

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

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## **UNSD/Esri Research Exercise**

The Irish Central Statistics Office (CSO), in collaboration with Ordnance Survey Ireland (OSi) and Esri Ireland, are currently participating in the UNSD/Esri Research Exercise. This is an exemplar of both interagency and public-private sector partnerships

This exercise 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."









## Role of the CSO

The CSO has a central role in the:

- identification
- management, and
- presentation

of the data needed to meet the requirements of the SDG Indicators.

In this responsibility, the CSO will deploy, as far as possible, the Generic Statistical Business Process Model (GSBPM), which has 8 phases and 34 sub-phases.



## **Generic Statistical Business Process Model**

Quality Management / Metadata Management							
1. Specify Needs	Preparation and development of statistical methodologies	3. Build necessary instruments for enforcement	4. Data collection	5. Data processing	6. Analyse	7. Dissemination	8. Evaluate
1.1 Determine needs for information and necessary results	2.1 Definition and development of the methodology for collecting data and conducting survey	3.1 Build data collection instrument	4.1 Selection of final population/sample	5.1 Integration of data collection	6.1 Statistical analysis of results	7.1 Design and production of dissemination products	8.1 Gather evaluation inputs
1.2 Consult & confirm needs	2.2 Defining a framework and methodology for the sample selection	3.2 Build instruments for data collection	4.2 Preparation of data collection	5.2 Control, editing and data correction	6.2 Quality control results	7.2 Management of published disseminated products	8.2 Conduct evaluation
1.3 Establish output objective, analysis and testing possiblities	2.3 Development of methodology for data processing	3.3 Configure workflows	4.3 Primary data collection	5.3 Imputation and weightening	6.3 Detailed analysis and interpretation of data publishing	7.3 Promote dissemination products	8.3 Agree action plan
		3.4 Testing instruments for data collection and data processing	4.4 Overtaking data from administrative and other secondary sources	5.4 Production of derived variables	6.4 Protection of confidential data	7.4 Manage user support	
		3.5 Test statistical business process	4.5 Entering of data collection	5.5 Calculating the aggregate			
				5.6 Calculation of final data files			
				5.7 Production and updating registers and database			



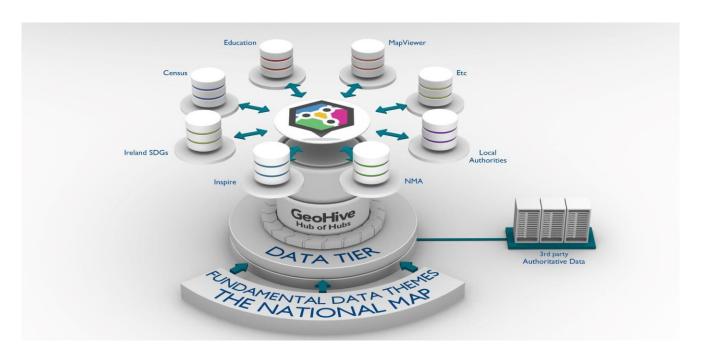
# Tasks completed by Project Team

Sourced information for 60 **indicators** (mostly Tier 1) and created **100+ datasets** at NUTS 3, county and census local area geography.

Developed Ireland's **SDG platform**, hosted on OSi's web portal, known as GeoHive, where interested parties can openly access, visualise and download data and related APIs. <a href="http://irelandsdg.geohive.ie/">http://irelandsdg.geohive.ie/</a>



## **GeoHive Platform**





Ireland's SDG portal was officially launched at the European Forum for Geography and Statistics (EFGS) Conference on 2<sup>nd</sup> November 2017.

Site was well received across:

- Government,
- Public Sector, and
- Civil Society.

The information contained on this portal will inform Ireland's progress against each Goal.

The Department of Communications, Climate Action and Environment (DCCAE) has responsibility for officially reporting on Ireland's progress towards meeting national SDG targets.





Governments, businesses and civil society together with the United Nations (UN) have started to mobilise efforts to achieve the Sustainable Development Agenda by 2030. Universal, inclusive and indivisible, the Agenda calls for action by all countries to improve the lives of people everywhere.

This is Ireland's public platform for exploring, downloading and combining publicly available data relating to the UN and the European Union (EU) Sustainable Development Goals. Ireland's progress against each Goal is measured using a set of globally and EU agreed Indicators and here you can search for, discover and visualise the data we use to create those Indicators.





Sign In

This platform was developed as part of a partnership between Ordnance Survey Ireland, the Central Statistics Office and Esri Ireland







#### Explore the Sustainable Development Goals via Story Maps

Click any Story Map below to access an interactive narrative on a Sustainable Development Goal for Ireland.









Story maps are in development around Goals 1-2 and 6-8.

## Each story map will:

- open with policy commentary provided by the relevant Department, Agency or Office, and
- contain supporting information and relevant interactive maps.



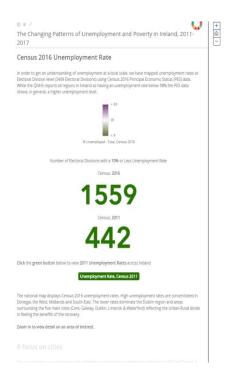
The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017

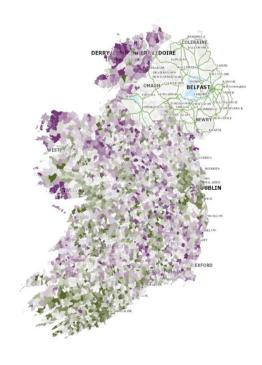
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This Story Map illustrates changes in Ireland in relation to unemployment and poverty throughout the last decade. The Story Map has been developed to support efforts in reporting Ireland's status in relation to achieving United Nations (UN) Sustainable Development Goals.

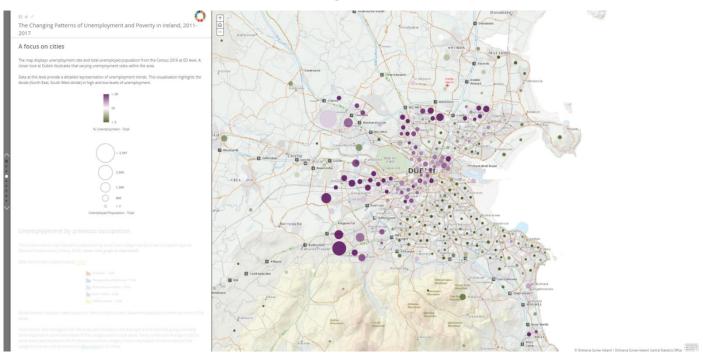
















Sign In

#### Explore our data for Sustainable Development Goals

Click on an icon below to access spatial indicators relating to a particular Goal.



1. No Poverty



2. Zero Hunger



Good Health & Wellbeing



4. Quality Education



5. Gender Equality



 Clean Water and Sanitation



7. Affordable & Clean Energy



8. Decent Work & Economic Growth



9. Industry Innovation &



10. Reduced Inequalities



11. Sustainable Cities and



12. Responsible
Consumption and



13 Climete Action



14. Life Below Water



15. Life on Land



16. Peace, Justice & Strong Institutions



 Partnerships for the Goals



Boundary Data

This is an ongoing project and to date we have provided data for indicators across all of the 17 Goals.













### Governance

Established a OSi/CSO/Esri Ireland data governance team which holds weekly meetings.

In addition, the CSO established a national UN SDG Indicators Data Governance Board (UNSDGDGB) consisting of various stakeholders from Government Departments and Agencies, which meets on a quarterly basis.

#### The UNSDGDGB has responsibility for:

- metadata,
- business glossaries,
- lifecycle management, and
- data quality.



## Governance, ctd.

There is also a UN SDG Civil Service Senior Officials Group, chaired by the DCCAE, which both the CSO and OSi are invited members.

- This group is charged with developing the official reports on Ireland progress toward the SDG Goals.
- Subsets of this group have official responsibility for the policy aspects of individual Goals.
- All the story maps on the Ireland's SDG portal are presented to this group for feedback prior to release, most especially if there is a policy aspect to a narrative.





# **Additional Information**



## **Census 2016 Open Data Site**

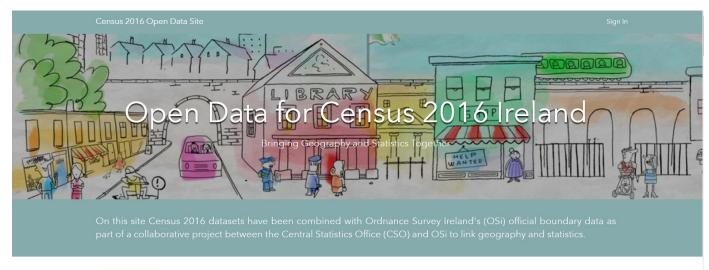
The SDG team has also built an open data website, in August 2017, to complement the release of Irish Census 2016 data. <a href="http://census2016.geohive.ie/">http://census2016.geohive.ie/</a>

This website was completed within three weeks of the release of the Census data.

Its was built as an exemplar of the SDG portal, to inform stakeholder of the features and functionally of these types of websites.



## **Census 2016 Open Data Site**



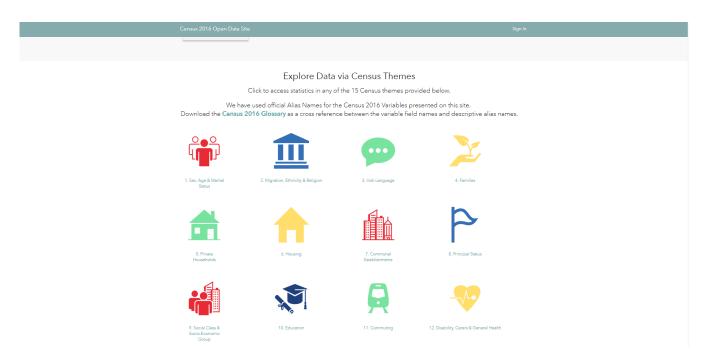








## **Census 2016 Open Data Site**







# **Developments**

## **Ongoing Developments**

- Process mapping CSO and OSi interactions.
- Automating the extraction of SDG data from CSO's Statbank and joining to shapefiles in ArcGIS.
- Developing a complementary map solution using the *ggplot2* package in R.





