Applying Climate Just in Trafford and Salford

Greater Manchester Fire and Rescue Service

Greater Manchester Fire Fighters rescued over 1,000 people from Boxing Day floods in 2015 © Greater Manchester Fire & Rescue Service

1. SUMMARY

The Greater Manchester Fire and Rescue Service (GMFRS) serves around 2.8 million people from 41 fire stations. The Service has a support role in tackling flood events (both through pumping water and rescuing people) and in providing safety advice. GMFRS attended a Climate Just training course in December 2015 to explore how the tool might be able to help target safety advice to vulnerable people. JRF and Climate UK went on to work with GMFRS during 2016 to apply Climate Just data and insights to this issue. A key part of this was the analysis and quantifying of the exposure and vulnerability to flooding of Trafford and Salford, two boroughs which GMFRS was investigating to pilot some preparatory flood risk mitigation activity.

2. ACTIVITIES

The primary purpose of the analysis was to provide the evidence base on:

- How exposed are Trafford and Salford to flooding and how many households are at risk?
- How vulnerable are Trafford and Salford to flood risk and why?
- Which areas are most disadvantaged by flooding and why?

The initial analysis was carried out using the online Climate Just map tool. Several map layers were analysed individually and in combination to provide insights into:

- Exposure to flood risk
- Social vulnerability to flooding
- Flood disadvantage
- Possible responses to flood disadvantage

The tool also provides indices of sensitivity, enhanced exposure, ability to prepare, respond and recover. The data on indicators (the issues) were then compared against the English mean to highlight key areas of vulnerability in the boroughs.

GMFRS have also combined the findings with data they already hold (from Experian and Office for National Statistics), to enhance their local intelligence on flooding risk. This will enable them to make judgements about vulnerable households within the disadvantaged areas identified and to combine that with information about households at high risk of fire.

3. NEXT STEPS

The report provided evidence of exposure and vulnerability to flooding in Trafford and Salford, highlighting that overall, Salford is more vulnerable than Trafford, and that there is a strong combination of exposure and vulnerability in parts of Salford. Four out of five of the most vulnerable areas are also areas in which the highest number of households are exposed to flood risk.

Drawing on research, best practice, local intelligence and relevant case studies, GMFRS started to consider how, working alongside local partners, they could begin to respond to vulnerability and exposure to flooding. Potential has been identified for locally specific information on flooding to be made available to crews attending incidents using Mobile Data Terminals (MDTs) carried on board fire appliances. The maps (shown below) provided an opportunity to move beyond a consideration of physical factors to social factors and showing not just which places were at risk but also why, because of their vulnerability and more depth and detail in terms of their ability to respond and prepare.

4. BARRIERS

There are many pressures on the time and resources of a Fire and Rescue Service and there may be difficulties in scheduling targeted public outreach work on flooding awareness and preparation, due to the range of other prevention activities the service is delivering (e.g. Safe and Well visits, Seasonal 'Safe4' Campaigns, Safe Drive Stay Alive).

5. GUIDING PRINCIPLES

- Analysis such as this can help differentiate between those who need help and those who don't. Targeting resources during events could help to relieve some of the pressure on health and social care systems which are likely to be particularly stretched due to impacts on infrastructure and care professionals themselves, who may themselves be dealing with impacts.
- Borough-wide analyses are limited in that they provide a general picture only.
- While an analysis like this is a starting point for highlighting areas of high social vulnerability and where disadvantage from flooding is likely to be more pronounced, voluntary sector and local authority personnel are likely to know who in their local area is most vulnerable on an individual basis.
- Action should be tailored to the local context, and build on local understanding of flood experiences and local capacity to respond, for example, considering what existing provision is in place from different organisations to help improve flood risk management. Hence Salford Resilience Forum and the AGMA CCRU (Association of Greater Manchester Authorities - Civil Contingencies Resilience Unit) were also consulted as part of this project.

6. CONTACT

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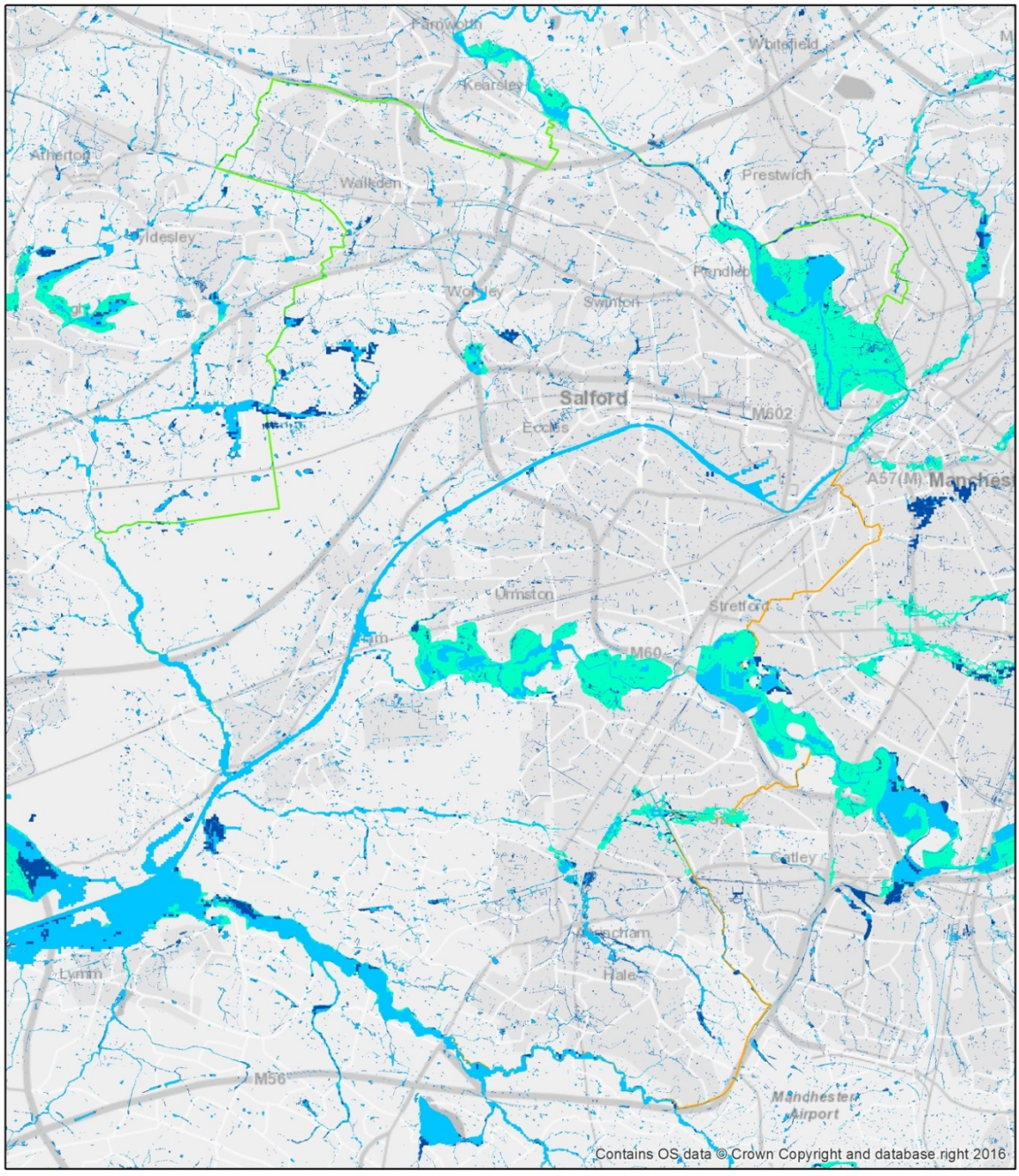
Exposure to flood risks
Trafford and Salford



Vulnerability
- Slight
- Extremely low
- Relatively low
- Average
- Relatively high
- Extremely high
- Acute

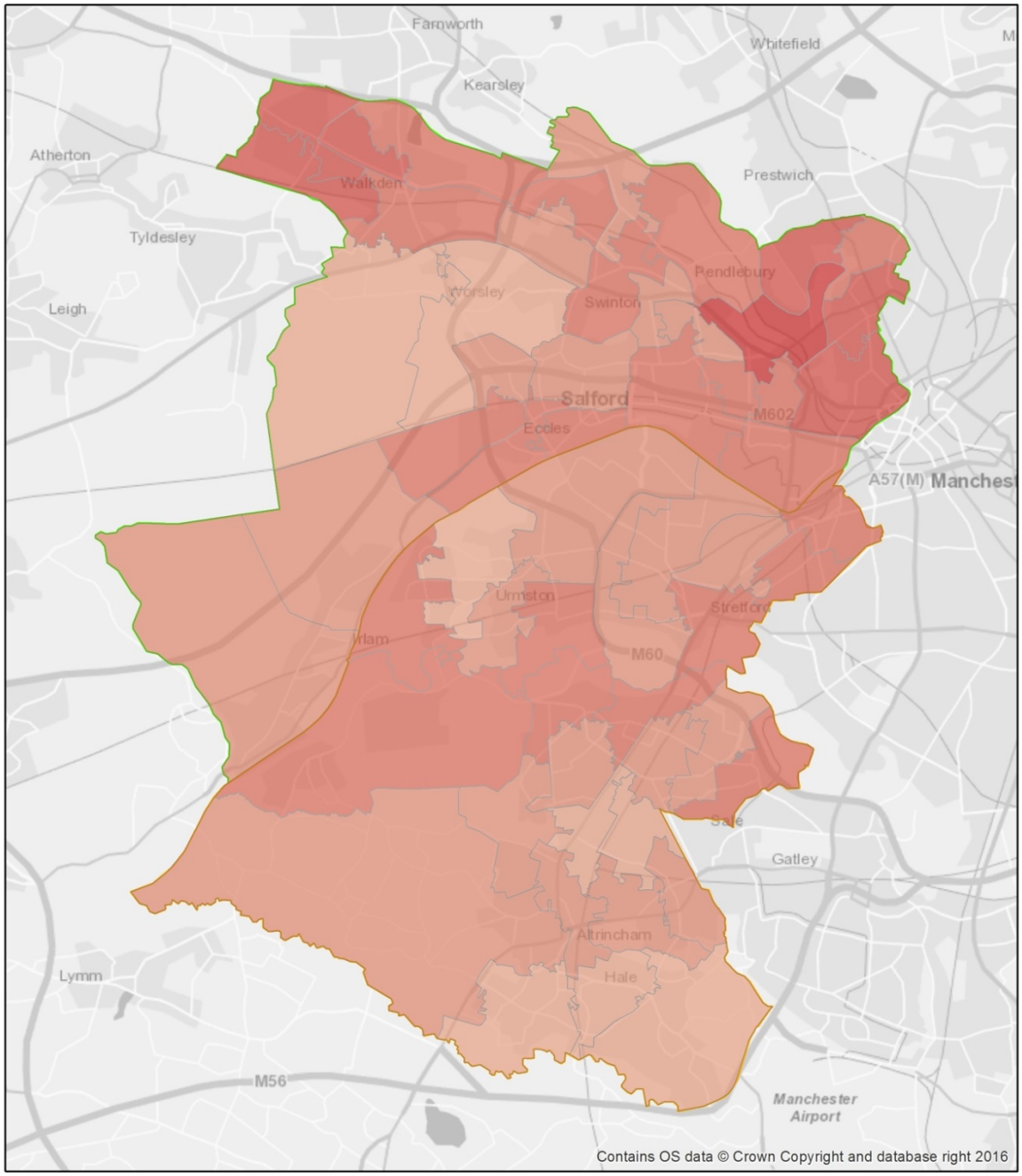
Areas
- Salford
- Trafford

Households in Flood Warning Areas
- Household

Number of households in Flood Warning Areas per MSOA
- 1 - 51
- 2253 - 3624

Exposure to flood risk
- 1/30 yr surface water/river flood risk
- 1/100 yr surface water/river flood risk
- Areas affected by flooding
- Flood Warning Areas

Vulnerability to flooding
Trafford and Salford



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