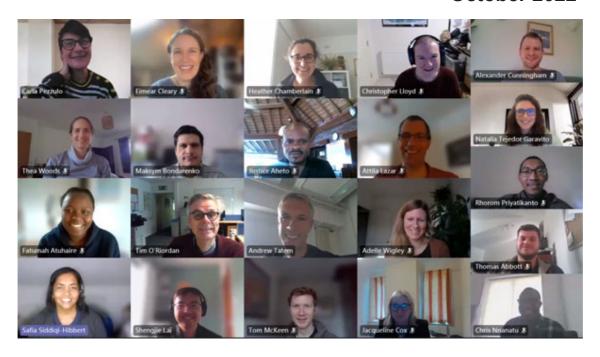
WorldFop

October 2022



Welcome to our new newsletter!

Making decisions count everyone, everywhere

Welcome to our new newsletter. Every 3 months we will keep you up to date with what's happening in our open, geospatial, demographic research programme.

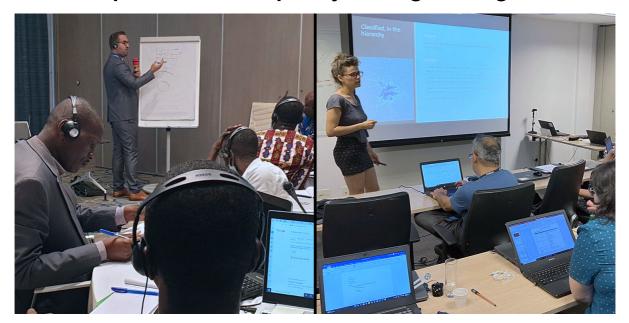
Since 2004, WorldPop has partnered with governments, UN agencies and donors to



produce almost 45,000 open population datasets, complementing traditional population sources with dynamic, high-resolution data for mapping human population distributions, with the ultimate goal of ensuring that everyone, everywhere is counted in decision making.

This month we're focusing on new projects, our co-development and capacity strengthening work and what we're doing for the upcoming #30daymapchallenge. We'll also introduce our new map-style brochure and new papers and datasets produced by our team.

Co-development and Capacity strengthening



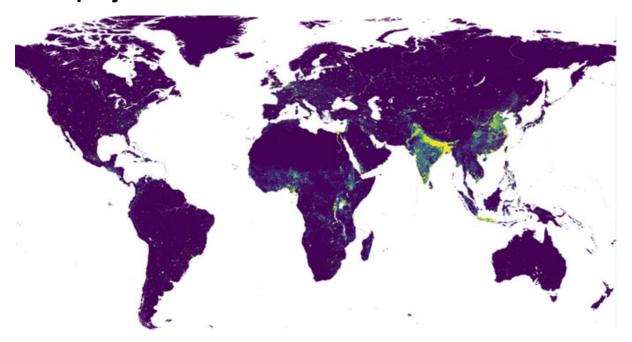
WorldPop is a global leader in co-developing bespoke statistical methods for modelled population estimates to support national censuses. We work with national statistical offices, universities, ministries of health and other government and non-governmental organisations to enhance to geospatial and analytic skills of officials and statisticians in population modelling and mapping. In recent months we have worked with teams in Brazil and Benin.

In <u>Brazil</u>, Research Fellow Edith Darin led a workshop on <u>bottom-up population</u> <u>modelling</u> as part of a two-week workshop at the Instituto Brasileiro de Geografia e Estatística (IBGE, the Brazilian Statistics Office) in Rio de Janeiro. The bottom-up approach to population estimation uses geolocated population counts, satellite data, characteristics from local survey samples and other localised data to produce high resolution population estimates.

In <u>Benin</u> Dr Sarchil Qader trained in-country statisticians at the National Institute of Statistics and Demography, National Institute of Geography and the University of Abomey Calavi in the use of his preEA tool to create a national sampling frame. He also worked with local teams to carry out field work in support of the delineation of enumeration areas prior to their imminent census.

We have a busy few weeks ahead. Next month our teams will be working with the government of Papua New Guinea and the national statistics office in Thailand, helping them prepare for their national censuses. We will also be running an in-country workshops for the Zambia Statistics Agency and other government and non-government organisations as part of the GRID3 project. And at our home at the University of Southampton we will be providing training in population modelling and mapping for participants from the University of Ghana, the Ghanaian Ministry of Health and the Ghana Health Service as part of the Countdown to 2030 project.

New projects



In addition to the <u>13 geospatial and demographic projects</u> we are currently working on we have recently started 4 new projects.

The <u>Global 2</u> project will work to address the considerable and growing demand for our demographic data. This year alone our data has been cited by over 360 research articles, reports and working papers. With funding from the Gates Foundation, by the end of 2024 we will have updated our population estimates beyond 2020 and improved access to our gridded population datasets and methods.

Nigeria VaxPop II is an extension to our Zero Dose II project that is working to explore further the attributes of un/under-vaccinated children in Nigeria. The project will provide additional insights into the characteristics of zero-dose children to support planning of country strategies, as well as co-development and capacity strengthening workshops to support in-country expertise in geospatial analysis.

In the <u>GRANULAR</u> project we join over 20 partners across the EU in working to better understand the challenges facing rural areas in Europe. We will adopt a range of data and methods to develop a new 'Rural Compass' platform to inform and improve rural policy making and development.

<u>Thailand (UNFPA)</u> will see our team providing technical assistance and training to support the upcoming census in Thailand. Working with the Thailand National Statistics Office (TNSO) we will co-design bespoke statistical methods for modelling population estimates and provide in-depth training to enhance the skills of TSNO staff. We are currently developing another four long term projects - see our next newsletter in early 2023 for an update on these and current projects.

ESRI living atlas collaboration



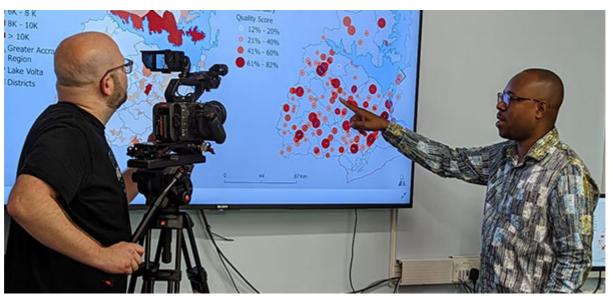
We have recently partnered with Esri, the global market leader in geographic information system (GIS) software, location intelligence, and mapping.

Our datasets are critical for measuring and monitoring sociodemographic changes over time and informing and supporting environmental, health, and development applications at local, subnational, national, and regional levels.

Charlie Frye, Esri chief cartographer says, "having the WorldPop 1-km gridded demographic datasets available as imagery layers in ArcGIS Living Atlas of the World provides unprecedented convenience to query and analyze population anywhere on Earth. That these datasets no longer need to be downloaded or preassembled prior to use will result in substantial time and cost savings for any organization needing to understand recent population changes."

The 1-km raster layers, curated by the WorldPop Spatial Data Infrastructure team led by Dr Maksym Bondarenko, are available in ArcGIS Living Atlas of the World for population per grid cell, population density per grid cell, and population by age and sex per grid cell.

Celebrating Impact



Team WorldPop are immensely proud that our colleague and PhD researcher Winfred Dotse-Gborgbortsi has been nominated as a finalist for this year's prestigious

ESRC Celebrating Impact Prize for his work on Geospatial analysis for Ghanaian maternal healthcare delivery and international policy.

As a finalist, Winfred is having a film made about his work and its impact. Winners will be awarded £10,000 to spend on knowledge exchange, public engagement or other communications activities related to their research.

The winners will be announced at an awards ceremony on 2 November 2022 as part of the ESRC Festival of Social Science (FoSS). The event will be live streamed 16:30 GMT, and you may register to join the event by following this link. (Register here).

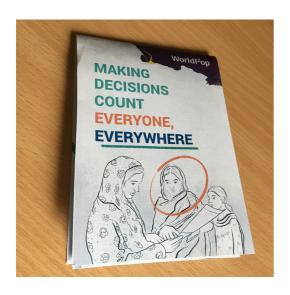
Winfred has recently led work on a <u>research paper</u> exploring adverse maternal health outcomes linked to distance to health facilities in Ghana, and aims to submit his thesis for examination within the next 3 months

Saluting Innovation

A WorldPop team led by <u>Chris Jochem</u> have been awarded the eminent Michael Breheny Prize for their paper for <u>Classifying settlement types from multi-scale spatial</u> patterns of building footprints, published in 2021.

The <u>prize</u> is awarded annually for the most innovative paper in Environment and Planning B: Urban Analytics and City Science journal during the preceding year. Chris's co-authors on the paper are Doug Leasure, Ollie Pannell, <u>Heather Chamberlain</u>, Patricia Jones, and <u>Andy Tatem</u>.

Our new brochure



A new brochure illustrating our practice and impact is now <u>online</u> and available to download.

A physical copy of this lovely thing can be yours - for free - just message us with your mailing details and we'll pop one in the post*.

*As our print run is limited only the first 100 requests will be sent a copy.

#30DayMapChallenge

November heralds the start of the #30DayMapChallenge - a daily map-making mission that's open to everyone. There's a theme for each day of the month, and participants share their maps on Twitter or other social media platforms using the hashtag #30DayMapChallenge.

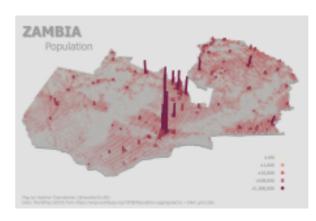
The cartographic gauntlet was first thrown down by Finnish geographer and map designer <u>Topi Tjukanov</u> in 2019 - and it's now burgeoned into a global playground, as can be seen from the variety of <u>contributions to last year's challenge</u>. There are no prizes, just the possibility of gaining the esteem and admiration of fellow mapmakers.



This year we will be participating in the challenge, sharing a variety of maps from across the WorldPop team. For each map we'll try to share some information on the data sources that have been used in the map. We'll be posting all our maps on Twitter, so keep an eye out for our daily postings.

Nearly all the datasets that WorldPop produces are geospatial in nature, and many are well-suited to the themes of this year's challenge. We have a lot of raster datasets, we have global datasets, we have polygons datasets, datasets for islands, movement, datasets at a variety of scales. Fantasy or music maps are not exactly our core data products, but we're up for the challenge.

If you too want to join in with the #30DayMapChallenge then we've compiled a list of datasets that you might find useful for creating your topographic depictions, atlases, plans, projections, etc. We'd love to see what you make using WorldPop datasets, so please tag us in your posts on Twitter (@WorldPopProject).



Happy Mapping!



On 22 September WorldPop Director, Professor Andy Tatem, spoke at the Geospatial for sustainable agriculture and urban development in Africa virtual event organised by The Food and Agriculture Organization of the United Nations (FAO).

Our latest research papers

Our team have authored or co-authored 12 research papers in the past 3 months, including significant papers on:

- the spread of COVID-19 (e.g., <u>Impact of non-pharmaceutical interventions and vaccination on spread of COVID-19 in Europe</u>),
- methods (e.g., <u>How accurate are WorldPop-Global-Unconstrained gridded</u> population data at the cell-level?),
- the impact of physical distance on access to health services (e.g., <u>Distance is "a big problem"</u>: a geographic analysis of reported and modelled proximity to maternal health services in Ghana) and
- vaccination coverage (e.g., <u>Timeliness of routine childhood vaccination in 103 low-and middle-income countries</u>, 1978–2021).

See our <u>publications list</u> and search more than 200 highly cited papers published since 2004.

We hope you enjoyed our first newsletter.

If you did, please share it with your friends and colleagues.

Our next edition will be published in January 2023.

Subscribe to our newsletter

















The WorldPop research programme, based in the School of Geography and Environmental Sciences at the University of Southampton, is a multi-sectoral team of researchers, technicians and project specialists that produces data on population distributions and characteristics at high spatial resolution.



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