The Importance of Statistical-Geospatial Integration

Strengthening Statistical and Geospatial Integration
"The SDGs Geospatial Roadmap and the GSGF Implementation Guide"

Tuesday, 2 August 2022
2:30 pm - 3:55 pm
United Nations Headquarters, New York

Moderated by: Lorraine McNerney, Ireland

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Government of Ireland

The Importance of Statistical-Geospatial Integration - Ireland's experience

Lorraine McNerney, CIO Ordnance Survey Ireland

Ordnance Survey Ireland

An Phríomh-Oifig Staidrimh
Central Statistics Office

Ireland’s geo-statistical partnership for Agenda 2030 Commitments

Policy and Stakeholder Co-ordination

Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil
Department of Communications, Climate Action & Environment

Geospatial Data and GeoHive Platform

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Statistics and Data Governance

An Phríomh-Oifig Staidrimh
Central Statistics Office

2030 Agenda: goals, targets, indicators - and data!

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An Phríomh-Oifig Staidrimh Central Statistics Office

GeoHive - Ireland's UN SDG Reporting Platform

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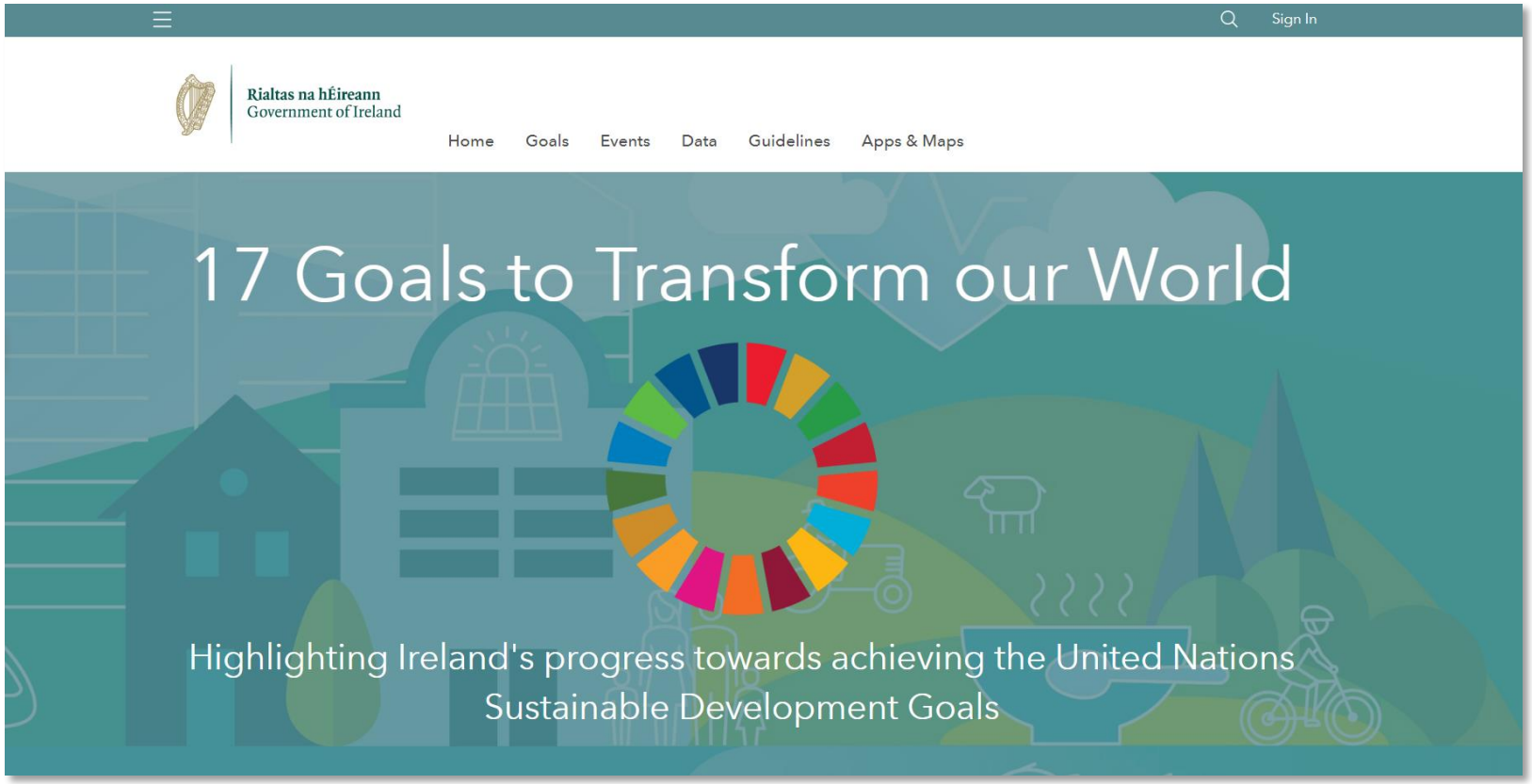

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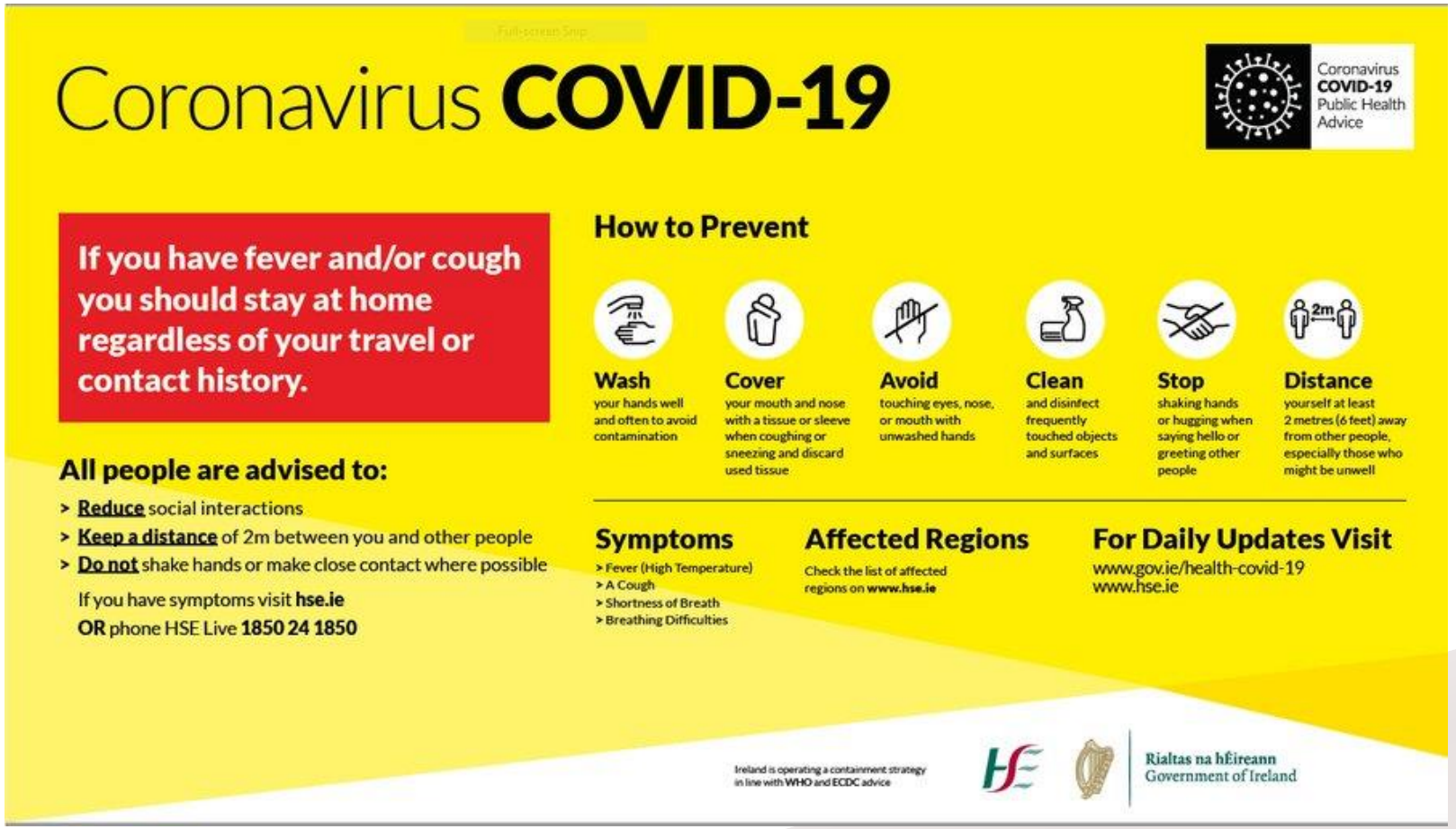
Ireland eGovernment Awards 2019

WINNER
Environment & Social Impact Award Category

ESRI Special Achievement In GIS Winner

Then… refocusing the SDG team to COVID-19



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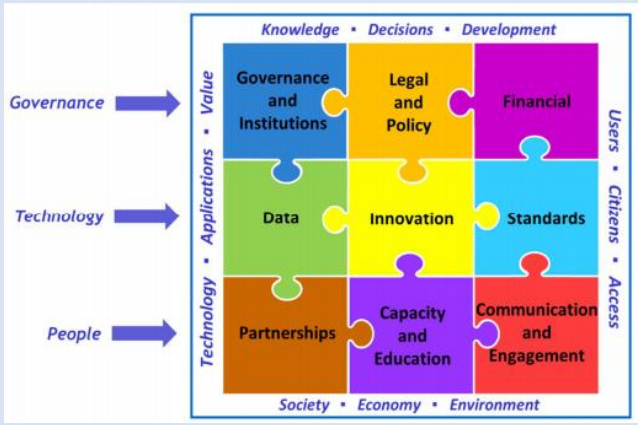
Foundations of Ireland's approach – applying existing frameworks

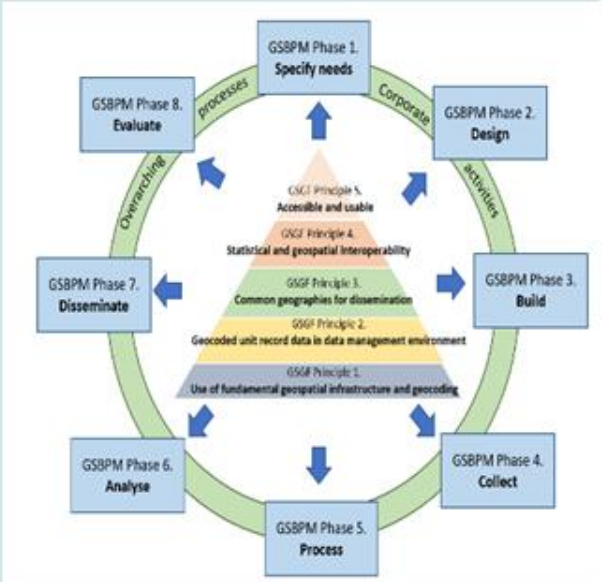
Generic Statistical Business Process Model GSBPM

The Global Statistical Geospatial Framework GSGF

UN-GGIM's Integrated Geospatial Information Framework - IGIF



GSBPM and GSGF Principles



Terms of Reference, March 2020

GeoHive Covid-19 Response Coordination Group

Name	GeoHive Covid-19 Response Coordination Group
Membership	The membership of this group consists of the following organisations: • Ordnance Survey Ireland (OSi) • The Central Statistics Office (CSO) • The Department of Housing, Planning, and Local Government (DHPLG) • the All-Island Research Observatory (AIRO) • Esri Ireland. The associated levels of responsibility and accountability are defined in a separate RASCI matrix.
Goals for the Group	The goals for this group are to: 1. Build a participation network that facilitates the "collect once, use many times" philosophy of the Public Services Data Strategy for geo-statistical data in the response to the Covid-19 outbreak. 2. Introduce geospatial and statistical data governance procedures that focus on reducing/removing data duplication. 3. Maximise the use of the State's geospatial hub (GeoHive) through appropriate data collection and data visualisation.
Group Working Methods	The GH-COVID19-RCG meets on a daily basis with all meetings held using remote video/phone conferencing to maintain social distancing. The Group has established a: • GeoHive Covid-19 response platform with public, private and secure virtual data room capabilities • Geo-statistical data governance and management sub-group to provide expertise in support of the Government's Covid-19 response • GeoHive technical architecture sub-group to provide the expertise in support the Government's Covid-19 response.
Group Documentation	A Terms of Reference (TOR), Data Governance and Stakeholder Relationship mapping is in place to manage the governance and co-ordination of the stakeholders involved and communication channels. A shared programme repository has been established.

1. To build a participation network that facilitates the **"collect once, use many times" philosophy** of the Public Service Data Strategy in the response to the COVID-19 outbreak

2. To introduce geospatial and statistical data governance procedures that focus on reducing/removing data duplication.

3. To maximise the use of the GeoHive through appropriate data collection and data visualisation

COVID-19 Data Ecosystem and Data Governance

Health Data

Various COVID-19 Data Sources
(Micro data shared under the Statistics Act 1993)

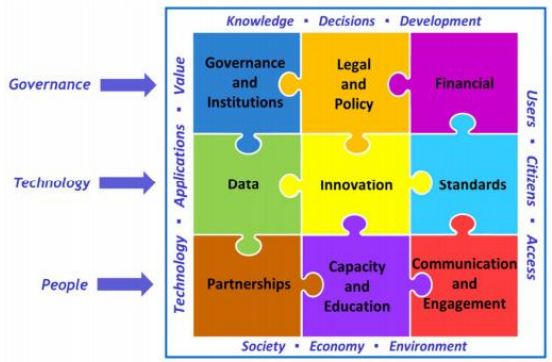
CSO Administrative Data Centre

Anonymised statistical data

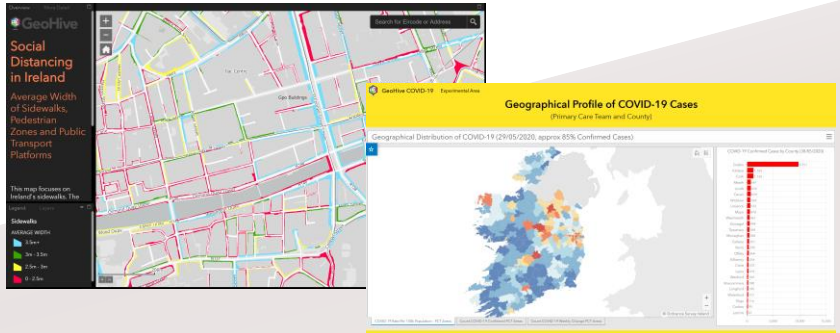
National Pandemic Modelling Team

Epidemiological data

GeoHive COVID-19



COVID-19 Data Hub, Apps, Dashboards, Reports and Analysis



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Data, infrastructure and processes

The Group established:

- ✓ GeoHive COVID-19 response platform with public/private/secure virtual data hubs
- ✓ Geo-statistical data governance and management sub-group to provide expertise in support of the national COVID-19 response
- ✓ GeoHive technical architecture sub-group to provide the expertise in support of the national COVID-19 response
- ✓ Various data led initiatives - which are summarised in the following slides

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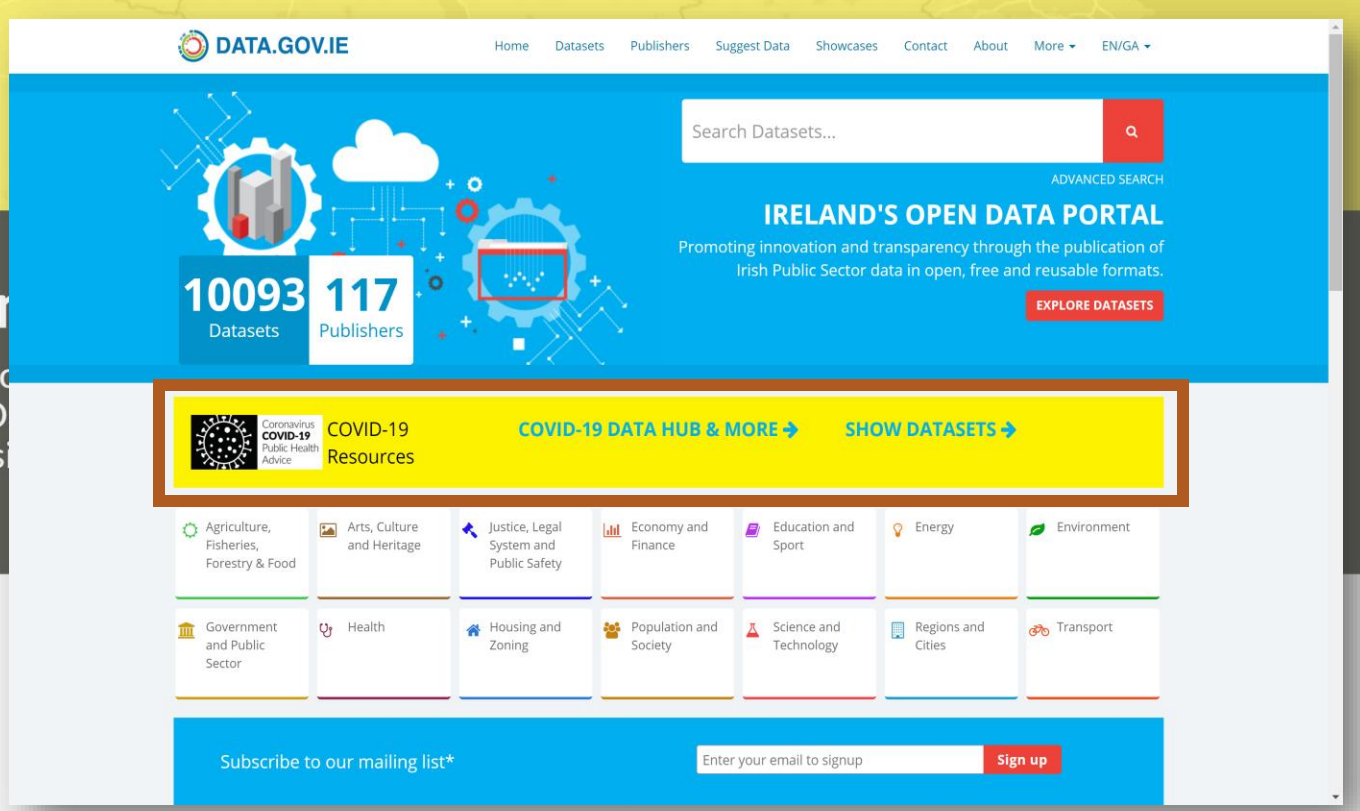
Coronavirus COVID-19 Public Health Advice

Ireland's COVID-19 Data Hub



National Statistics, Informatio

The information presented in this site is based on
(HPSC) and the Health Service Executive (HSE). D
line with newly published data. This site is built us

Confirmed Headline Figures

Click for more information

Total Confirmed Cases (HPS...

Total Deaths (HPSC)

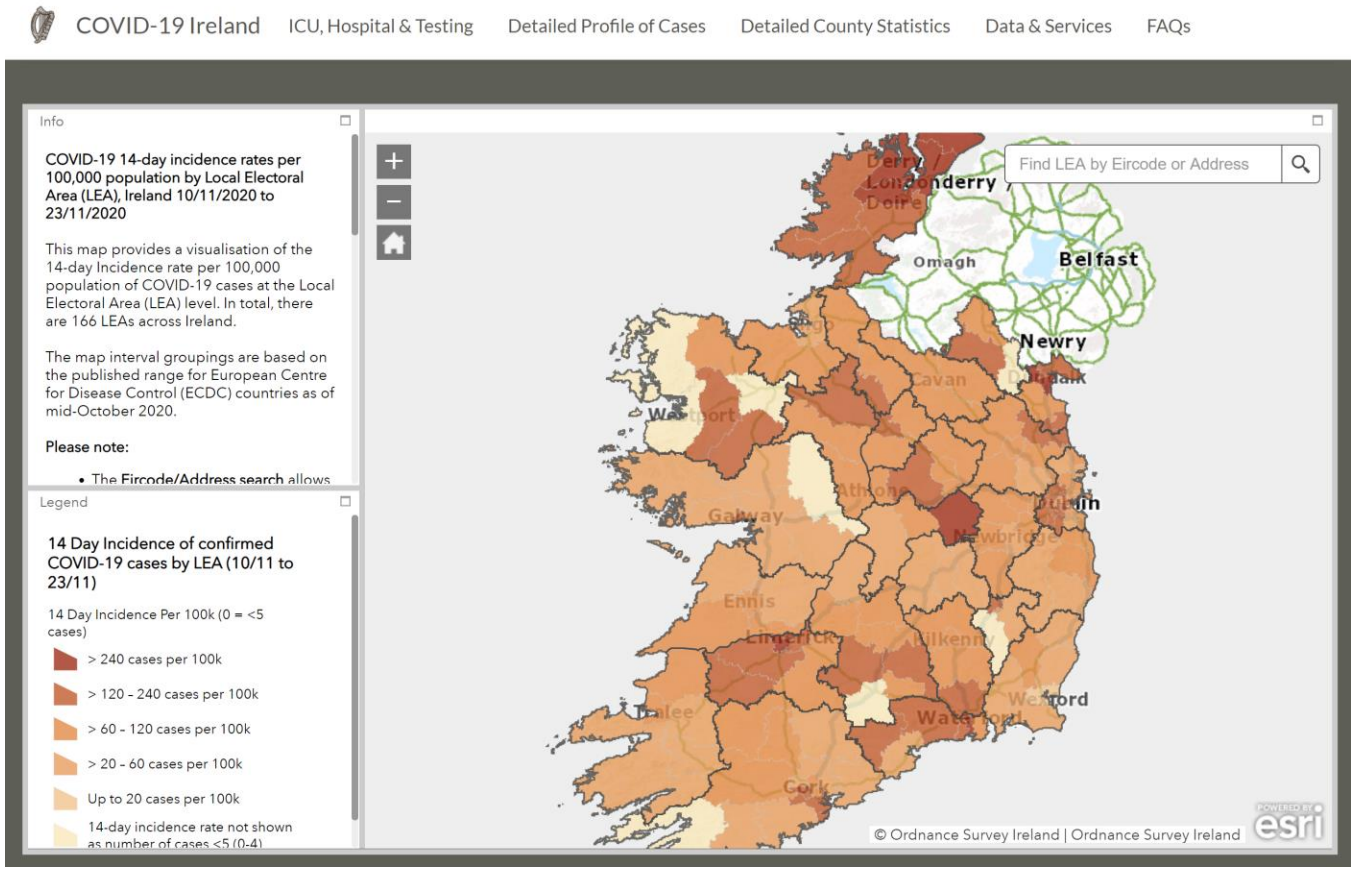
Latest Daily Cases (HPSC)

Latest Daily Deaths (HPSC)

Over

350 million

views since June 2020



An Roinn Caiteachais Phoiblí agus Athchóirithe
Department of Public Expenditure and Reform

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta
Department of Housing, Local Government and Heritage

An Roinn Sláinte
Department of Health

An Phríomh-Oifig Staidrimh
Central Statistics Office

hpsc

AIRO

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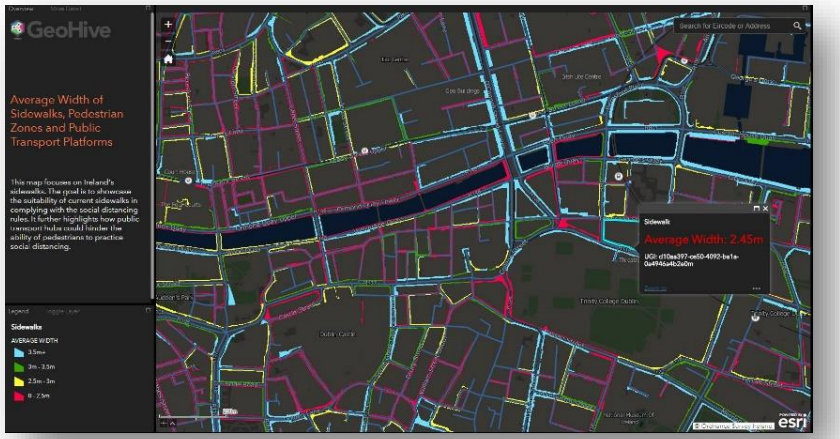
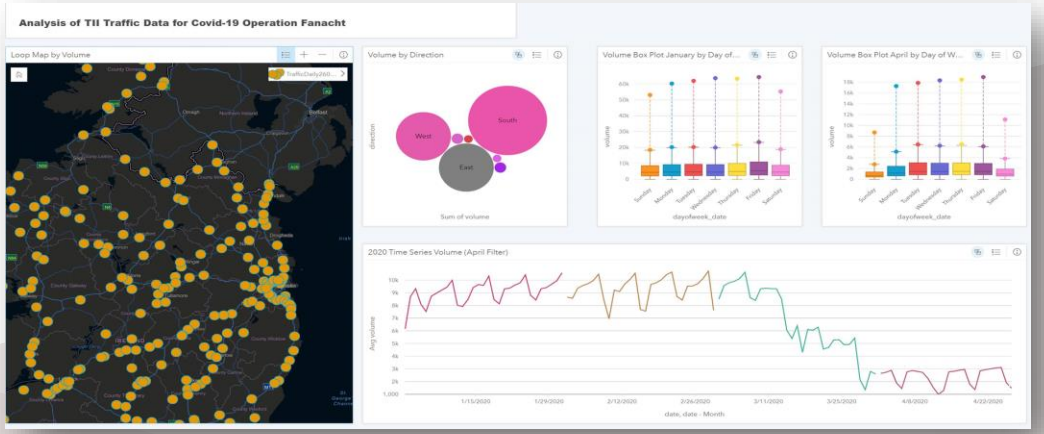
esri

Local Authority Dashboards & An Garda Síochana Data Hub

Public and secure dashboards; updated daily. Publically available for use by all Local Authorities with a daily data supply.

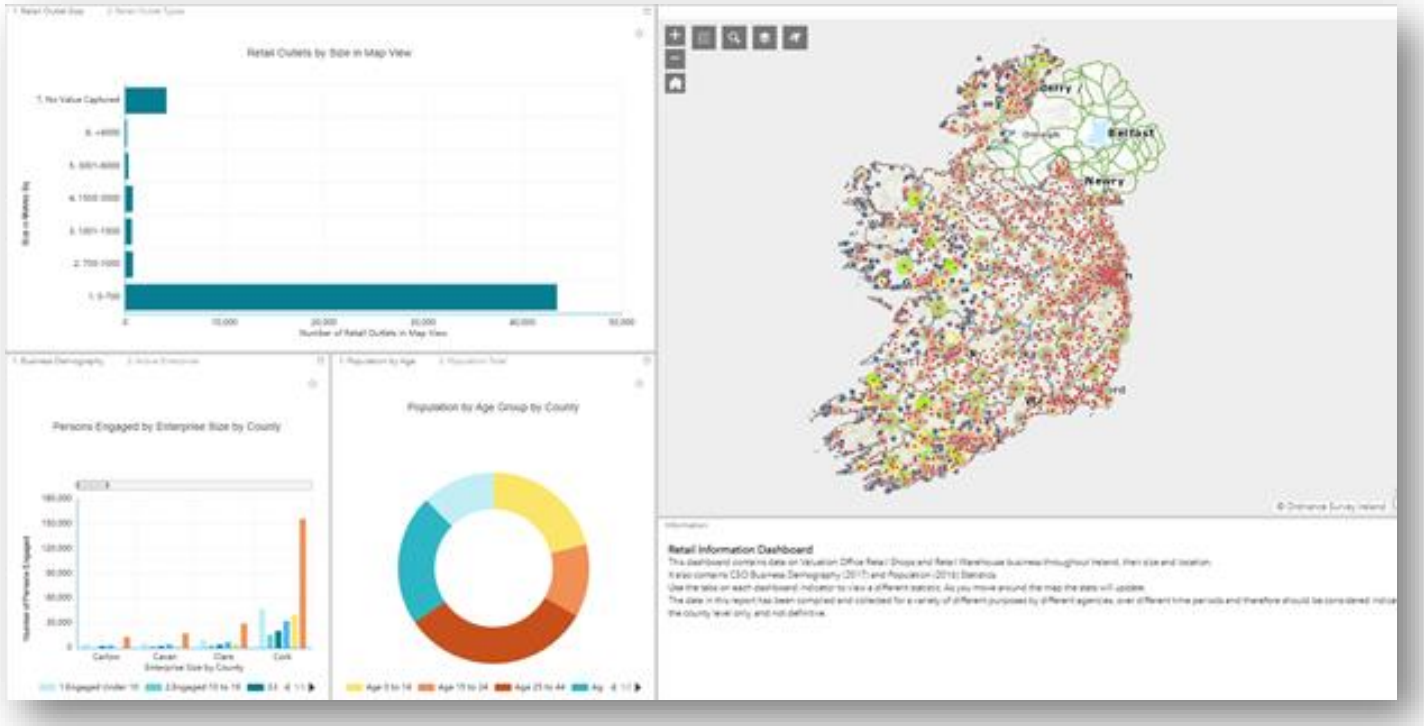


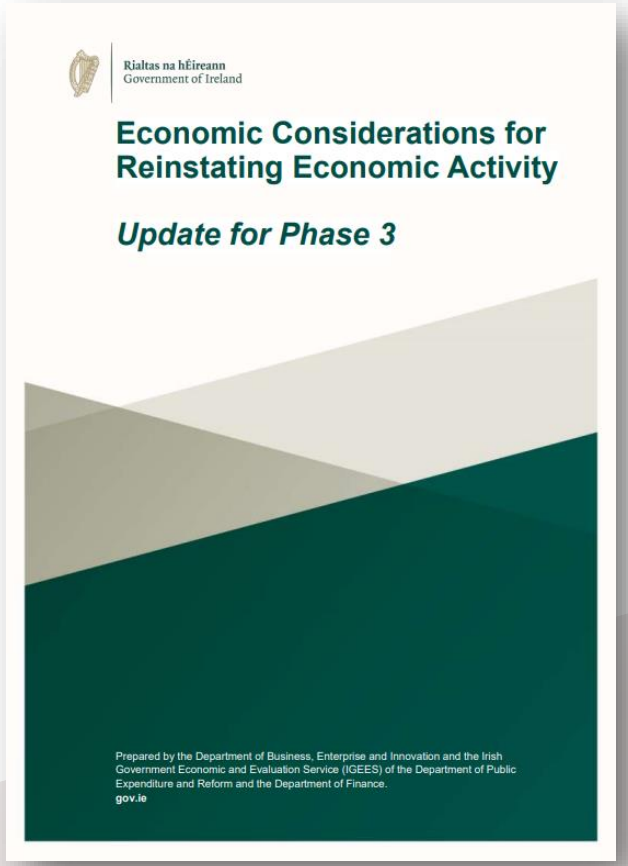
Pavement Width, Public Transport & Retails Locations



Secure access for all Policing Control Room for traffic mobility and trend analysis.

Dept. of An Taoiseach business dashboards / reports





Map-based dashboard and report that displays business and retail information, showing the classification, density and size of business premises by location.

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Key takeaways

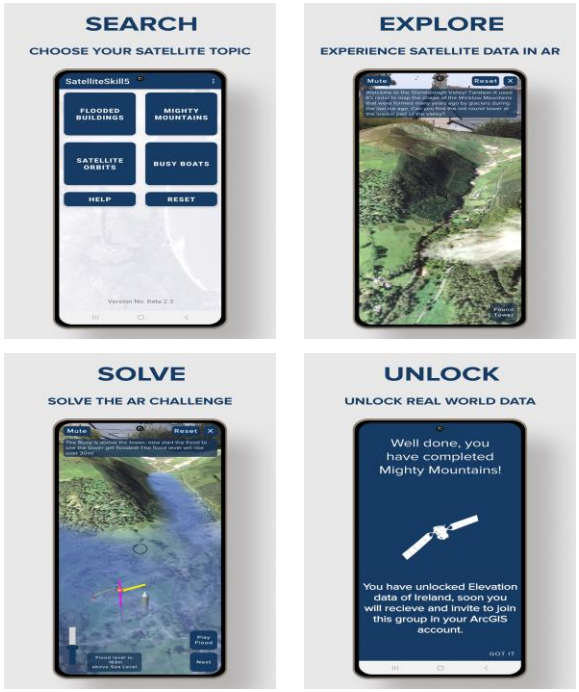
- **Geospatial data and apps** have played a key role in revealing **insights, patterns and trends** as part of the Ireland's COVID-19 response.
- Geospatial and statistical **data governance** removed duplication and enabled sharing.
- Rapid response due to **re-use of existing platform,** however there was still a significant data management overhead due to various standards used across data sources.
- Resulted in the real understanding of the **value that geospatial data and infrastructure** plays in enabling data sharing, collaboration & analysis to gain insights and to manage.
- **Significant demand for data** from citizens, academia and others.

Conclusions

- **It's all about the data.** Does it exist, is it up to date, is it accessible, who knows about it?
- **Collaboration is key.** It is easier to build quickly on existing relationships/platforms than to build new ones.
- **The race to real time is complex.** The data we use is from the past, the problems we are solving are in the future.
- **A single source of truth is essential.** Not having to debate the data allows more time to debate the policy.

5*S Partnership – Space, Surveyors, STEM, Students and the SDGs

A joint initiative providing education and outreach to over 10,000 second level students and over 25% of all secondary schools in Ireland



Delivering customised StoryMaps and an SDG Augmented Reality App to interactively engage with SDG Data using Ireland SDG Data Hub - https://irelandsdg.geohive.ie/

https://5sdiscover.maynoothuniversity.ie/

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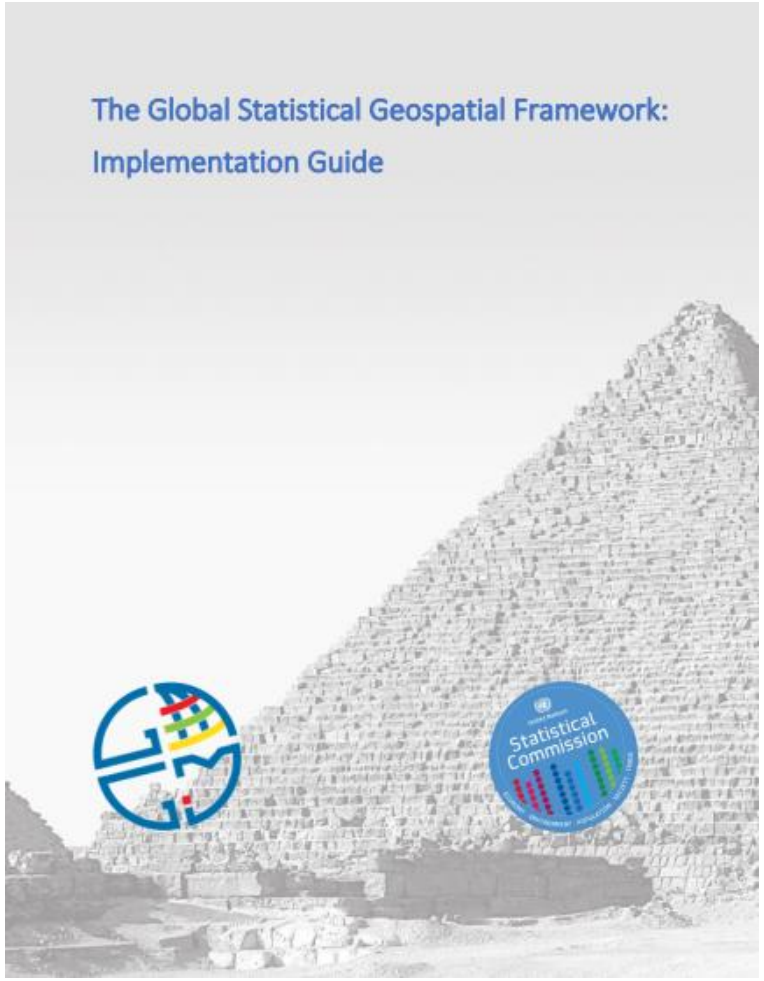
Our Side Event today…