



An  
Phríomh-Oifig  
Staidrimh

Central  
Statistics  
Office



# Ireland's innovative approach to monitoring the SDG indicators through geospatial visualisation

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# UNSD/Esri – FIS for SDGs Programme



The Irish Central Statistics Office (CSO), in collaboration with Ordnance Survey Ireland (OSi) and Esri Ireland, are currently participating in the UNSD/Esri **Federated Information System (FIS) for the Sustainable Development Programme**. This is an exemplar of both inter agency and public-private sector partnerships

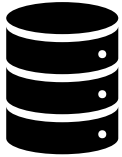
This programme commenced in May 2017 with a goal to develop and deploy a new approach for monitoring the UN SDGs using geographic information systems – “geospatial potential of statistical data.”



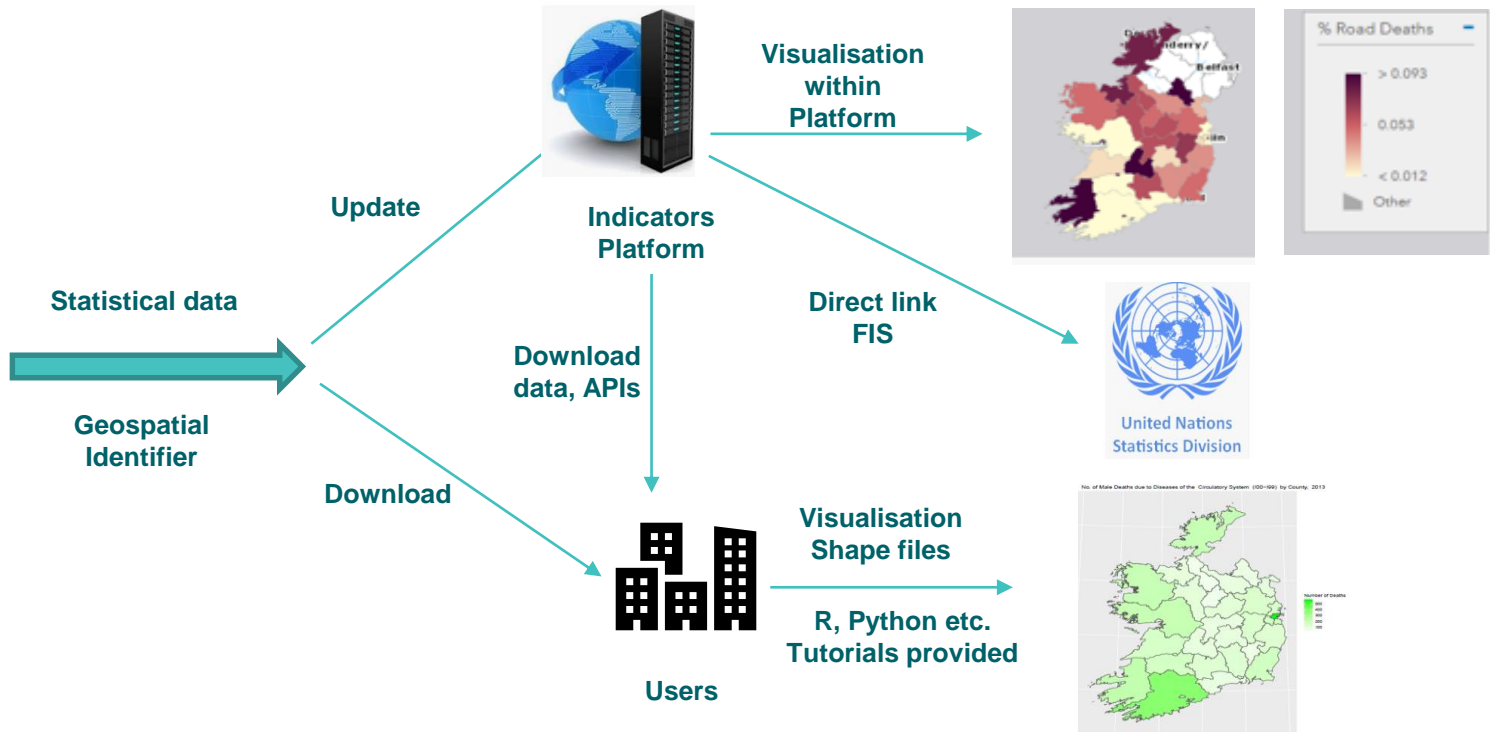


# Ireland's SDG reporting ecosystem

CSO's  
Statbank



WebPX



# Tasks completed by Project Team



Sourced information for 211 **indicators** (mostly Tier 1), of which 60 have a geospatial aspect, and created **100+ datasets** at NUTS 3, county and census local area geography.

Developed Ireland's **National SDG Indicators Platform**, built with Esri technology and hosted on OSi's web portal, known as GeoHive, where interested parties can openly access, visualise and download data and related APIs.

<http://ireland-s-hub-for-sustainable-development-goals-irelandsdg.hub.arcgis.com/>



# Story Maps



The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017

### A focus on cities

The map displays unemployment rate and total unemployed population from the Census 2016 at ED level. A closer look at Dublin illustrates that varying unemployment rates within the area.

Data at this level provide a detailed representation of unemployment trends. This visualisation highlights the divide (North East, South West divide) in high and low levels of unemployment.

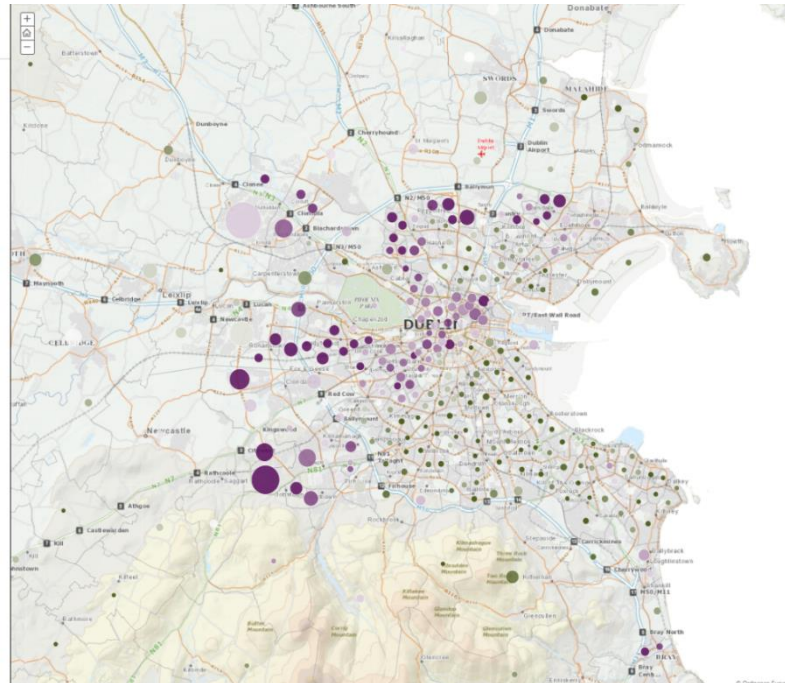
Unemployment by previous occupation

This performance map represents population by social class (categorized by level occupation type at Electoral Division level (Census, 2016)). Hover over graph to view detail.

Click here to take a closer look at [this map](#)

Unskilled manual (includes trades people or Semi-skilled (includes blue-collar) populations dominate many of the areas.

Non-manual (includes farm workers and managers (100-199 acres) are included in the managerial and technical group providing more population in the dominance of this category in rural areas. Farm workers and managers (200 or more acres) are included in the Professional workers category which may explain the dominance of this category in some rural areas such as [Mount Edgecumbe Co. Clare](#).



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# Geospatial Potential of Statistical Data

- Geospatial identifier with all statistical data.
- Esri Shapefiles readily available.
- Now testing Earth Observations data – merging with census boundary files (shapefiles) and geospatially coded statistical data.



# Mapping a Table of Data with Esri Shapefiles in R - Tanzania



An introductory tutorial to mapping opensource data with two shapefiles using the “*ggplot2*” and “*tmap*” packages in R

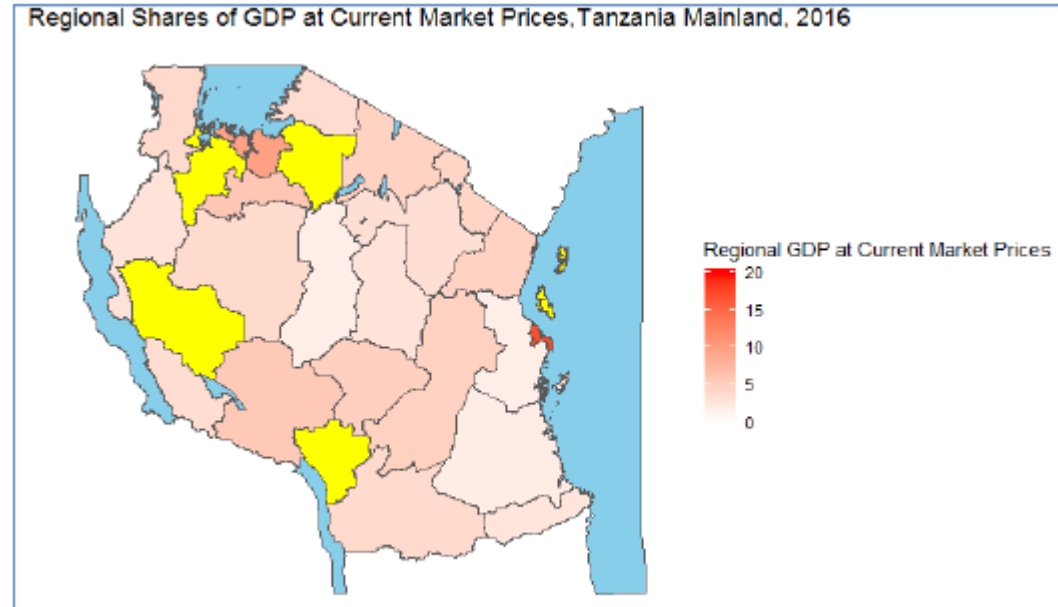


Figure 1: Geospatial presentation of GDP data.

