An Phríomh-Oifig Staidrimh
Central Statistics Office

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

Kevin McCormack

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 inter agency 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, UNECE the Generic Statistical Business Process Model (GSBPM), which has 8 phases and 34 sub-phases.

Generic Statistical Business Process Model

Tasks completed by Project Team

Sourced information for 180 **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 **SDG platform,** build 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/

Ireland's SDG portal

Ireland's SDG portal was officially launched at the European Forum for Geography and Statistics (EFGS) Conference on 2nd November 2017 and redesigned in July 2019.

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.

Redesign of SDG platform

- SDG portal was redesigned to improve user experiences by deploying the features of Insights of ArcGIS, which is a web-based, data analytics workbench where our users will be able to explore spatial and non-spatial data.

- The DCCAE have agreed that the redesigned platform will become the central hub for national information on the SDGs Goals and the monitoring of the 230+ indicators
- http://ireland-s-hub-for-sustainable-development-goals-irelandsdg.hub.arcgis.com/

Ireland's SDG portal

Welcome to Ireland's Sustainable Development Goals (SDGs) data hub.

This is a collaboration platform for reporting on progress towards the goals and sharing information on related initiatives.

Ireland's progress against each goal is measured using a set of United Nations (UN) global and European Union (EU) agreed targets and indicators.

Story Maps

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

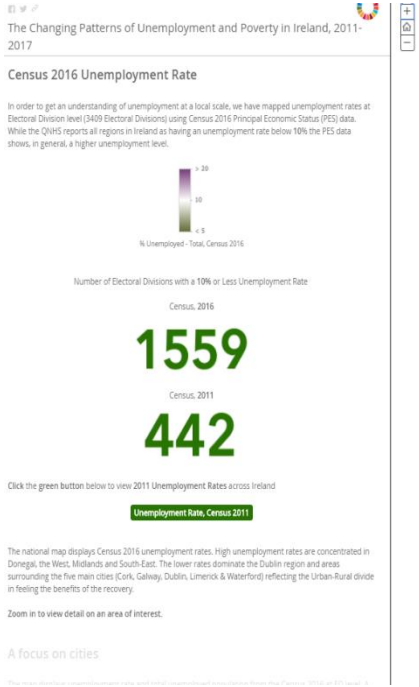
Each story map will:

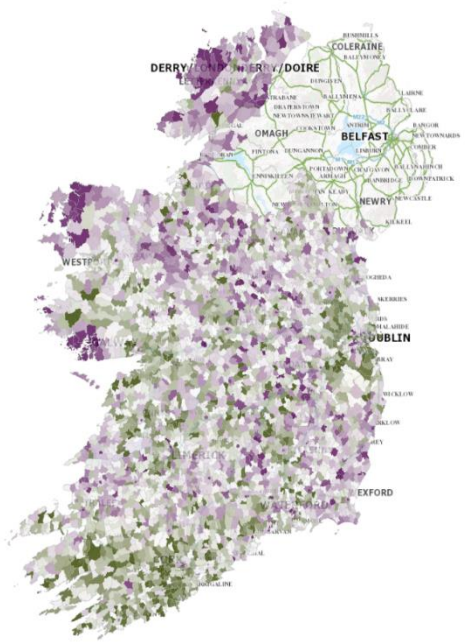
- open with policy commentary provided by the relevant Department, Agency or Office, and
- contain supporting information and relevant interactive maps.

Story Maps

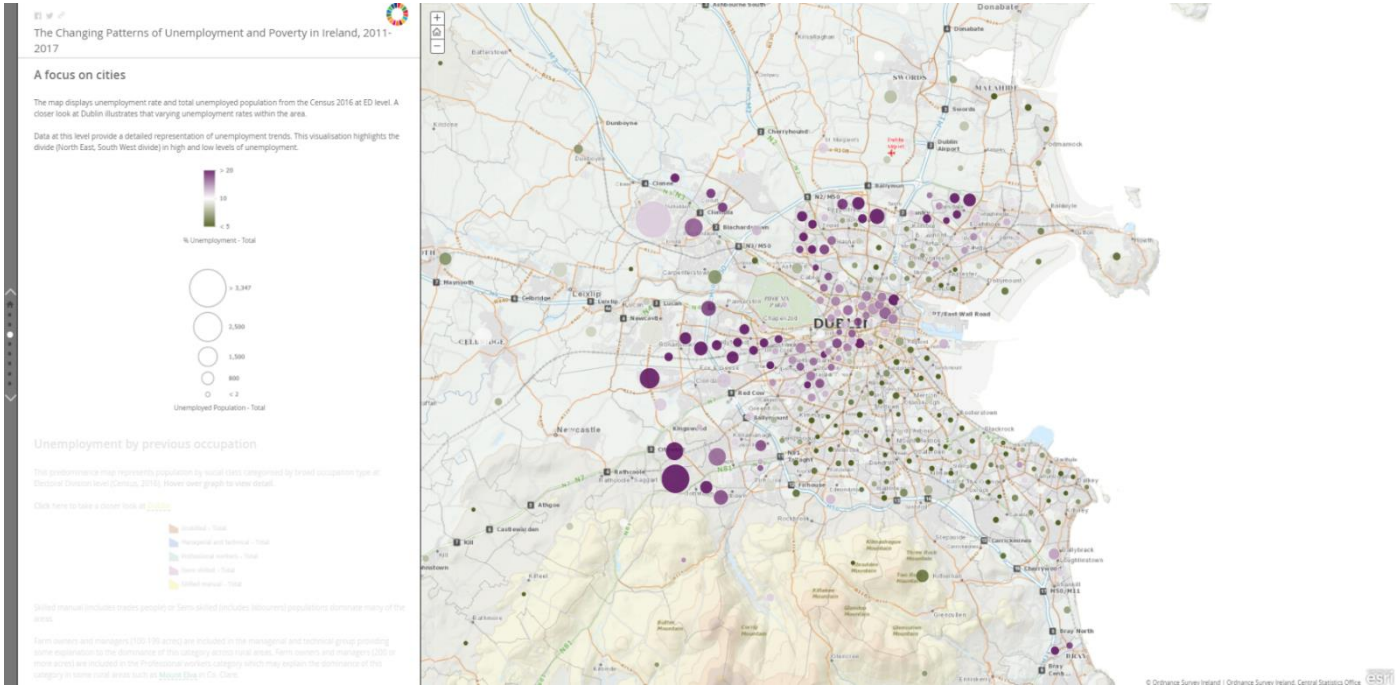
The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017
This Story Map illustrates changes in Ireland in relation to unemployment and poverty throughout the last decade. The Story Map has been developed to support efforts in reporting Ireland's status in relation to achieving United Nations (UN) Sustainable Development Goals.
SWEATER
CHOICE
Ladbrokes

Story Maps


The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017
Census 2016 Unemployment Rate
In order to get an understanding of unemployment at a local scale, we have mapped unemployment rates at Electoral Division level (3409 Electoral Divisions) using Census 2016 Principal Economic Status (PES) data. While the QNHS reports all regions in Ireland as having an unemployment rate below 10% the PES data shows, in general, a higher unemployment level.
> 20
10
< 5
% Unemployed - Total, Census 2016
Number of Electoral Divisions with a 10% or Less Unemployment Rate
Census, 2016
1559
Census, 2011
442
Click the green button below to view 2011 Unemployment Rates across Ireland
Unemployment Rate, Census 2011
The national map displays Census 2016 unemployment rates. High unemployment rates are concentrated in Donegal, the West, Midlands and South-East. The lower rates dominate the Dublin region and areas surrounding the five main cities (Cork, Galway, Dublin, Limerick & Waterford) reflecting the Urban-Rural divide in feeling the benefits of the recovery.
Zoom in to view detail on an area of interest.
A focus on cities


COLERAINE
DERRY/DOIRE
OMAGH
BELFAST
NEWRY
DUBLIN
EXFORD

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.
> 20
10
< 5
% Unemployment - Total
> 3,347
2,500
1,500
800
< 2
Unemployed Population - Total
Unemployment by previous occupation
Donabate
Swords
Dublin Airport
Dunboyne
Cherryhound
Clonee
Blanchardstown
Maynooth
Celbridge
Lucan
Newcastle
Red Cow
Newcastle
Athgoe
Castlewarden
Kill
Carrickmines
Bray North
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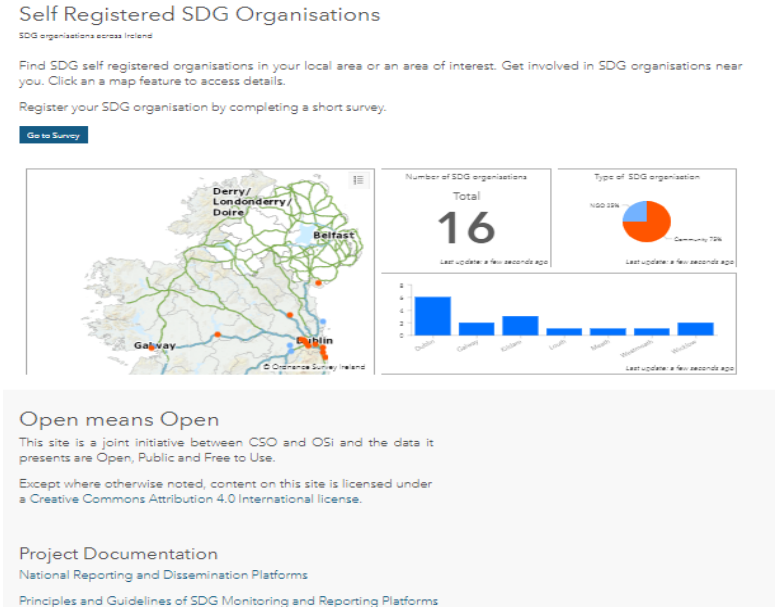
esri

Front Page

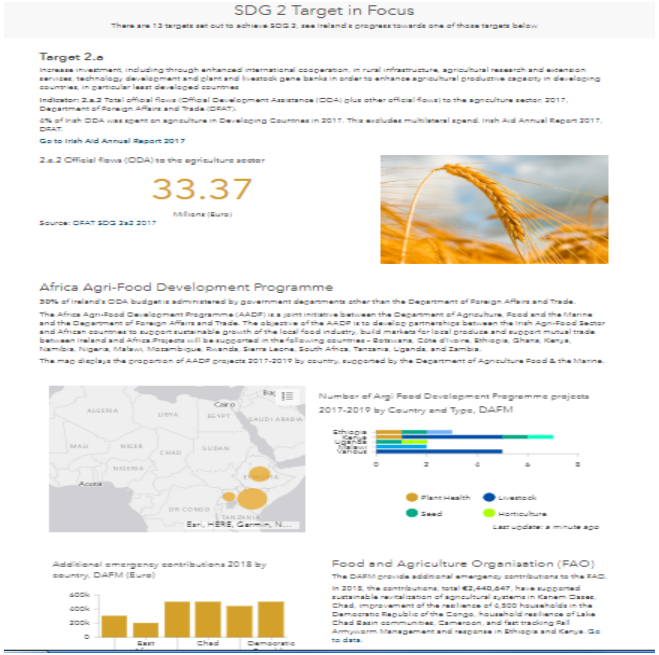
GeoHive
Explore the Sustainable Development Goals
Click on a card below to access progress reports and indicator data relating to a particular Goal.
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17 PARTNERSHIPS FOR THE GOALS
Explore

Self Registrations of SDG Organisations

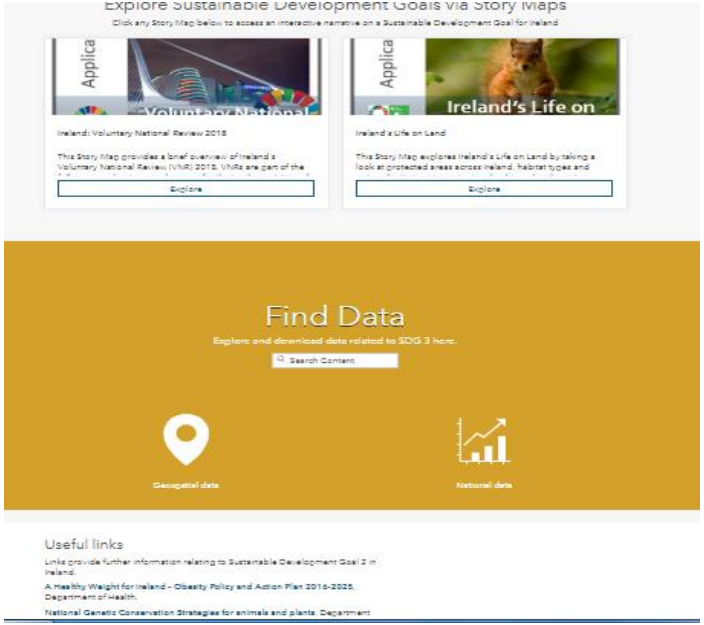


Click on Icon – Goal 2

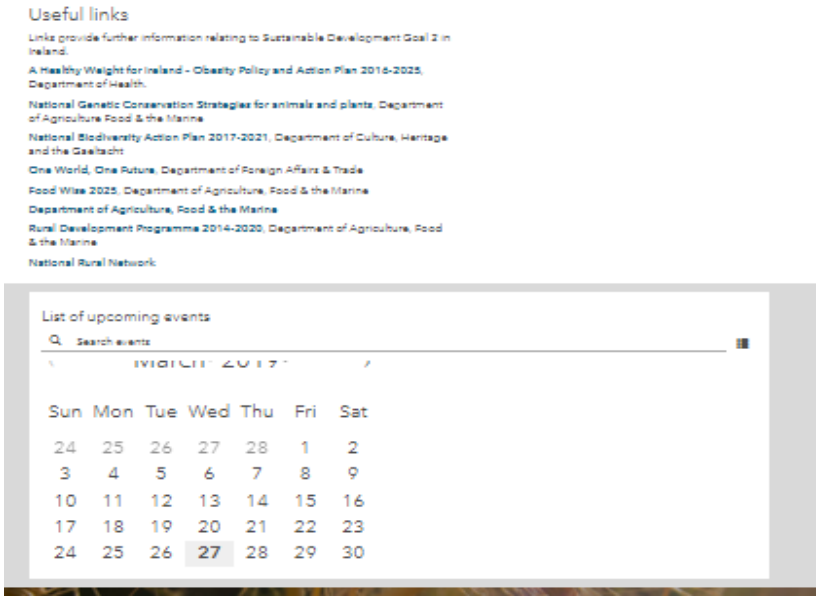
Click on a Icon – Goal 2, Ctd.



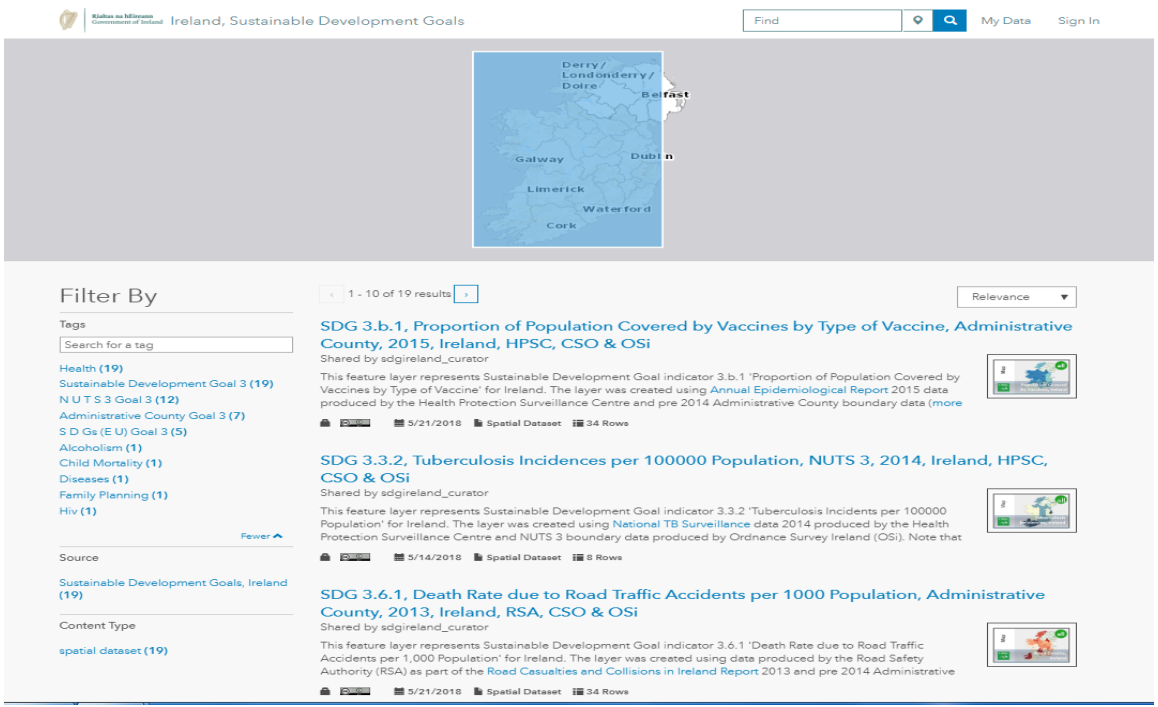
Click on a Icon – Goal 2, Ctd.



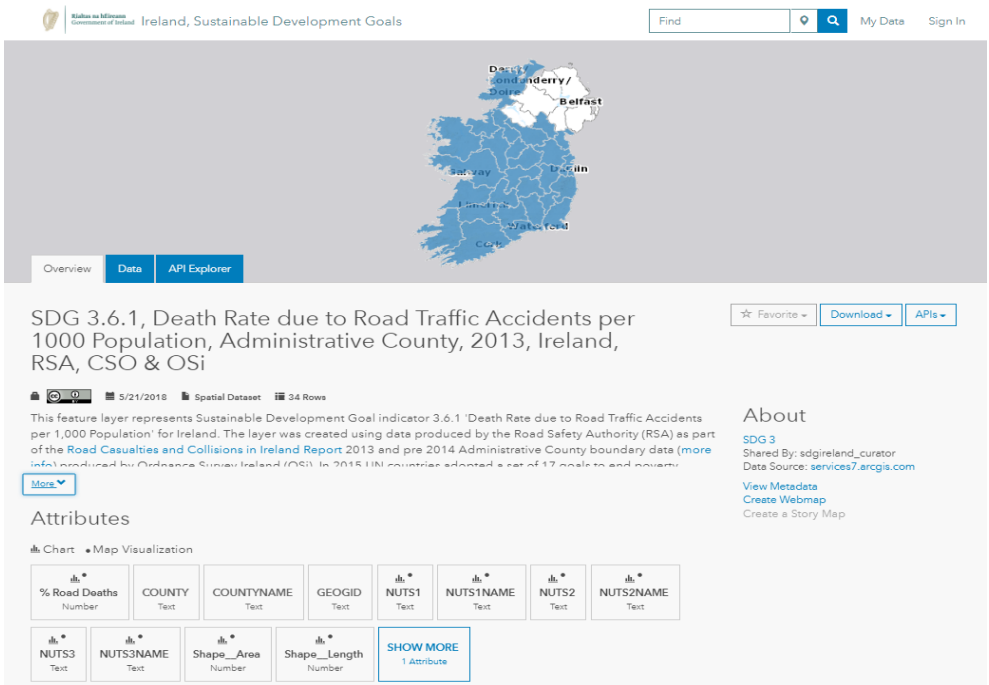
Click on a Icon – Goal 2, Ctd.



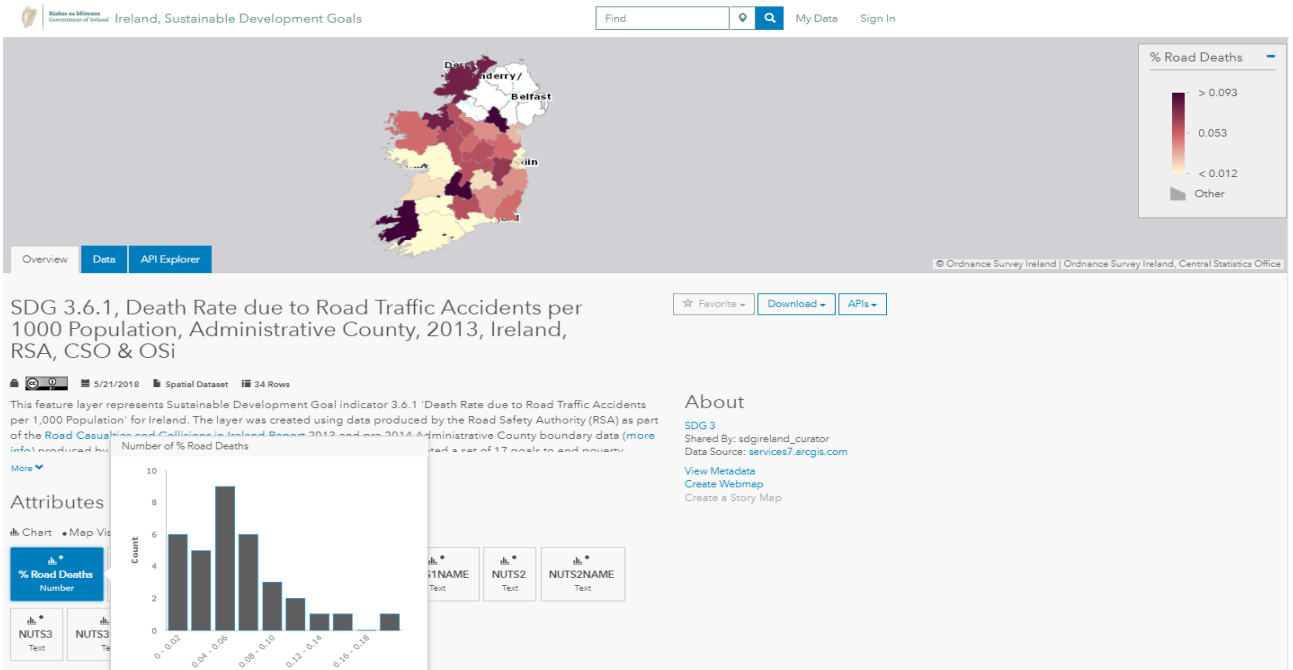
Ireland's SDG portal



Ireland's SDG portal



Ireland's SDG portal



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.

An Phríomh-Oifig Staidrimh
Central Statistics Office

Regional SDGs Ireland 2017

Regional SDGs Ireland 2017

Embracing the experiences gained from working on the UNSD/Esri research project, the CSO's SDG team has also developed an electronic SDG publication with a national focus.

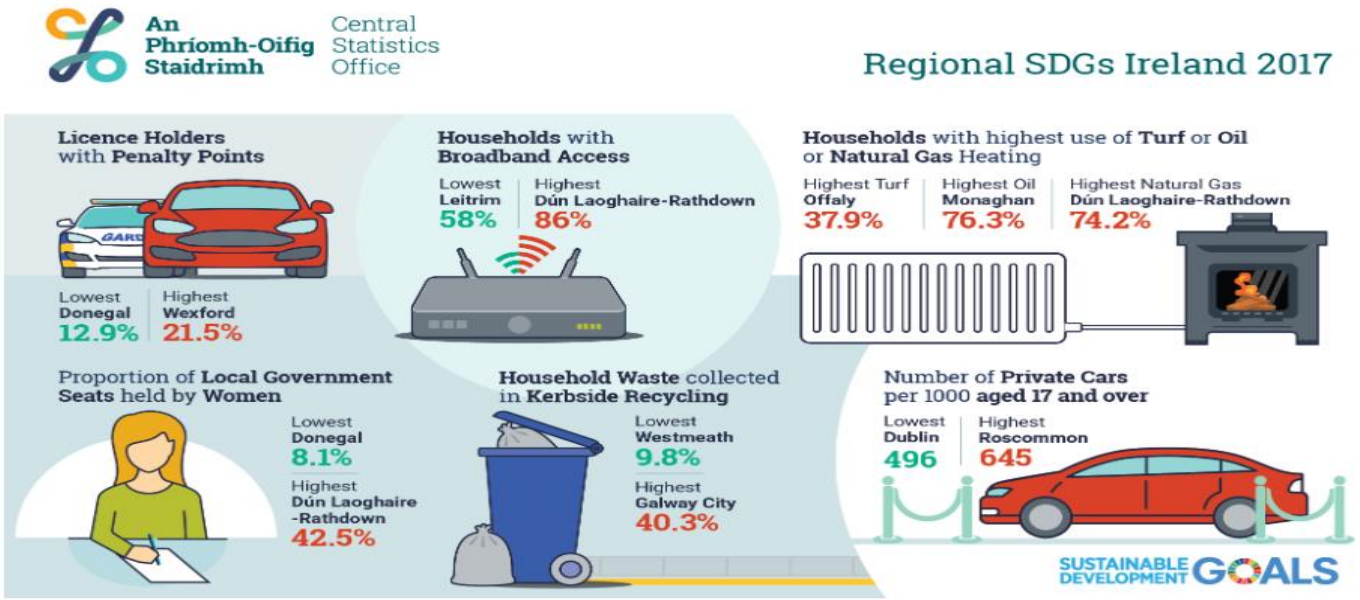
This publication is an update of a previous publication, "*Regional quality of life in Ireland 2013*" and is an exemplar of Irish SDG publications which will be complementary our SDG reporting platform.

This publication has been very well received across all sections Government and social society. Its design will inform future Irish VNRs.

It can be found here:

https://www.cso.ie/en/releasesandpublications/ep/p-rsdgi/regionalsdgsireland2017/

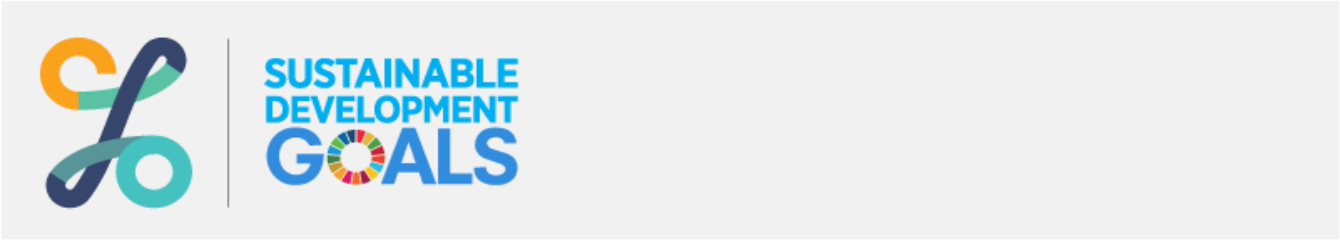
Regional SDGs Ireland 2017



CSO statistical publication, 26 February 2019, 11am

Regional SDGs Ireland 2017

Introduction



This report on regional life in Ireland in 2017 is the third in the series from the CSO. It has been re-ordered in line with the 17 Sustainable Development Goals (SDGs), a set of global development targets adopted by United Nations (UN) member countries in September 2015. The CSO, Ordnance Survey Ireland (OSi) and Esri-Ireland (Environment Systems Research Institute) established a project team in April 2017 to engage with a combined UN Statistics Division (UNSD) Esri research exercise with a goal to develop and deploy a new approach for monitoring the UN SDGs using geographic information systems. The result of this exercise is a new website, hosted on OSi's Geohive platform, which contains indicators for Ireland on the UN SDGs. It is intended that all the indicators in this Regional report will be loaded onto the Geohive.

Regional SDGs Ireland 2017

HIGHLIGHTS IN MAPS

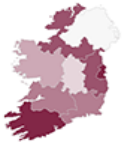
Poverty, employment, education

One in four people (25.7%) living in the Border region was at risk of poverty in 2017. The at risk of poverty rates in Dublin (11.7%) and the Mid-West (12.9%) were less than half the rate of the Border region.

The highest employment rate in 2017 was in the South-West at 70.1% followed Dublin at 69.1% while the lowest was in the Midland region at 59.4%.

One in three people nationally whose full-time education has ceased had a third level qualification. This proportion was highest in Dublin at 40.7% and lowest in the Midland region at 26.4%.

At risk of poverty rate



Employment rate

Third level education

Regional SDGs Ireland 2017

There are seven chapters in this release.

Users can navigate this release by simply clicking on one of the chapters.

Regional SDGs Ireland 2017

YOU ARE HERE: HOME / STATISTICS / REGIONAL SDGS IRELAND 2017 / POVERTY & HEALTH

Regional SDGs Ireland 2017

Poverty & health

- At risk of poverty rate
- Consistent poverty rate
- Life expectancy
- Total period fertility rate
- Age-standardised discharge rates
- Standardised death rates
- Persons with a disability
- Carers
- Medical cards
- Perception of health status
- Prevalence of drinking alcohol
- Mortality rates due to road traffic accidents
- Suicide mortality rate
- Fair Deal scheme

Regional SDGs Ireland 2017

2.1 At risk of poverty rate by region 2013-2017

Table 2.1 At risk of poverty rate by region, 2013 - 2017

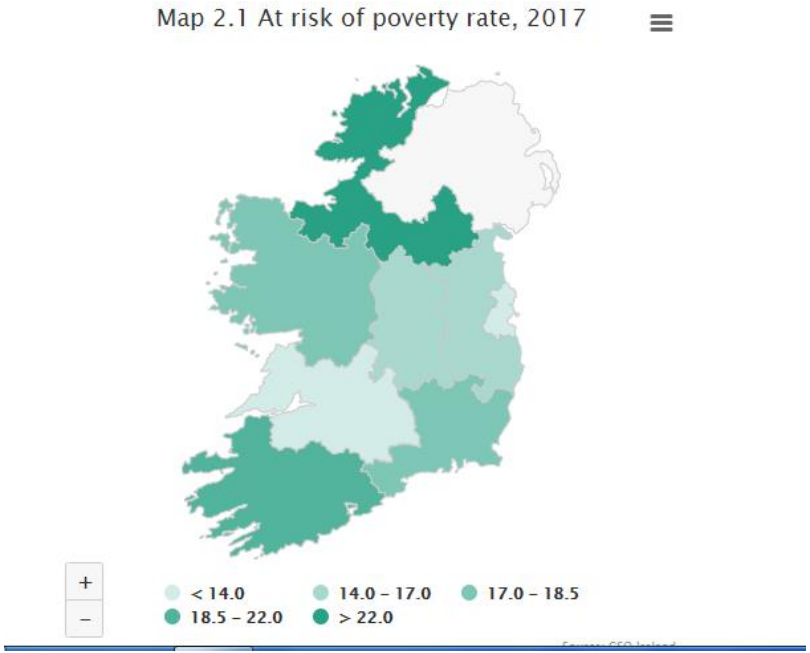
% persons

Region	2013	2014	2015	2016	2017
Border	28.6	23.8	21.8	20.5	25.7
Midland	19.1	17.0	15.6	18.9	14.2
West	18.8	21.9	19.5	22.7	18.4
Dublin	9.5	10.5	12.2	11.6	11.7
Mid-East	16.1	16.7	16.5	16.0	14.5
Mid-West	16.0	20.9	14.8	14.1	12.9
South-East	19.7	17.0	19.0	18.1	18.3
South-West	17.3	18.3	18.8	18.0	18.7
Total	**16.2**	**16.7**	**16.3**	**16.2**	**15.7**

Source: CSO SILC

Open in Excel: Regional SDGs Ireland 2017 Table 2.1 (XLS 12KB)

- Nationally 15.7% of people in Ireland were at risk of poverty in 2017.
- One in four people (25.7%) living in the Border region was at risk of poverty in 2017.
- The at risk of poverty rates in Dublin (11.7%) and the Mid-West (12.9%) were less than half the rate of the Border region.



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Central Statistics Office

SDG Indicator data on CSO's dissemination database

Statbank

Statbank

- StatBank is the CSO's online database of Official Statistics . This database contains current and historical data series compiled from CSO statistical releases and is accessed at

- http://www.cso.ie/px/pxeirestat/statire/SelectTable/Omrade0.asp?Planguage=0.

Statbank

Statistical Product - Goal 1 - No Poverty RSS

Key Tables

G0101 SDG 1.1.1 Proportion of the Population in Consistent Poverty by NUTS 3 Regions and Year *(2004-2017)* - *Modified on 04/10/19 at 11:15*
Download .px file (Size: 2.1 kb)

G0102 SDG 1.2.1 Proportion of the Population Living below the National Poverty Line by NUTS 3 Regions and Year *(2004-2017)* - *Modified on 04/10/19 at 11:15*
Download .px file (Size: 2.3 kb)

G0103 SDG 1.2.2 Deprivation Rate by NUTS 3 Regions and Year *(2004-2017)* - *Modified on 04/10/19 at 11:15*
Download .px file (Size: 2.2 kb)

G0104 SDG 1.3.1 Proportion of the population receiving Social Welfare Payments by County, Year and Statistic *(2007-2016)* - *Modified on 04/10/19 at 11:15*
Download .px file (Size: 6.4 kb)

G0105 SDG 1.4.1 Dwelling Facilities by NUTS 3 Regions, Year and Statistic *(2016-2016)* - *Modified on 18/10/19 at 11:04*
Download .px file (Size: 2.9 kb)

G0106 SDG 1.4.1 Dwelling Facilities by County, Year and Statistic *(2016-2016)* - *Modified on 21/05/19 at 11:04*
Download .px file (Size: 3.4 kb)

G0107 SDG 1.4.2 Proportion of total adult population with secure tenure rights to land by NUTS 3 Regions, Year and Statistic *(2016-2016)* - *Modified on 18/10/19 at 12:00*
Download .px file (Size: 2.9 kb)

G0108 SDG 1.4.2 Proportion of total adult population with secure tenure rights to land by County, Year and Statistic *(2016-2016)* - *Modified on 18/10/19 at 12:00*
Download .px file (Size: 2.2 kb)

G0109 SDG 1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters by State and Year *(2016-2016)* - *Modified on 21/05/19 at 12:18*
Download .px file (Size: 0.9 kb)

G0110 SDG 1.5.2 Direct economic loss attributed to disasters in relation to GDP by State, Year and Statistic *(2016-2016)* - *Modified on 21/05/19 at 11:04*
Download .px file (Size: 3.7 kb)

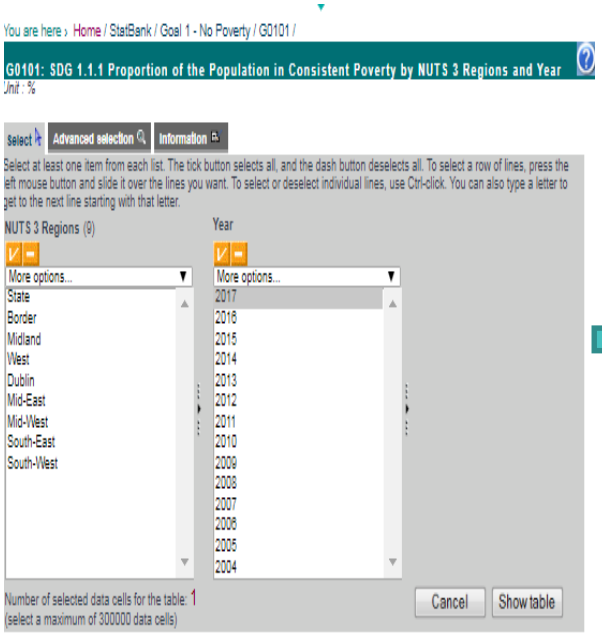
G0111 SDG 1.5.3 Countries that adopt and implement national disaster risk reduction strategies by State and Year *(2015-2015)* - *Modified on 21/05/19 at 12:18*
Download .px file (Size: 1.1 kb)

G0112 SDG 1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies by State and Year *(2018-2018)* - *Modified on 21/05/19 at 12:18*
Download .px file (Size: 0.9 kb)

G0113 SDG 1.a.1 Proportion of domestically generated resources allocated by the government directly to poverty by State, Year and Statistic *(2016-2018)* - *Modified on 21/05/19 at 11:04*
Download .px file (Size: 1.5 kb)

G0115 SDG 1.a.2 Proportion of total government spending on essential services by State, Year and Statistic *(2000-2019)* - *Modified on 21/05/19 at 11:04*
Download .px file (Size: 2.3 kb)

Statbank



Unit : %

Download file as... Comma Separated (*.csv)

Edit table Pivot

Graphics Line Chart

Codes in separate columns

Show data on Map

Incl. Footnotes

SDG 1.1.1 Proportion of the Population in Consistent Poverty (%) by NUTS 3 Regions and Year

	2012	2013	2014	2015	2016	2017
State	8.2	20.9	8.3	8.5	8.2	6.7
Border	9.8	8.5	13.8	10.1	11.4	9.4
Midland	7.3	9.0	9.1	7.5	10.6	7.7
West	7.1	5.3	9.0	7.9	7.8	3.9
Dublin	6.3	9.3	5.4	6.9	7.3	6.4
Mid-East	8.9	8.0	9.0	8.1	8.1	6.5
Mid-West	7.6	12.6	8.6	7.7	7.0	6.2
South-East	12.1	7.5	10.2	9.9	6.3	5.9
South-West	9.7	9.0	8.1	11.3	9.4	8.5

Source: CSO, SILC 2004/15 - Table SIA12, SIA13 and SIA 20
Link: https://www.cso.ie/px/pxeirestat/statire/SelectVarVal/Define.asp?MainTable=SIA12&PLanguage=0&PXSId=0
Link: https://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?MainTable=SIA13&PLanguage=0&PXSId=0
Link: https://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?MainTable=SIA20&PLanguage=0&PXSId=0

Visualisation from Statbank

- APP under development which joins a
- Statbank PX file, with
- an Esri shape file, to
- produce a colorplot

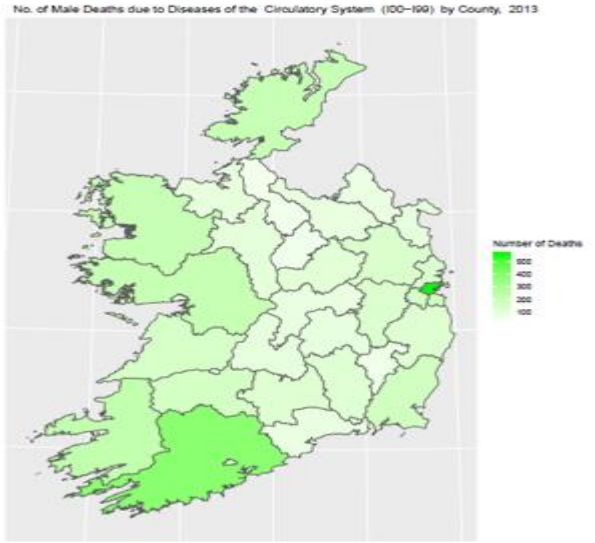


Figure 1: Geospatial presentation of mortality data.

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