The Obesity and Fast Food Project

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PEOPLE PLACES HEALTHIER LIVES

Aim

To investigate the association between the spatial distribution of fast-food outlets and the prevalence and distribution of obesity (for adults) – using the Understanding Society (UKHLS) data.

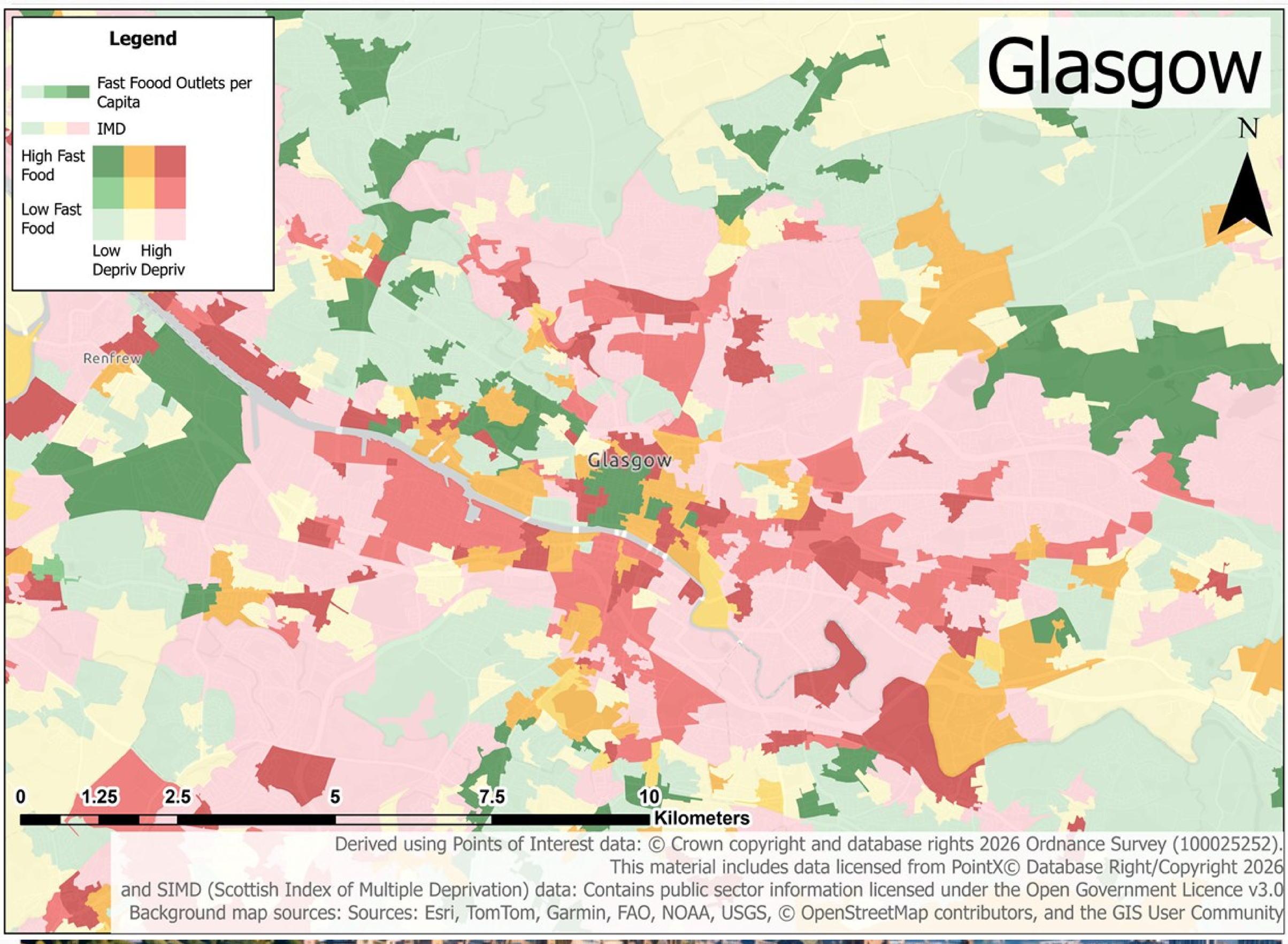
Methods

- Data linkage between multiple datasets
- Descriptive statistics
- Mapping and spatial analysis
- Logistic regression models
- Spatial models with Gaussian random fields (R-INLA)
- Assessment of feature importance

Data

- Ordnance Survey Points of Interest (PoI) (fast food outlets)
- Understanding Society (Wave 1) data
- Scottish Index of Multiple Deprivation (SIMD)
- Welsh Index of Multiple Deprivation (WIMD)
- Index of Multiple Deprivation (IMD)
- Derived spatial variables: number of fast food outlets within 100m, 200m, 300m and 400m of each residence.

Results (descriptive)



Derived using Points of Interest data: © Crown copyright and database rights 2026 Ordnance Survey (100025252).
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and SIMD (Scottish Index of Multiple Deprivation) data: Contains public sector information licensed under the Open Government Licence v3.0
Background map sources: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Contact us for more maps and information on our models:
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Scan the QR code for more maps and output!

A Healthier Scotland Through Data and Discovery