



**Ireland's UN SDG Data Hub**  
*Lorraine McNerney, General Manager*



**Ordnance  
Survey  
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"*

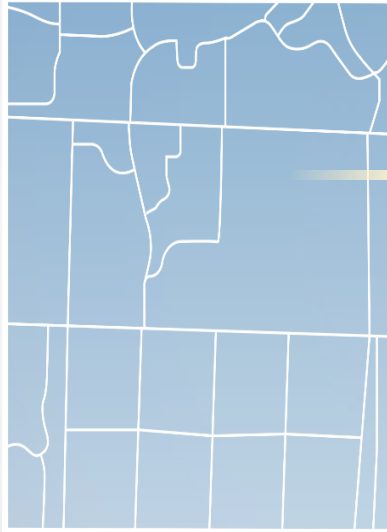


- Ireland's National Statistical Office
- Established 1949
- Operates under the Statistics Act, 1993

**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

## Geospatial Data



## IDs

GUID	Area
1203501750071	42.3
1203501750072	34.8
1203501750073	26.9
1203501750074	51.2

## Statistical Data

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

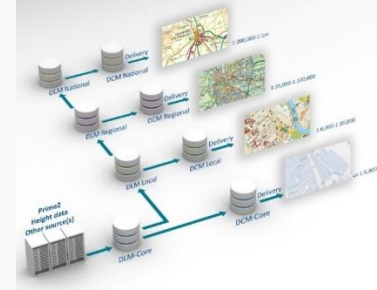
EA Id	Num HH	Avg HH size
1203501750071	89	4.9
1203501750072	98	5.1
1203501750073	102	5.1
1203501750074	85	5.8

# What Geospatial/OSi brings to the relationship (1)



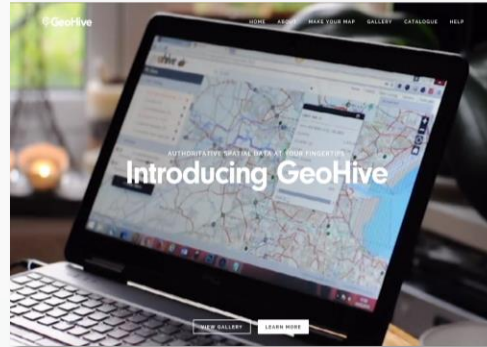
## Fundamental Data Themes

Authoritative reference for all geographic objects



## Automated Product Generation

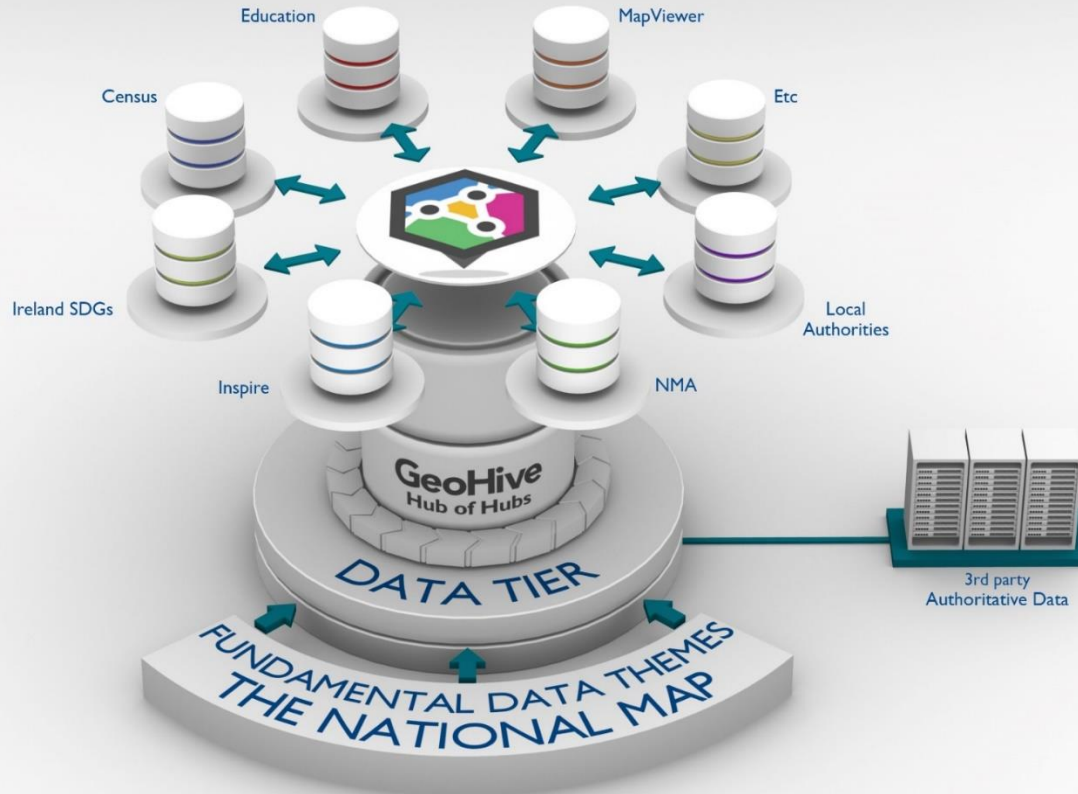
Maintained and consistent Multi-Resolution Data Store



## Visualisation and Collaboration

National Geospatial Platform (GeoHive)

# What Geospatial/OSi brings to the relationship (2)



GeoHive - National Data Infrastructure





## 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.



# 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.

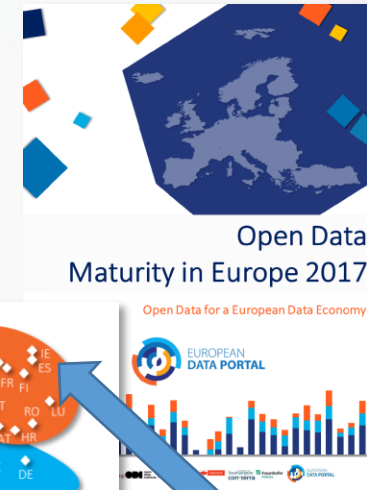
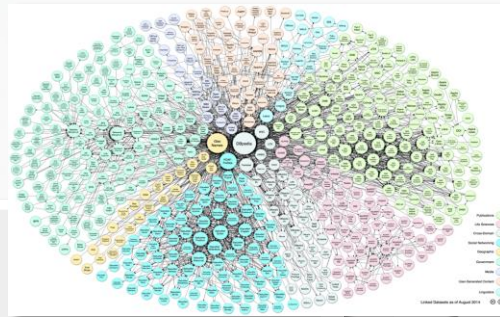
**About the Initiative**  
The goal of Ordnance Survey Ireland's (OSI) initiative with ADAPT is to develop a platform to publish OSI's geospatial data as Linked Data on the Web whilst adhering to best practices in the domain of geospatial information. The publication of Linked Data enables third parties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

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

**Contact and Legal**  
Contact us:  
• Corporate  
• Geosolve  
Or send us an email via [geohive@osi.ie](mailto:geohive@osi.ie).

Legal:  
• Corporate  
• Privacy  
• Terms of Use

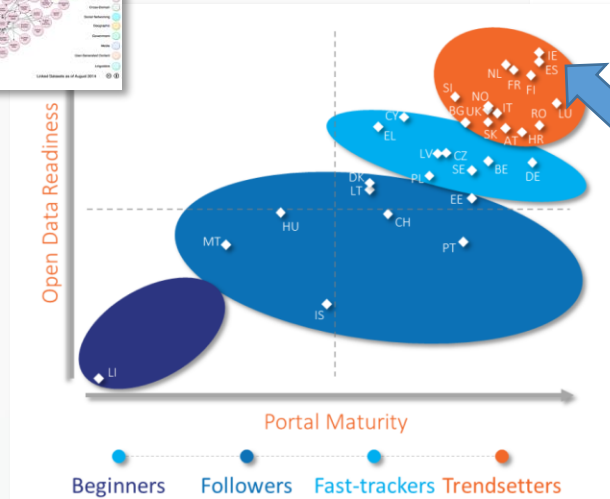
© 2016 Ordnance Survey Ireland.



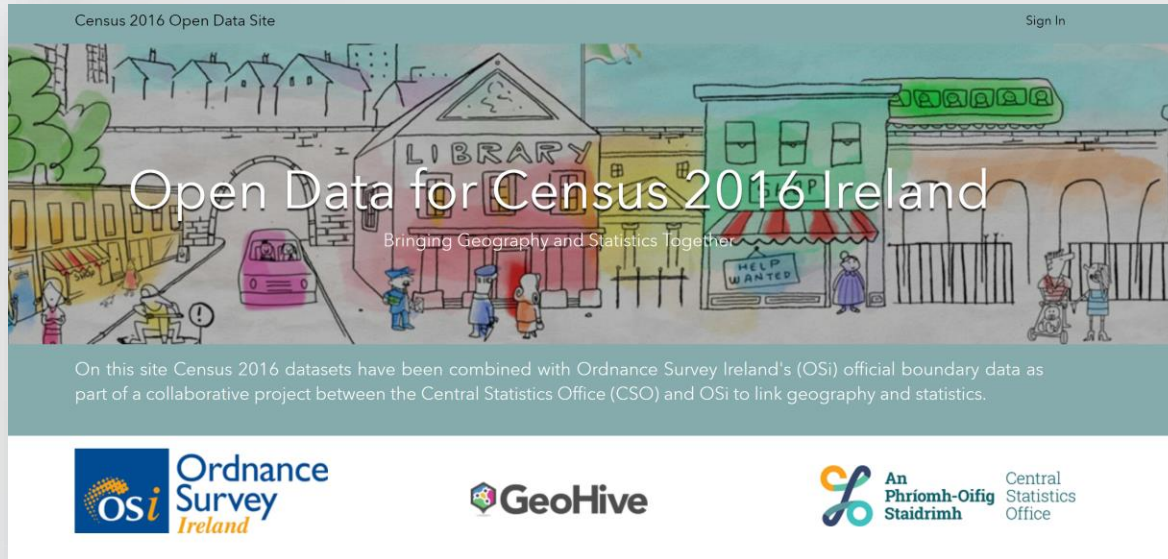
**Open Data Maturity in Europe 2017**

Open Data for a European Data Economy

EUROPEAN DATA PORTAL



# 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.

 **Ordnance Survey**  
Ireland

 **GeoHive**

 **An Phríomh-Oifig Staidrimh**

Central Statistics Office

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

**census**  
**2016**  
**RESULTS**

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.



# Developed & launched Ireland's UN SDG Data Hub



Ireland, Sustainable Development Goals

Sign In

## 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 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.

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

# Ireland's UN SDGs Data Hub – Explore Data

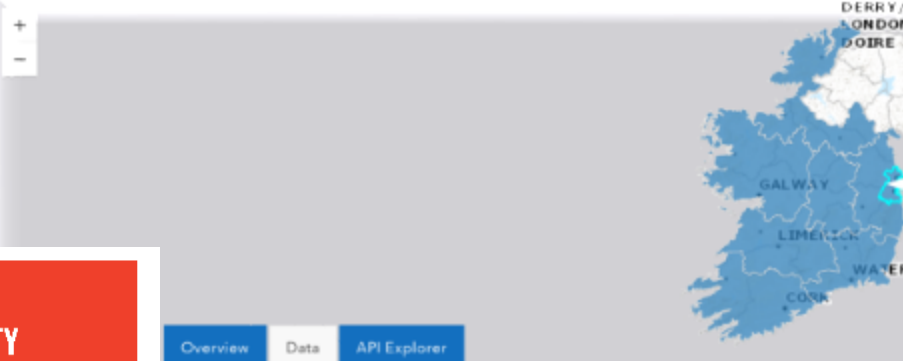




## 5 GENDER EQUALITY



5. Gender Equality



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

OBJECTID	6
NUTS1	IE
NUTS1NAME	Ireland
NUTS2	IE06
NUTS2NAME	Eastern and Midland
NUTS3	IE061
NUTS3NAME	Dublin
Shape__Area	2597391756.7597656

Overview
Data
API Explorer

★ Favorite
Download Data
APIs

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

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



9. Industry  
Innovation &  
Infrastructure

Overview Data API Explorer

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

☆ Favorite ▾ Download Data ▾ 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 URL

```
https://services7.arcgis.com/9KcQK31BYuGgE6/arcgis/rest/services/SDG_9.2.2,_NUTSIII,_M  
anufacturing_Employment_as_Percentage_of_Tot  
al_Employment,_2017/FeatureServer/@/query?wh  
ere=1&outFields=*8outSR=4326&f=json
```

Parameter	Value
Where	No Active Filters <span>+</span>
Out Fields	<input checked="" type="checkbox"/> OBJECTID <input checked="" type="checkbox"/> NUTS1 <input checked="" type="checkbox"/> NUTS1NAME <input checked="" type="checkbox"/> NUTS2 <input checked="" type="checkbox"/> NUTS2NAME <input checked="" type="checkbox"/> NUTS3 <input checked="" type="checkbox"/> NUTS3NAME <input checked="" type="checkbox"/> GUID <input checked="" type="checkbox"/> Shape_Area <input checked="" type="checkbox"/> Shape_Length <input checked="" type="checkbox"/> MaleTotal <input checked="" type="checkbox"/> FemaleTotal <input checked="" type="checkbox"/> TotalIndustryEmployment <small>The fields to be included in the returned result set.</small>

Spatial Inputs

Output Options

Try It Out Reset





# StoryMaps – providing a narrative on Ireland’s SDGs




Government of Ireland  
Department of Public Expenditure and Reform  
Ireland, Sustainable Development Goals  
Indicators. login


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








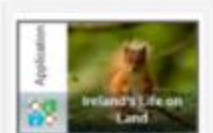
Explore the Sustainable Development Goals via Story Maps  
Click any Story Map below to access an interactive narrative on a Sustainable Development Goal for Ireland.



The Status of Ireland's Rivers



The Changing Patterns of Ur...



Ireland's Life on Land



# StoryMap # 1 – Ireland's Life on Land



## Ireland's Life on Land

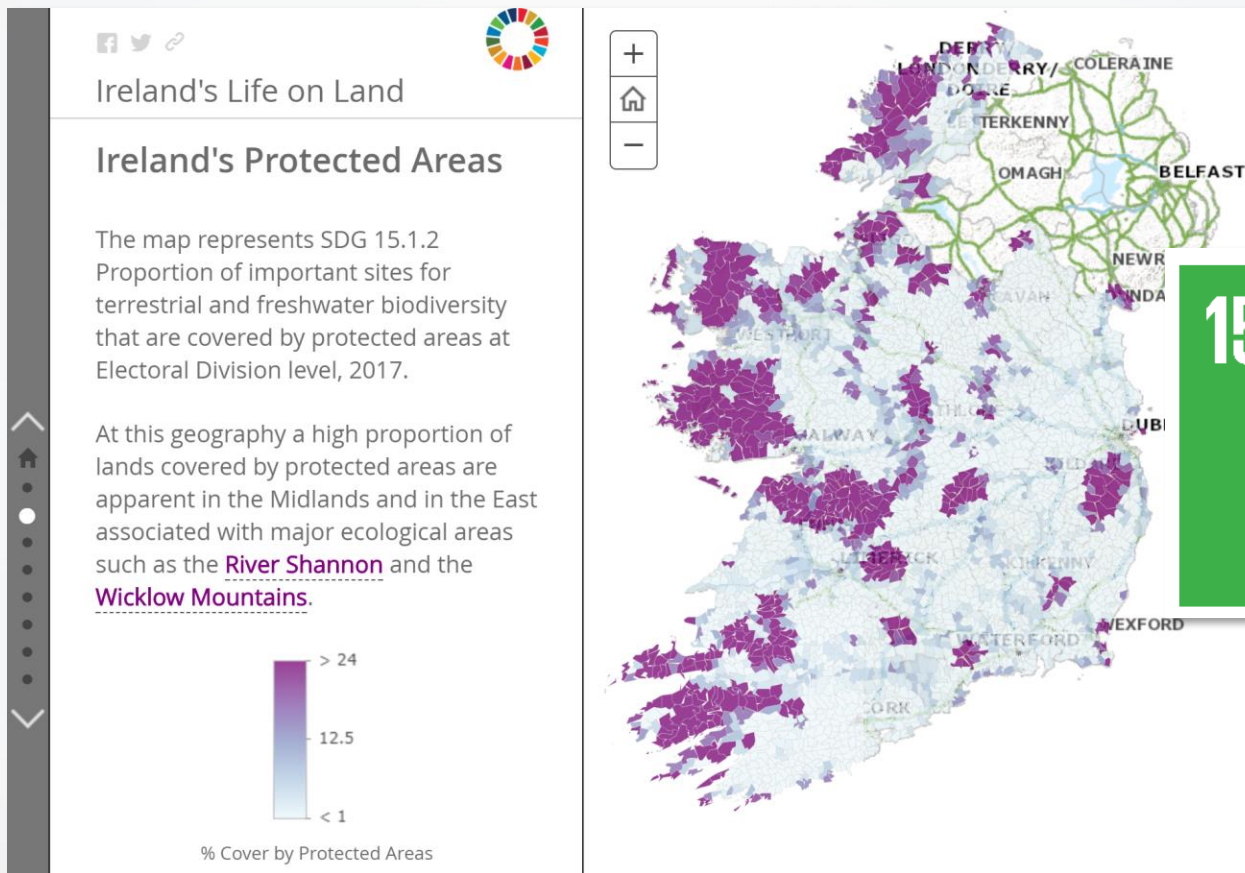
This Story Map explores Ireland's Life on Land by taking a look at protected areas across Ireland, habitat types and national initiatives to protect and enhance biodiversity. This story map has been developed to support efforts of reporting Ireland's status in relation to achieving United Nations (UN)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

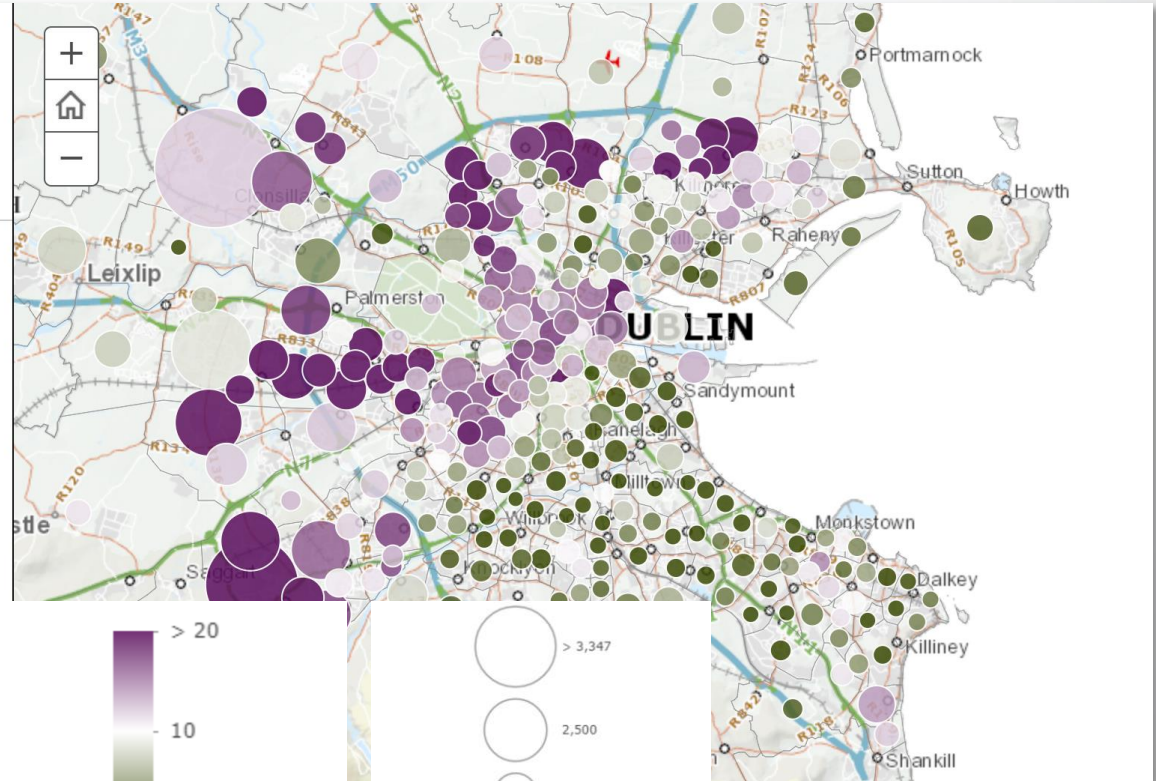


## The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017

### 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.





# SDG Data Governance

- Established an OSi/CSO/Esri Ireland **Data Governance Team**, which meets weekly
- Established a national UN SDG Indicators **Data Governance Board** comprising stakeholders from Government and Agencies, which meets quarterly to agree:

- ✓ Metadata
- ✓ Business glossaries
- ✓ Lifecycle management
- ✓ Data quality

Quality Management / Metadata Management							
1. Specify Needs	2. 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 surveys	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 Define 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 dissemination products	8.2 Conduct evaluation
1.3 Establish output objective, analysis and testing possibilities	2.3 Development of methodology for data processing	3.3 Configure workflows	4.3 Primary data collection	5.3 Imputation and weighting	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 Overmaking 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 aggregates	5.6 Calculation of final data files		
				5.7 Production and updating registers and database			



- Established UN SDG Civil Service **Senior Officials Group**, chaired by Department of Communication, Climate Action & Environment (DCCA), which both CSO and OSi are invited members with responsibility for:
  - ✓ Developing official reports on Ireland's progress towards the SDG Goals
  - ✓ Policy for the individual goals
  - ✓ Signing off on StoryMap content including policy narrative



# Progress to-date in Ireland

- Formally launched **Ireland's UN SDG Data Hub** where interested parties can openly access, visualise and download data related APIs
- Developed **62 indicators (mostly Tier 1) and 112 datasets** at various geographies
- Established a **data governance teams** with key stakeholders

StoryMap for Ireland's official reporting on progress towards meeting national SDG targets delivered at the UN High Level Political Forum (HLPF) in July.



# Key take-aways...

- Collaboration proven to be a great success, providing clear win-win for us and our stakeholders (**we are greater than the sum of our parts**)
- The value of having a clear understanding on organisational roles and responsibilities regarding national geospatial and statistical data (**playing to our strengths & removing duplication**)
- It's amazing what can be done with a **simple MOU and good will**
- The **value in visualising** statistical data within a geospatial context
- The value of re-purposing existing systems and architecture
- As a result of this successful collaboration CSO and OSi are partnering in taking the leading role in supporting government in the **development of a National Data Infrastructure (NDI)**.

Have that cup of coffee!





Thank You

