



Ministry
of Justice

A Hot and Violent World:

Climate change, Crime and Justice

Protecting and advancing the principles of justice



Problem statement



Continued greenhouse gas emissions and warming is intensifying, contributing to water shortages, rising sea levels, increasing flood-related risks and worsening pollution.

Studies have revealed correlations between climate change and violent crimes. Increased temperatures and other extreme events with their associated consequences, including food scarcity and other key resources, are major ways in which climate change leads to violence and crime.

How will climate change impact crime and justice in the UK?



Challenge question

How will climate change impact crime and justice in the UK?

Potential sub-questions:

1. Will climate change cause there to be a change in types of crime?
2. What types of crime will be more prevalent?
3. Will climate change cause more crime, or less crime?
4. How will different climate hazards affect crime?
5. How will climate-change induced crime affect the criminal justice system?
6. How will climate change affect the health & wellbeing of justice-involved populations?

Key outputs:

- To overlay historical crime data and temperature increase within the UK (together with regional variances) and map out a correlation to predict whether crime patterns will change along with climate change. This could be achieved by analysing datasets from Home Office, ONS and MoJ data alongside Met Office climate projections to solve the challenge
- Literature review with identified gaps to explore the subject further relevant to the criminal justice system
- Presentation of the findings relevant to the criminal justice system

About the Ministry of Justice

The Ministry of Justice is a major government department, at the heart of the justice system. We work to protect and advance the principles of justice. Our vision is to deliver a world-class justice system that works for everyone in society.

Responsibilities

We are responsible for these parts of the justice system:

- Courts
- Prisons
- Probation services
- Attendance centres

The organisation works together and with other government departments and agencies to bring the principles of justice to life for everyone in society. From our civil courts, tribunals and family law hearings, to criminal justice, prison and probation services. We work to ensure that sentences are served and offenders are encouraged to turn their lives around and become law-abiding citizens. We believe the principles of justice are pivotal and we are steadfast in our shared commitment to uphold them.

Our priorities

- Protect the public from serious offenders and improve the safety and security of our prisons
- Reduce reoffending
- Deliver swift access to justice

Read our [Outcome Delivery Plan](#) to find out more about how we will deliver our priority outcomes, how we will measure our success, and how we will ensure we continuously improve.

Who we are

Each year, millions of people use our services across the UK - including at over 300 courts and hearing centres, and over 100 prisons in England and Wales. We work with many other government agencies, including; Children and Family Court Advisory and Support Service, Criminal Injuries Compensation Authority, HM Courts and Tribunals Service, Her Majesty's Prison and Probation Service, Legal Aid Agency, Office of the Public Guardian, Youth Justice Board.

Literature review

Journals	Relevance
Ranson, M. 2012. Crime, Weather, and Climate Change. https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/files/ranson_2012-8.FINAL.pdf	Analysis of monthly crime data and daily weather data for 2,972 US counties, focussing on month-to-month changes in crime.
Anderson, Craig, Brad Bushman, and Ralph Groom. 1997. "Hot Years and Serious and Deadly Assault: Empirical Tests of the Heat Hypothesis." <i>Journal of Personality and Social Psychology</i> 73 (6): 1213-1223.	Study the relationship between annual average crimes rates and temperatures, using data for the United States as a whole
Rotton, James, and Ellen Cohn. 2003. "Global Warming and U.S. Crime Rates: An Application of Routine Activity Theory." <i>Environment and Behavior</i> 35 (6): 802-825	A similar analysis based on state-level annual averages
Lynch, M.J., Stretesky, P.B., Long, M.A., Barrett, K.L. 2022. The Climate Change-Temperature-Crime Hypothesis: Evidence from a Sample of 15 Large US Cities, 2002 to 2015. <i>International Journal of Offender Therapy and Comparative Criminology</i> . 66 (4):430 – 450.	Drawing on prior studies, green criminologists have hypothesized that climate change will both raise the mean temperature and the level of crime. This is known as the Climate Change Temperature-Crime Hypothesis (CCTC).

Further resources



Ministry
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HM Prison &
Probation Service



Home Office



Office for
National Statistics



Met Office

Ministry of Justice and HMPPS Statistics

- [Statistics at MOJ - Ministry of Justice - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/collections/statistics-at-moj)
- [Safety in custody statistics - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/collections/safety-in-custody-statistics)
- [HMPPS Annual Digest, April 2020 to March 2021 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/hmppps-annual-digest)
- [Offender management statistics quarterly - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/collections/offender-management-statistics-quarterly)

Home Office Statistics

- [Crime outcomes in England and Wales statistics - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/collections/crime-outcomes-in-england-and-wales-statistics)

Office for National Statistics

- [Crime in England and Wales Statistical bulletins - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk/crime-in-england-and-wales-statistical-bulletins)

MET Office Datasets

- [Datasets - Met Office](https://www.metoffice.gov.uk/data/accessing-data)
- [UK Climate Projections \(UKCP\) - Met Office](https://www.metoffice.gov.uk/research/ukcp)