e-atlas

Developing a Turing GeoVisualization Engine

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project overview

e-atlas

Developing a Turing GeoVisualization Engine

Start: May 2019

Title: Turing e-Atlas / Geovisualization Engine

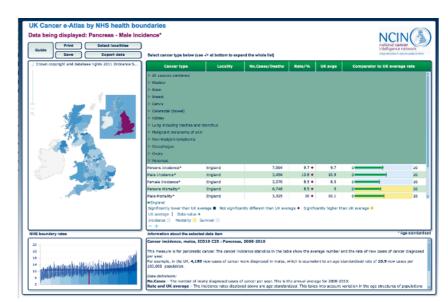
Sponsor: Strategic Priorities Fund ASG

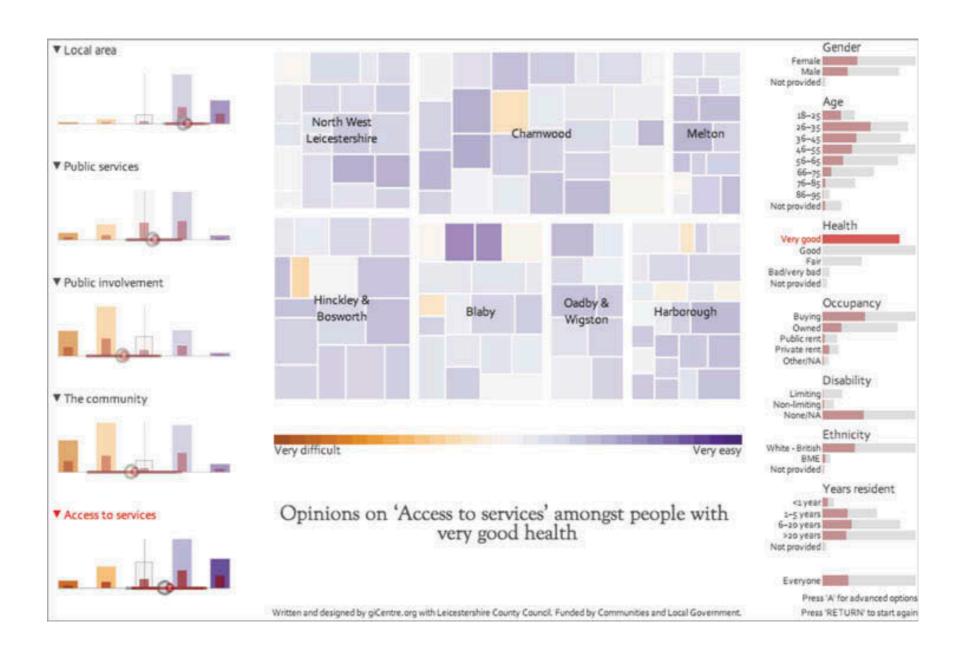
Outcome: A web-based visual analysis tool for flexibly loading and

exploring geo-spatial referenced data









Slingsby et al. 2014

Designing an exploratory visual interface to the results of citizen surveys International Journal of Geographical Information Science, 28:10, 2090-2125 user-configured chart generation and composition user-loaded data user-configured interactions

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decreasing flexibility

what is an e-atlas?

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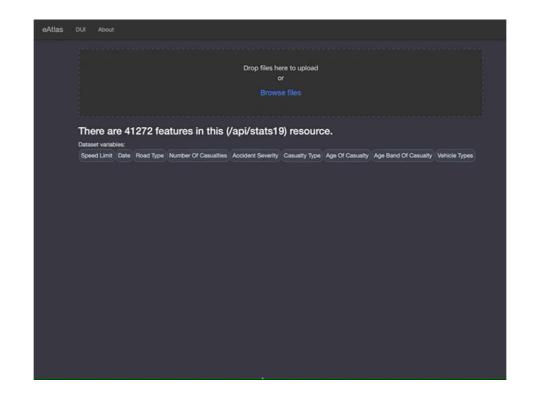
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The Alan Turing Institute e-atlas







github repo (run in docker container): https://github.com/layik/eAtlas

prototype 0



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e-atlas UI visual analysis data processing connect to data view components space | time | thematic drag-drop input data .csv | .json |.geojson explore fields visual selection+query freq charts spatial via zoom-pan temporal ranges temporal via slider recode types thematic via click Technical notes Front-end: ReactJS Back-end: R d3.js - for shape primitives and scaling/transformation functions Powered by geomplumber R package. MapboxGL - for slippy 2.5D map rendering. Deck.gl - scalable WebGL overlay on MapboxGL (Uber) ReactVIS - d3 based tech stack compatible vis library (Uber)

project workflow

- 1. Identify domains, datasets and analysis requirements
- 2. Develop and refine Turing e-atlas tool
- 3. Document visual data analysis process with code examples



