



Geospatial & Statistics - Collaboration in Ireland

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Geospatial & Statistics collaboration in Ireland



- Context for collaboration
- Our approach to collaboration
- What we agreed to collaborate on
- What geospatial brings to the relationship
- What we've achieved to-date
- Takeaways



Geospatial & Statistics collaboration in Ireland



- Ireland's National Mapping Agency
- Established in 1824
- Operates under the Ordnance Survey Ireland Act, 2001

Mandate: *"To provide a national mapping service in the State... creating and maintaining the definitive national mapping and related geographic records"*



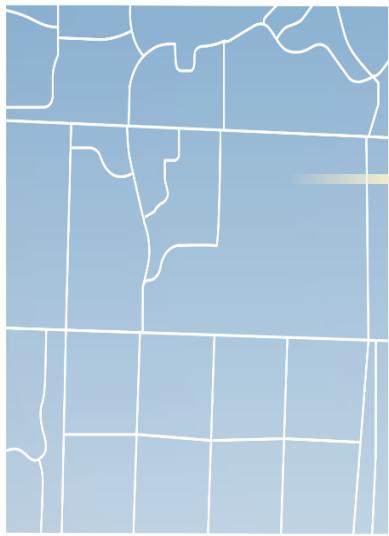
Central Statistics Office

- Ireland's National Statistical Office
- Established 1949
- Operates under the Statistics Act, 1993

Mandate: *"The collection, compilation, extraction and dissemination for statistical purposes of information relating to economic, social and general activities and conditions in the State"*

Location as a common framework

Boundaries



IDs

GUID	Area
1203501750071	42.3
1203501750072	34.8
1203501750073	26.9
1203501750074	51.2

Statistics

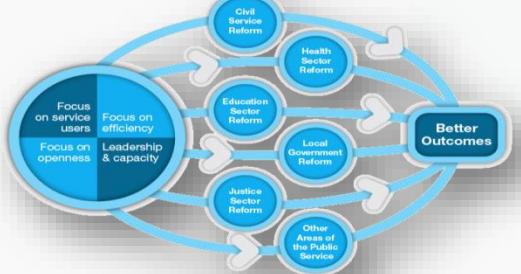
EA Id	Population	Male	Female
1203501750071	432	209	223
1203501750072	502	240	262
1203501750073	525	258	267
1203501750074	494	251	243

EA Id	Num HH	Avg HH size
1203501750071	89	4.9
1203501750072	98	5.1
1203501750073	102	5.1
1203501750074	85	5.8

Context for Collaboration



Public Service Reform Plan 2014-2016



Strategic Reforms

- Focus on Service users
- Focus on efficiencies
- Focus on openness
- Leadership & capability

Public Sector ICT Strategy



Strategic Pillars

- Build shared infrastructure
- Drive digitisation & innovation
- Support data sharing
- Improve governance
- Increased capabilities

"Delivering better outcomes and efficiency through innovation and excellence in ICT"



What we agreed to Collaborate on



OSi/CSO MOU, October 2016

Aim: To establish a closer working relationship to maximise CSO and OSi data and assets for our mutual stakeholders and in support of the Government's Public Sector Reform agenda.

1. Establish joint **CSO/OSi technical working group** to develop data visualisation.
2. Develop technical solution to fulfil Ireland's **reporting responsibilities** under the United Nations 2030 agenda for Sustainable Development.
3. Collaboration in developing **new data dissemination channels**.
4. Promote the **statistical potential of geospatial** data as part of the wider development of the National Data Infrastructure.

Initiative 1 - linked open data

Created 20+ common national datasets as '5 Star' Linked Open Data

data.geohive.ie
Serving Ireland's geospatial information as Linked Data.

About the Initiative
The goal of Ordnance Survey Ireland's (OSI) initiative with ADAPT is to develop a platform to publish OSI's geospatial data as Linked Data on the Web via a web application to facilitate reuse in a meaningful way of geospatial information. The publication of Linked Data enables third parties to explore and consume rich data in a meaningful manner via a combination of simple, standardized technologies (e.g., RDF and URIs) that operate over the Web's existing HTTP infrastructure.

[View details >](#)

Download and Query
Ordnance Survey Ireland's geospatial data is available both via Triple Pattern Fragments Server and web client, a Linked Data front-end (e.g., by following the HTTP URI of County Dublin) and as downloadable datasets for local use.

[View details >](#)

Contact and Legal
Contact us:

- Corporate
- GeoHive

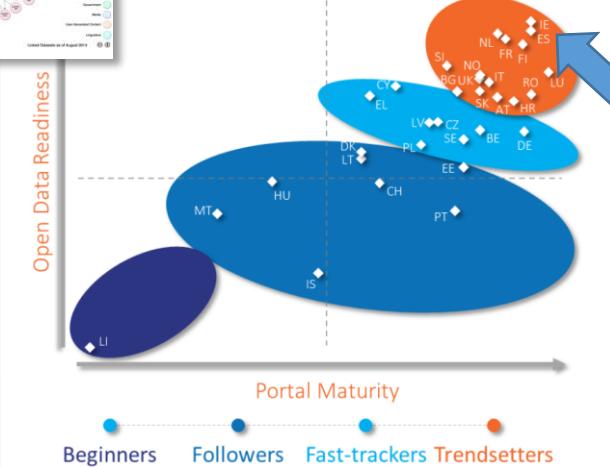
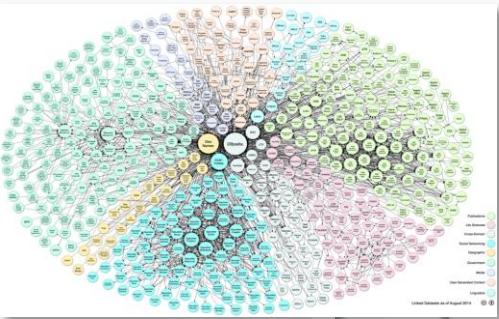
Or send us an email via geohive@osi.ie.

Legal:

- Corporate
- Privacy
- Terms of Use



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Initiative 2 – Geospatial portal for Census 2016

Census 2016 Open Data Site

Sign In

Open Data for Census 2016 Ireland

Bringing Geography and Statistics Together

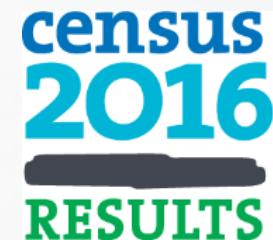
On this site Census 2016 datasets have been combined with Ordnance Survey Ireland's (OSi) official boundary data as part of a collaborative project between the Central Statistics Office (CSO) and OSi to link geography and statistics.

OSi Ordnance Survey Ireland

GeoHive

An Phriomh-Oifig Stáitíomh Central Statistics Office

<http://census2016.geohive.ie/>



Statistical and boundary data fused together to provide over 500 layers of geo-statistical information.



UNSD/Esri Research Project (commenced May 2017)

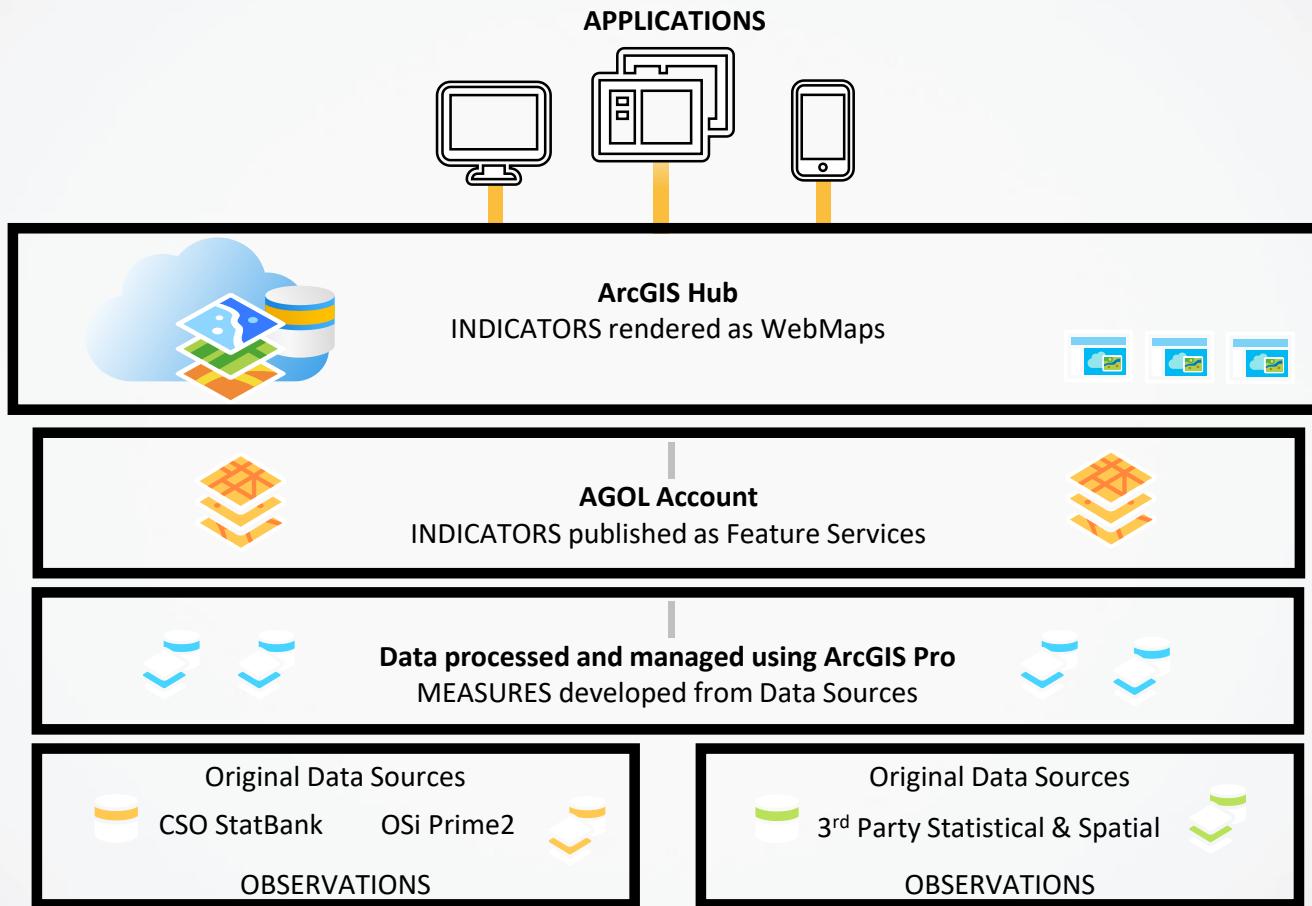
- Project goal - new approach for monitoring UN SDGs using GIS
- Participation of 7 UN Members - Ireland, Mexico, Senegal, Philippines, Qatar, South Africa and Australia.
- OSi and CSO - participating in partnership with Esri Ireland.



Statistics Division



Technical Architecture – ArcGIS Open Data & Hub



Developed & launched Ireland's UN SDG Data Hub



<http://irelandsdg.geohive.ie/>

- Established a joint OSi/CSO **data governance team**.
- We've been working on 12 of the 17 SDG Goals and have developed **indicators and datasets** at NUTS 3, county and local area geography.

Ireland, Sustainable Development Goals

17 Goals to Transform our World

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 UN Sustainable Development Goals. Ireland's progress against each Goal is measured using a set of globally agreed Indicators and here you can search for, discover and visualise the data we use to create those Indicators.

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

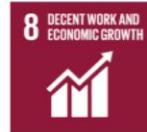
Ordnance Survey Ireland

GeoHive

An Phríomh-Oifig Stáitíochta
Central Statistics Office

Ireland's UN SDGs Data Hub – Explore Data

Ireland, Sustainable Development Goals [Sign In](#)

 1. No Poverty	 2. Zero Hunger	 3. Good Health & Wellbeing	 4. Quality Education	 5. Gender Equality	 6. Clean Water and Sanitation
 7. Affordable & Clean Energy	 8. Decent Work & Economic Growth	 9. Industry, Innovation & Infrastructure	 10. Reduced Inequalities	 11. Sustainable Cities and Communities	 12. Responsible Consumption and Production
 13. Climate Action	 14. Life Below Water	 15. Life on Land	 16. Peace, Justice & Strong Institutions	 17. Partnerships for the Goals	 Boundary Data

Ireland's UN SDGs Data Hub – Data Access



5. Gender Equality

Ireland, Sustainable Development Goals

Find My Data Sign In

(1 of 2)

SDG 5.5.1, NUTSIII, Proportion of Seats Held by Women in Local Government, 2014, Local Government Elections & OSi

OBJECTID NUTS1 NUTS1NAME NUTS2 NUTS2NAME NUTS3 NUTS3NAME Shape__Area

6	IE	Ireland	IE06	Eastern and Midland	IE01	Dublin	2597391756.7597656
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Zoom to © Ordnance Survey Ireland

Overview Data API Explorer

SDG 5.5.1, NUTSIII, Proportion of Seats Held by Women in Local Government, 2014, Local Government Elections & OSi

Favorite Download Data APIs

Showing 1 to 8 of 8 Hint: Click on to filter columns.

OBJECTID	NUTS1	NUTS1NAME	NUTS2	NUTS2NAME	NUTS3	NUTS3NAME	Shape__Area	Shape_
1	IE	Ireland	IE04	Northern and Western	IE041	Border	33976428463.48242	4334486..
2	IE	Ireland	IE04	Northern and Western	IE042	West	40510973141.15039	4736892..
3	IE	Ireland	IE05	Southern	IE051	Mid-West	28529686404.691406	1508101..
4	IE	Ireland	IE05	Southern	IE052	South-East	19344366248.70215	1609152..
5	IE	Ireland	IE05	Southern	IE053	South-West	32387562750.646972	4373512..

Ireland's UN SDGs Data Hub – APIs and Documentation

Ireland, Sustainable Development Goals

Find My Data

Overview Data API Explorer

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SDG 9.2.2, NUTSIII, Manufacturing Employment as Percentage of Total Employment, 2017, Ireland, CSO & OSi

★ Favorite APIs

No license specified 7/6/2017 Spatial Dataset 8 Rows

Explore this dataset's API by completing the fields below. The fields will populate the query URL and the output will appear in the JSON box below. If you'd like to know more about the API, please refer to the full [REST API documentation](#).

Query

Parameter	Value
Where	No Active Filters
Out Fields	<input checked="" type="checkbox"/> OBJECTID <input type="checkbox"/> NUTS1 <input type="checkbox"/> NUTS1NAME <input type="checkbox"/> NUTS2 <input type="checkbox"/> NUTS2NAME <input type="checkbox"/> NUTS3 <input type="checkbox"/> NUTS3NAME <input checked="" type="checkbox"/> GUID <input type="checkbox"/> Shape__Area <input type="checkbox"/> Shape__Length <input type="checkbox"/> MaleTotal <input type="checkbox"/> FemaleTotal <input checked="" type="checkbox"/> TotalIndustryEmployment

The fields to be included in the returned result set.

Spatial Inputs

Output Options

Try It Out Reset

Ordnance Survey Ireland

StoryMaps – providing a narrative on Ireland's SDGs



Ireland, Sustainable Development Goals

Sign In

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.



The Changing Patterns of Un...



Ireland's Life on Land



The Status of Ireland's Rivers

StoryMap # 1 – Ireland's Life on Land



Ireland's Life on Land

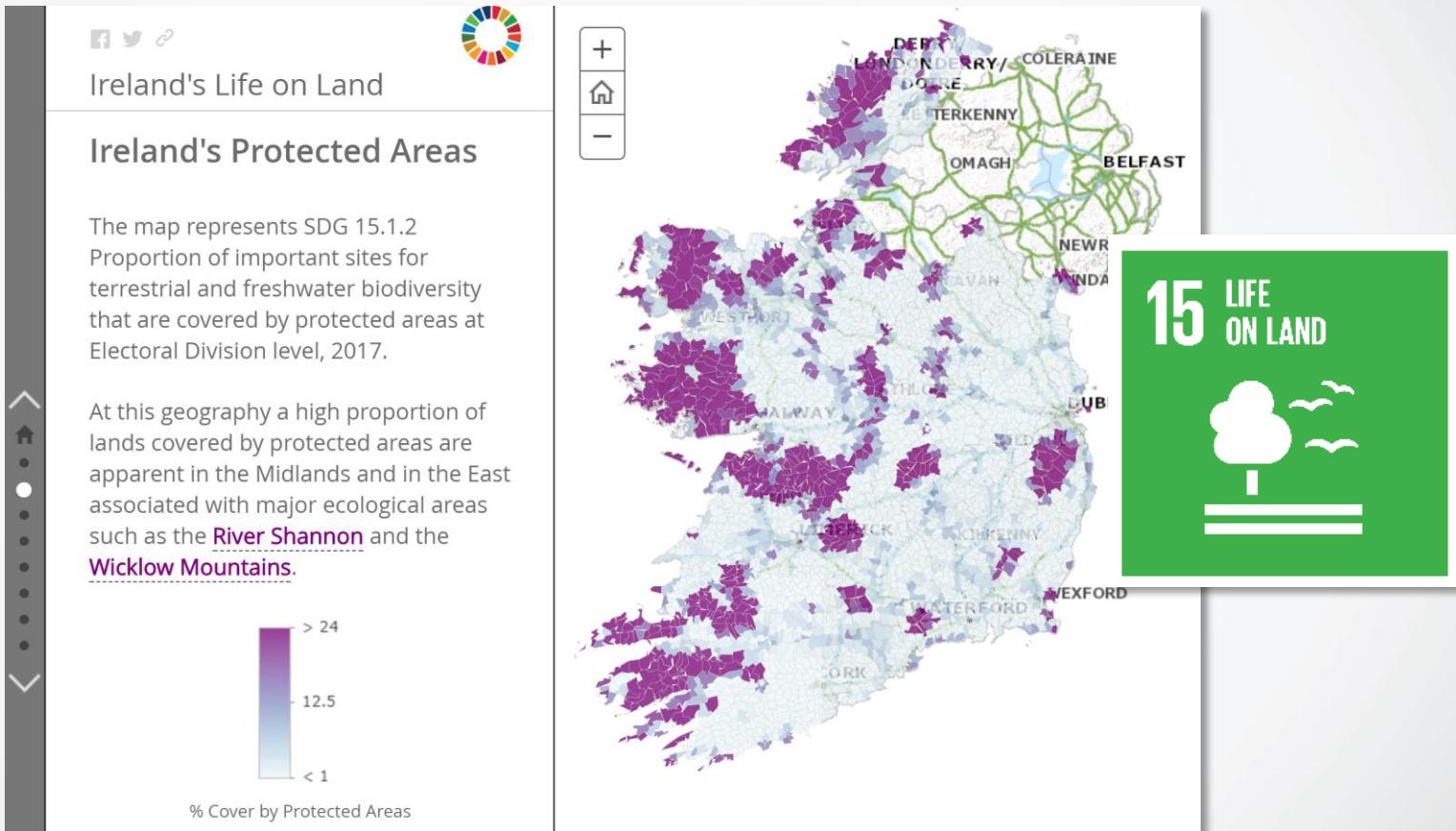
This Story Map explores Ireland's Life on Land by taking a look at protected areas across Ireland, habitat types and national initiatives to protect and enhance biodiversity. This story map has been developed to support efforts of reporting Ireland's status in relation to achieving United Nations (UN) Sustainable Development Goals.

UN countries have adopted a set of 17 goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to help achieve the goals set out in the agenda by 2030.

The indicators illustrated below provide an insight into Ireland's progress towards sustainable Development Goal numbers 6 and 15.



StoryMap # 1 – Ireland's Life on Land



StoryMap # 2 – Changing Patterns



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



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.

UN countries have adopted a set of 17 goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to help achieve the goals set out in the agenda by 2030.



StoryMap # 2 – Changing Patterns

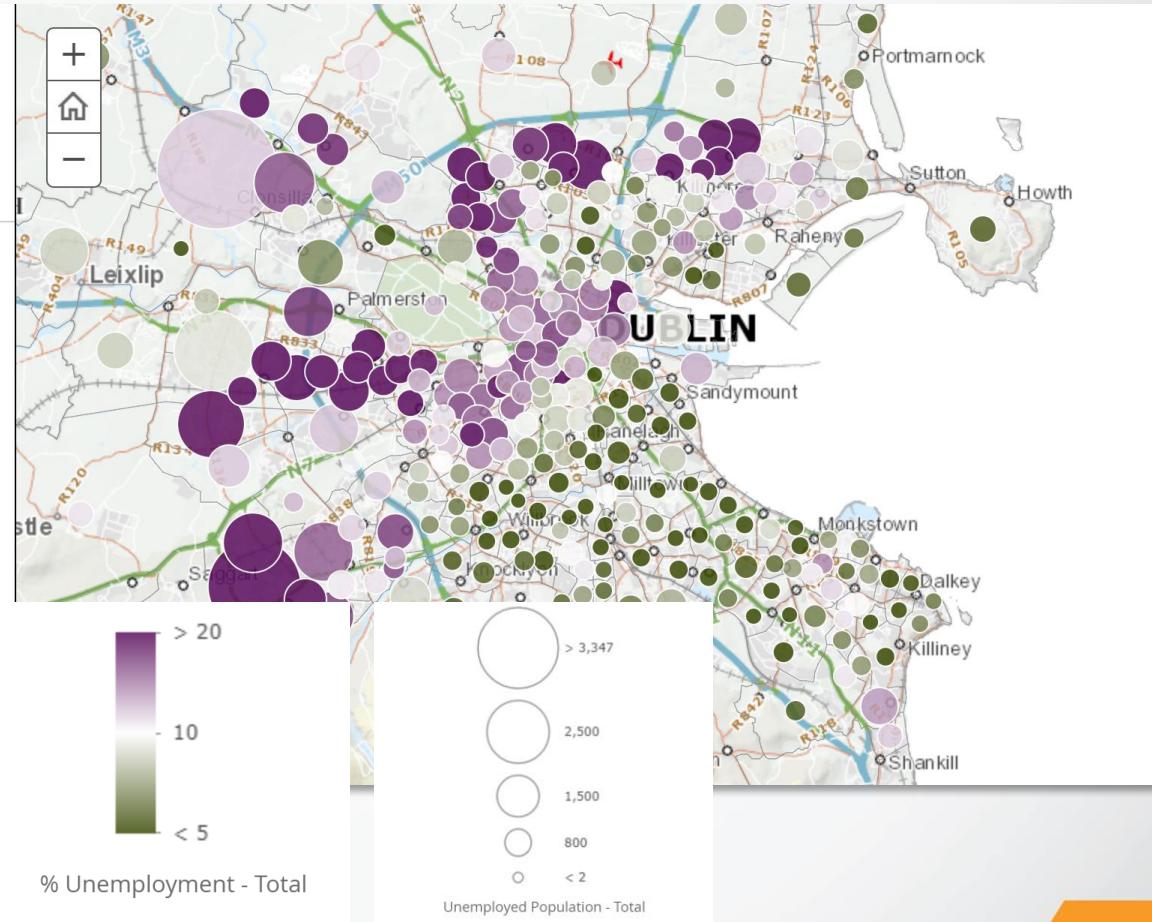


The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017

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.



Progress to-date in Ireland

- Formally launched **Ireland's UN SDG Data Hub** in **November 2017** where interested parties can openly access, visualise and download data related APIs
- Developed **56 indicators and 112 datasets** at various geographies
- Established a **data governance team** with key stakeholders

StoryMap for Ireland's official reporting on progress towards meeting national SDG targets.

<https://unstats-undesa.opendata.arcgis.com/>





Ordnance
Survey
Ireland

EuroGeographics Q-KEN Meeting
Dublin, 23rd May 2018

Thank You

