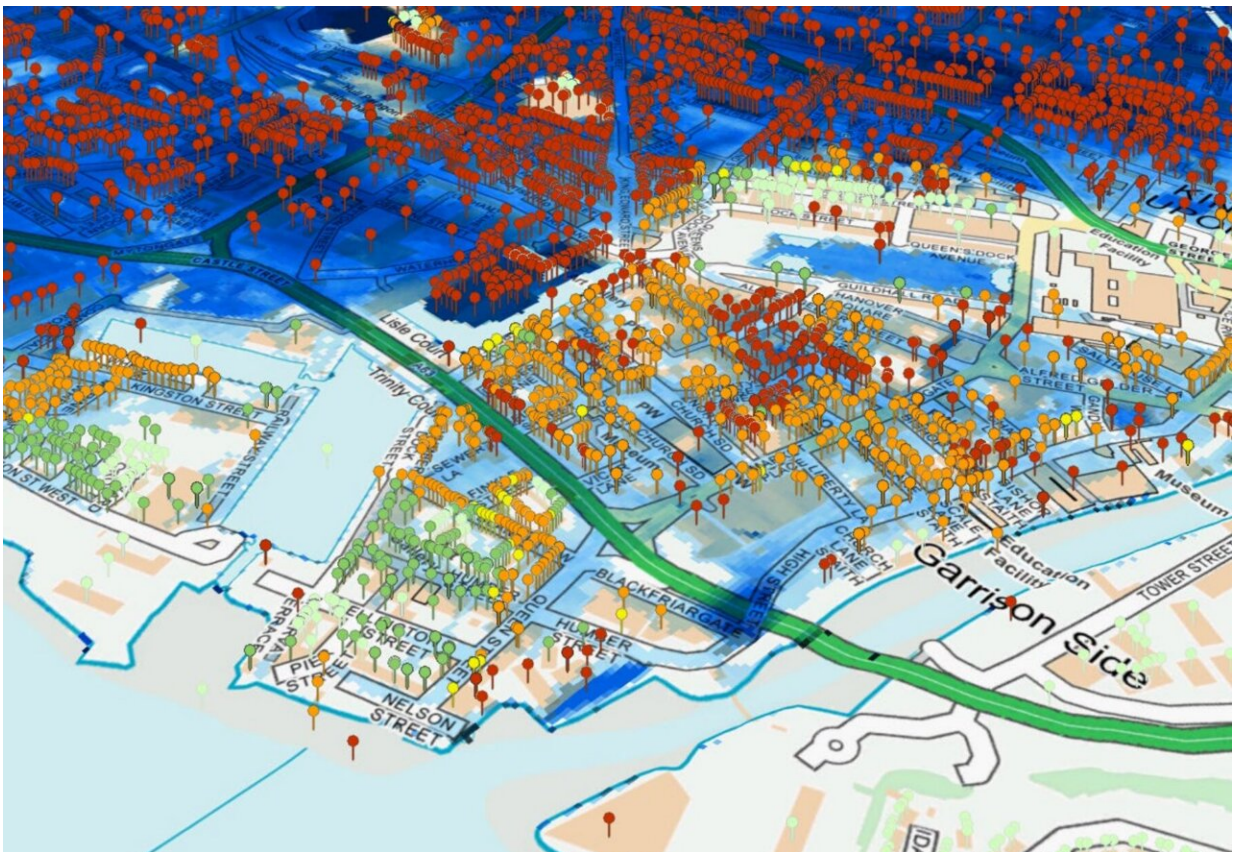


# One in six properties in England will be affected by flood risk by 2050, study suggests

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This image shows Twinn's Flood Map fluvial data in blue. Twinn Flood Score data points are overlaid, color coded to describe the flood risk to properties, with red representing locations with very high flood risk predicted. Credit: Twinn by Royal HaskoningDHV.

A new report from Bayes Business School (formerly Cass) shows how flood risk affects English residential property values to raise awareness among policy makers and regulators.

Data from the report, authored by Dr. Alexandros Skouralis, lead researcher and Dr. Nicole Lux, Senior Research Fellow at Bayes, shows that residential properties at risk of flooding are sold at 8.14% lower on average compared to non-affected properties, which reaches as high as 32.2% for the highest risk properties.

Using a unique property price dataset provided by Rightmove, the UK's number one property website, the report analyzes the 4.8 million listings and 3.2 million completed transactions that took place between 2006 and 2022.

For all properties, a property-level [flood](#) score was provided by Twinn by Royal HaskoningDHV that considers risk from fluvial, pluvial and tidal sources. It uses advanced flood-modeling techniques and incorporates the most current hydrology data from the Centre of Ecology & Hydrology. The model is also used by the major insurance companies.

Key findings from the report include:

- Properties at highest risk of flooding are based in East of England, Yorkshire and the Humber and the North West, which typically have flood risk probability of between 10% and 12%.
- Semi-detached and terraced properties (9% flood risk probability) are more vulnerable to flooding since prevention measures—such as improved windows, doors, vents and pipes will only be effective in conjunction with neighbors versus detached houses with only a 7% flood risk probability.
- Overall flood risk is expected to increase for 73% of affected properties by 2080, while the probability of flooding is set to

increase by a further 8%. A low-risk property, with a probability of flooding below 20%, that is affected by a flood event is expected to be sold at a [lower price](#) of between 9.6% and 13.6%.

- The value of lower priced properties is likely to be more affected by flood risk when compared to higher priced properties.

The report shines a light on the extent to which [climate change](#) and the increased propensity of natural disasters is affecting the housing market.

Ed Burgess, Strategic Manager in Data Services at Rightmove, commented, "We've been at the forefront of data innovations in the environmental space, using our unique position as the UK's number one property website to help businesses and organizations to better understand how climate factors could affect the property market, both now and in the future."

"Although flood risk is largely factored into a valuation at the property marketing stage, the analysis shows how it will play a more significant role in property valuations by 2050, and is likely to rise up the list of home-mover concerns."

Dr. Nicole Lux, Senior Research Fellow at Bayes Business School, said the findings should be a wake-up call for risk protection programs.

"In this [empirical study](#) we quantify the impact that the risk of flooding has on property valuations," she said. "With sea levels and unpredictability of climate set to rise in years to come, this poses a great threat to properties and the [housing market](#)—particularly in low-income neighborhoods."

"Flood risk impact on low-income neighborhoods is something national programs from the Environmental Agency's flood risk management plans (FRMPs) should take into account."

"In any case, market participants such as property buyers, insurance companies etc have already accounted for the flood risk in all their underwriting and pricing."

**More information:** Report: [cdn.roxhillmedia.com/production ...  
5fe173d8fc61c850.pdf](https://cdn.roxhillmedia.com/production/5fe173d8fc61c850.pdf)

Provided by City University London

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