

Nine good things about open science

& one bad thing

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Anyone can find your work

The screenshot shows a BBC News article interface. At the top, there's a navigation bar with 'BBC' and 'Your account'. Below it, a red 'NEWS' banner contains links for 'Home', 'UK', 'World', 'Business', 'Politics', 'Tech', 'Science', 'Health', and 'Family & Education'. Underneath, there's a sub-navigation bar for 'UK' with links to 'England', 'N. Ireland', 'Scotland', 'Alba', 'Wales', 'Cymru', and 'Local News'. The article title is 'How much of your area is built on?' by Mark Easton, Home editor, dated 9 November 2017. A search bar prompts the user to 'Enter your postcode to find out how land is used in your area'.

How land is used in the UK



Source: Corine Land Cover inventory



@undertheraedar

It's a nice

thing to

do

e.g. Figshare

The screenshot shows the Figshare interface for a dataset. At the top, there is a search bar and navigation links for 'Browse', 'Upload', 'Sign up', and 'Log in'. Below the navigation, there are icons for 'TEXT' and 'ARCHIVE' files. The main content area displays a grid of file thumbnails with their names and sizes: 'readme - updated... .txt (4.17 kB)', 'commutes.net (83.83 MB)', 'us_ttw_v3_US_on... .zip (150.95 MB)', 'lower_48.png (6.47 MB)', 'map_1.png (10.16 MB)', 'map_2.png (8.5 MB)', 'map_5.png (8.5 MB)', and 'map_6.png (11.27 MB)'. Below the grid, there are buttons for 'Cite', 'Download all (868.76 MB)', 'Share', 'Embed', and '+ Collect (you need to log in first)'. At the bottom, the dataset title 'United States Commutes and Megaregions data for GIS' is displayed, along with statistics: 50126 views, 8989 downloads, and 0 citations. The version is 'Version 5' and it was posted on 31.01.2017 by Alasdair Rae, Garrett G.D. Nelson.

It's a good

thing to

do

hyperloop

The screenshot shows a webpage from Virgin Hyperloop One. At the top, the logo 'Virgin hyperloop one' is on the left, and navigation links 'HOW IT WORKS', 'OUR STORY', 'ROUTES', 'UPDATES', and 'CAREERS' are on the right. A dark bar contains the text 'Press F11 to exit full screen'. The main content is a large map of the United States with numerous colored dots representing population density or megaregions. Major cities are labeled, including Eureka, Reno, San Francisco, Fresno, Los Angeles, San Diego, Phoenix, Las Vegas, Salt Lake City, Albuquerque, Denver, Rapid City, Boise, Salt Lake City, Omaha, Des Moines, Kansas City, St. Louis, Louisville, Nashville, Memphis, Birmingham, Oklahoma City, Indianapolis, Chicago, Milwaukee, Detroit, Cleveland, Pittsburgh, Columbus, Washington, D.C., Richmond, Raleigh, Knoxville, Charlotte, Atlanta, Savannah, Tallahassee, Tampa, Marquette, Minneapolis, Buffalo, Albany, Boston, Hartford, New York, Philadelphia, and Richmond. Below the map, the article title 'Five Maps That Improve Our View Of America's Megaregions' is displayed. The author's name 'Bruce Upbin' and Twitter handle '@bupbin' are shown, along with his title 'VP, Strategic Communications, Hyperloop One'. The date 'DEC 19 2016' is at the bottom left. Social media icons for YouTube, Twitter, Instagram, Facebook, and LinkedIn are at the bottom right.

@undertheradar

It's the right

thing to

do

Bobbleheads



@undertheradar

It'll look **bad**

if you

don't



People will

share

back



@undertheraedar

You will find

it helpful



@undertheraedar

Others will

find it

helpful



Populations, megapopulations, and the areal unit problem

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ABSTRACT

Models of epidemic disease and programs for their management require accurate population data as a critical component of most studies. But the traditional definitions of urban places assumed discrete borders and localized populations. The vast increase in urban travel at all scales has raised the problem of how we define those urban populations. This paper reviews the issues as an areal unit problem within the context of the evolving idea of “megaregions” and their definition.

1. Introduction

Models of dynamic infectious disease events assume a bacterium or virus will spread within a susceptible community of persons to other, easily identified at-risk populations through a network of interpersonal contacts or commercial exchanges linking infected and at-risk populations (Altman, 1995). Studies of disease expansion, either simulations (Orbann et al., 2017) or analyses of reported epidemics, therefore have required three distinct but related data sets. The first two describe clearly defined, stable populations, one infected and the other susceptible (at risk). These must be of sufficient size for each to support first the transfer to and then the propagation of bacterial or viral entities within their jurisdictions (Balcan and Vespignani, 2012). A third dataset describes one or another measure of connectivity permitting disease transfer between those distinct population centers.

A critical question often overlooked in both disease modeling and event analysis is how best to define areal units that accurately describe those populations. It has long been understood that population models employing different areal units will return different results when individual data are aggregated to local, urban, state, or national scales of address (Duncan et al., 1961). In defining a unit for study three things are critical. First, the constancy of this or that jurisdictional boundary encompassing a population and, second, the quality of reportage on that population. Third, and of equal importance, is the degree to which those units reflect a stable population embedded in a network promoting transfer between different but similarly defined units.

2. The Urban

Cities have long served as a principal areal unit in disease studies, both as sites of infection and as loci of disease transfer. It was for this reason that in the fourteenth century quarantine programs first banned travelers from infected to epidemic-free port cities in an attempt to protect at-risk populations (Rosen 1993, 43–45). In the late eighteenth century local health boards, constituted in part to address yellow fever outbreaks in the U.S., were charged with collecting primary data on local disease incidence, advising citizens on how best to avoid contagion, and on enacting measures to manage where they could not prevent an outbreak in their cities (Koch, 2017, 33–38).

Similarly the assumption has always been that human travel—international, national, and local—is a principal vector for disease transmission between population centers. It was a strong motif in Holbein the Younger’s famous sixteenth century *Dance Macabre* commentary on plague (Holbein, 1538/, 1971). In the first modern global pandemic, cholera incidence was mapped in the nineteenth century, city by city along existing sea and land routes (Brigham, 1832; Koch, 2017, 260–171). Contemporary studies have focused less on the nature of urban places as disease catchments and more on the networks that connect them (Brockmann and Hufnagel, 2006; Balcan et al. (2009)). Principal attention has centered on international airline passenger flights (Colizza, Barrat, Barthélemy and Vespignani, 2006) and international cargo ship carriage (Kaluza et al., 2010) as disease vectors (Tatem et al., 2012; Teran-Romer et al., 2017). Airline travel has been

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support



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Please note: In the residential typology maps in the original version of this study, the Escalator and Gentrifier categories were labelled incorrectly. Escalators were labelled as Gentrifiers, and vice versa. This was corrected in January 2018, and a revised report made available. JRF and the authors apologise for this error.

Scrapping half of councils 'will save cash and boost efficiency'

Marc Horne

October 17 2018, 12:01am,
The Times

Theatre



Greater Glasgow would become the largest local authority in Britain if a study's proposal is adopted
JONATHAN NICHOLSON/GETTY IMAGES

Scotland has too many councils and almost half of them should be scrapped to save money, a report has suggested.

The number of local authorities should be reduced from 32 to 17, according to an academic paper. The study, by the University of Sheffield, supported the creation of Greater Glasgow, which would be Britain's largest local authority and combine Renfrewshire, East Renfrewshire and East and West Dunbartonshire with the city of Glasgow.

T The Times Scotland 
@thetimesscot

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Scotland has too many councils and almost half of them should be scrapped to save money, a @sheffielduni report has suggested



Scrapping half of councils 'will save cash and boost efficiency'

Scotland has too many councils and almost half of them should be scrapped to save money, a report has suggested. The number of local authorities should be reduced ...

thetimes.co.uk



clarabel @Skinnycortado · Oct 17

Replying to @thetimesscot @sheffielduni

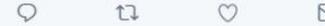
Thanks for the interest but I think Scotland can manage to run our local govt services without any help from Sheffield Uni.



Conachair @sugaracre · Oct 17

Replying to @thetimesscot @sheffielduni

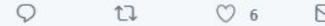
Which scruffy team of beer-swilling, hemp-dragging undergraduates was responsible for that pile of mince, and who paid for it? Unlike England Scotland has unitary authorities and lots of strategic joint working.



The Hipcrime Vocab @Chad_C_Mulligan · Oct 17

Replying to @thetimesscot @sheffielduni

Have the people writing this "study" even visited Scotland? My council area is already massive, stretching from Leadhills near Dumfries and Galloway, up to Rutherglen in Glasgow.



Feral_Timelord3 @Timelord3Feral · Oct 18

Replying to @thetimesscot @sheffielduni

Sheffield Uni can f u u u c k ooooo fffff



Slides with links

<http://bit.ly/scidata18-rae>