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MaREI
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Connecting with Communities – Climate Adaptation Engagement in Cork City

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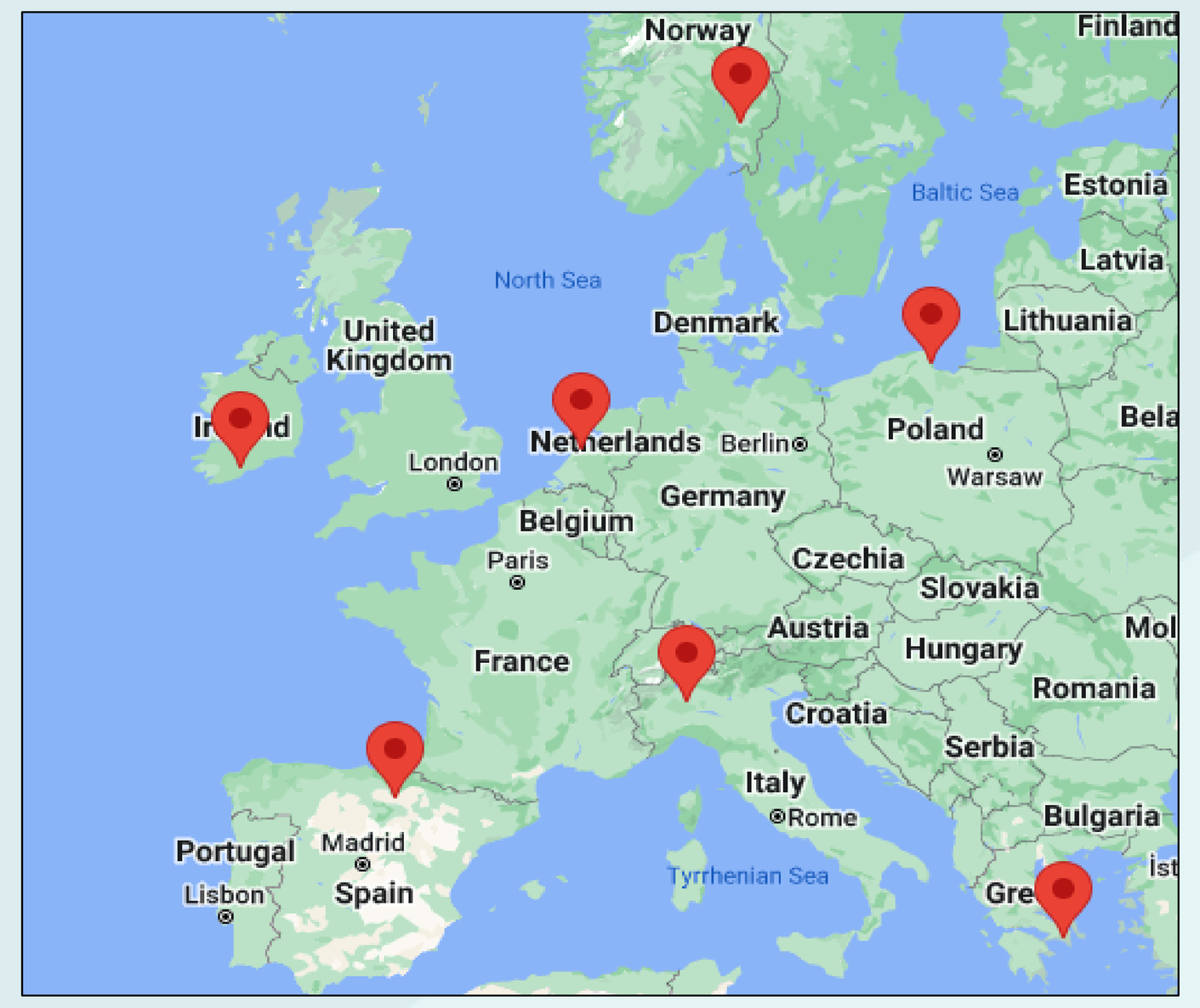
Cork City Council

REACH OUT
shaping climate resilient cities

CONTEXT

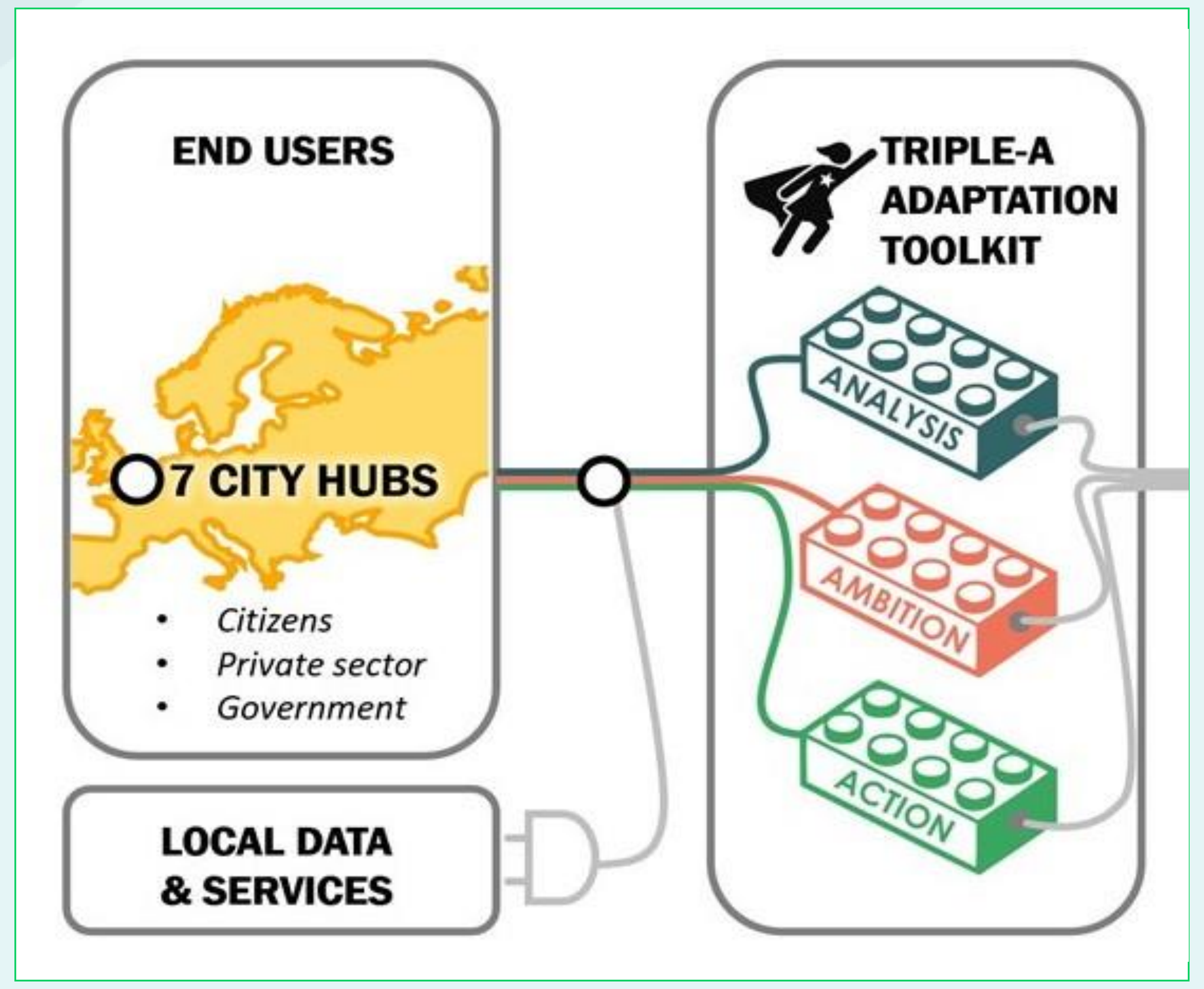
- Cities faces a range of climatic hazards, that are currently impacting them, something that will continue to worsen in the future.
- Adaptation action is often an intrinsically local issue, impacting stakeholders in different ways, and must have local support for it to be successful.
- Climate service tools provide a way to communicate knowledge from scientific research to users, supporting action that fits the needs of local citizens.
- The REACHOUT project aims to bridge the last step in climate service delivery, making tools accessible and user friendly.

- Cork is one of 7 city hubs across the EU that is involved in the REACHOUT project



- These tools are being trialed and validated through stakeholder engagement with feedback allowing for further development

METHODS



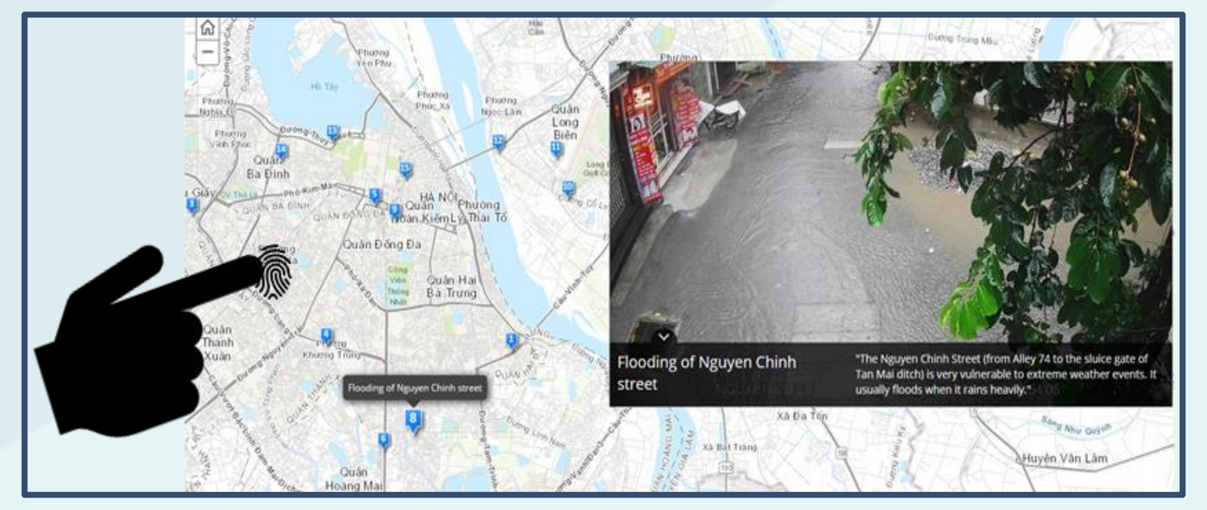
- The city hubs will co-develop and trial a suite of climate services tools with a range of stakeholders.
- Tools are tailored to each city's needs.
- Cork city have worked with European partners to select and fine tune a range of climate tools aimed at supporting local authorities, civil society actors and citizens. These include:
  - Crowdsourcing Tool
  - FloodAdapt Tool
  - Adaptation Pathways Generator Tool
  - Social Vulnerability Index

Engagement and collaboration between stakeholders enables successful climate action

RESULTS TO DATE

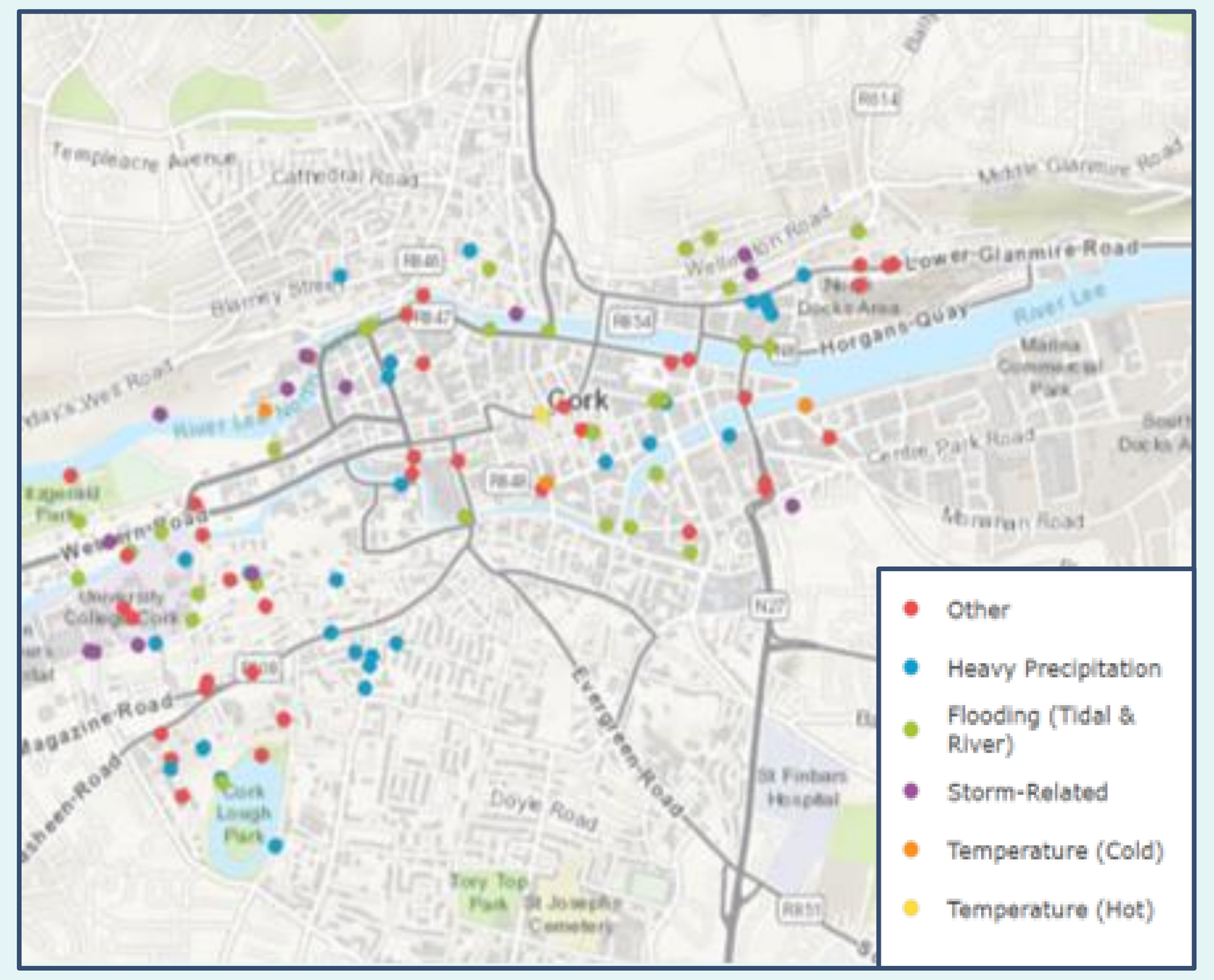
CROWDSOURCING TOOL

- Using a phone, users upload information on parts of the city that may be vulnerable to different climate hazards in real time.



TRIAL & TESTING

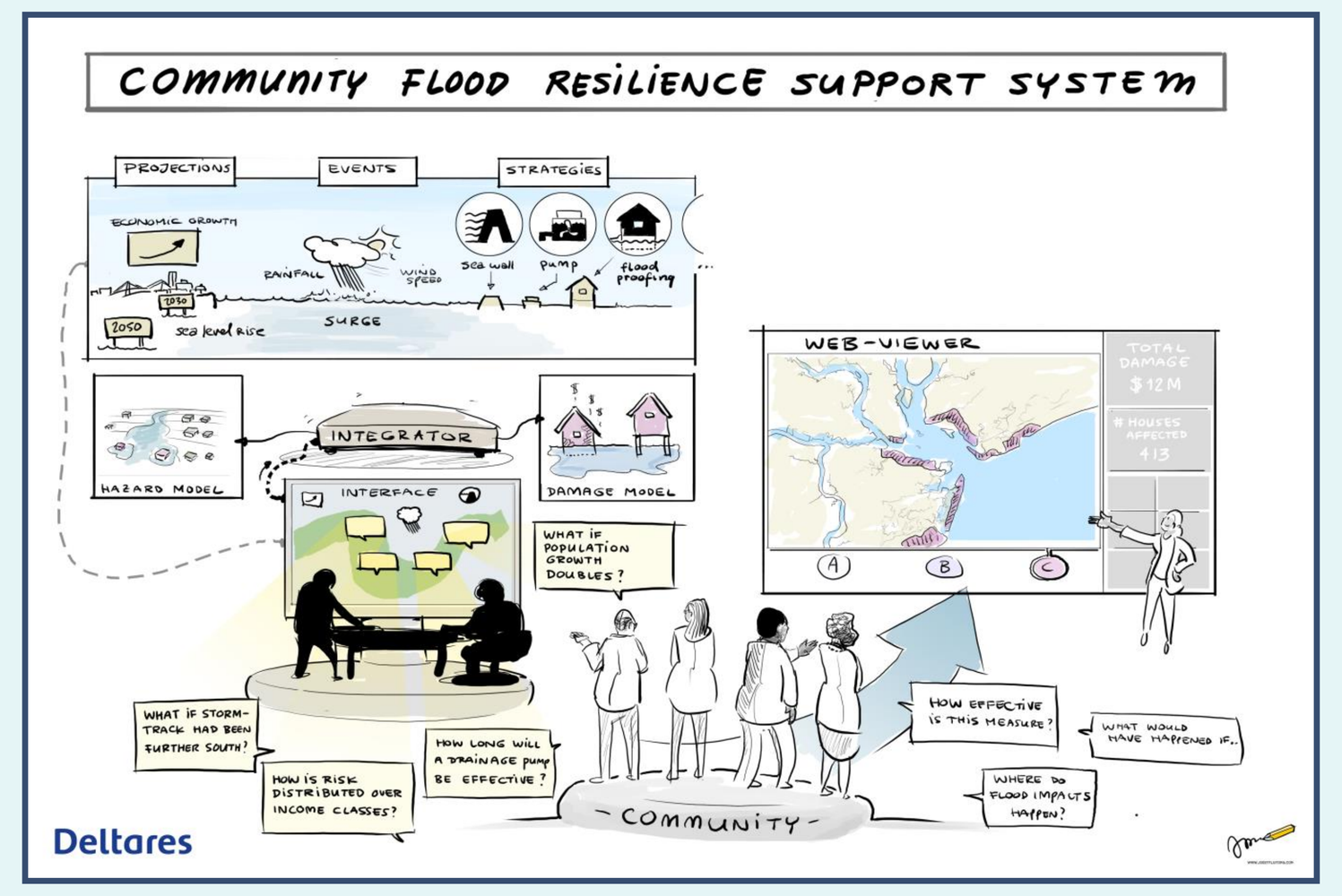
- The results of this are being analysed by UCC and the City Council and will be used to inform decision-making.



- UCC Geography students have tested the beta version of the crowd sourcing tool

FLOODADAPT TOOL

- A decision-support tool for flood risk
- Accounts for various hazards that compound together to increase flood risk
- Calculate damage to infrastructure.
- Models the impact of flood interventions



DEVELOPMENT

- Deltares and Cork City Council have worked together to create a first version of both the hazard and damage models for the city

ADAPTATION PATHWAYS TOOL

- Allows users to explore a range of adaptation options and potential pathways through time.

WORKSHOP

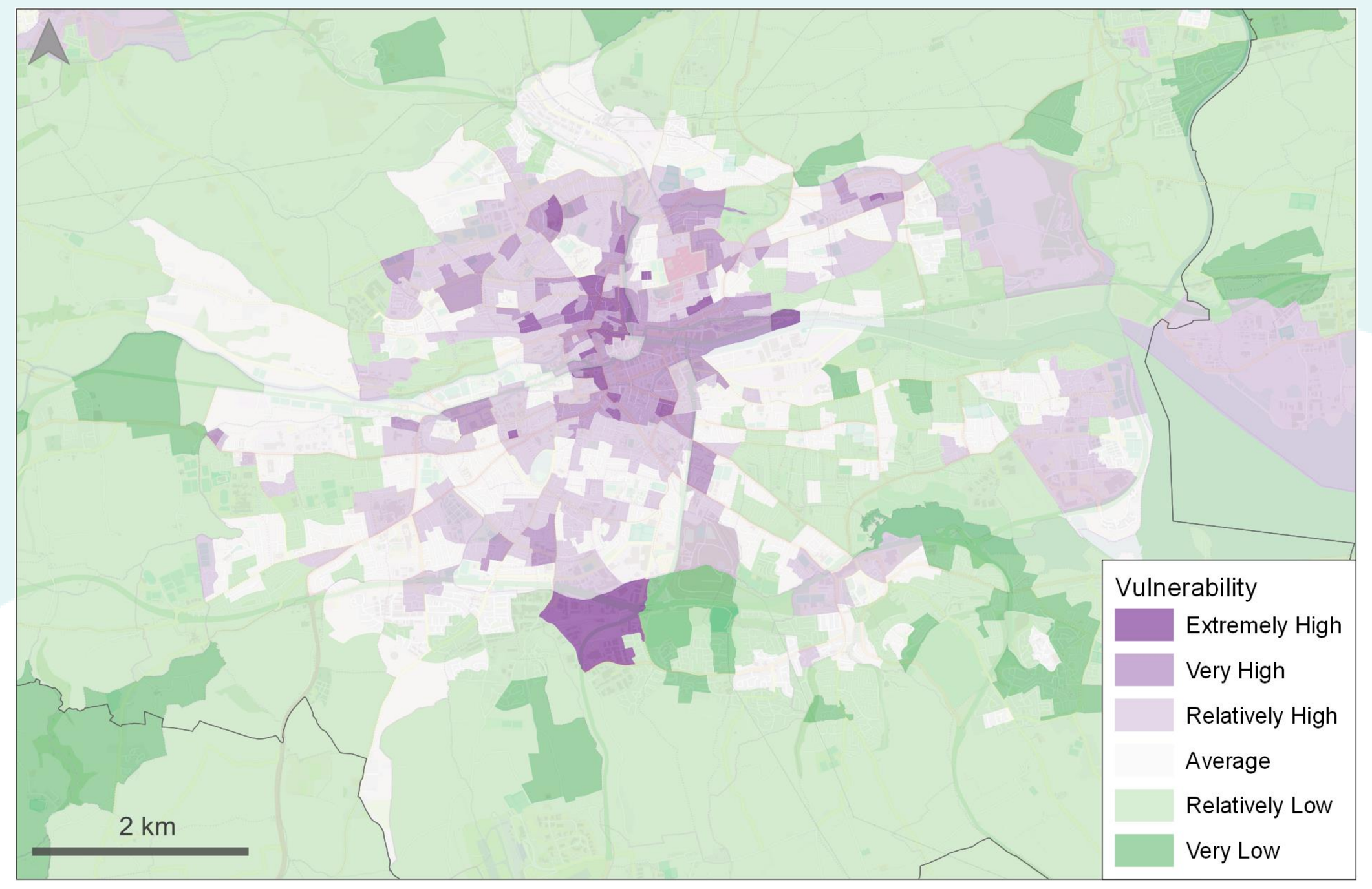
- To engage with stakeholders on the pathways tool, Cork City Council, with UCC and Deltares, hosted a public workshop in 2022, highlighting the work of the REACHOUT project and seeking robust feedback.

SOCIAL VULNERABILITY INDEX

- Compiled from a collection of 25–30 socio-economic and environmental variables, including a populations sensitivity and exposure to climate change and their adaptative capacity (the ability to prepare, respond and recover from climate impacts).
- Allows decision-makers to compare risks and prioritise solutions to ensure that the vulnerable are not further disadvantaged by climate impacts or adaptation measures.

MAPPING

- A map showing the vulnerability of Cork City to a range of environmental hazards.
- UCC are working with the city council to map vulnerability to specific hazards, such as flooding and heat stress, in the city.
- These are the primary hazards Cork city faces due to its low-lying location and the urban heat island effect that impacts cities.



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