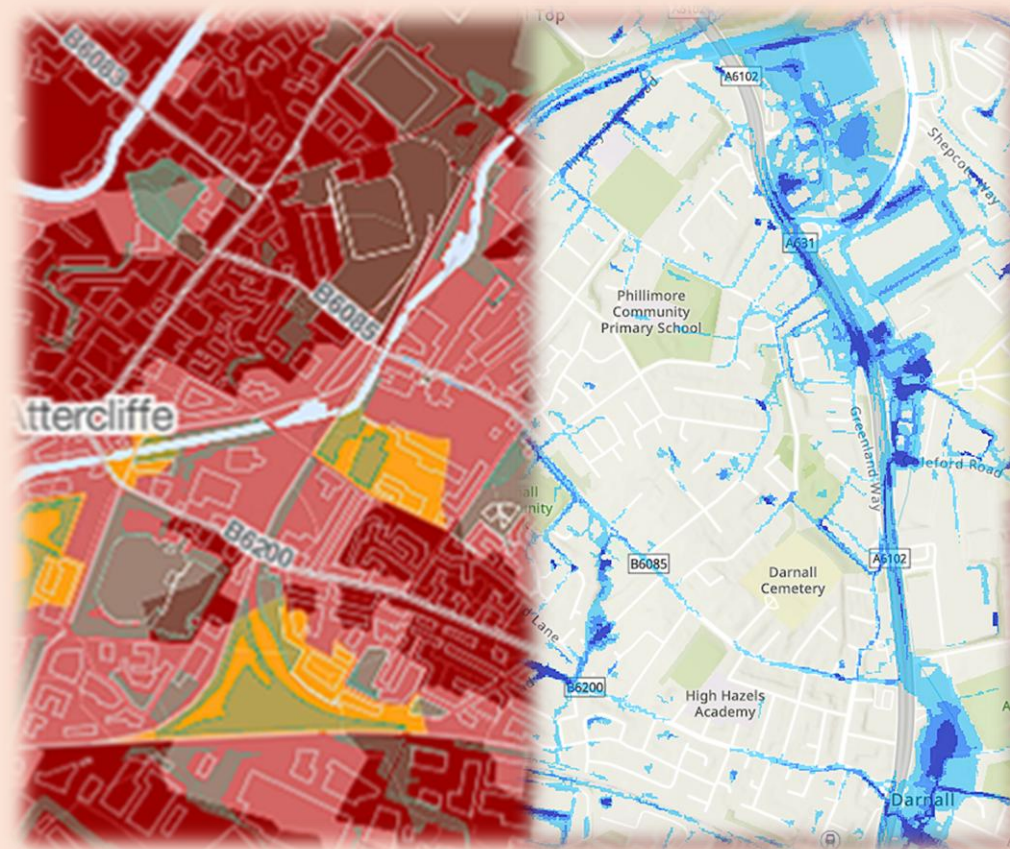


# Is Your School Climate Ready?

Leveraging authoritative vulnerability data to target support and secure resources.

Kit Marie Rackley (they/she)

[k.rackley@uea.ac.uk](mailto:k.rackley@uea.ac.uk)



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# Is Your School Climate Ready?

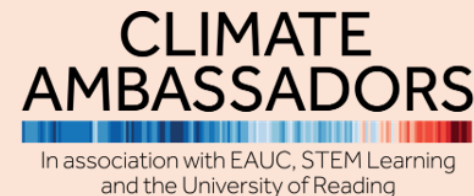
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[t.ly/nTdXm](https://t.ly/nTdXm)



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# Motivation

ALL EDUCATION  
SETTINGS TO HAVE A:

- DESIGNATED  
SUSTAINABILITY LEAD
- CLIMATE ACTION PLAN

Regional hubs



## Climate Change & Sustainability Education Strategy

Strategic aims:

1. Excellence in education and skills for a changing world
2. Net zero
3. Resilience to climate change
4. A better environment for future generations



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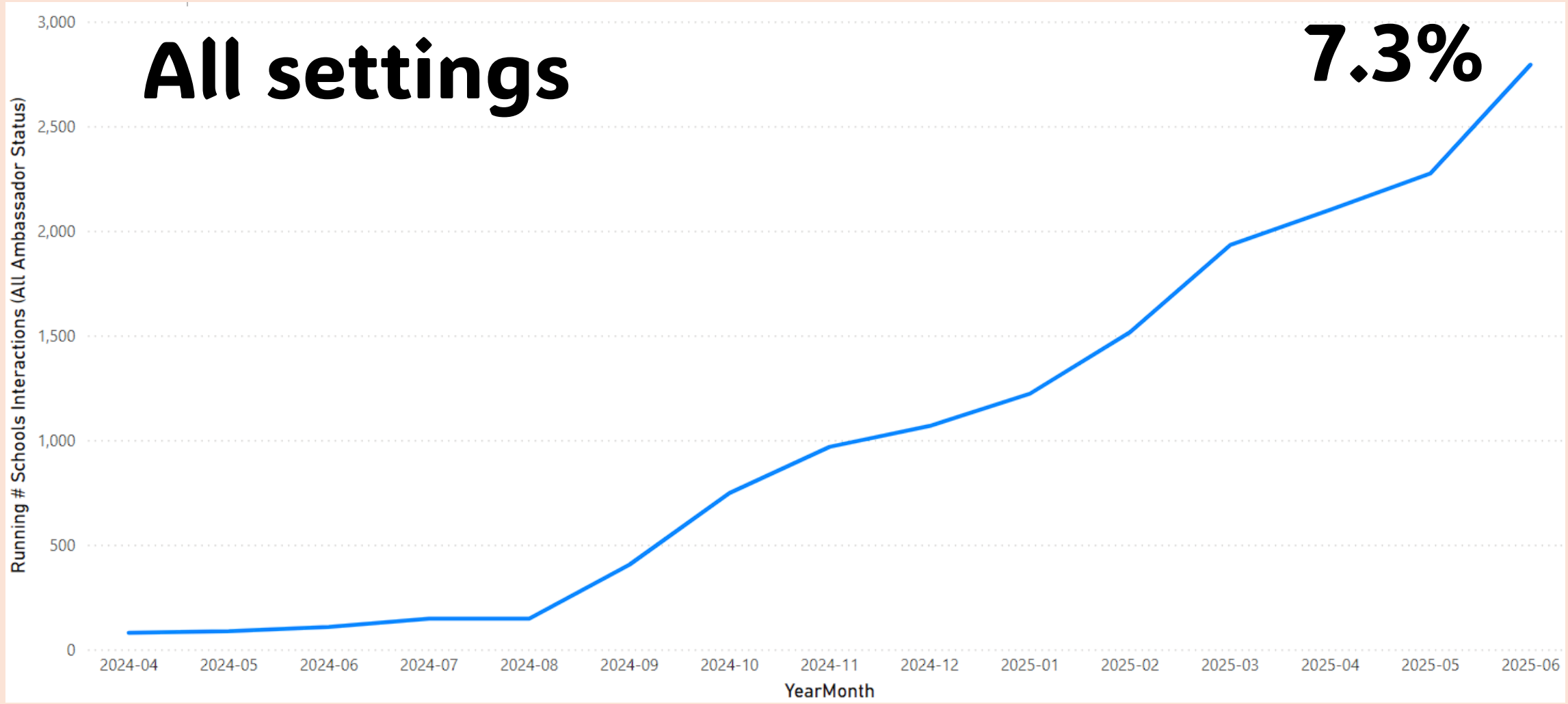
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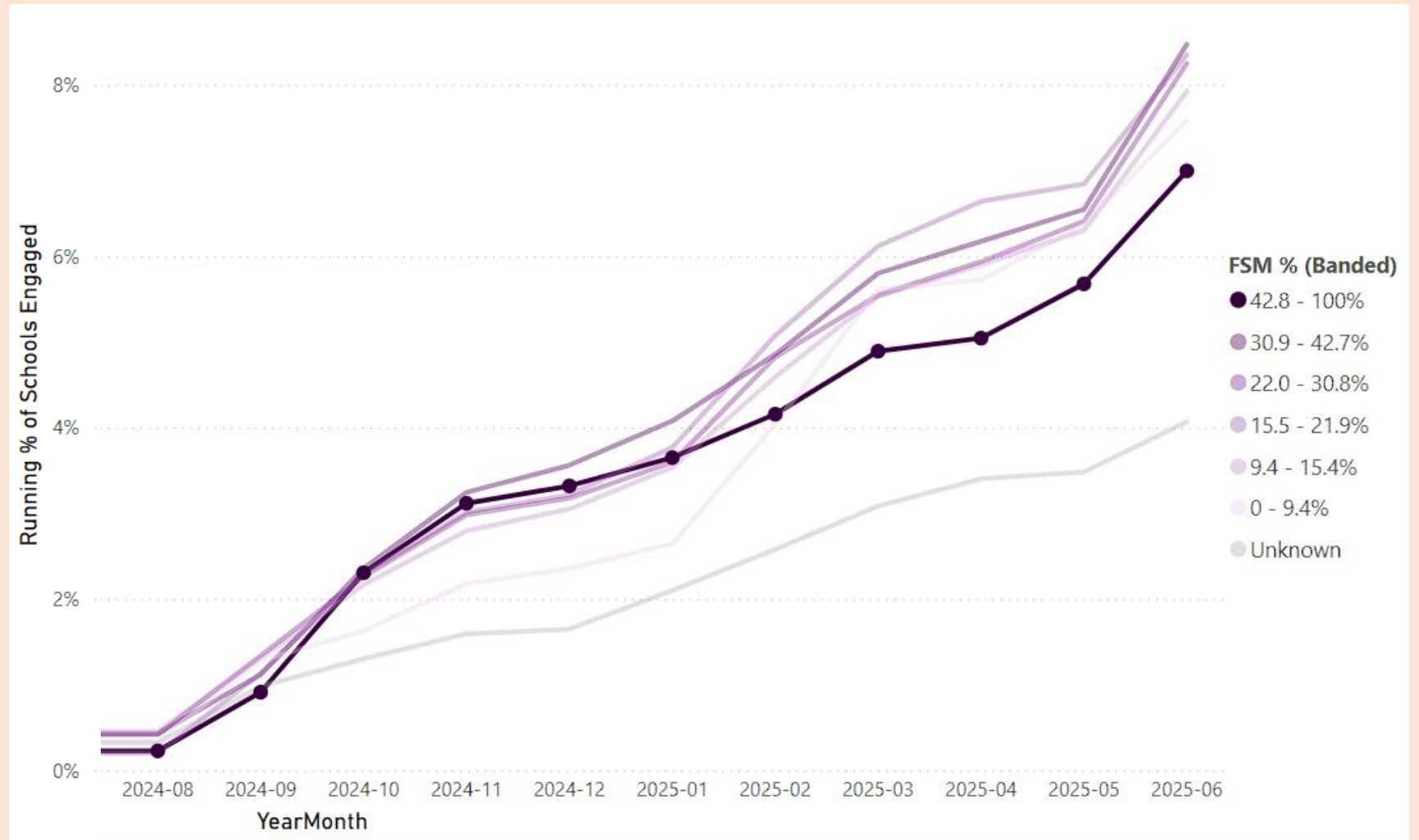
# All settings

7.3%



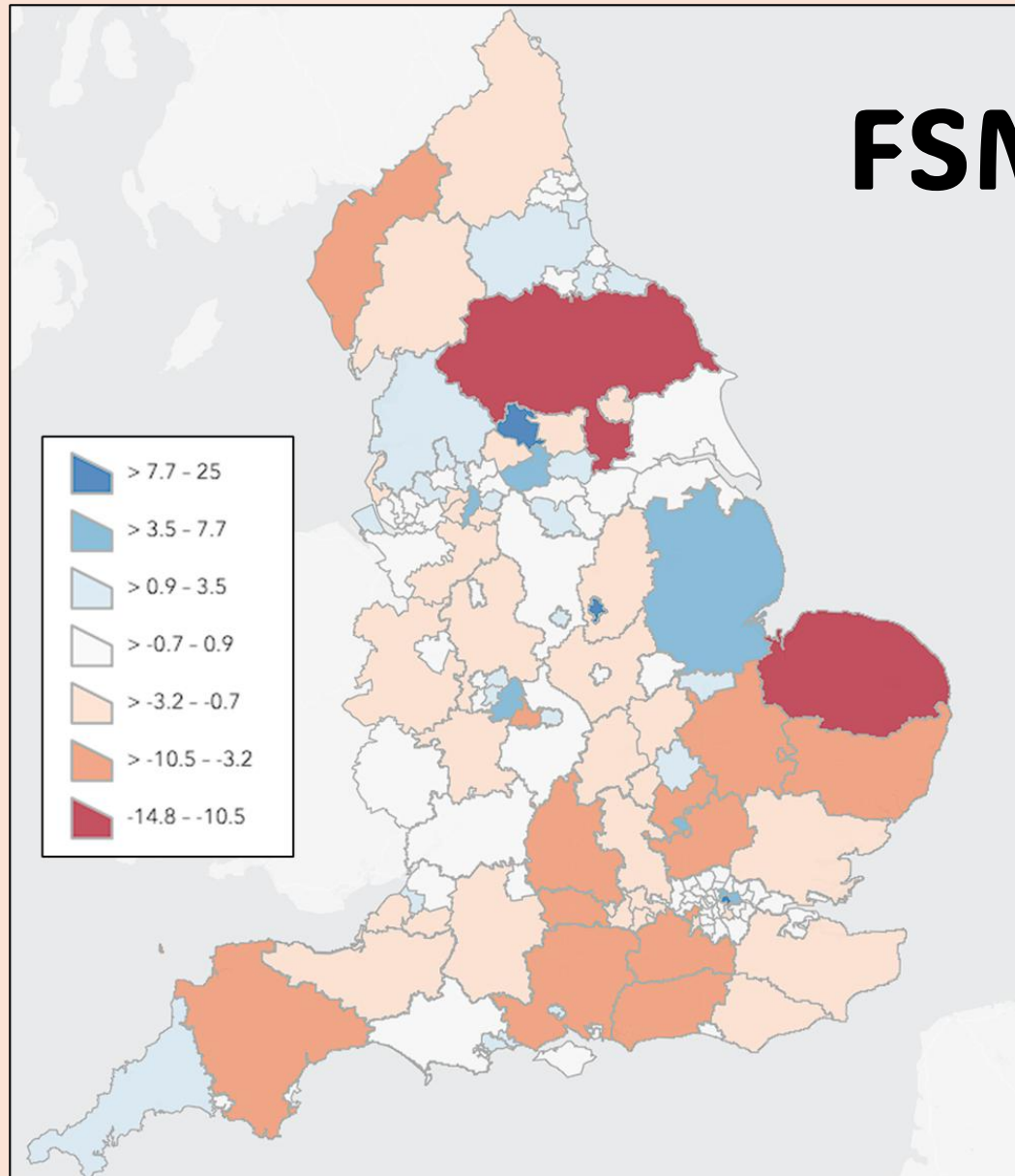
# Gap analysis

**An inverse equity gap.** Schools with the highest levels of economic disadvantage show a consistently lower cumulative engagement rate than less disadvantaged schools, indicating a critical priority for intervention.



# Gap analysis

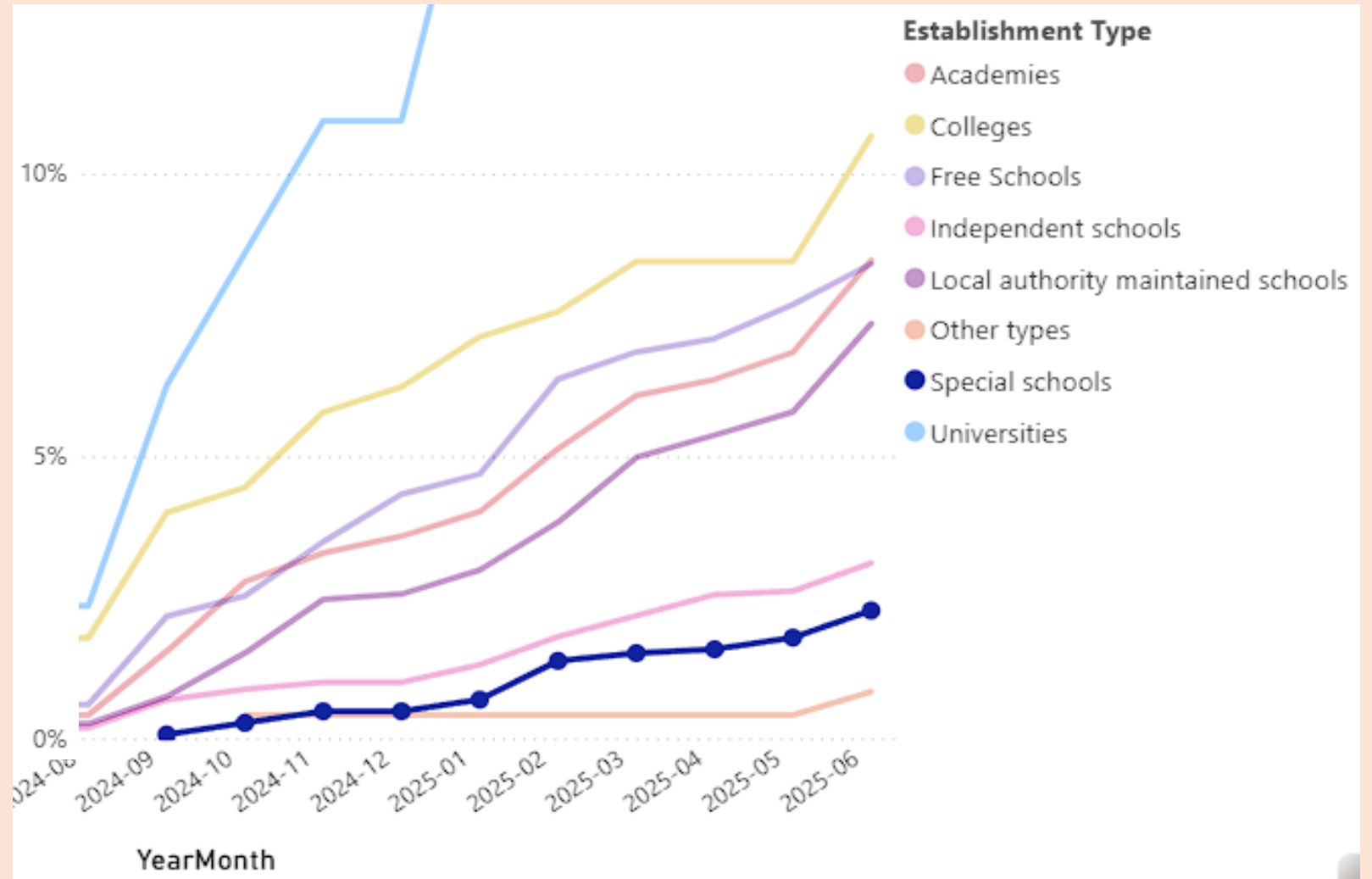
Stark regional inequity in programme engagement. Local Authorities are coloured by their Deprivation-Adjusted Gap—a **negative score indicates fewer engagements in high-FSM schools relative to low-FSM schools**, weighted by local deprivation levels. Dark red areas (e.g., Norfolk, North Yorkshire) indicate most severe underservice of deprived communities. Blue areas indicate relative equity or better service for high-FSM schools.



## FSM gap

# Gap analysis

An institutional engagement gap. Special Educational Needs (SEN) settings are significantly less likely to be engaged by the programme than mainstream schools, highlighting a key equity concern.



## Establishment type

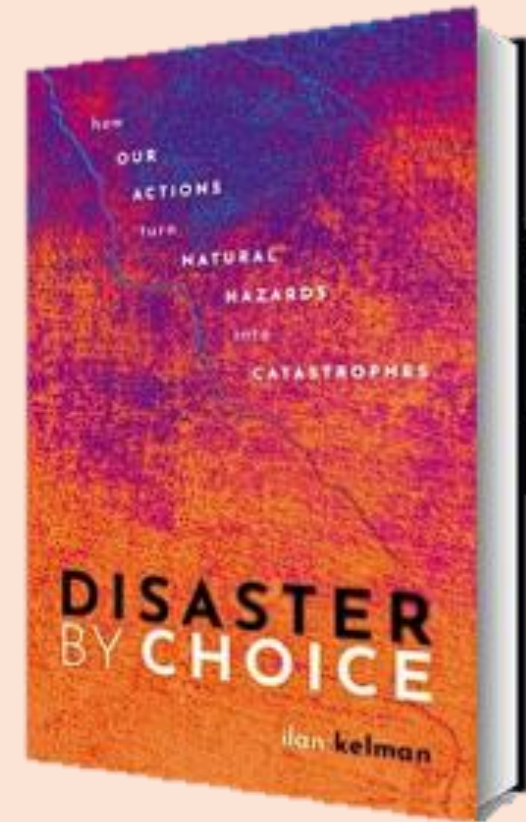
# Rationale

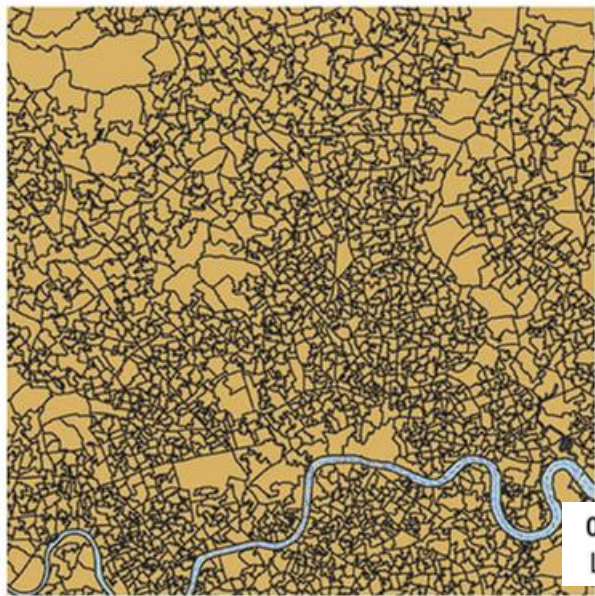
“

We also need to consider why those affected by nature cannot cope with it. The reason lies beyond the natural environment: vulnerability of people, places, infrastructure, and communities.

– **Ilan Kelman**

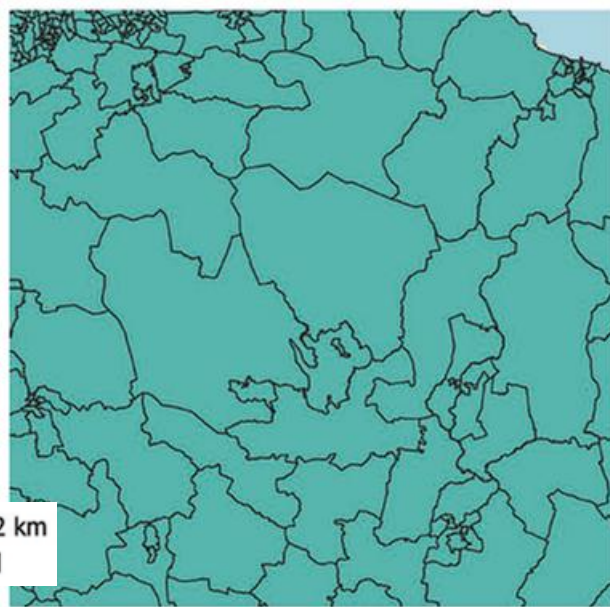
”





England

Left: Urban settings



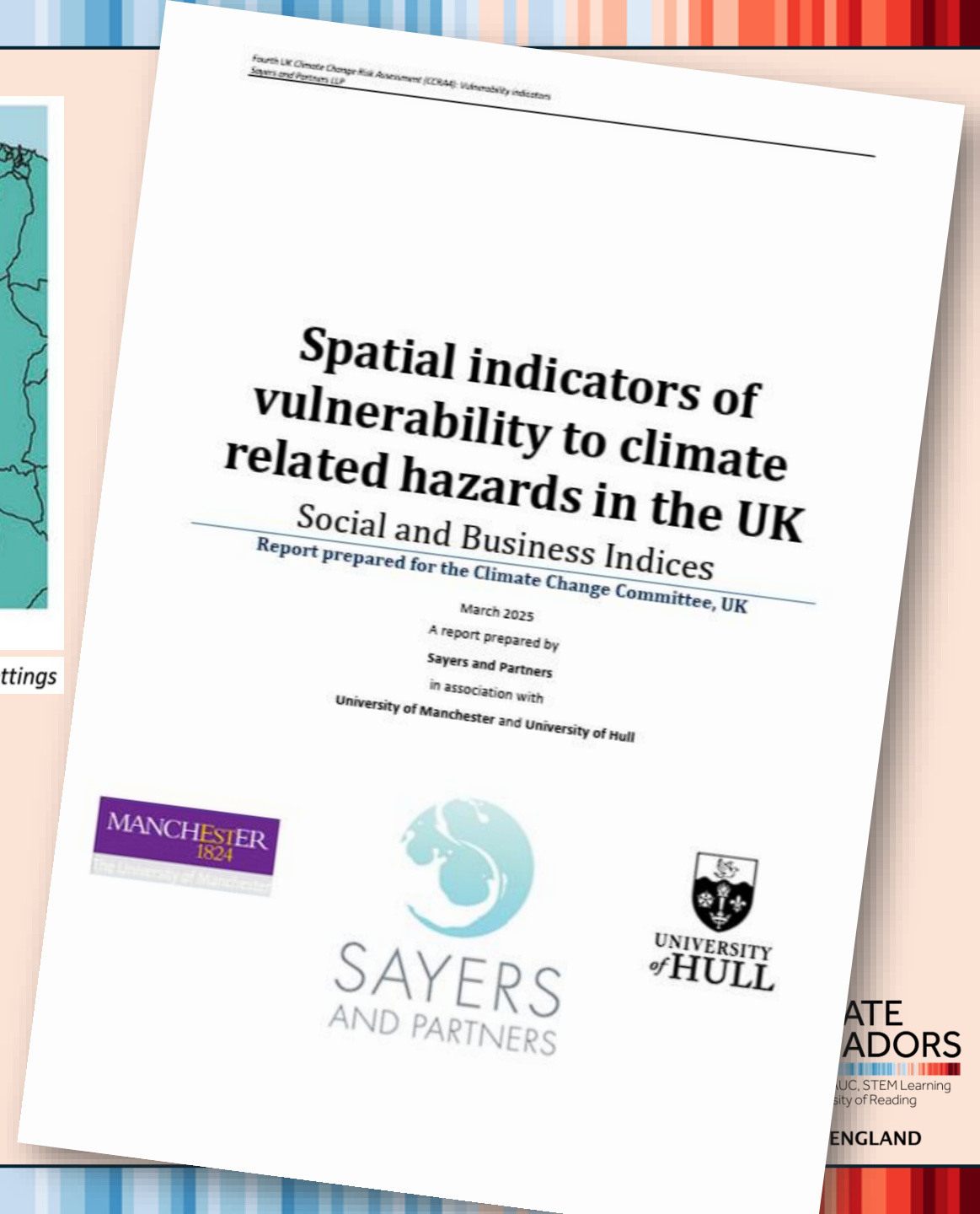
England

Right: Rural settings

[t.ly/UCsHR](https://t.ly/UCsHR)



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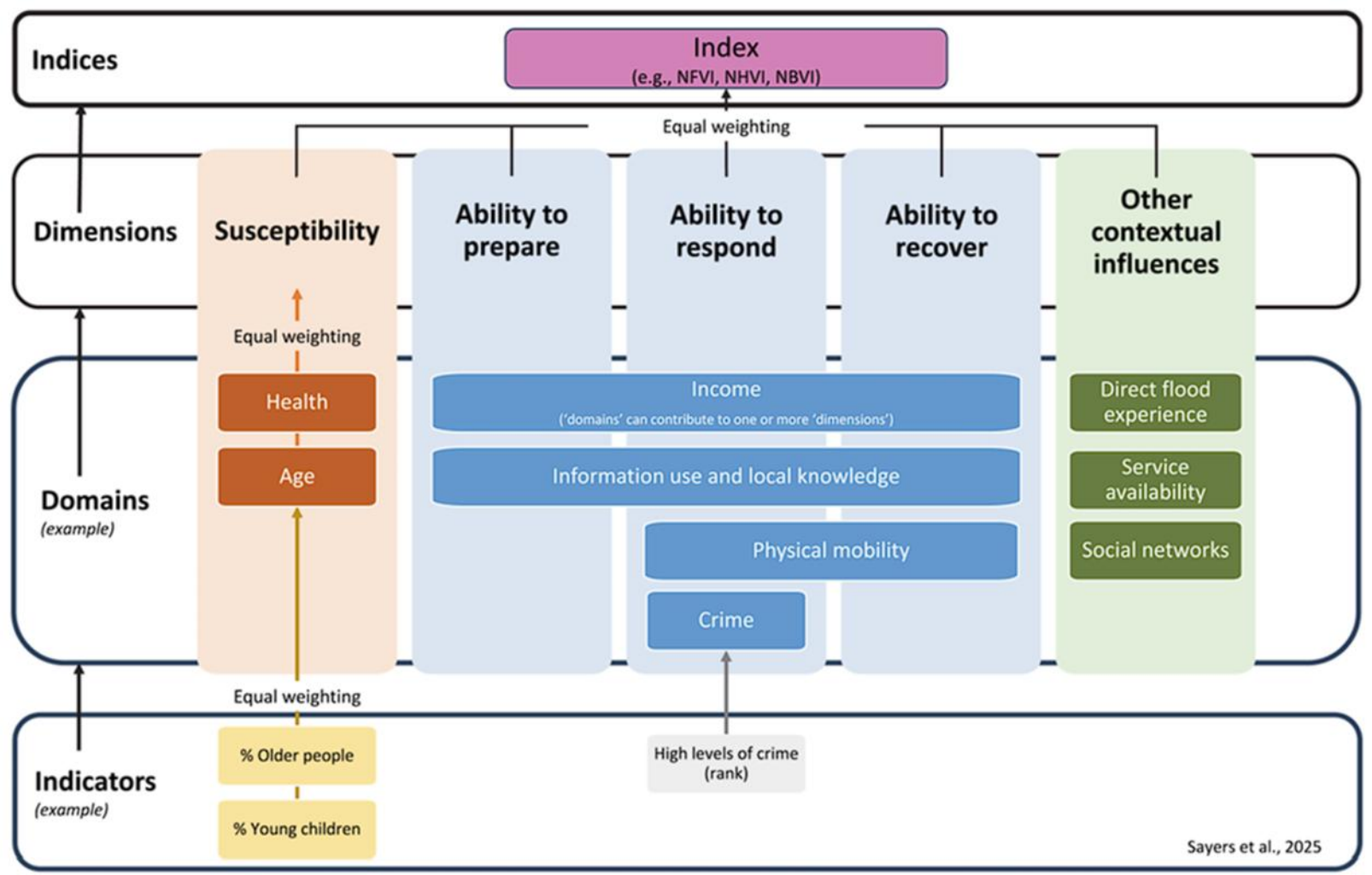
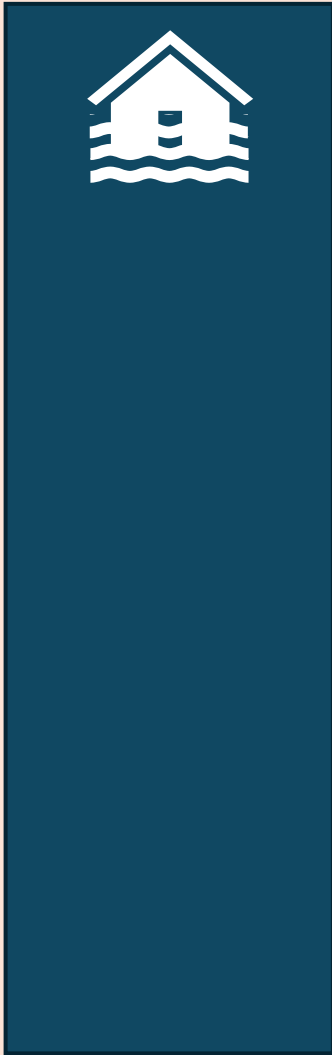
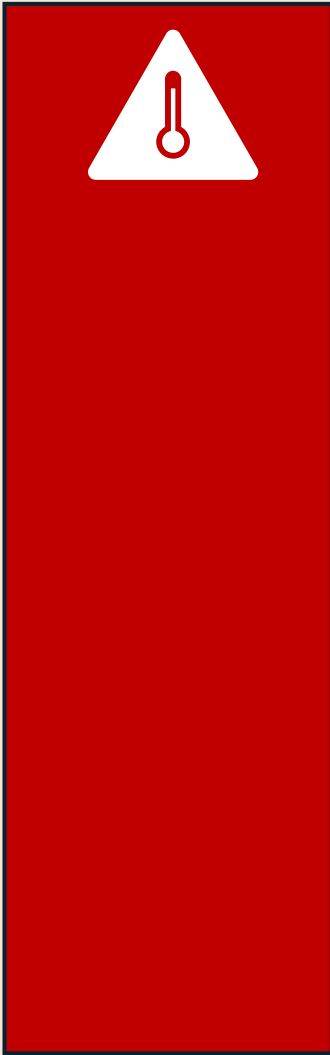


Figure 2-1 Framework of vulnerability assessment - A tiered approach



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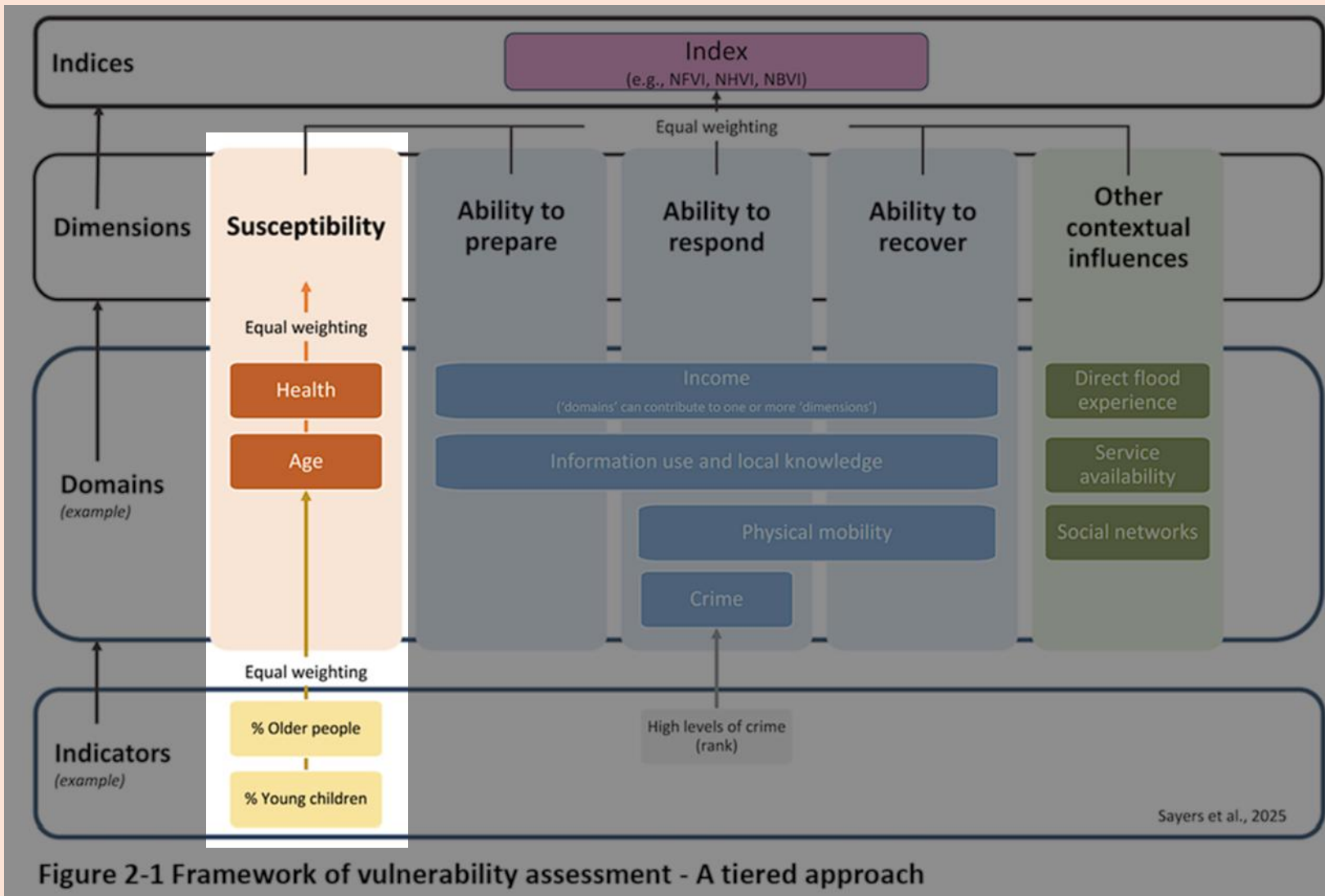
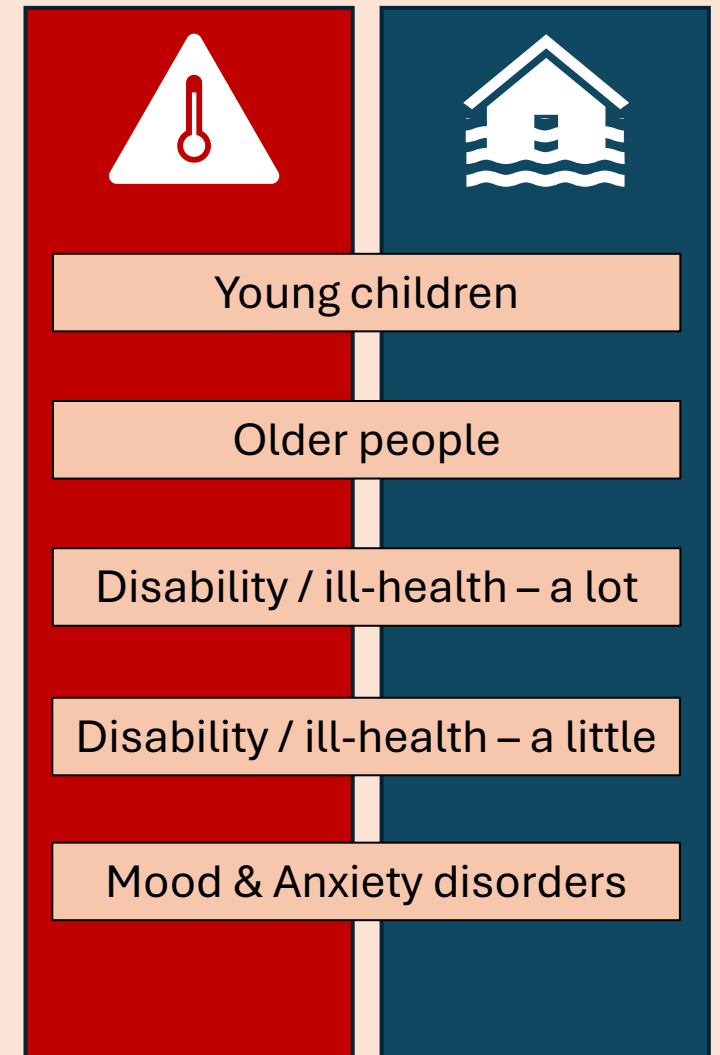


Figure 2-1 Framework of vulnerability assessment - A tiered approach



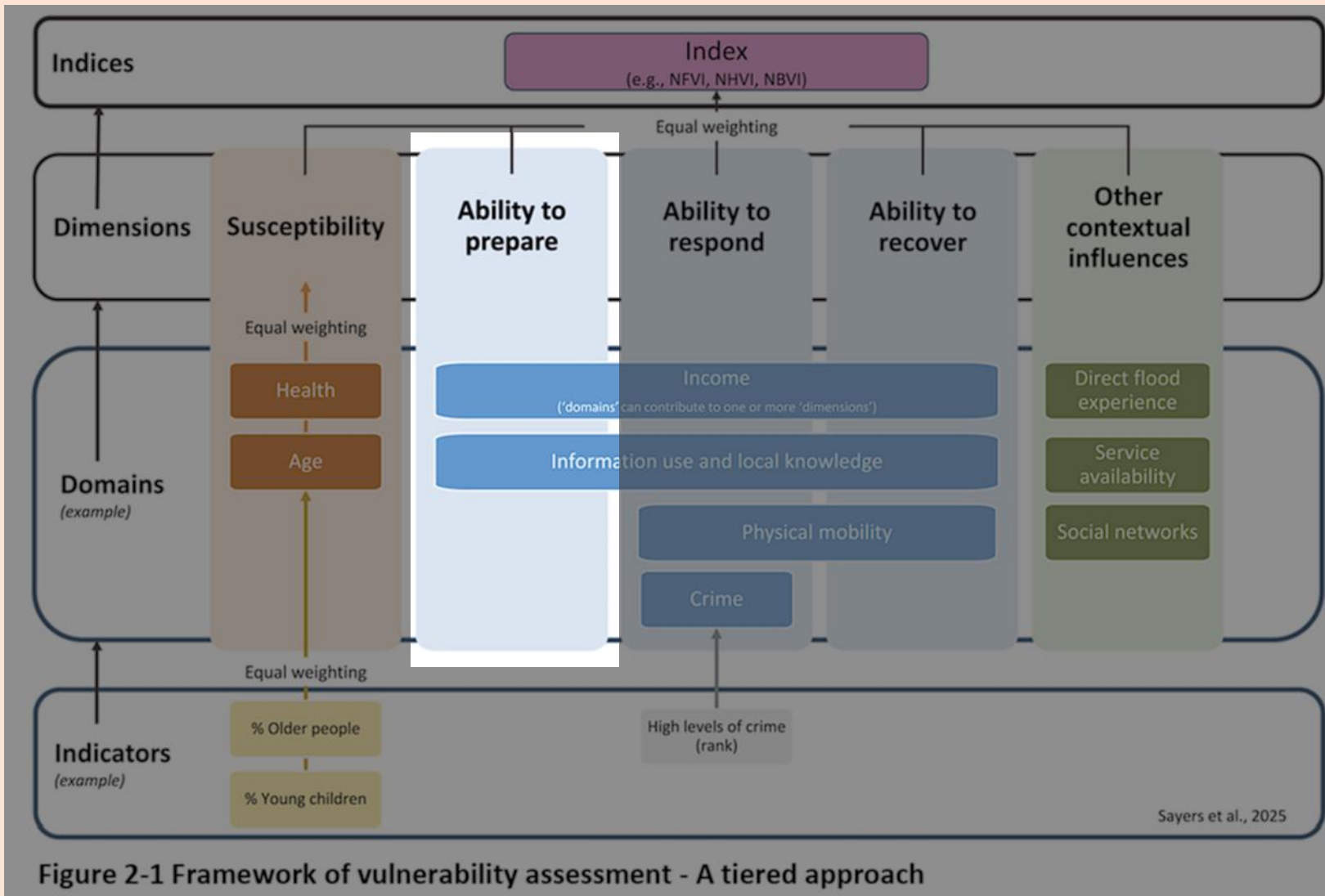
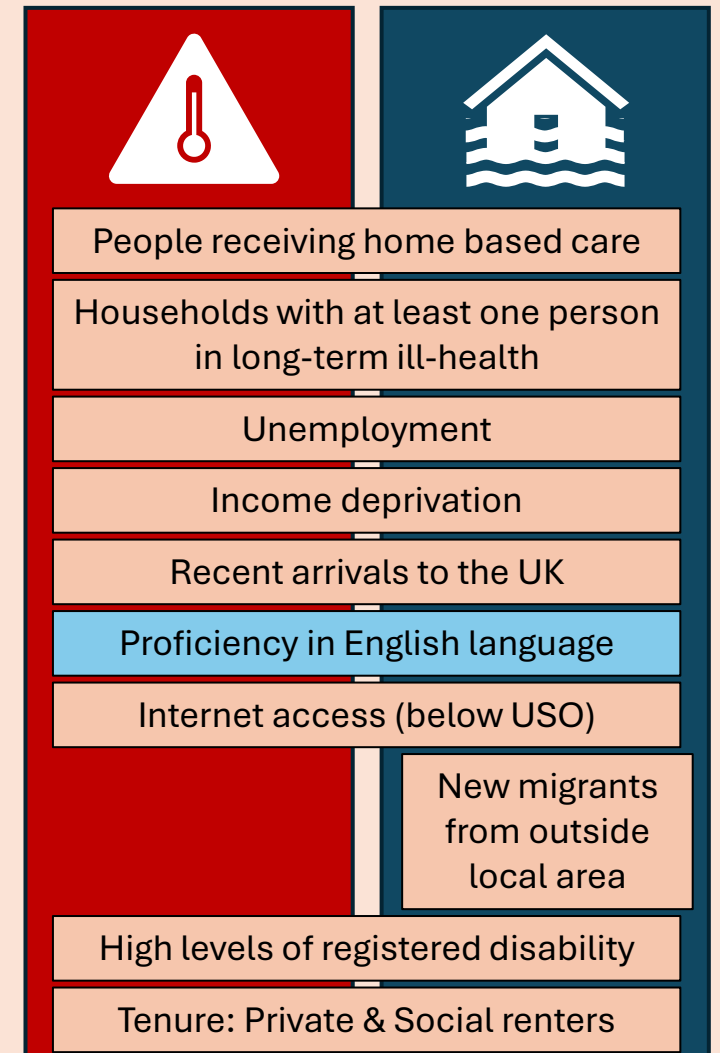


Figure 2-1 Framework of vulnerability assessment - A tiered approach



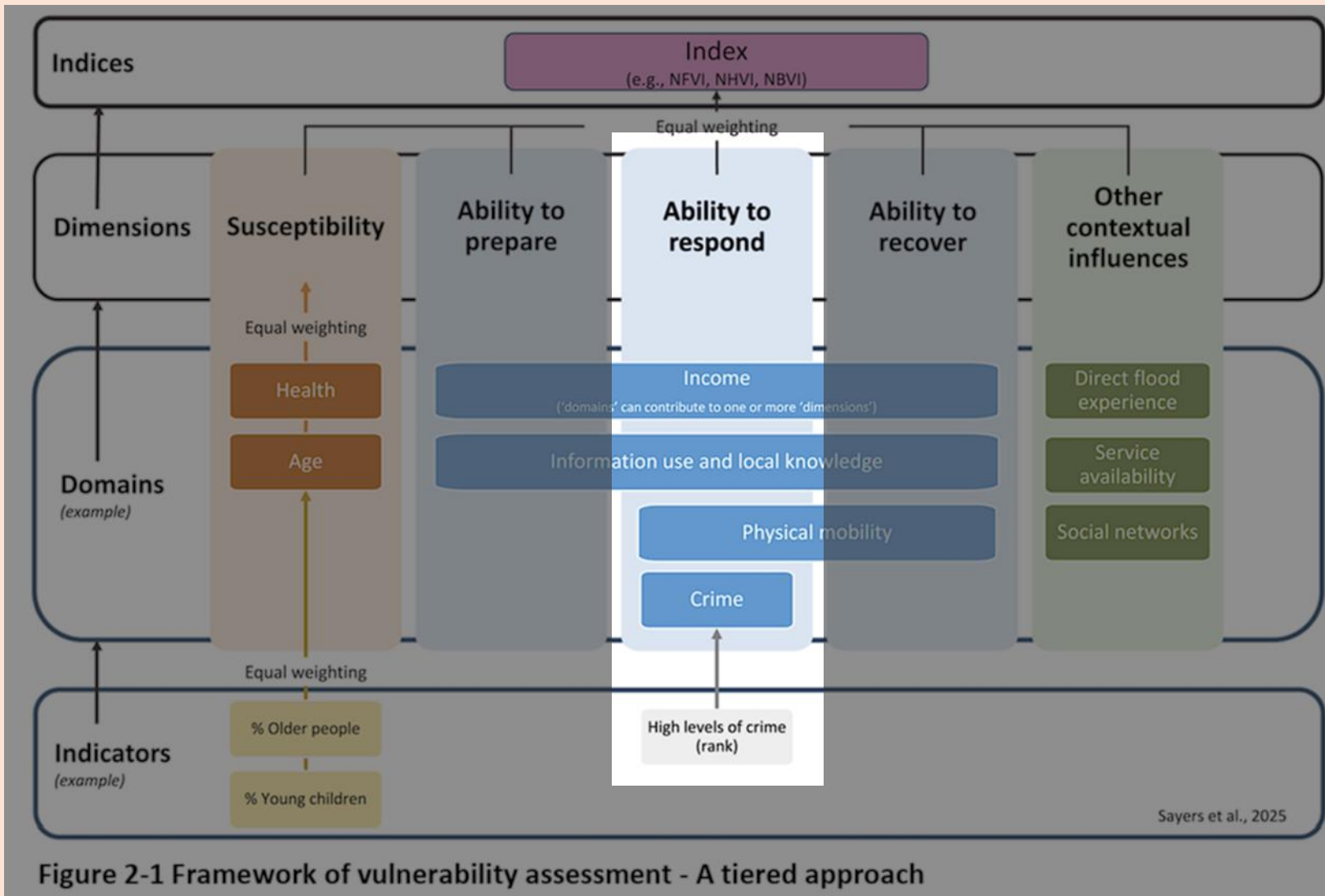
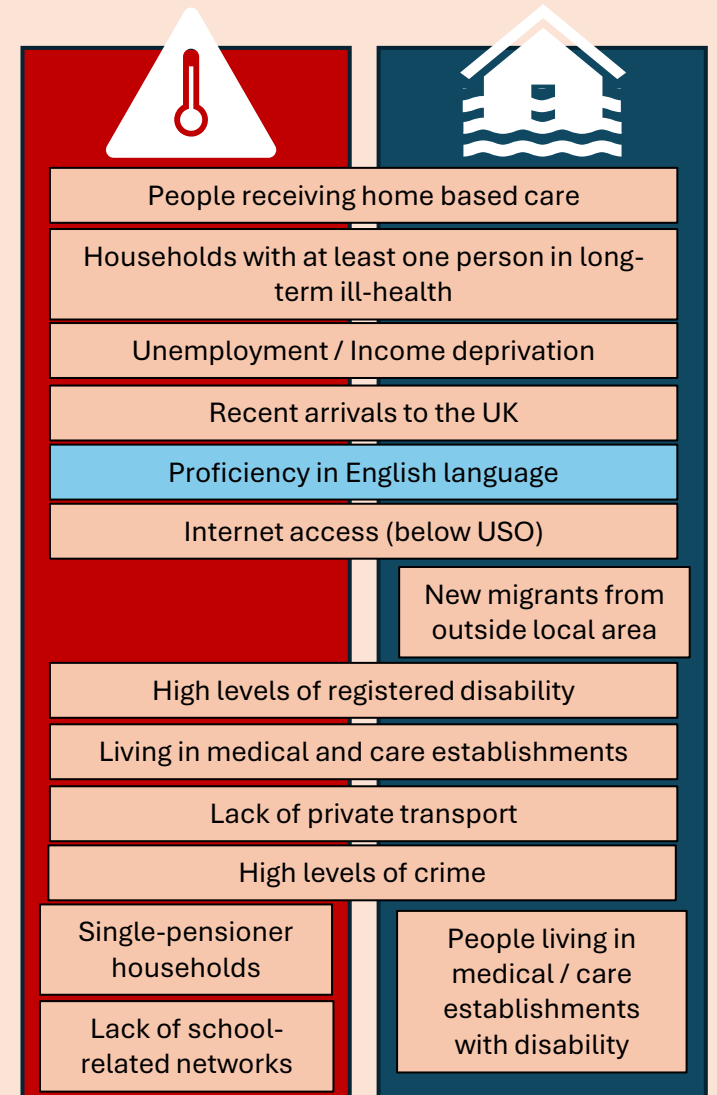


Figure 2-1 Framework of vulnerability assessment - A tiered approach



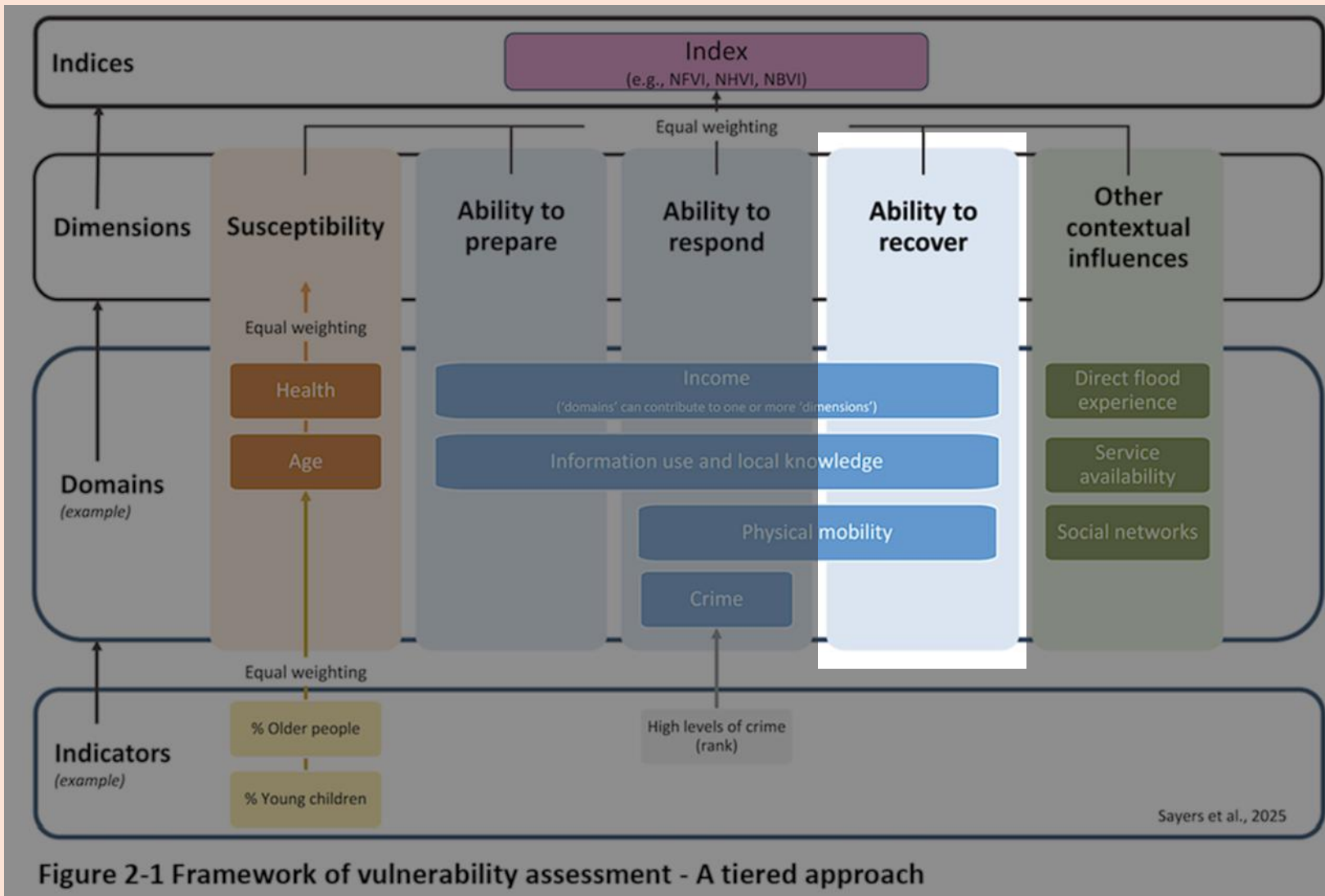
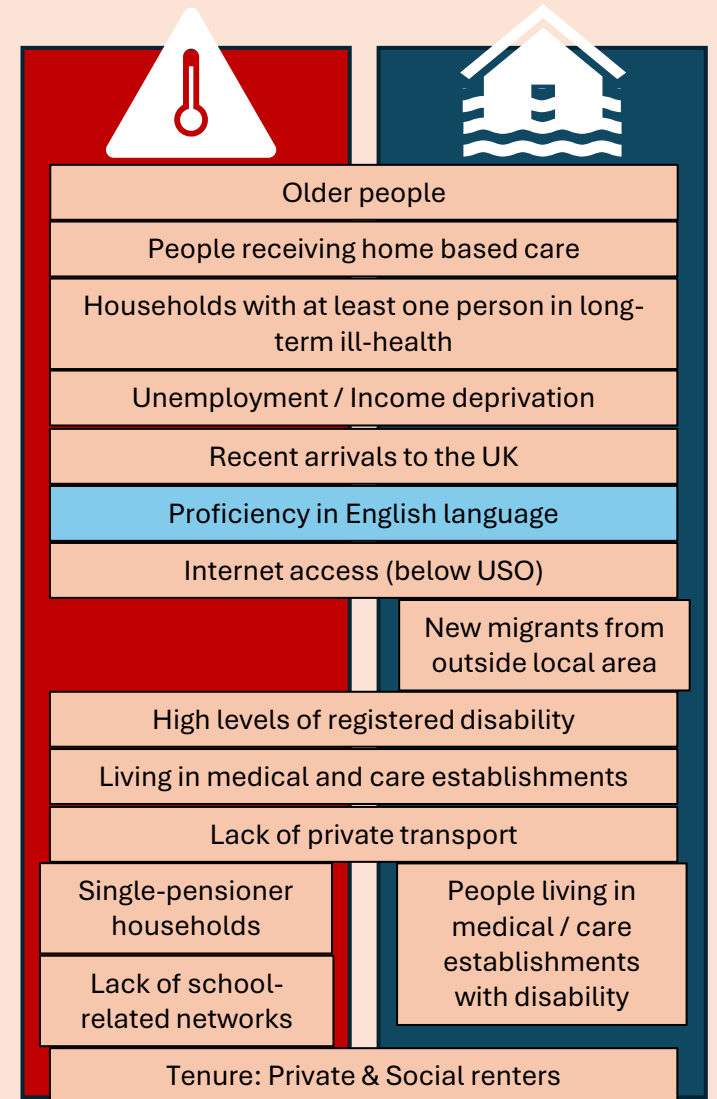


Figure 2-1 Framework of vulnerability assessment - A tiered approach



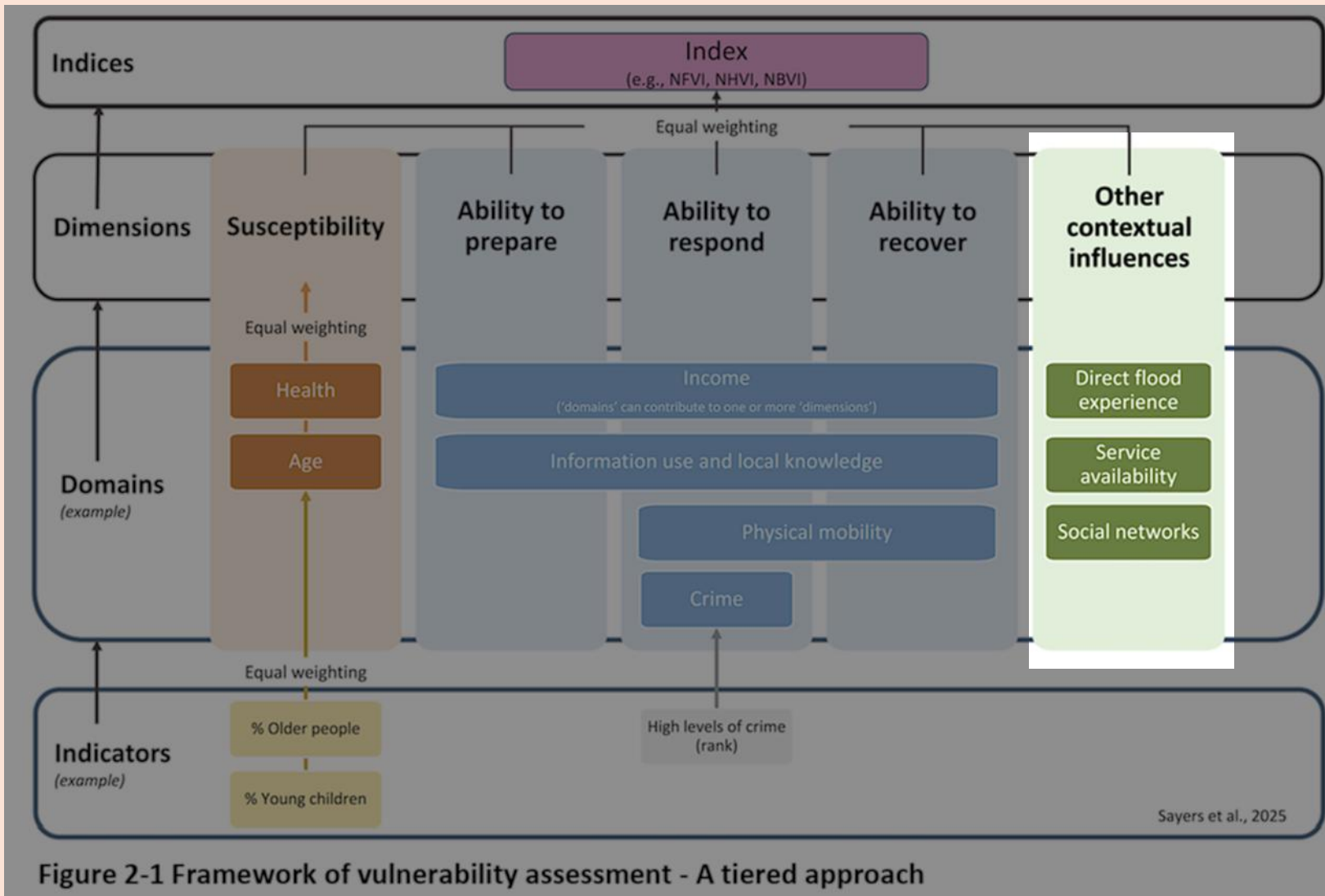
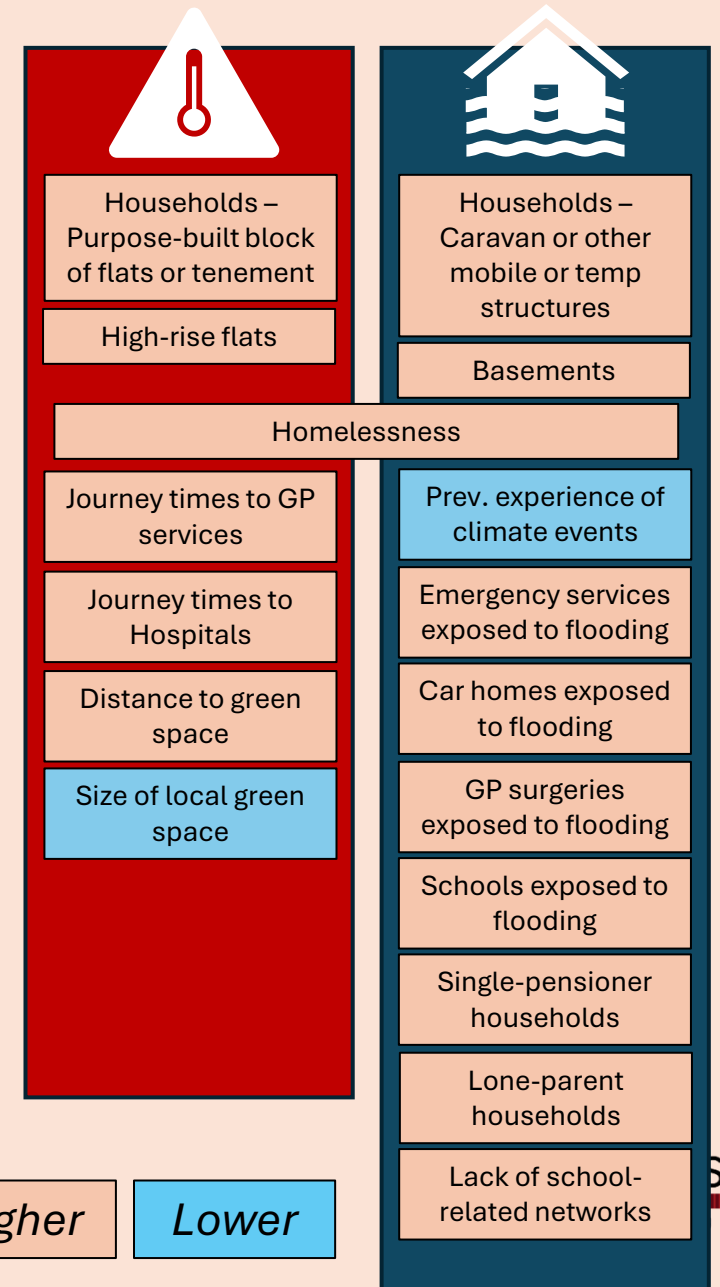
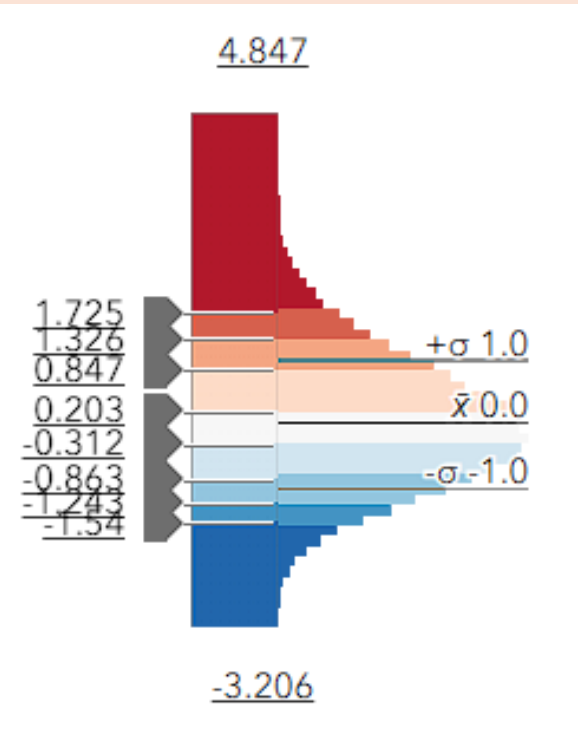
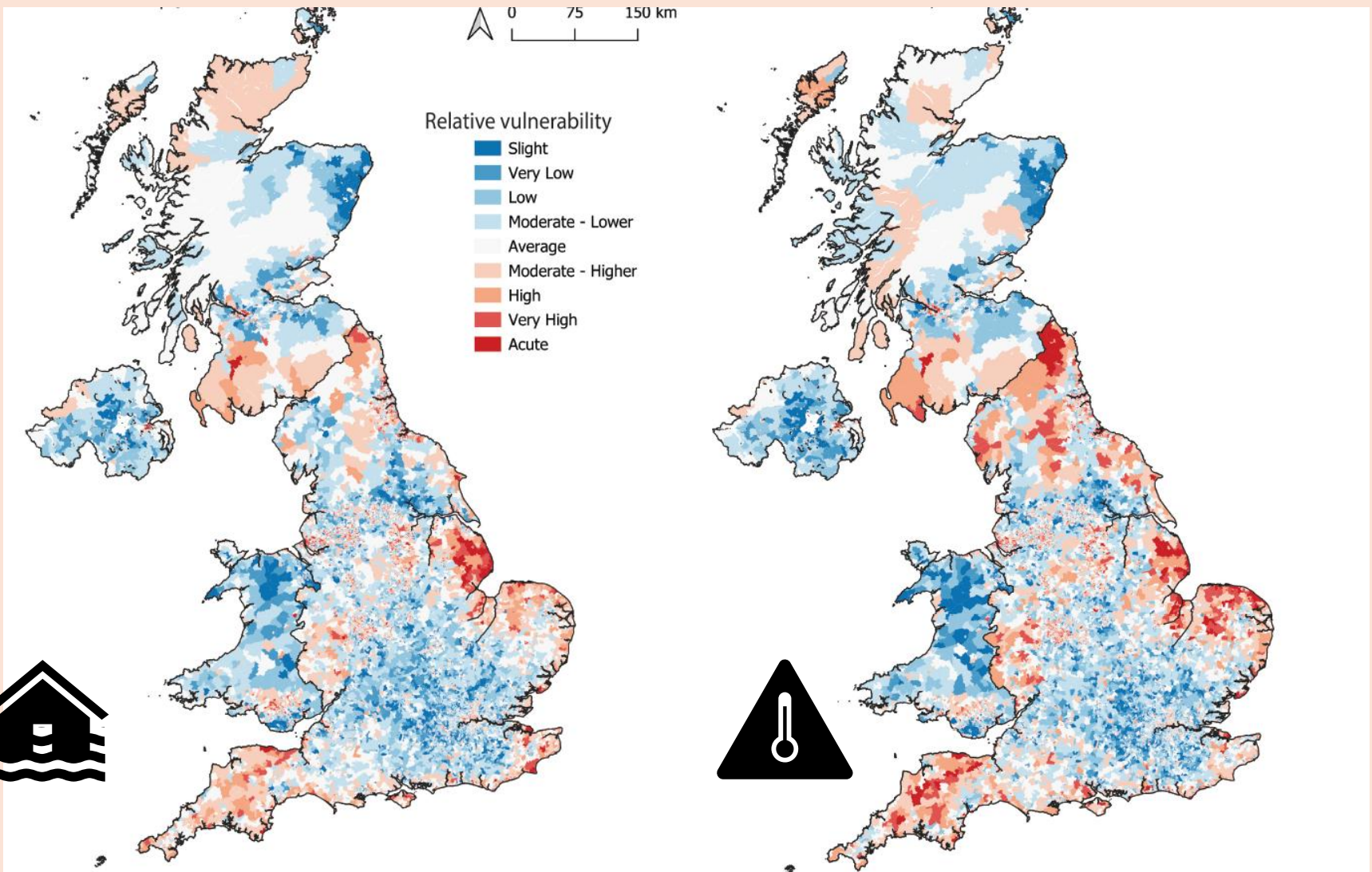


Figure 2-1 Framework of vulnerability assessment - A tiered approach





Z score  
 0 = national average

NVFI



AND

NVHI



AND

SSI-KMR

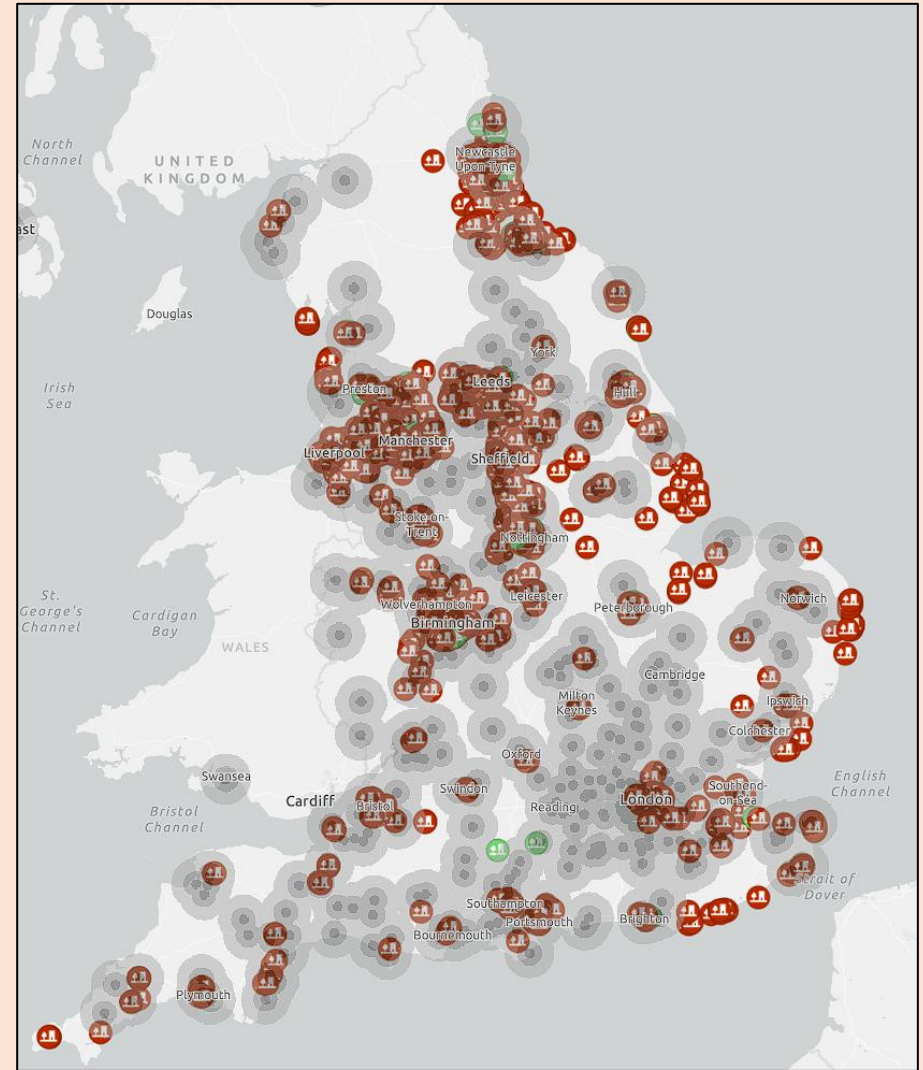


AND

**%FSM  $\geq 42.8\%$**   
*(top 1/5<sup>th</sup> nationwide)*

=

**“Most Vulnerable”**



# What does this mean for your school?

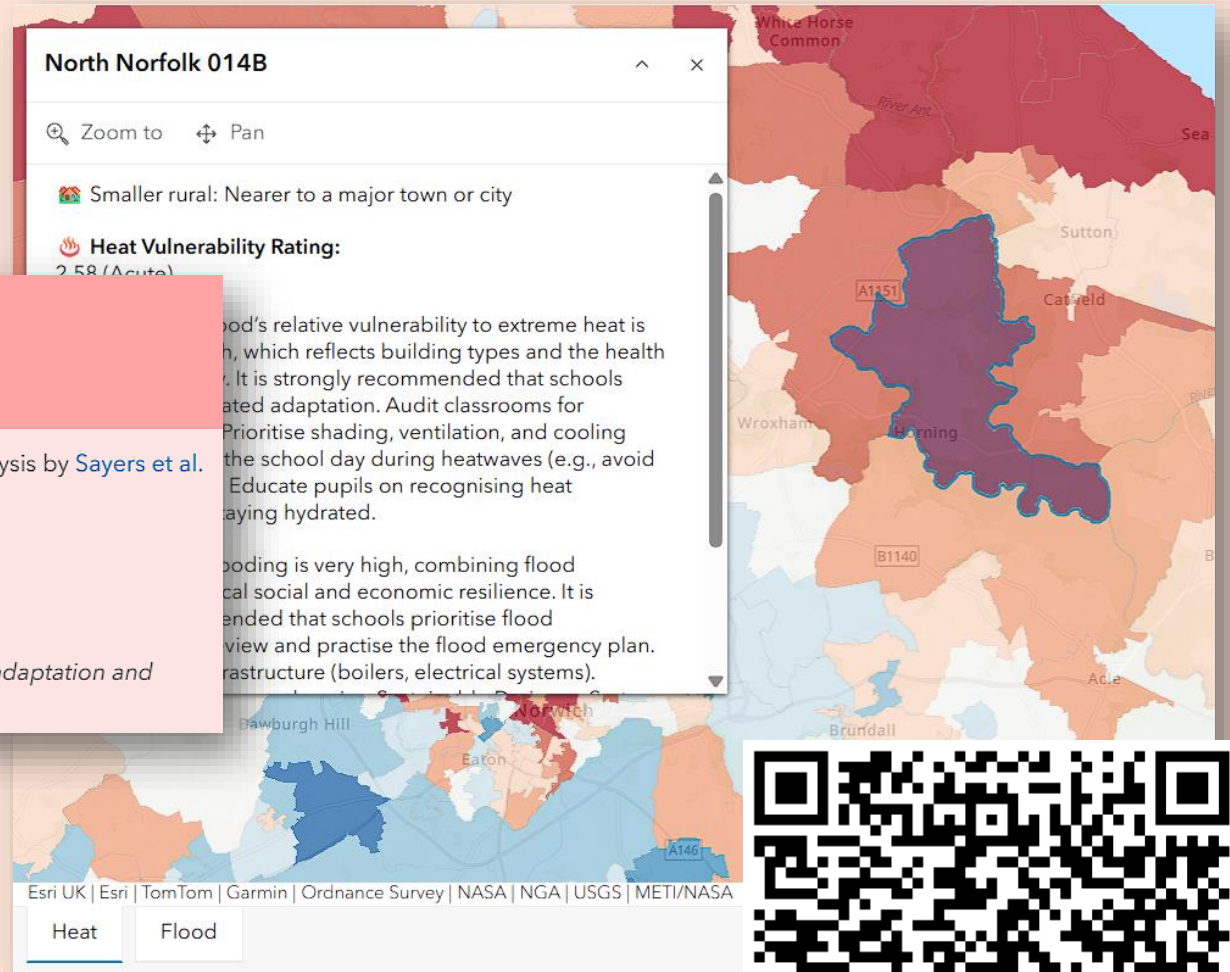


Welcome

to the School's Climate Vulnerability Explorer

This is an *in-development* interactive map concept, based on geospatial climate vulnerability analysis by [Sayers et al. \(2025\)](#). There are three simple functions:

- 🔍 **Search** for a school using the button in the top-right of the screen.
- 📁 **Select a tab** along the bottom of the map to switch between *heat* and *flood* vulnerability.
- 📄 **Click on an area of the map** to get details and suggestions for a school's Climate Action Plan *adaptation and resilience* pillar.



[t.ly/Au69V](https://t.ly/Au69V)

Evaluation >

[t.ly/g9XWo](https://t.ly/g9XWo)

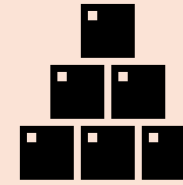


# Limitations



## Geospatial

- Neighbourhood  $\neq$  School
- Ignores micro-site variations
- Residential-based exposure
- No built-environment sensitivity



## Componential

- Adult-bias variables
- No pupil-level vulnerability
- Equal weighting not school-appropriate
- Missing operational context

## A 'school-centred' index is needed because...

- Sayers = **place vulnerability**
- Needs **pupil vulnerability + school-site vulnerability + operational capacity**

# Next step: School Climate Vulnerability Index (SCVI)

## Pillar 1: Context (Place vulnerability)

NVHI (Sayers)  
NVFI (Sayers)

## Pillar 2: Pupils (Socioeconomic vulnerability)

FSM  
SEND  
EAL  
Persistent absence  
Mobility  
CIN/\_CPP/LAC

## Pillar 3: School (Institutional/site vulnerability)

Green Space Inequality  
Surface water flood risk  
Air pollution (NO2 or PM2.5)  
Urban heat island index  
School building era

## Suggestions?

# Other sources

Is your area vulnerable to extreme heat? (BBC)

<https://t.ly/S5vy1>

Gov.UK Check Long Term Flood Risk Map

<https://t.ly/axF-h>

