



# Establishing Ireland's United Nations Sustainable Development Goals (UN SDGs) Data Hub

'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"

- 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"



### OSi/CSO Memorandum Of Understanding (Octber 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 Irish Government's Public Sector Reform agenda

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

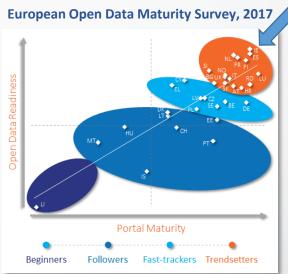




### Initiative (1) – National Geospatial Linked Data

- 20+ common national datasets as '5 Star' Linked Open Data
- Publication of 2016 Census data



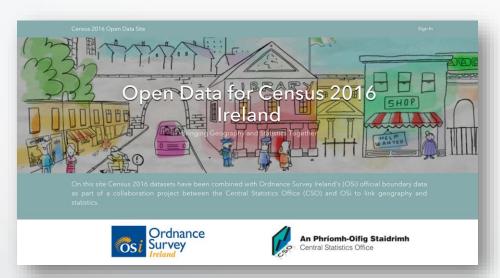




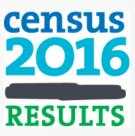


#### Initiative (2) – Geospatial portal for Census 2016

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



http://census2016.geohive.ie/







## Initiative (3) – Joint hosting of European Forum for Geography and Statistics (EFGS) 2017









Welcome to the official website of the 10th European Forum for Geography and Statistics (EFGS)

This year's conference takes place in Dublin from 2nd to 3rd November 2017 and is proudly hosted by Ireland's Central Statistics Office (CSO) and Ordinance Survey Ireland (OSI). The partnership between the CSO and OSI is long established and was recently underplined by a commitment to collaborate in relation to the visualisation of statistical outputs, publishing certain geographies as Linked Open Data and fulfilling Ireland's reporting responsibilities under the United Nations 2030 agenda for Sustainable Development. READ MORE





#### Initiative (4) – Establishing Ireland's UN SDGs Data Hub



Officially launched on 2<sup>nd</sup> November 2017.

The information contained will support reporting of Ireland's progress against each Goal.



#### **Establishing Ireland's UN SDGs Data Hub**



## **UNSD/Esri Research Project (commenced May 2017)**

- Project goal is to develop and deploy a new approach for monitoring SDGs using geographic information systems
- Participation of seven UN Members Ireland, Mexico, Senegal,
   Philippines, Qatar, South Africa and Australia
- OSi and CSO, are participating in partnership with Esri Ireland.











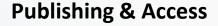
#### The Geospatial role in SDGs



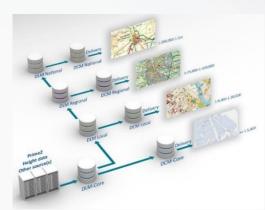


Referencing

Authoritative Referencing of geography (National Object Platform)



National Geospatial Platform (GeoHive collaborative portal)



**Visualisation** 

Maintained and consistent Multi-Resolution Data Store





#### **Progress to-date in Ireland**

- Established a joint OSi/CSO data governance team the Irish
  Department of Communications, Climate Action and Environment
  (DCCAE) who has responsibility for officially reporting on Ireland's
  progress towards meeting national SDG targets
- Developed 51 indicators and 99 datasets at NUTS 3, county and local area geography
- Developed Ireland's UN SDG Data Hub where interested parties can openly access, visualise and download data related APIs
- Formally launched on 2<sup>nd</sup> November at EFGS Conference in Dublin.



#### Ireland's UN SDGs Data Hub – Homepage







## Ireland's UN SDGs Data Hub – Explore Data





Ireland, Sustainable Development Goals

Sign In

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



1. No Poverty





2. Zero Hunger



3. Good Health & Wellbeing



4. Quality Education



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



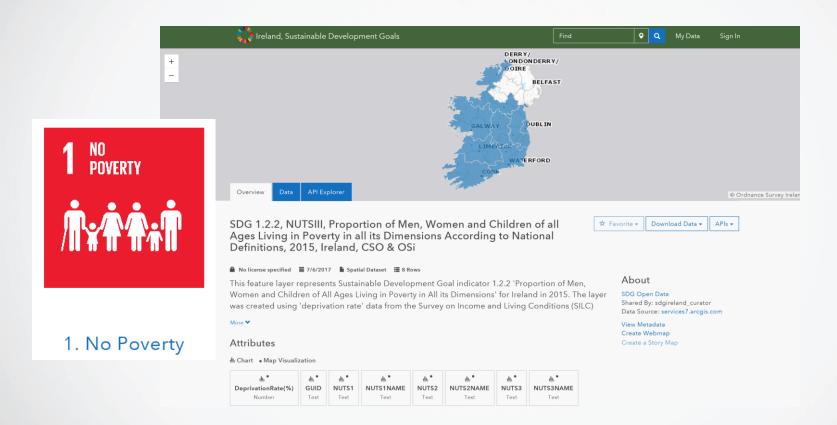
17. Partnerships for the Goals



Boundary Data

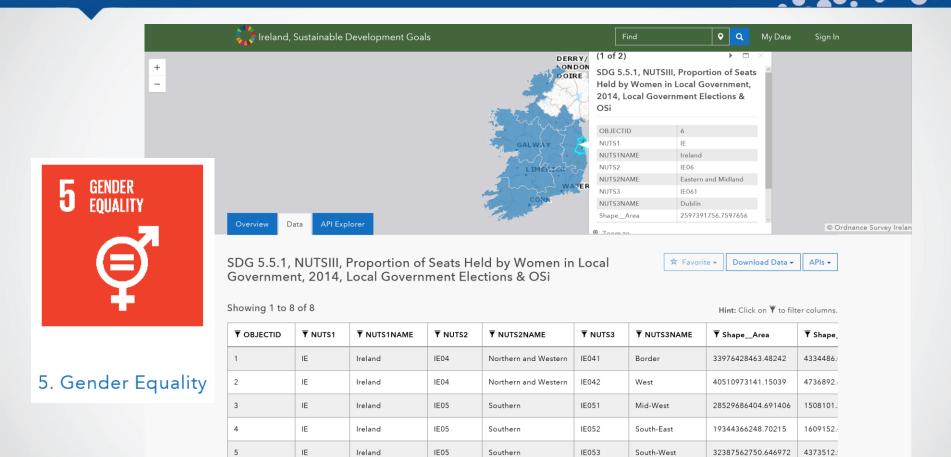


#### Ireland's UN SDGs Data Hub – Interactive MapViewer



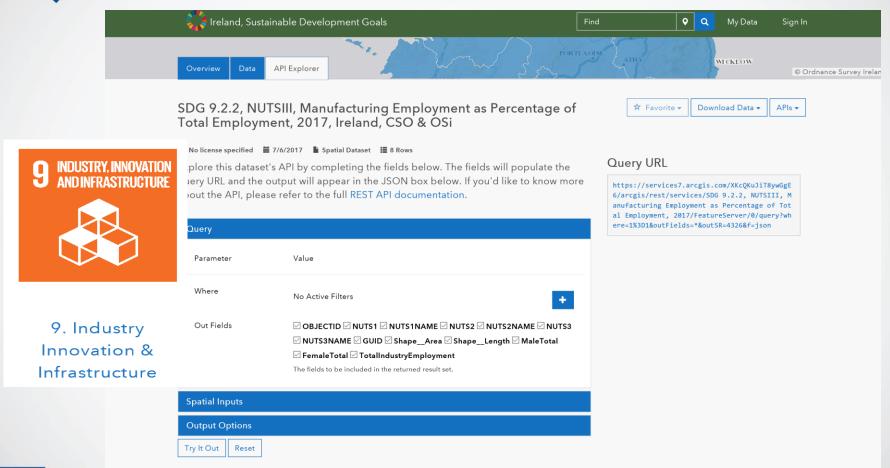


#### Ireland's UN SDGs Data Hub – Data Access





#### Ireland's UN SDGs Data Hub – APIs and Documentation





### Ireland's UN SDGs Data Hub - Map Layers and Gallery





## **UN Sustainable Development Goal Indicators, Ireland**

UN Sustainable Development Goals in Ireland

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Search maps

SDG 8.2.1, NUTSIII, Annual Growth Rate of Real GDP per Employed Person, 2014, Ireland, CSO & OSi

Feature Service by sdgireland curator. Last Modified 7/25/17.

This feature layer represents Sustainable Development Goal indicator 8.2.1 'Annual Growth Rate of Real GDP per Employed Persons' for Ireland, 2014 at NUTSIII level. Source: Central Statistics Office, Ordnance Survey Ireland.

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SDG 2.1.2, NUTSIII, Prevalence of Moderate or Severe Food Insecurity in the Population based on the Food Insecurity Experience Scale, 2015, Ireland, CSO & OSI

Feature Service by sdgireland curator. Last Modified 7/25/17.

This feature layer represents Sustainable Development Goal indicator 2.1.2 'Prevalence of Moderate or Severe Food Insecurity in the Population' for Ireland, 2017 Q1 at NUTSIII level. Source: Central Statistics Office, Ordnance Survey Ireland.

17



SDG 9.2.1, NUTSIII, Manufacturing Value Added as a Proportion of GDP and per Capita, 2014, Ireland, CSO & OSi

Feature Service by sdgireland curator. Last Modified 7/25/17.

This feature layer represents Sustainable Development Goal indicator 9.2.1 'Manufacturing Value Added as a Proportion of the GDP and per Capita' for Ireland, 2014, at NUTSIII level. Source: Central Statistics Office, Ordnance Survey Ireland.

1



SDG 3.6.1, Administrative County, Death Rate due to Road Traffic Accidents, 2013, Ireland, RSA, CSO & OSi

Feature Service by sdgireland\_curator. Last Modified 7/21/17.

This feature layer represents Sustainable Development Goal indicator 3.6.1 'Death Rate due to Road Traffic Accidents as Percentage of the Population' for Ireland, 2013 at

This Gallery presents work to date on mapping the Indicators for selected UN Sustainable Development Goals in Ireland

:: 1

Open Data indicators that represent implementation and attainment of UN Sustainable Development Goals in Ireland. Indicators are produced as part of the Federated Sustainable Development Goal Research Initiative and a collaboration project between Ordnance Survey Ireland and the Central Statistics Office.



## **Story Maps**









#### Story Maps – providing a narrative on Ireland's SDGs





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.









### Story Map # 1 – Ireland's Life on Land



By 8



#### 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 toward, ustainable





#### Story Map # 1 - Ireland's Life on Land





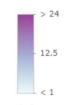


Ireland's Life on Land

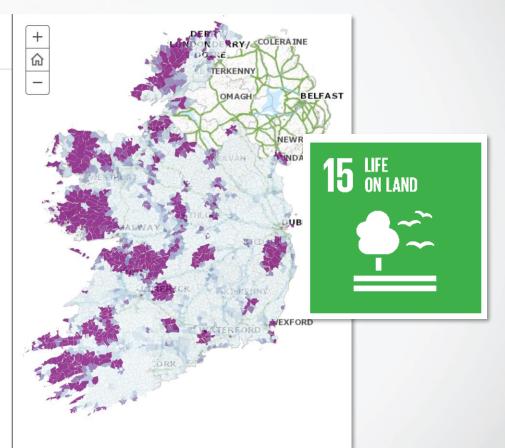
#### Ireland's Protected Areas

The map represents SDG 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas at Electoral Division level, 2017.

At this geography a high proportion of lands covered by protected areas are apparent in the Midlands and in the East associated with major ecological areas such as the River Shannon and the Wicklow Mountains.



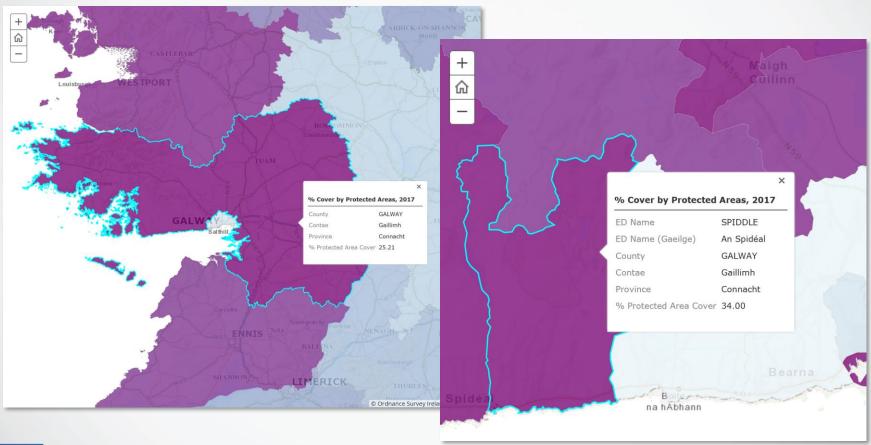
% Cover by Protected Areas





## Story Map # 1 – Ireland's Life on Land







#### **Story Map # 2 – Changing Patterns**



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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.

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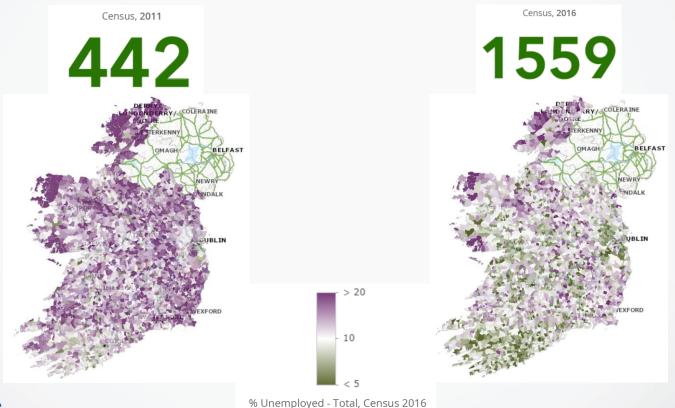




#### **Story Map # 2 – Changing Patterns**



#### Number of Electoral Divisions with a 10% or Less Unemployment Rate





#### **Story Map # 2 – Changing Patterns**



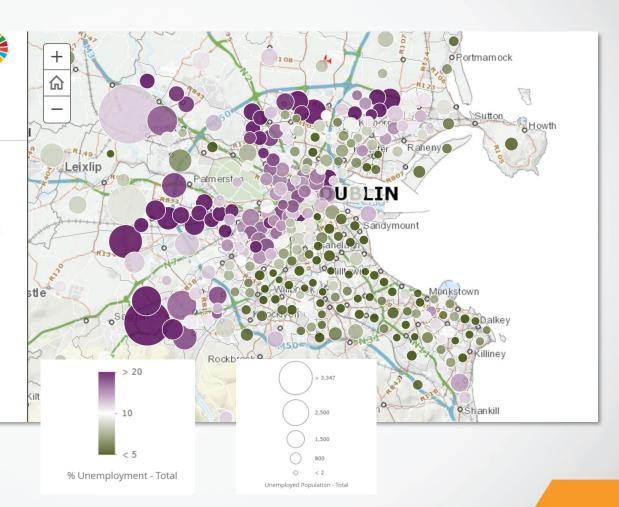


The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017

#### 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.





## **Ireland's Key Takeaways**



- The value of a strong collaborative relationships
  - OSi & CSO
  - Technical Partner (Esri)
- The value of a platform approach to national mapping and to national geospatial systems architecture
- The value of having a clear understanding on the organisational roles and responsibilities regarding national geospatial data and national statistical data
- The value in visualising statistical data within a geospatial context
- The value of re-purposing existing systems and architecture





**UN-GGIM, 28<sup>th</sup> November, Mexico City Establishing Ireland's UN SDGs Data Hub** 

## Thank You



