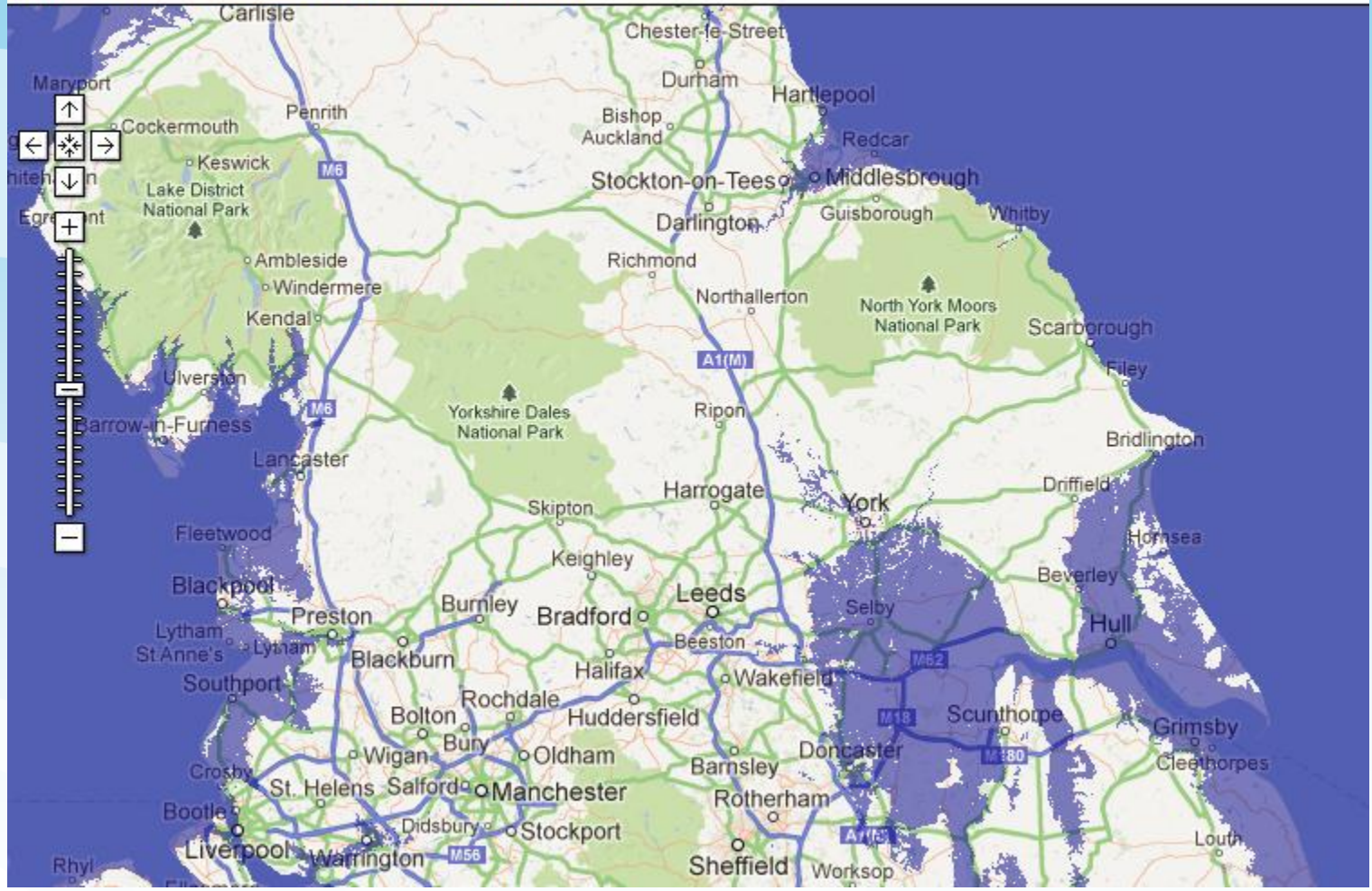
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Sea level rise: **+13 m** ▾

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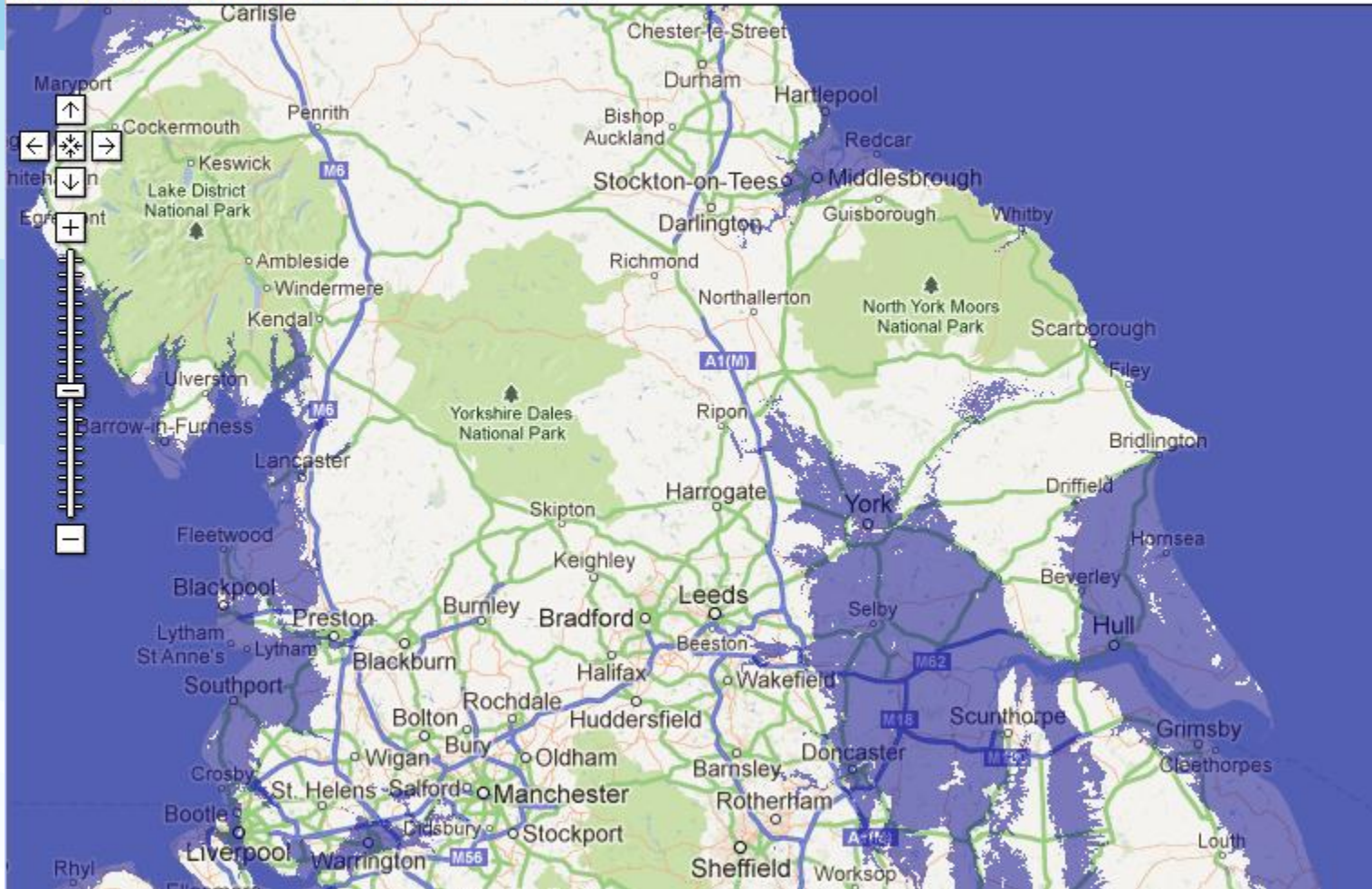
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Sea level rise: **+20 m** ▾

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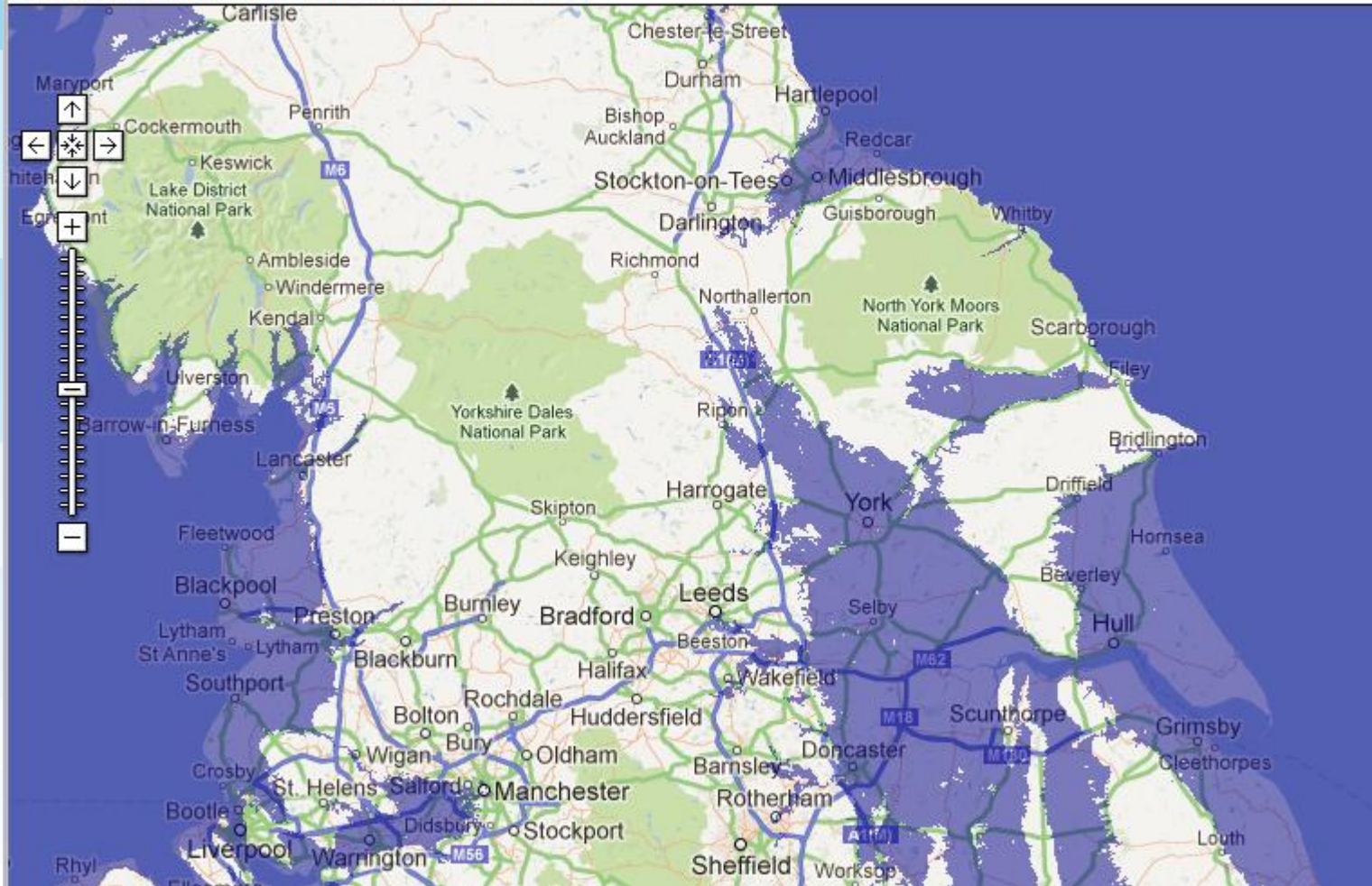
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Sea level rise: **+30 m** ▼

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Sea level rise: **+50 m** ▾

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Fleet Flood Resolution

- Location of ambulance stations
- ‘Red routes’ – open roads
- Air Ambulance co-ordination
- HART and emergency response team
- Boats for the future?



Estates Flood Resolution

- Plasterboard horizontal
- Electrical points raised
- Sand bags
- Drains cleared regularly
- Sewage blocks
- Flood barriers for buildings



Heat

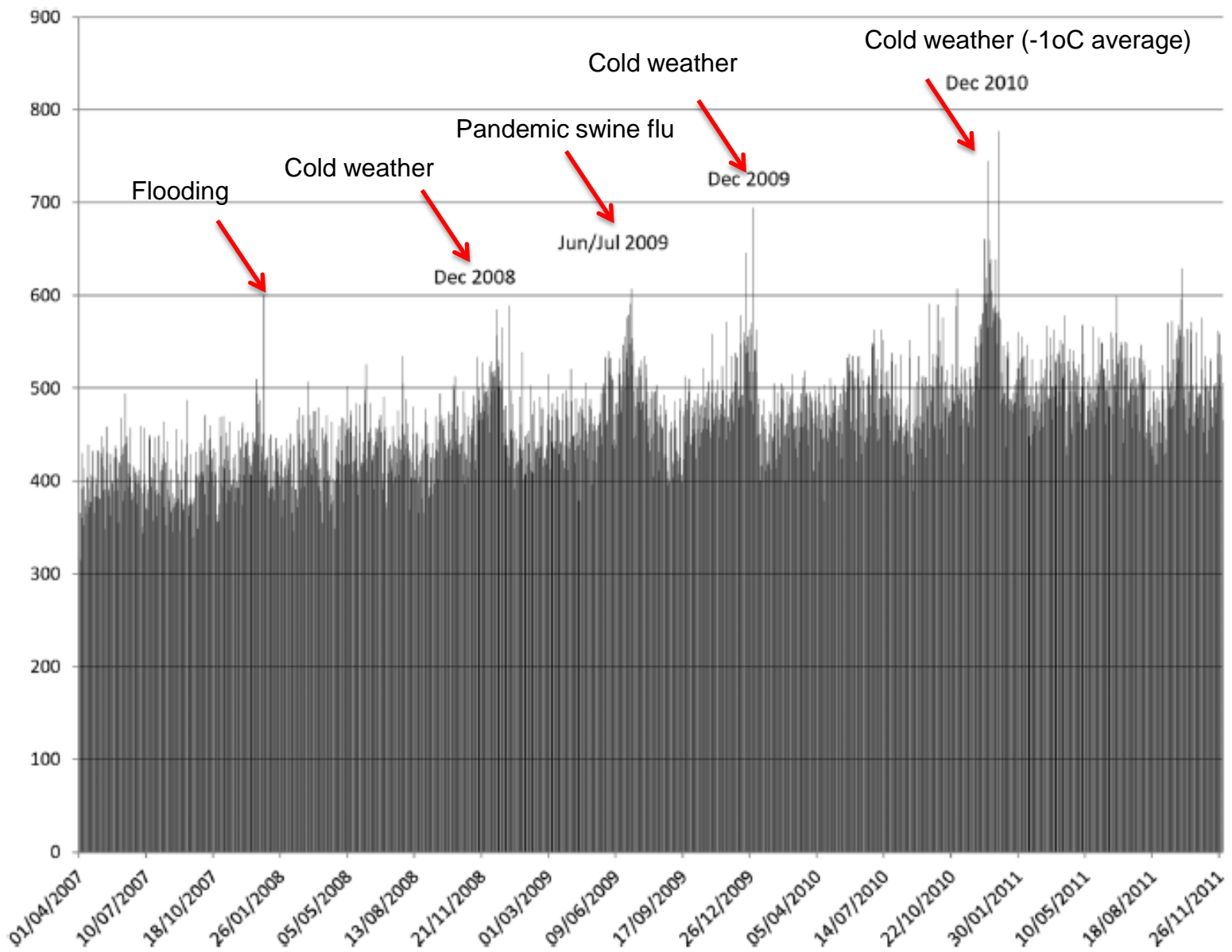
- Health implications
 - Overheating
 - Dehydration
- Increase in number of calls



Cold weather

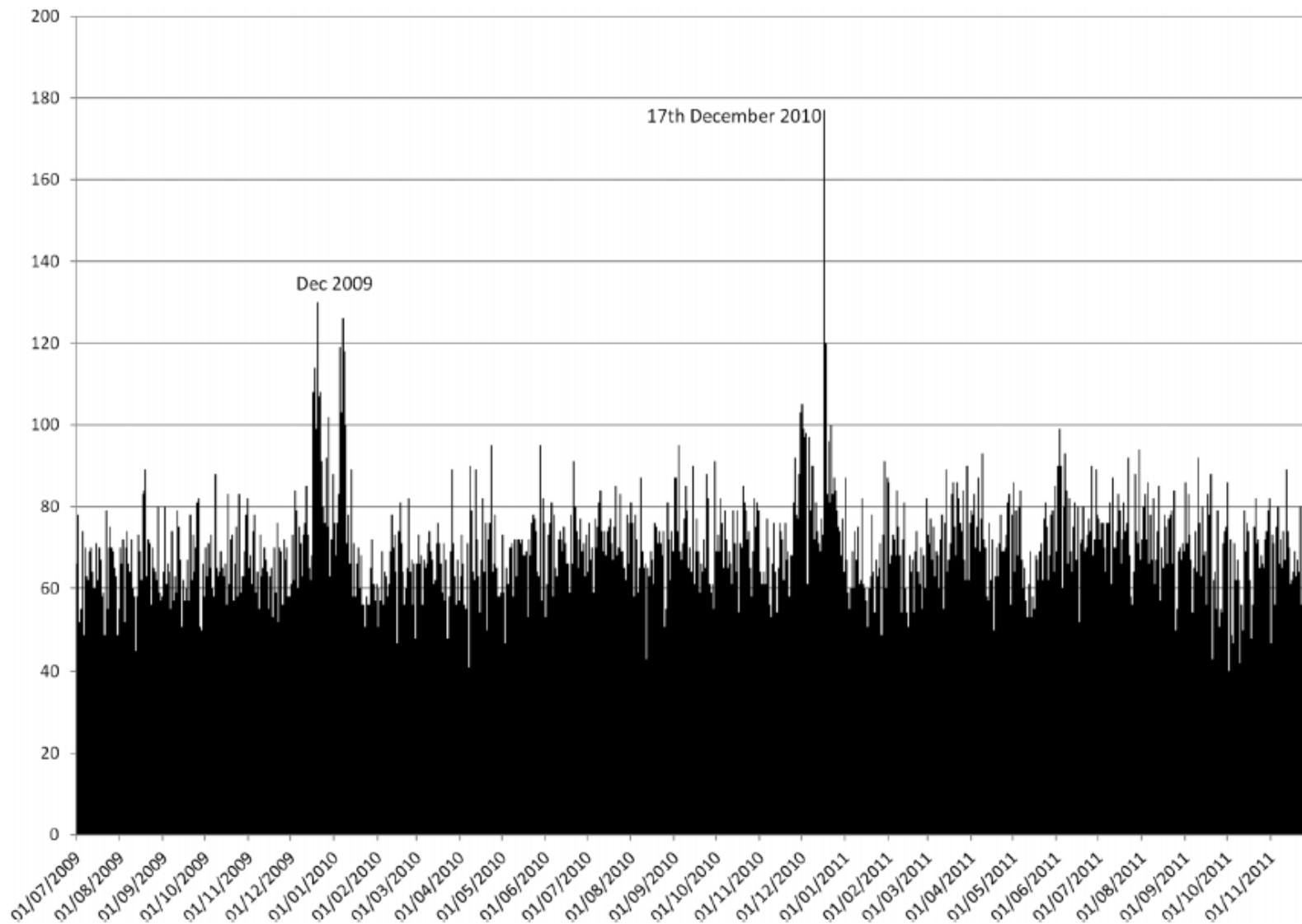
- Health implications
 - Rise in slips, trips, falls
 - Breathing problems
 - Rise in heart attacks and strokes
- Ability to get to patients
- Strain on resources





Total daily 999 ambulance calls 1 April 2007–30 November 2011.





Daily number of ambulance patients with falls/back injuries—traumatic 2009–11.

Ambulance call-outs and response times in Birmingham and the impact of extreme weather and climate change - John Edward Thornes, Paul Anthony Fisher, Tracy Rayment-Bishop and Christopher Smith



Cold weather health effects

In Britain, a cold spell during a mild winter is followed:

- 2 days later by a sudden rise in heart attacks (by up to a third)
- 5 days later by a rise in the number of strokes
- 12 days later by a rise in respiratory illness



Cold weather resolution

- 4x4 programme to get staff to work
- Vehicle Servicing
- Snow tyres
- Working with Air Ambulance
- Working with health groups, Hotspots and local authorities to reduce fuel poverty



Business resilience issues

- Increased calls and stretching resources
- Storm surges
- Deployment issues – correct place?
- Capability to deal with extreme weather



Business resilience

- Weather/Flood warnings
- Increased staff on duty
- Planning for ambulance locations
- Working with local authorities and other emergency services
- Taken on 111
- First 'Gold Cell' in the country

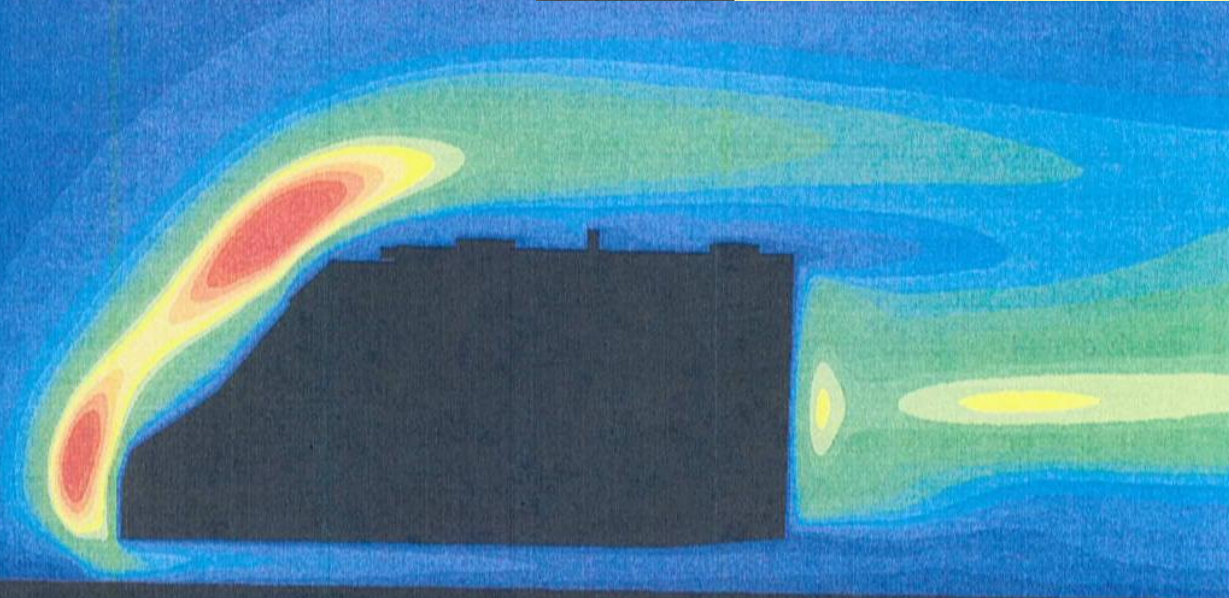
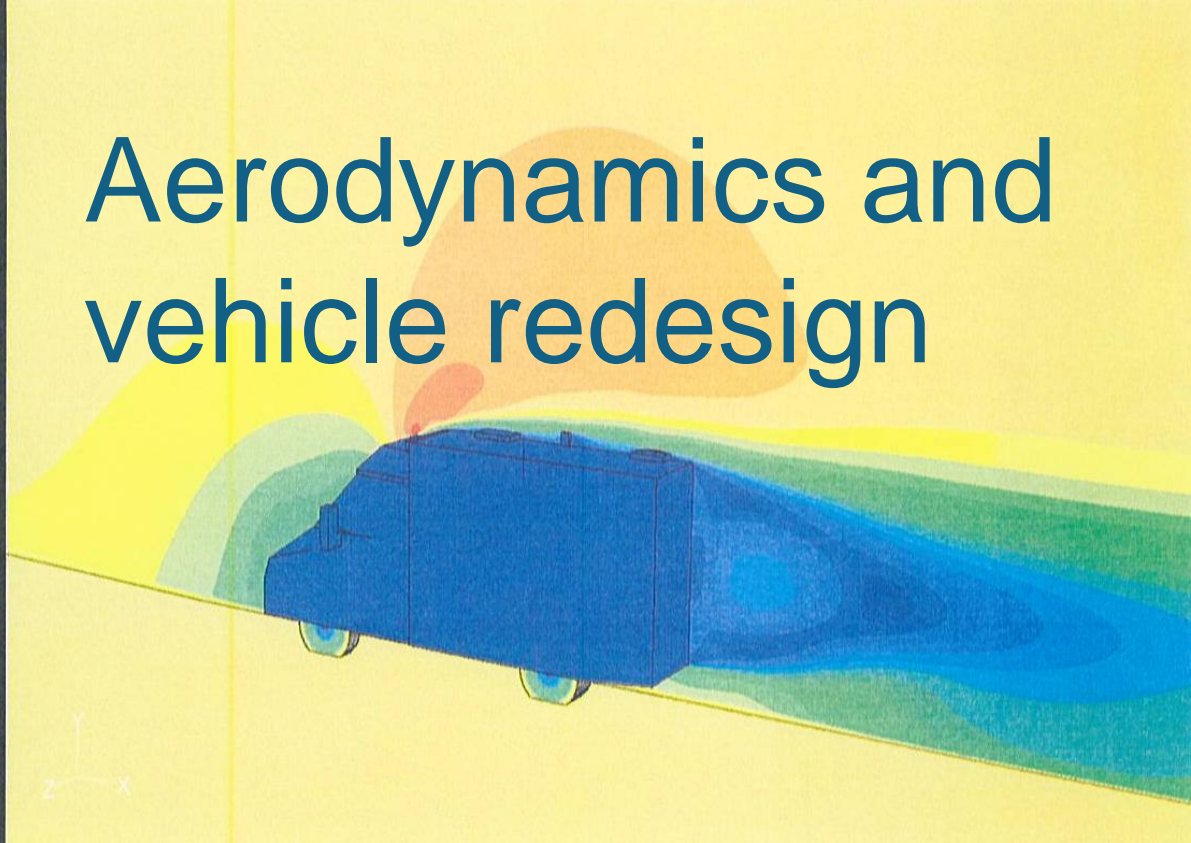
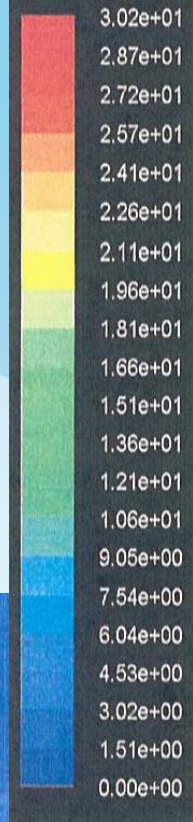


Ambulance Service CO₂ Reductions

- Redesigning the ambulance
 - Aerodynamics
 - Tyres
 - Telematics
 - KERs technology
- Eco driving
- Auto route planning



Aerodynamics and vehicle redesign



New Fleet



Ambulance Service CO₂ Reductions

- Alternative fuel
 - CNG
 - Electric
 - Hybrid
- More efficient vehicles
- Vehicle movements



Ambulance Service CO₂ Reductions

- Estates
 - Insulation
 - Boiler upgrades and optimisation
 - Energy reduction
 - Location
- Renewables
 - Solar
 - Wind



Yorkshire Ambulance Service

Working to reduce our impact on the environment and adapt to the uncertain changes in the future



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