

Quality Information for All – Numbers Matter

Mid-term Review

National Statistics Board

Strategic Priorities
for Official Statistics

2021 – 2026



© **Copyright of the Government of Ireland 2024**

Reproduction is authorised subject to acknowledgement of the source.
Further information is available at <https://www.cso.ie/en/aboutus/whoweare/copyrightpolicy/>

ISSN: 2737-7709

December 2024

Table of Contents

Chairperson’s Introduction	6
NSB Vision, Values and Goals for the Irish Statistical System	7
Vision	7
Values	7
Strategic Goals	7
The National Statistics Board	9
Our Role	10
Our Members	11
Mid-term Review of Strategic Priorities for Official Statistics 2021 – 2026	13
Introduction	14
Key Advancements from Strategy 2021-2026	15
Key Outstanding Challenges from Strategy 2021-2026	15
Progress on Priorities for Official Statistics	19
Priority 1: Monitor Transformations in the Environment, Economy and Society	20
Priority 2: Communications	33
Priority 3: Enhance Administrative Data for Statistical Use	36
Priority 4: National Data Infrastructure	38
Priority 5: Embed Eircodes in all Public Sector Data Holdings	42
Priority 6: Potential of Big Data	44
Priority 7: Data Confidentiality	47
Priority 8: General Data Protection Regulation (GDPR)	49
Progress on Further Actions Building on the Existing Strengths of the Irish Statistical System	53
Actions 1 to 3 - Quality and Trust	54
Actions 4 to 6 - Users of Statistics	57
Actions 7 to 10 - Enhancing CSO Capacity	60
Appendices	65

Abbreviations

AI	Artificial Intelligence
AIML4OS	AI and Machine Learning for Official Statistics
AIS	Automatic Identification System
API	Application Programming Interface
BER	Building Energy Rating
COPA	Census of Population Analysis
CPI	Consumer Price Index
CRT	Centre for Research Training
CSMB	Civil Service Management Board
CSO	Central Statistics Office
DCEDIY	Department of Children, Equality, Disability, Integration and Youth
DECC	Department of the Environment, Climate and Communications
DETE	Department of Enterprise, Trade and Employment
DGA	Data Governance Act
DoH	Department of Health
DSP	Department of Social Protection
DPIA	Data Protection Impact Assessment
EC	European Commission
ECOFIN	Economic and Financial Affairs Council
EHDS	European Health Data Space
EPA	Environmental Protection Agency
ESCoP	European Statistics Code of Practice
ESRI	Economic and Social Research Institute
ESS	European Statistical System
EU	European Union
FSLG	Formal Statistical Liaison Group
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GNI*	Gross National Income*
GNP	Gross National Product
GUI	Growing Up in Ireland
HICP	Harmonised Index of Consumer Prices
HRB	Health Research Board
HSE	Health Service Executive
HVD	High Value Datasets
ICT	Information and Communications Technology
IGEES	Irish Government Economic and Evaluation Service
IGSS	Irish Government Statistical Service
ISS	Irish Statistical System
ISSCoP	Irish Statistical System Code of Practice
MDD	Modified Domestic Demand
ML	Machine Learning
MoU	Memorandum of Understanding
NDI	National Data Infrastructure
NISRA	Northern Ireland Statistics and Research Agency
NNI	Net National Income

NSB	National Statistics Board
OCR	Organisational Capability Review
ODPC	Office of the Data Protection Commissioner
OECD	Organisation for Economic Co-operation and Development
OGCIO	Office of the Government Chief Information Officer
OGP	Office of Government Procurement
ONA	Other National Authority
OSI	Ordnance Survey Ireland
PMOD	PAYE Modernisation
PPSN	Personal Public Service Number
PSB	Public Sector Body
QMF	Quality Management Framework
QMSA	Quality Management, Support, and Assurance
RMF	Research Microdata File
ROS	Revenue Online Service
ROSA	Researcher Online System for Applications
SEAI	Sustainable Energy Authority of Ireland
SEEA	System of Environmental Economic Accounting
SILC	Survey on Income and Living Conditions
SSCU	Statistical System Coordination Unit
SUSI	Student Universal Support Ireland
TILDA	The Irish Longitudinal Study on Ageing
IDS-TILDA	Intellectual Disability Supplement to the Irish Longitudinal Study on Ageing
UBI	Unique Business Identifier
UN	United Nations
VDR	Virtual Data Rooms

Chairperson's Introduction



The role of the National Statistics Board (NSB), under the Statistics Act 1993, is to guide the strategic direction of the Central Statistics Office (CSO) and to establish priorities for the development of official statistics in Ireland. We did this, most recently, in our publication *Quality Information for All – Numbers Matter* covering 2021 to 2026. I am pleased now to introduce a Mid-term Review of this strategy. In this Review each of the eight priorities and ten actions we set out is examined.

Overall, the NSB considers that there has been significant progress made by the CSO in realising the ambitions of the strategy and highly commends the Office on this. Not surprisingly, there remain challenges and these are discussed in this Review.

The CSO is a trusted and independent source of information. It is innovative and agile in its data outputs and insights, much of this being facilitated by the development of the National Data Infrastructure. The Frontier Series is particularly impressive. A key challenge now is building on this work by developing further its data stewardship role in the public sector to enable yet greater insights. I have no doubt that this is possible given the significant achievements in less than a decade.

I would like to thank all my fellow Board members over the last six years for their expertise and commitment to the NSB. Thanks also to Jennifer Banim, Director General of the CSO and her predecessor, Pádraig Dalton and their team for their professionalism and support to the Board. In particular, special thanks to Brian Cahill, secretary to the Board, and his predecessor, Claire Hanley for their significant input. We are very grateful. As I will be completing my six-year term of office in early 2025, I wish the NSB every success in the future and it is a privilege to be its chairperson.

Anne Vaughan
Chairperson

December 2024

NSB Vision, Values and Goals for the Irish Statistical System

Vision

A world-class system of official statistics using the best available data to provide high-quality, timely, independent and readily accessible information which informs an understanding of Ireland's society, economy and environment.

Values

A strong commitment to the independence, objectivity and quality of Irish official statistics.

A drive for a system of official statistics that meets user needs and is user-friendly.

The recognition of confidentiality, data protection and security as the basis for trust in official statistics.

Strategic Goals

To produce timely, independent, accessible and quality official statistics based on an Irish Statistical System comprising a comprehensive programme of censuses and surveys, public sector administrative data and private sector data sources to support national user needs.

To cultivate an innovative system which seeks to access and use all data sources to provide timely insights.

To implement and embed fully a National Data Infrastructure across the public sector, incorporating permanent unique identifiers and common data standards.

To communicate the importance of official statistics and the advantages that official statistics have over other sources of information.

Mid-term Review of

Quality Information for All – Numbers Matter

National Statistics Board Strategic Priorities for Official Statistics 2021 – 2026

The National Statistics Board



The National Statistics Board

Our Role

The NSB is the body assigned to guide the strategic direction of the CSO which is Ireland's largest producer of official statistics and internationally recognised national statistical office. The NSB was established on a statutory basis under the Statistics Act 1993. The function of the Board in guiding, with the agreement of the Taoiseach, the strategic direction of the CSO includes –

- a) establishing priorities for the compilation and development of official statistics;
- b) assessing the resources of staff, equipment and finance which should be made available for the compilation of official statistics;
- c) arbitrating, subject to the final decision of the Taoiseach, on any conflicts which may arise between the office and other public authorities relating to the extraction of statistics from records or to the co-ordination of statistical activities.

The NSB is guided by the UN Fundamental Principles of Official Statistics¹ and the Statistics Act 1993 which provides a legal national framework for the fundamental values and principles that govern official statistics in Ireland. In addition, the NSB believes it is essential that the official statistics are produced to the highest quality and in accordance with the principles of the European Statistics Code of Practice (ESCoP).

The Board meets at least five times a year and at each meeting is updated by the Director General of the CSO on relevant developments within the office. The agenda and minutes of each meeting are published on the NSB website² once agreed by the Board.

¹ Adopted by the UN Statistical Commission (UN Economic and Social Council, 1994, Report of the Special Session of the Statistical Commission, New York, 11-15 April 1994, E/1994/29)

² <https://www.nsb.ie/meetings/>

Our Members

The NSB has eight members including the Director General who is an ex officio member. The other members are appointed by the Taoiseach as set out under Section 18 of the Statistics Act 1993.^{3,4}



Anne Vaughan
Chairperson



Cliona Saidléar



Eithne Fitzgerald



Emma Cunningham



Jim Scheer



John Shaw



Martina Lawless



Jennifer Banim

³ <http://www.irishstatutebook.ie/eli/1993/act/21/section/18/enacted/en/html>

⁴ See biographies of the Board members in Appendix 2.

Mid-term Review of

Quality Information for All – Numbers Matter

National Statistics Board Strategic Priorities for Official Statistics 2021 – 2026

Mid-term Review of Strategic Priorities for Official Statistics 2021 – 2026



Mid-term Review of Strategic Priorities for Official Statistics 2021 – 2026:

Quality Information for All – Numbers Matter

Introduction

In May 2021 the National Statistics Board published their Strategic Priorities for Official Statistics 2021 – 2026 entitled Quality Information for All – Numbers Matter. In the strategy the Board outlined their Vision, Values and Goals for the Irish Statistical System and identified the key challenges for Official statistics in Ireland. To achieve these goals and overcome the challenges faced, the Board identified eight **priorities** for the development of Official Statistics in Ireland along with ten further **actions** building on the existing strengths of the Irish Statistical System.

The Board, in carrying out its function under the Statistics Act, meet at least five times a year⁵ to review progress being made and engage with key stakeholders on the priorities and actions identified in the strategy. The Board are kept up to date by the Director General of the CSO along with presentations from CSO staff and other members of Irish Government Statistical Service (IGSS) and the Irish Statistical System (ISS). In addition to updates on statistical outputs, these include presentations on the use of Artificial Intelligence and the management of Cyber-security.

The Board reviewed its role and responsibilities under the Act during 2024 and was satisfied that it is meeting these and providing support and constructive challenge to the CSO and value added to the statistical ecosystem.

Additionally, the Board held discussions with key academics and policy makers on relevant topics to assess progress and identify future challenges. These sessions included the following areas:⁶

- Health Data
- Environment Data
- Housing Data
- Data and information on disability and related areas
- Labour Market Statistics
- Macro-Economic Statistics

This review has been prepared based on all this information to illustrate the progress that has been made on the strategic priorities and actions and to identify where further progress remains to be made. The review is part of a framework which helps guide the CSO and the ISS. The other documents that complement this review and provide valuable guidance include: the European Statistics Code of Practice (ESCoP) Peer Review⁷; the Organisational Capability Review (OCR); along with the CSO's own strategic documents including: CSO Statement of Strategy 2024-25, CSO 2030 and CSO Annual Review.

⁵ The Board met on six occasions in 2021, five times in 2022 and 2023 and six times in 2024.

⁶ See appendix 3 for a summary of recent NSB Discussion session and the experts involved in those sessions.

⁷ The most recent Peer Review was undertaken in February 2022 which confirmed full compliance with ESCoP, with zero findings reported.

In what follows, progress that has been made in each NSB priority area between May 2021 and November 2024 is outlined and achievements relating to each NSB action are summarised. The NSB provides a comment on the progress made relating to each topic and outlines some challenges that will be faced in the future. Overall, the NSB considers that there has been significant progress made by the CSO in achieving the strategic priorities and actions, and highly commends them on this. Not surprisingly, there remain challenges. The following summarises the position at a high level.

Key Advancements from Strategy 2021 – 2026

Data Stewardship

The CSO has greatly improved its role in managing data in Ireland by focusing on better data organisation, standardisation, and communication across government departments. Key initiatives to advance the National Data Infrastructure include: adding Eircodes (postal codes) to public sector data, establishing the Unique Business Identifier (UBI), and developing standard classifications, all of which are aimed at connecting and standardising various government data sources. These efforts have enabled the release of new and more advanced statistical reports.

The CSO has recently established the three pillars of the NDI as Standards; Skills and Services. Each pillar is fundamental to the successful implementation of the infrastructure.

Trust & Transparency Centre

In 2024, the CSO launched a Trust and Transparency Centre on its website as a key part of its strategy. This section provides clear information about data sources, how data is used, and the strong measures in place to keep it confidential. The Centre also features videos of senior leaders discussing the CSO's work and addressing important topics related to data ethics.

Monitoring Transformations

The CSO has made significant progress in tracking various aspects of life in Ireland, with major improvements in the range, depth, linking and accuracy of the official statistics now produced.

This includes more detailed environmental reports, more frequent updates on inflation, development of economic growth measures and new insights into societal well-being. These efforts help ensure that Irish society remains well-informed and that decision makers have an independent evidence base upon which decisions can be made.

Key Outstanding Challenges from Strategy 2021 – 2026

Understanding our Society

Despite CSO making significant progress in measuring the economic and social well-being of Irish society, challenges remain in key policy areas including, for example, health and housing statistics.

Health Statistics: Ongoing difficulties in integrating data across public services data holdings hinder the development of a cohesive health data framework. However, the creation of a Health and Social Cohesion division within the CSO and the establishment of the Health Research Data Centre represents significant steps forward in enhancing health and social care statistics in Ireland.

Housing Statistics: Data gaps and inconsistencies within public data holdings reflect the underlying systemic data challenges in this crucial policy area. To tackle these issues, the establishment of a Housing division within the CSO, the expansion of housing statistics through linked administrative datasets and the recent launch of the [CSO's Housing Hub](#) represent positive developments.

Big Data

The CSO has advanced its Big Data capabilities through investments in skills (Big Data Development Unit) and infrastructure (the Data Hub), utilising these resources for various statistical analyses, including port traffic and pandemic mobility.

However, without a legislative framework to sustainably access privately held Big Data for official statistics the scope for access to this data is limited.

The amendments to EU Regulation 223/2009 have been adopted by the European Parliament and signed into law by the European Council. This should provide a legislative basis for access to privately held Big Data for official statistics into the future.

Eircode as a Public Good

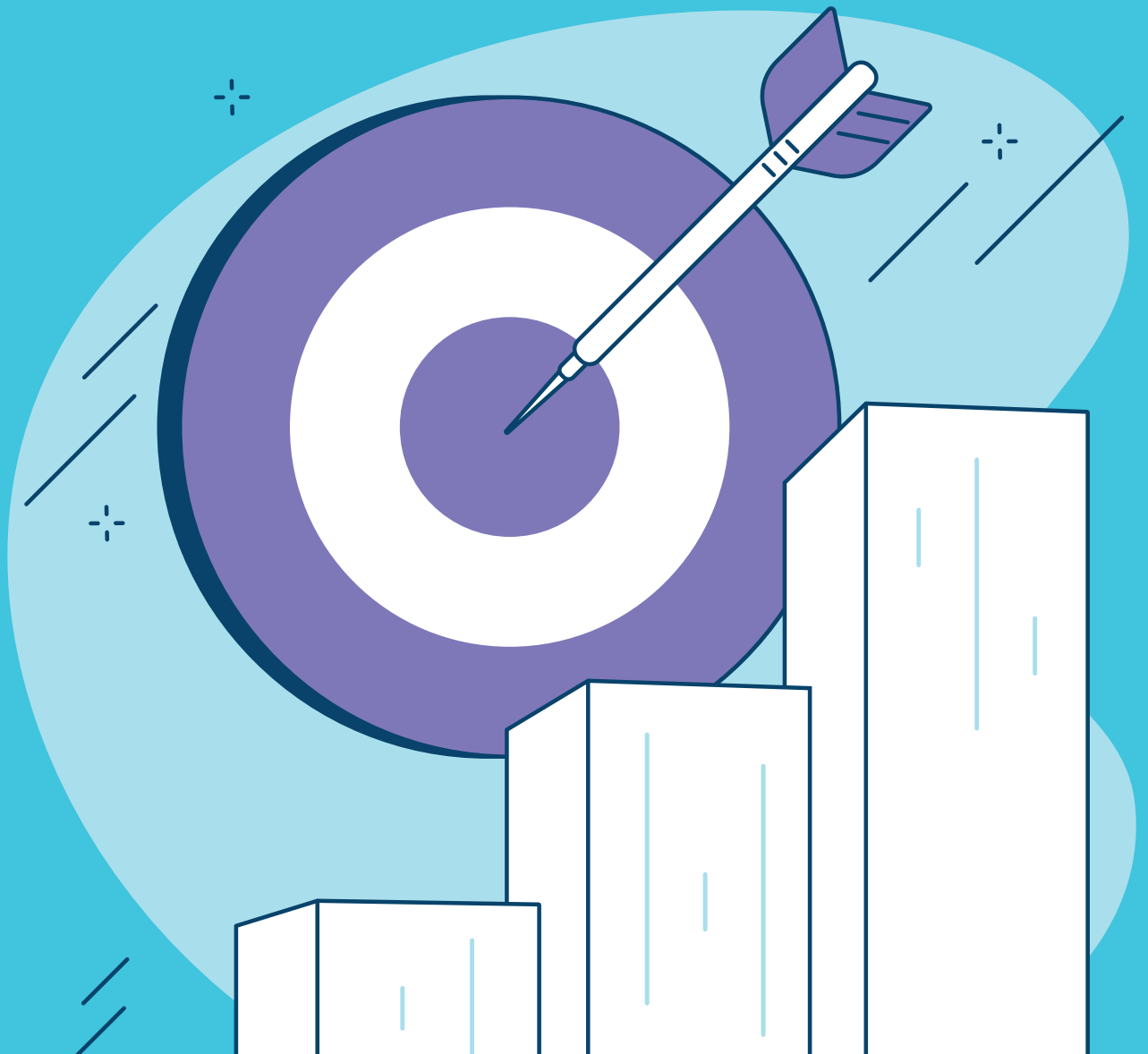
The NSB has strongly recommended that the Department of the Environment, Climate and Communications (DECC) consider treating Eircodes as a public good, making them freely available to everyone. DECC is exploring this possibility under the Open Data Directive. Following a new EU regulation on high-value data sets, DECC is expected to make a decision on the future of Eircodes prior to the expiration of the current commercial license at end 2026. The NSB welcomes this approach.

Mid-term Review of

Quality Information for All – Numbers Matter

National Statistics Board Strategic Priorities for Official Statistics 2021 – 2026

Progress on Priorities for Official Statistics



Progress on Priorities for Official Statistics

Priority 1: Monitor Transformations in the Environment, Economy and Society

The key broad themes identified by the NSB relate to monitoring the transformations taking place in the environment, society and the economy. The Central Statistics Office (CSO) needs to ensure that it is in line and ideally ahead of users' requirements in order to assist policy makers and inform the public generally. Important areas of action for the CSO, working with public sector agencies, are to:

Theme 1:

- Link datasets and provide a greater level of granularity in the **environmental area**;

Theme 2:

- Respond to **transformations in the economy** and the way business is changing to capture effectively a true picture of what is happening;
- Reflect and monitor the changes in the operation of the **labour market and quality of employment**;

Theme 3:

- Provide data to monitor trends in **well-being and social cohesion**; and
- Broaden the range of outputs, products and services it can provide across the broader **health** domain. In this context, the Department of Health should develop a comprehensive infrastructure for health and related data.

Priority 1: Theme 1 - Environment and Climate

Theme 1: Link datasets and provide a greater level of granularity in the environmental area.

NSB Comment: Significant progress has been made in the area of environment and climate-related statistics to support Ireland's decarbonisation and evidence-based policy making. By collaborating with key stakeholders, the CSO has expanded its data outputs, including new reports on energy use and ecosystem accounts. These efforts, bolstered by innovative data linkage and additional resources, ensure that the CSO's outputs are aligned with the needs of policy makers, researchers, and the public. Significant further growth in demand for data in this area is envisaged.

Summary of Progress

The CSO has prioritised and invested in the enhancement of environmental and climate-related statistics in recent years to support Ireland's transition to a low-carbon economy and inform evidence-based policy making. Given the urgency of the response needed, a key aim of the CSO's efforts has been to produce reliable, granular data that can guide decisions on emissions reduction, energy use, and the development of sustainable practices. To achieve these goals, significant investments have been made, including the establishment of the Environment, Ecosystems, Sustainability, and Business Directorate within the CSO which has facilitated the expansion of work in the area and outputs on the topic. Within the Directorate there are now three Divisions focusing on the production of statistics related to Ecosystem Accounts, Environment, Climate and Energy and Sustainability.

The CSO has made substantial progress in expanding its suite of environmental statistics, driven by extensive engagement with key stakeholders such as the Environmental Protection Agency (EPA), Sustainable Energy Authority of Ireland (SEAI), the Department of the Environment, Climate and Communications (DECC), the Department of Finance and the Climate Action Unit in the Department of the Taoiseach. These collaborations, including the establishment of the Climate and Energy Liaison Group, chaired by the CSO, enable a coordinated approach among organisations involved in climate data which has been crucial in identifying data needs and gaps. This has led to a significant increase in the number of environmental outputs and new reports produced which are most beneficial to users. For example, the CSO, EPA and Department of Finance⁸ are collaborating on the OECD's Inclusive Forum on Carbon Mitigation Approaches to develop carbon intensity metrics.

The CSO has leveraged its data linkage capabilities and available administrative data extensively to produce new cross-domain environmental outputs. For example, the “Decoupling Emissions from Economic Activity 2022” report, published in November 2024, examined trends in emissions and economic and employment data for NACE sectors with high emissions. The CSO is also collaborating with Gas Networks Ireland to produce detailed gas consumption data. These initiatives highlight the CSO's commitment to providing detailed, relevant data to support targeted climate action and how the CSO is using its data linkage capabilities to provide insights. See Appendix 1 for a comprehensive list of new releases published since May 2021.

The creation of anonymised research microdata files (RMFs) demonstrates the CSO's role in adding value and supporting the needs of the policy making system. Efforts include combining SEAI Building Energy Ratings (BER) with the CSO Survey on Income and Living Conditions (SILC) to produce a data file that is being used by the Economic and Social Research Institute (ESRI) to develop a more nuanced indicator of energy poverty. Furthering this innovative approach in creating RMFs, the CSO is collaborating with SEAI by combining electricity and gas meter consumption data with building energy ratings and Census of Population information to provide insights on topics such as decarbonisation in the residential sector and meet the research data needs of stakeholders in the area.

The CSO has also engaged with DECC on implementing the NDI principles through a seconded statistician and the activities of the Statistics and Statistical Coordination Unit (SSCU), ensuring that the data outputs are aligned with policy needs.

To support these expanding efforts, the CSO has secured additional resources, including new statisticians funded by SEAI and EPA, ensuring continued progress in the development of environment, climate and waste statistics and further enhancing the CSO's capacity.

The CSO co-organised a UNECE Webinar on Administrative Microdata for Climate Change, Energy, and Environment Statistics, where it shared its experiences in accessing and using large-scale environment-related administrative microdata and learned from other Statistical Offices' experiences. The CSO also hosted a European Official Statistics Director Generals meeting in late October 2023, where the Environment team presented its use of large-scale administrative microdata.

Based on a paper prepared by the CSO, with contributions from Australia, the Netherlands, the International Energy Agency, and UNECE, the Director General of the CSO presented a review of the use of administrative microdata for environment, energy, and climate change statistics at the Conference of European Statistics in October 2024. The presentation explored the potential of administrative microdata in tracking the transition to a low-carbon economy, identified key challenges, and offered recommendations for both national and international stakeholders.

By bringing together key players and leveraging these resources and collaborations, the CSO is ensuring that its data outputs are aligned with the needs of policy makers, researchers and the public.

⁸ The Department of Finance are also collaborating with the CSO and the ESRI on producing granular Supply and Use table data, as part of the I3E intertemporal computable general equilibrium (CGE) model calibration, which reproduces the structure of the economy.

Future Challenges

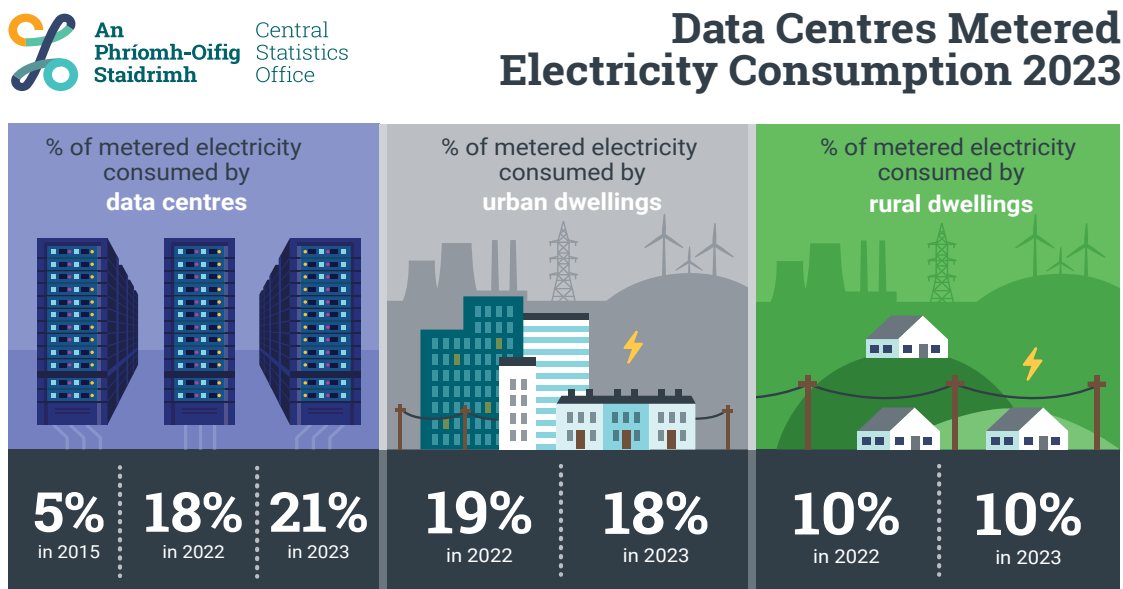
The CSO faces the challenge of continuously updating its methodologies to align with evolving international reporting requirements⁹, standards, regulations¹⁰ and frameworks for environmental and climate statistics.

Integrating diverse and complex data sources, such as emissions data, energy use, and ecological indicators into a cohesive and detailed statistical framework is crucial. For example, there are challenges in determining which fossil fuel subsidies and supports are in scope for green budgeting as there is no System of Environmental Economic Accounting (SEEA) methodology or Eurostat manual in place.

Providing access to granular BER data by SEAI to facilitate financial services reporting requirements would be welcomed by the Board when the revised EU Energy Performance of Buildings Regulation (EPBD) comes into effect. This access would allow for the integration of energy efficiency classifications into financial services and corporate reporting, leading to valuable downstream benefits for policy analysis.

The CSO needs to continue to advance its data linkage and use of administrative data to provide more granular insights to support targeted policy making and a comprehensive understanding of environmental trends; and to identifying and fill gaps in environmental data by continuing to engage, collaborate, work closely with stakeholders, policy makers and the research community to ensure the production of the appropriate measures to meet data needs.

Cross-domain reporting should continue to advance by linking environmental, climate, and sustainability statistics with economic and societal metrics, such as understanding the environment’s contributions to the economy and the economic impacts on the environment. The NSB supports collaboration between the Department of Finance and the CSO to examine these interdependencies. Additionally, the CSO should communicate complex environmental data to stakeholders and the public and make explicit reference and link to other relevant data sources¹¹ while adapting outputs to align with changing climate policies and regulations.



Source: Data Centres Metered Electricity Consumption 2023 - CSO statistical publication, 23 July 2024

9 The amendment of Regulation (EU) 691/2011 introduces three new reporting requirements to the European environmental economic accounts: Forest, Environmental Subsidies, and Ecosystem Accounts. These modules will be mandatory for reporting in 2025.

10 E.g. The existing Classification of Environmental Protection Activities (CEPA) and Classification of Resource Management Activities (CReMA) will be replaced with a new classification in late 2025. For Ireland, this change will affect the Environment Goods and Services Sector (EGSS), Environmental Subsidies and Similar Transfers (ESST), and Environmental Protection Expenditure Accounts (EPEA) questionnaires.

11 E.g.s [National Inventory data](#) (EPA); [Decoupling Emissions from Economic Activity 2022](#) (CSO) and [Environmental Accounts Air Emissions 2022](#) (CSO).

Priority 1: Theme 2 - Economy and Business

Theme 2: Respond to transformations in the economy and the way business is changing to capture effectively a true picture of what is happening.

NSB Comment: Good progress has been made to ensure developments in the economy and business are measured appropriately and sufficient insight is available to policy makers and the public alike. The CSO has made notable progress in measuring areas such as domestic economic activity¹², productivity, inflation, and digital transition. By enhancing methodologies and producing timely outputs including flash estimates, the CSO ensures that its statistics remain relevant and reflective of contemporary economic realities. These advancements provide crucial insights for policy makers and businesses navigating the challenges of economic shifts.

Summary of Progress

The CSO has made good progress in enhancing economic and business statistics over the past several years. This progress is evidenced by a range of new outputs, methodological improvements, and responses to emerging data needs in the areas of economic measurement, productivity, inflation, tourism, and gender balance in business. In recognition of the importance and complexity of the topic the CSO has invested in the area by splitting economic statistics into two separate directorates, one to compile the national economic statistics and the other to compile international economic statistics.

The CSO addresses the challenges posed by globalisation and its impact on traditional economic indicators through several initiatives. By analysing Net National Income (NNI) in comparison to Gross National Income (GNI*), the CSO helps to reduce distortions caused by globalisation, offering a clearer view of domestic economic well-being. Additionally, the CSO's updates to the Consumer Price Index (CPI) reflect changes in consumption patterns and inflation, which are crucial for evaluating living costs. By rebasing the CPI to incorporate contemporary spending habits, the CSO ensures that inflation measures remain relevant and accurately capture the economic experiences of households.

The CSO has made significant progress in delivering a suite of more timely economic data by introducing flash estimates. A new system for early GDP estimates now enables the CSO to release preliminary GDP figures just 30 days after the end of the reference quarter. Additionally, Ireland's flash estimates for the Harmonised Index of Consumer Prices (HICP) are published a day before Eurostat's release and two weeks ahead of the final detailed monthly figures. These improvements provide policy makers and the public with quicker access to essential economic information. However, due to the unique structure of the Irish economy, challenges remain with the use (and value) of GDP estimates for Ireland and with the scale of revisions to the flash GDP estimates and the communication around all these estimates. The NSB recognises that some economists question the value of these early GDP figures for accurately reflecting Ireland's economic health, although they remain essential for EU reporting.

As economies and businesses undergo rapid transformations, the need for updated and nuanced statistical insights becomes increasingly critical. In response to the digital transformation, highlighted by the expansion of e-commerce and fintech, the CSO has enhanced its methodologies to capture the growing digital economy. This includes the Digital Transactions in the Irish Economy report, which reflects the OECD's framework for measuring digital activities.

In the realm of productivity statistics, the CSO's Productivity in Ireland reports provide detailed insights into sectoral and firm-level performance. This aligns with the increasing focus on

12 Example of new measures of domestic economic activity include Net National Income, Modified Domestic Demand, GNI*.

understanding productivity divergence and firm performance, which are critical for shaping effective policy instruments.

The CSO's recent developments in outputs demonstrate a proactive approach to meeting the challenges posed by digital transformation, globalisation, productivity shifts, and Brexit. By enhancing statistical methodologies and addressing pressing issues like Brexit, COVID-19, inflation and the cost of living, the CSO plays a crucial role in providing relevant insights that inform policy and business decisions in an increasingly complex economic landscape.

In early 2024 the NSB held a session on Macro-Economic Statistics: Current and future data needs with the CSO and a range of stakeholders. The discussion between the Board, pre-eminent academics, CSO senior statisticians and policy colleagues from the Department of Finance and the Department of the Taoiseach highlighted the strides that have been made in recent years in providing more timely estimates of the macro economy and more meaningful measures of the domestic economy.

It was noted that standards in the European System of Accounts (ESA) currently being developed are likely to emphasise net economic measures, which may reduce distortions caused by multinational activities. Challenges remain in valuing unpaid work in the home, natural resources, environmental services and capital formation (amongst others).

Ireland's economy is uniquely shaped by the presence of large multinational companies, which significantly influence macro-economic statistics. While these multinationals boost Ireland's economic output, their activities can distort traditional economic indicators, making it more challenging to assess the true well-being of the domestic economy. To address this, updating statistical frameworks, such as the ESAs, aims to shift the focus toward net measures of the economy like GNI* and MDD, to offer a more accurate picture of national prosperity in the context of globalisation. These modernised approaches are intended to better reflect domestic economic realities and support more sustainable policy decisions.

Future Challenges

As the digital economy continues to expand rapidly, traditional statistical frameworks face significant difficulties in capturing the full scope of economic activities related to digital technologies, e-commerce, and fintech.

The Irish economy is highly dynamic, influenced by rapid technological advancements, economic shocks, and shifts in consumer behaviour. Adapting statistical frameworks and reporting to reflect these changes swiftly is a significant challenge. Ensuring that the Irish statistical system is adaptable to these dynamic changes is crucial for providing timely and accurate economic insights.

The structure of the Irish economy, which is heavily influenced by large multinational companies, poses a challenge for the CSO in producing meaningful aggregated business statistics at the sectoral level. This complicates the provision of RMF datasets that accurately represent key sectors of the economy, while maintaining confidentiality, making it difficult for researchers to gain a comprehensive understanding of the broader economic landscape.

Traditional GDP measurements often overlook the value of environmental services, natural capital, and non-market activities such as household labour and volunteer work. Incorporating these elements into economic statistics presents a complex challenge and is necessary for a more holistic understanding of economic well-being. Without accounting for environmental services and non-market activities, economic progress and sustainability may be misrepresented, which complicates policy development aimed at environmental sustainability and recognising the economic value and sustainability of natural resources. Whether these elements are included in the measuring of economic activity will be negotiated as part of the next round of the European System of Accounts (ESA), in which CSO will have an integral role.

The disparities between macroeconomic indicators such as GDP, GNP, GNI*, and Modified Domestic Demand suggests that a key challenge exists in communicating this message clearly and effectively. Media coverage can focus on headline GDP figures, which may not reflect the reality of the Irish economy. The CSO must give careful thought to how information is communicated, what key messages are emphasised to users and media. Maintaining trust when communicating complex and nuanced data on the Irish economy is of critical importance.



Source: Quarterly National Accounts 2023 - CSO statistical publication, 12 July 2024

Priority 1: Theme 2 - Labour market, Quality of employment, and the Future of work

Theme 2: Reflect and monitor the changes in the operation of the labour market and quality of employment.

NSB Comment: The CSO has made significant progress in enhancing data accessibility and developing new analytical outputs on the labour market, quality of employment, and the future of work. Through initiatives like the development of Research Microdata Files and the introduction of the Monthly Estimates of Payroll Employees series, the CSO provides valuable, timely data on employment trends and conditions. Additionally, the CSO's focus on evolving work patterns, particularly in response to the COVID-19 pandemic, highlights its commitment to capturing the dynamic nature of the labour market and informing policy decisions. The NSB urges continued collaboration with users and stakeholders to further enrich the data landscape, ensuring that it meets the evolving needs of policy makers, businesses, and the public in understanding the complexities of the modern labour market.

Summary of Progress

The CSO has made significant progress in addressing key issues related to the labour market, quality of employment, and the future of work, which are themes of increasing importance. Recent initiatives include the publication of data on the distribution of Earnings by Gender and County, a research paper on the public/private sector pay differential, earnings among parents, detailed distribution of earnings, earnings by nationality and the introduction of a new quarterly publication on Job-Churn, reflecting the CSO's commitment to providing comprehensive insights into the dynamics of employment.

The CSO has also made a Research Microdata File (RMF) containing a 10% sample of Revenue PMOD data available to researchers enabling in-depth analysis of labour market trends. The development of the Monthly Estimates of Payroll Employees series using Administrative Data, such as PMOD, represents a significant step forward in providing timely and detailed employment statistics.

The NSB highlights the critical need for up-to-date data on hours worked, a key input for productivity measurement. The CSO implemented several initiatives to generate essential metrics reliant on hours worked. In 2023, the CSO conducted the Structure of Earnings Survey 2022, which supports the calculation of mean and median hourly earnings—key metrics for analysing the gender pay gap and other critical measures. To address researchers' needs, the CSO integrated PMOD earnings data into the Labour Force Survey RMF, which includes hours worked, enabling comprehensive analysis of low pay and productivity in the economy. Additionally, to examine public-private pay differentials, the CSO combined Labour Force Survey data with the Earnings Analysis using Administrative Sources, producing the Econometric Analysis of the Public-Private Sector Pay Differential.

In late 2024, the Department of Enterprise, Trade and Employment (DETE) submitted a business case to Revenue for the collection of hours worked data through Revenue's PMOD system. The proposal was led by DETE, in collaboration with the CSO and other interested policy bodies supporting the proposal, which included the Department of Social Protection (DSP), the Department of Children, Equality, Disability, Integration and Youth (DCEDIY), and the Low Pay Commission. The collection of hours worked would address a significant data gap, which is crucial for the production of key indicators relevant to a range of policy areas.

With the rapid evolution of work, particularly accelerated by the COVID-19 pandemic, the CSO has focused on understanding the impact of these changes. Publications like the "Impact of COVID-19 on Business and the Labour Market" and the analysis of job churn and labour market transitions of those previously supported by government wage schemes offer crucial insights.

In 2023, the NSB hosted a session on Labour Market Statistics: Current and Future Data Needs¹³, bringing together the CSO and various stakeholders to discuss the topic. The discussion emphasised the progress made in measuring the labour market in recent years and highlighted the potential for the CSO's data stewardship role through collaborations and engagements to further enhance independent and quality reporting. Opportunities include leveraging new data sources, reporting on emerging technologies and sectors, and collaborating with stakeholders to define new skills and jobs, such as green skills.

Future Challenges

Obtaining up-to-date and detailed data on hours worked remains a critical challenge, as it is essential for accurate productivity measurement. Integrating this data into existing systems requires broader consultation and collaboration. The DETE proposal, discussed earlier, is an important step in addressing this challenge and has strong support from the NSB.

The rapid evolution of work patterns, including the rise of remote work, gig economy jobs, and solo self-employment, challenges traditional statistical reporting. The CSO needs to continue to adapt its data collection methods to effectively capture these new and changing forms of employment.

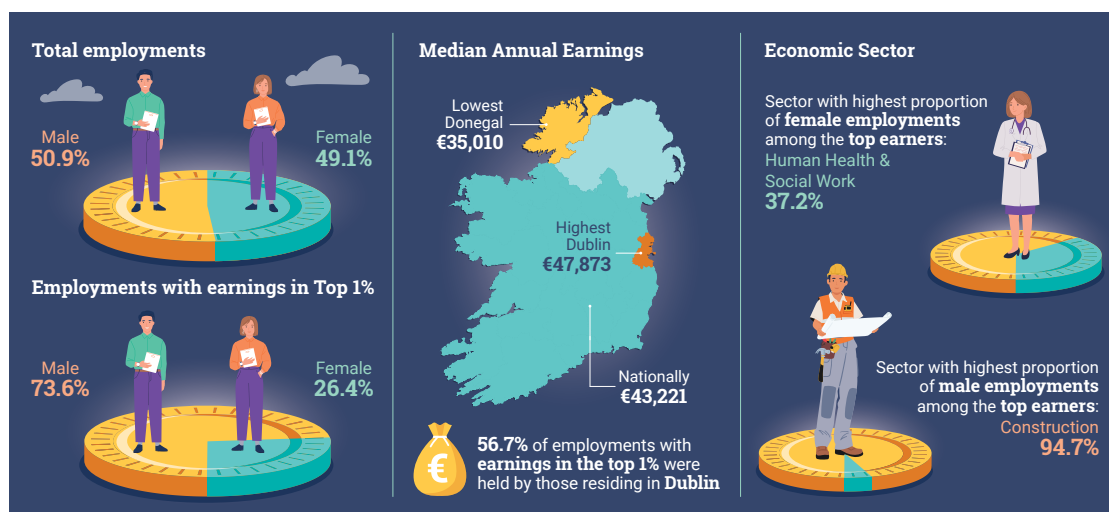
There is a need for better coverage and understanding of evolving contractual and working conditions, such as contract work and agency employment. Developing linked employee/ employer surveys and enhancing data on workplace training and reskilling initiatives are essential to address these changes.

The CSO should continue to develop methodologies to collect and report data on emerging technologies and sectors, including green skills and jobs, as well as the impact of artificial intelligence on employment and productivity. This requires collaboration with other entities and adapting statistical tools, such as web scraping, to stay relevant in a rapidly changing economic landscape.

The CSO should continue to invest in their field force and in multi-mode data collection to maintain and improve response rates in social surveys. Declining participation and differential non-response compromise data quality and representativeness, making it more difficult to produce accurate and reliable statistics.



Distribution of Earnings by Gender and County 2023



Source: Distribution of Earnings by Gender and County 2022 - CSO statistical publication, 12 December 2023

13 See details of NSB sessions in Appendix 2.

Priority 1: Theme 3 – Well-being and Social Cohesion

Theme 3: Provide data to monitor trends in well-being and social cohesion.

NSB Comment: The CSO has made significant progress in enhancing the measurement and communication of well-being and social cohesion. The CSO has published results from Census 2022, undertaken a pilot for an online Census and is already preparing for future censuses beyond 2027. A continuation of this proactive approach is needed to measure demographic shifts, address societal challenges and advance the understanding of various aspects of Irish life.

Summary of Progress

The CSO has made significant progress in measuring well-being and social cohesion within Irish society. Key developments include the production of more timely results from the Survey on Income and Living Conditions (SILC), which produces well-being statistics annually, broken down by demographic characteristics. SILC also provides crucial insights into material deprivation, arrears on mortgage/rent payments, and household financial difficulties within the reference year. These results highlight important national income and poverty indicators that are vital for understanding social cohesion.

In 2023, the CSO launched a new Well-being Hub, a dynamic resource that provides updates on various well-being indicators across eleven themes, including education, health, and work. Developed in collaboration with the Department of the Taoiseach and National Economic and Social Council (NESCC), this hub represents a major advancement in integrating and presenting well-being data.

The CSO also developed the Sexual Violence Survey in 2022 which was a complex and challenging undertaking. The project involved significant consultation with relevant stakeholders providing invaluable input. The six published reports in 2023 provided hugely important information on Irish society.

Additionally, the CSO introduced the OECD Trust Survey, with its latest publication released in 2024, contributing valuable data on public trust and its impact on social cohesion. The Women and Men in Ireland Hub was also launched, a comprehensive resource for gender equality data in Ireland.

The Equality Data Strategy, which is set to be finalised by the Department of Children, Equality, Disability, Integration, and Youth Affairs (DCEDIY), is intended to improve the collection of all equality data and will improve the ability of public bodies to monitor the impact of policies and initiatives and will complement the Equality Budgeting initiative led by the Department of Public Expenditure and Reform.

A significant achievement in 2023 was the release of Census 2022 data, which included a high-level summary publication, seven detailed thematic releases, and other key data sets. In 2024, the CSO produced publications on volunteering and homelessness, along with outputs such as a longitudinal census file. A joint Ireland-Northern Ireland Census report is due for release in late 2024/early 2025.

To monitor the continued demographic changes in Ireland, the CSO developed a frontier publication entitled Irish Population Estimates from Administrative Data Sources (IPEADS), which uses administrative data to estimate demographic statistics on an annual basis.

The NSB hosted a seminar in early 2024 to consider options on how future censuses are conducted in Ireland. New EU regulatory requirements for more frequent and granular data, added to the opportunities available from new data sources, mean it is important that the future

shape of the Census is considered. The seminar marked the start of a consultative process being undertaken by the CSO which will help inform the future Census model.

Future Challenges

As the focus on measuring well-being expands beyond traditional economic indicators, integrating new and emerging metrics poses a considerable challenge for the CSO. Well-being encompasses complex dimensions like mental health, social connectedness, and environmental quality, which are not easily quantified. Ensuring that data accurately captures the experiences of all demographic groups, including those affected by socioeconomic disparities, disabilities, and ethnic minorities, is crucial for creating an equitable representation of well-being and social cohesion.

In its data stewardship role and to set statistical standards, the CSO must lead and collaborate with new providers of public sector data holdings, helping them implement NDI+ within their systems. By leveraging these partnerships, the CSO can enhance the collection of appropriate data and production of independent insight. This process requires ongoing refinement, innovation, and investment in developing administrative systems along with improving data collection methods and survey response rates which can accurately capture the diverse aspects of society while integrating them into existing statistical frameworks.

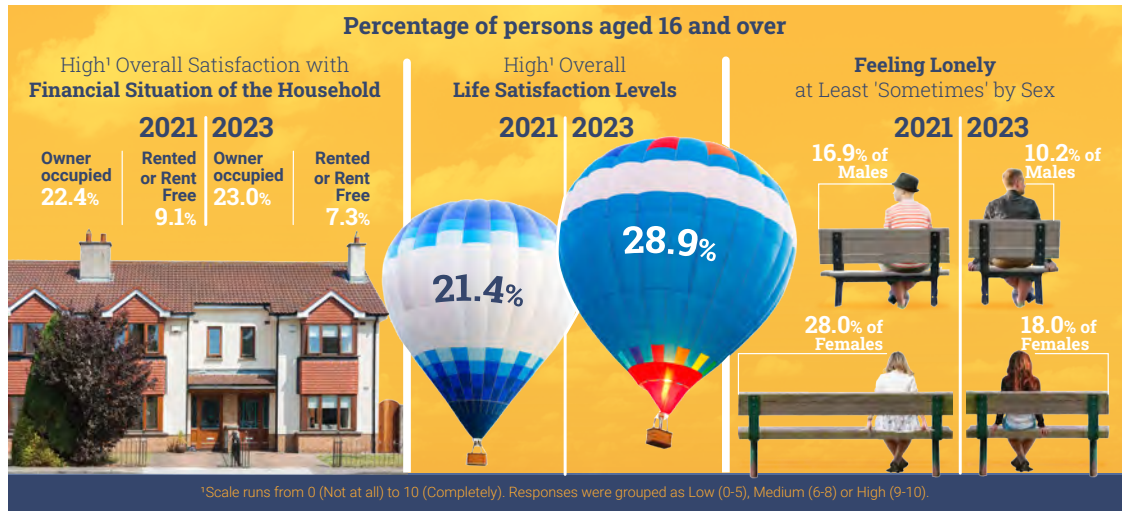
The transitioning to an online census presents challenges in accurately measuring hard-to-reach groups, such as older individuals, those with limited digital access and marginalised communities. Ensuring inclusivity requires targeted strategies, effective outreach, and effort to build trust and raise awareness among these groups. Similarly, utilising administrative data, which lacks the depth and detail found in traditional surveys, for annual population estimates presents the challenge of accurately reporting on attribute characteristics, making it difficult to estimate essential key demographic, social, and economic variables.

Measuring migration and population distribution in Ireland presents significant challenges due to the dynamic nature of migration flows and the complexity of tracking population movements. To address this, the CSO will need to further leverage administrative data sources and advance the development of IPEADS, which are crucial in overcoming these obstacles.

Housing is an important policy area for public policy and social cohesion. While the CSO has dedicated additional resources, established a Housing Division, expanded the range of outputs and launched a [Housing Data Hub](#), significant data gaps exist. Conflicting evidence from public data also underscores the need for enhanced data coherence.

Conducting a domestic violence survey in 2025 represents a significant undertaking for the CSO. The guarantee of confidentiality is crucial when undertaking surveys of this nature where sensitive questions may put victims at risk if privacy is not fully protected. Additionally, reaching vulnerable populations and encouraging participation can be difficult. Building on their experience and learnings from the Sexual Violence Survey conducted in 2022, the CSO is well placed to deliver on this challenging project.

Well-being 2023 - Survey on Income and Living Conditions (SILC)



Source: Well-being - Survey on Income and Living Conditions (SILC) 2023 - CSO statistical publication, 16 May 2024

Sexual Violence Survey 2022 - Main Results



Sexual violence is defined as a range of non-consensual experiences from non-contact experiences to non-consensual sexual intercourse. See report for further details.

Source: Sexual Violence Survey 2022 – Main Results - CSO statistical publication, 19 April 2023

Priority 1: Theme 3 – Health and Social Care

Theme 3: Broaden the range of outputs, products and services it can provide across the broader health domain. In this context, the Department of Health should develop a comprehensive infrastructure for health and related data.

NSB Comment: The CSO has made progress in enhancing the measurement of Health and Social Care in Ireland. The main initiative in this area have been the publication of Census 2022 data on the Disability, Health and Carers and the new publication Poverty Indicators by Health Status from SILC.

CSO has made progress in engaging and collaborating with key stakeholders in the area of health data and in making preparations for enabling the benefit of the Health Information Bill 2024 for PSBs. The Health Research Data Centre has been launched and will utilise Virtual Data Rooms along with improvements in the NDI+ implementation across health service providers.

Summary of Progress

The CSO has continued to enhance the scope and detail of health statistics to better address complex health-related issues in Ireland. The establishment of the Health and Social Cohesion Division marks a significant investment in the area and recognition of its importance. Given the critical role of non-health determinants such as age, sex, income, deprivation, education, environmental exposure and housing tenure in health status (need for healthcare and health outcomes) the CSO's capacity to match health data with non-health CSO and administrative data e.g. Census, Revenue, DSP, environmental, presents a significant opportunity for greater insights for health and social care.

During the COVID-19 pandemic and in order to support the work of the research community in this area and to inform evidence-based decision-making, a mechanism to facilitate the compilation of relevant COVID-19 health data was established for approved researchers. This mechanism is the CSO COVID-19 Data Research Hub.

In 2024, the CSO published statistics from Census 2022 statistics on [Disability, Health and Carers](#). This publication provides vital data to help track the developments in the area of Disability, Health and Carers at a national and local level. The CSO also published in 2024 the "Poverty Indicators by Health Status - SILC 2022" report, which highlighted the relationship between poverty indicators and self-perceived general health status, long-standing limitations in usual activities, and self-reported chronic illness status.

In November 2024 the CSO published the Frontier Series publications on [HSE Health Regions 2022](#). The six new Health Service Executive (HSE) Health Regions were established in March 2024 in a fundamental restructuring of the delivery of health and social care in Ireland. Using the Census of Population Analysis (COPA) 2022 and data matching from other administrative data sources, the CSO has produced this analysis of the demographics and health statistics for the people living in these HSE regions.

The CSO has been approached by the Department of Children, Equality, Disability, Integration and Youth to conduct a Disability Survey in 2028 as a follow up to Census 2027. The CSO is considering the possibility and is undertaking an initial project scoping exercise on this basis.

The CSO COVID-19 Data Research Hub made individual level administrative COVID-19 datasets available to researchers via the CSO RMF process under Section 20(c) of The Statistics Act, 1993. The provision for researcher access to the Hub followed extensive consultation between CSO, the Health Research Board (HRB), Department of Health (DoH) and the Health Service Executive (HSE). This consultation led to the establishment of the Research Data Governance Board. The CSO COVID-19 Data Research facilitated the undertaking of research of significant public importance that fed into the CSO COVID-19 Information Hub. This model of data access for

researchers is the basis upon which Virtual Data Rooms are based and are a viable option for further health research in the future when greater access to administrative health data is available.

In legislative developments, the [Health Information Bill 2024](#), which is being brought forward by the Minister for Health, will facilitate the sharing of health information for primary and secondary uses, including public health and research. This legislation will provide the basis for better sharing and linking of data for the purpose of producing health related statistics. The CSO's Health and Social Cohesion Division has been established to take advantage of this legislation when it is enacted.

The implementation of the Health Information Bill will require significant investment and development of digital health. [Digital for Care – A Digital Health Framework for Ireland 2024-2030](#) sets out a roadmap to digitally transform health services in Ireland and improve access for patients. Enhanced digital health roll-out will greatly increase the availability of health data for secondary use. At an EU level, the [European Health Data Space \(EHDS\)](#) is nearing finalisation. This is the first of a series of 14 Data Spaces to be developed by the EU. The EHDS will empower individuals to take control of their health data and facilitate the exchange of data for the delivery of healthcare across the EU (primary use of data) and provide a consistent, trustworthy, and efficient system for reusing health data for research, innovation, policy-making, and regulatory activities (secondary use of data). The EHDS will require enhanced sharing of data by public, private and voluntary healthcare providers across the EU.

Future Challenges:

Significant challenges remain in integrating and utilising health data across civil and public service bodies. Each health and social care provider typically operate its own data system with varying methods of organising and classifying data, making it difficult to achieve a comprehensive view of publicly funded health and social care.

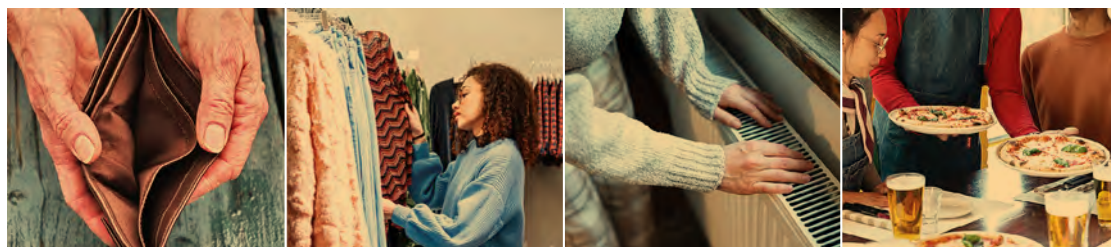
In its data stewardship role, the CSO should collaborate with and guide public bodies and third-party service providers to highlight the value of statistical data for policy analysis and their role as a data collector. This includes identifying data gaps, assisting in the implementation of NDI+, and enhancing systems to address these challenges. Such interventions will ultimately lead to improved data integration, greater linkage across agencies, greater insight from analysis and more effective health policy outcomes. Expanding the use of Virtual Data Rooms through the Health Research Data Centre should be prioritised to facilitate the expansion of research undertaken by stakeholders to inform health policy.

The requirements for data sharing and standardisation arising from the Health Information Bill and the European Health Data Space present opportunities in this area.



Poverty Indicators by Health Status

Survey on Income and Living Conditions (SILC) 2022



Persons aged 16 years and over, severely limited by a health problem in activities people usually do*

27.4%
are at risk of Poverty

compared with
10.1% not limited

24.0% are unable to afford to buy new clothes (not second-hand)

compared with
6.8% not limited

22.8% are unable to afford to keep their home adequately warm

compared with
5.4% not limited

19.4% are unable to afford to get together with family or friends once a month for a drink or meal

compared with
7.5% not limited

* Self-reported limitations in usual activities for at least six months prior to their interview date.

Statistics on this infographic do not reflect revisions made to population benchmarks due to the availability of Census 2022 data. For revised data see Poverty Indicators by Health Status Survey on Income and Living Conditions (SILC) 2023 - 25/06/2024

Source: Poverty Indicators by Health Status - Survey on Income and Living Conditions SILC 2023 - CSO statistical publication, 25 June 2024

Priority 2: Communications

In today's fast-moving and technologically advanced world, where information is readily available at the touch of a screen, the NSB recommends that the CSO takes action to **communicate to users** the advantages that official statistics have over other sources of information. The CSO must continue to promote itself as the trusted source of statistical data for all.

The NSB welcomes the progress to date by the CSO in developing a more **citizen-focused approach** to its outputs and recommends that the CSO continues to invest in this area; therefore, making statistics more meaningful and accessible for many users and the public generally.

The NSB recognises the demand for new CSO products and services such as **real-time** and so-called 'flash' estimates and recommends that the CSO explores the production of such estimates, in consultation with users, and only where relevant and appropriate to the data series.

NSB Comment: The NSB recognises that the CSO serves a wide range of users and has made significant progress in communicating with them effectively. The CSO has significantly improved the accessibility and user-friendliness of its data by incorporating clear narratives and context in its releases, enhancing public understanding. It has also improved its data presentation, including the creation of infographics and social media-friendly content to engage a broader audience, particularly younger users.

The NSB welcomes the introduction of the Trust and Transparency Centre, this is key in maintaining public trust in official statistics into the future. The Board also welcomes the improved accessibility of the CSO outputs and the lighter touch to their communications, where appropriate, to broaden the appeal and reach. A balance, however, must be maintained between the light-hearted communications and the quality and integrity of the statistics being produced.

Summary of progress

There are many different types of users of CSO outputs, each with unique requirements, skill sets and ways of engaging with the data. For example, academic researchers rely on detailed statistical datasets for their studies, often utilising the CSO's microdata files or PxStat tables to conduct in-depth analyses on topics such as economic trends and social issues. Policy makers, on the other hand, use CSO data to inform decision-making and develop evidence-based policies that address public needs, such as healthcare and education reforms. The media play a crucial role in interpreting and disseminating CSO data, often seeking accessible summaries and visualisations to communicate findings to the public effectively.

Recognising these diverse user groups, in recent years the CSO has dedicated itself to making its data more accessible and user-friendly for the public. All CSO releases now feature narrative and context at the beginning, making the data more understandable and relevant to a wider audience. This new format aims to provide clearer insights and improve the accessibility of statistical information for users of all backgrounds. The CSO has invested in making its data presentations more engaging. This includes styling improvements for charts and tables and the development of new infographic outputs. By creating social media-friendly content, such as Instagram stories, the CSO is broadening its reach and making data more appealing to a younger, digitally savvy audience. The CSO has also redeveloped its website to improve navigation, accessibility, and overall user experience. The CSO is committed to making web content available and accessible to the widest possible audience, including those who use assistive technologies and content optimised for universal access. All CSO statistical releases are freely available on the website; infographics are clear and include text subtitles; and

visualisation tools are produced with a focus on universal design. The CSO provides video and audio content on the CSO website for some releases, and on its YouTube and other social media channels as appropriate, all of which have subtitles. All infographics are translated into Irish and the Key Findings Chapter of all the CSO's flagship releases are also available in Irish.

The CSO's Access Officer Working Group, established in 2024, is developing further communication initiatives to ensure the CSO's outputs are accessible to the widest possible audience.

The CSO is committed to enhancing public trust and understanding of its work through its emphasis on social acceptance. This work is being developed in collaboration with Eurostat and other member countries, aiming to foster greater public awareness and confidence in the value of official statistics. Delivering a core element of this work, the CSO launched a [Trust and Transparency Section](#) on its website in 2024 to clearly explain what the CSO does, how it does it, the differences between CSO data and other data sources, its legal remit, and the legal guarantees the CSO provides around data protection and confidentiality. This section offers detailed information about data sources, how data is used, and the stringent confidentiality measures in place. Videos of Assistant Director Generals are featured, highlighting the CSO's work and addressing key issues related to data ethics, the guarantee of data confidentiality and data protection. A video on the CSO's commitment to protecting personal data and dependence on public support is part of this section and is used in an ongoing [digital marketing campaign](#). A link to this section of the website is part of the 'Related Content' of every statistical release published by the CSO. Trust has been identified as a priority in the draft external Communication and Dissemination strategy for the years up to 2028.

The CSO also launched the "[Count on Us](#)" campaign across radio and social media platforms in 2023. This campaign is designed to increase brand awareness and underscore the importance of trustworthy statistics. By periodically repeating the campaign, the CSO aims to maintain ongoing public engagement and reinforce the reliability of its statistical outputs.

To better understand public sentiment on various issues, the CSO conducts Pulse surveys, which provide timely insights into public opinion. These surveys are a key tool in the CSO's strategy to enhance engagement and ensure that its work remains closely aligned with the needs and perspectives of the Irish public.

Public consultations and feedback are integral to the CSO's approach to refining its statistical outputs. By engaging with users and stakeholders, the CSO can better tailor its products to meet the needs of both the public and policy makers. Feedback mechanisms are also in place to improve the functionality of the CSO's website and surveys, ensuring that these tools are as user-friendly and effective as possible.

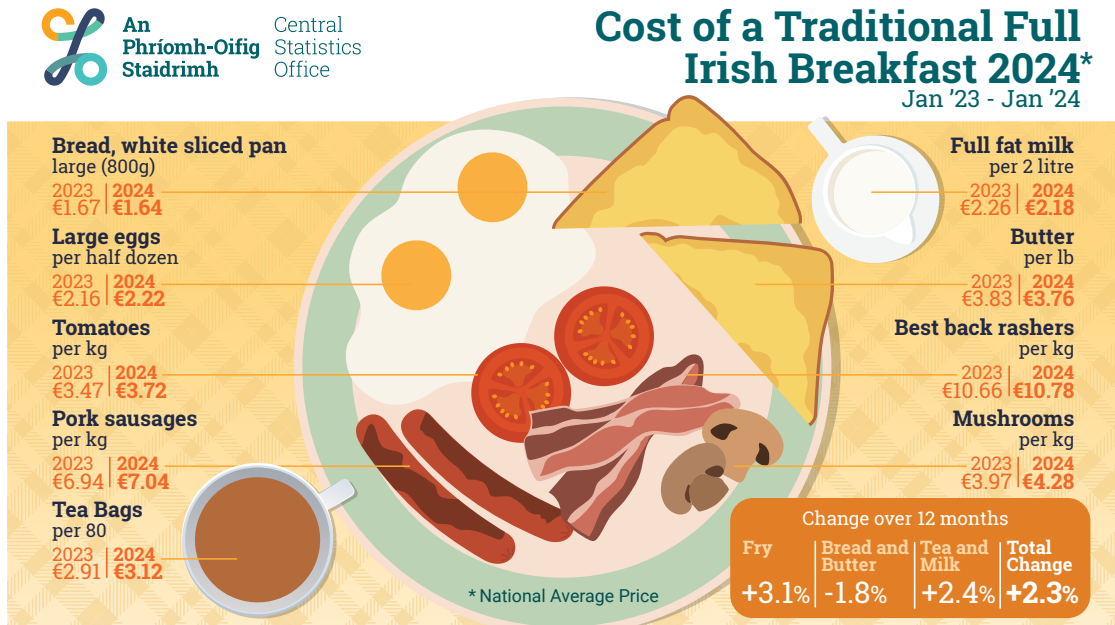
As part of the CSO's strategic engagement with the wider public, and younger audiences in particular, they use social and cultural touchpoints as a way to promote CSO data in a less formal way. For example in 2024, [CSO published infographics](#) with data relating to the counties participating in the All-Ireland finals, and they posted about ticket price inflation through the decades ahead of the Taylor Swift concerts and had several posts marking Team Ireland's participation in the Paris 2024 Olympics and Paralympics.

Future Challenges

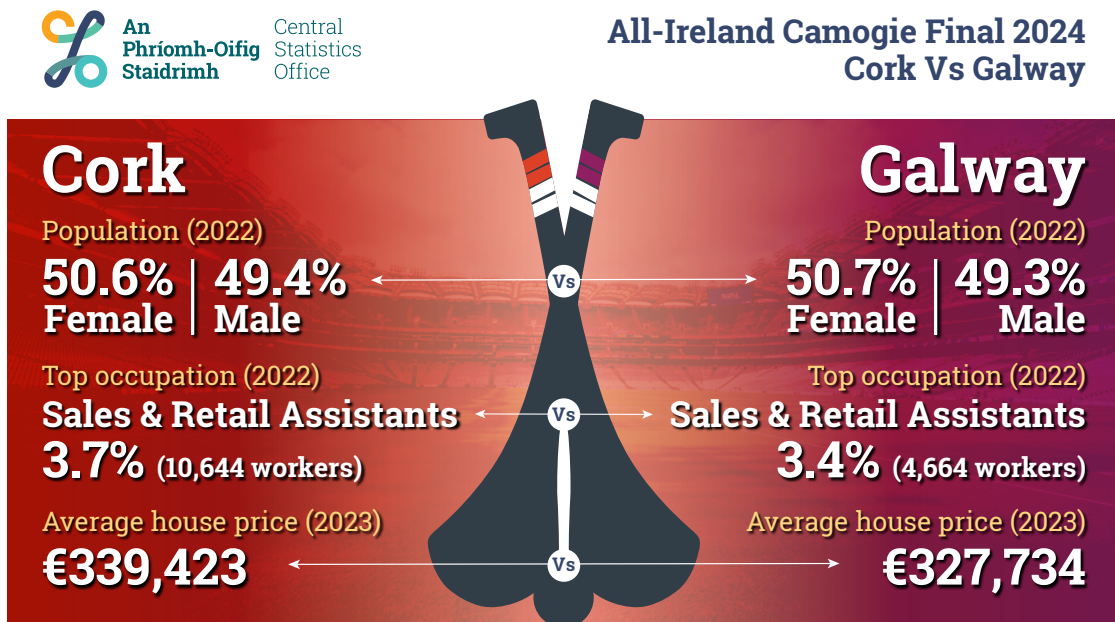
In the rapidly evolving landscape of information, where technological advancements and misinformation are prevalent, the CSO and producers of official statistics in Ireland face several key challenges in maintaining its role as a trusted source of statistical data. The proliferation of unverified information can undermine public confidence in statistics. To address this, the CSO must emphasise the rigorous methodologies and transparency behind its data to maintain public trust. As user expectations evolve, providing data in a clear and meaningful way becomes vital. Continued investment in user-friendly website design and interactive tools, coupled with regular feedback from users, will help the CSO meet diverse needs and enhance engagement.

A key challenge is how to communicate complex statistics, which could be easily misinterpreted, so that they are accessible to the public and media. An appropriate balance must be maintained between the light-hearted communications which are of broader interest and appeal with the quality and integrity of the statistics being produced.

The CSO should build on the accessibility of its outputs by implement the initiatives developed by the CSO's Access Officer Working Group, to ensure the CSO's outputs are available to the widest possible audience.



Source: Cost of a Full Irish Breakfast 2024 - CSO press statement, 15 March 2024



Source: All-Ireland Camogie Championship 2024 - CSO feature article, 09 August 2024

Priority 3: Enhance Administrative Data for Statistical Use

The NSB believes the use of **administrative data** sources is critical in meeting the challenges facing official statistics in the future and recommends that:

- the CSO develops **standards, rules and guidelines** to govern the classification, storage and management of data across government organisations; and drives the roll-out of common data classifications and standards with particular focus on strategic areas of policy and expenditure such as health, education and social protection; and
- the administrative data of government organisations should be **suitably structured** to ensure the data is fit for use for statistical purposes by their organisation and the broader Irish Statistical System (ISS) in a timely and efficient manner. These organisations should commit to the practical enhancement of the value of their data and work with the CSO to implement actions to drive the changes needed to design or adapt their systems.

NSB Comment: The CSO has made **good progress** in enhancing administrative data for statistical use through the development of robust standards, improved metadata practices, and strategic stakeholder engagement. These efforts are aligned with the NSB's recommendations to ensure that administrative data is effectively managed, standardised, and utilised to support high-quality official statistics.

Summary of progress

The CSO is responsible for advancing the development of standards, rules, and guidelines crucial for managing administrative data for statistical purposes across government organisations. The CSO has recently implemented a new Secondary Data Model. This model standardises the processes from data acquisition through to data use. The model is central to enhancing the fit-for-use quality of administrative data for statistical purposes.

The Administrative Data Centre (ADC) is working on standardising key variables and classifications to ensure data consistency and coherence across all data holdings. The ADC has implemented 13 standardised formats for all data entering the Data Hub.

The Quality Management, Support, and Assurance (QMSA) division is embedding quality checks into new data acquisitions and promoting the adoption of common classifications and storage standards across the IGSS. This aligns with the NSB's recommendation to enhance the practical value of administrative data.

Virtual Data Rooms (VDR) provide access to high quality data and analytical tools in a governance centric environment to public service organisations that may not otherwise have the resources, or capability, to be involved in developing an evidence-base underpinning their policy and decision-making. The CSO is collaborating with four departments (Department of Health, Department of Agriculture, IGEES in DPENDR, and DECC) on VDR pilot projects that opened in 2024, supported by funding secured by the OGCI. These data rooms will facilitate better integration and use of administrative data across government organisations.

Extensive engagement with key stakeholders, including the Data Governance Board and the NDI Champions group, has been conducted. The CSO has highlighted the importance of common data standards and classifications across public sector data holding, particularly in strategic policy areas.

To ensure a clear understanding of the data landscape, the CSO organises annual Administrative Data Centre seminars, where new developments are presented, and feedback received from stakeholders.

The CSO makes extensive use of administrative data, with approximately 70% of its CSO outputs relying either entirely on administrative sources or on a blend of administrative, survey and other sources.

Future Challenges

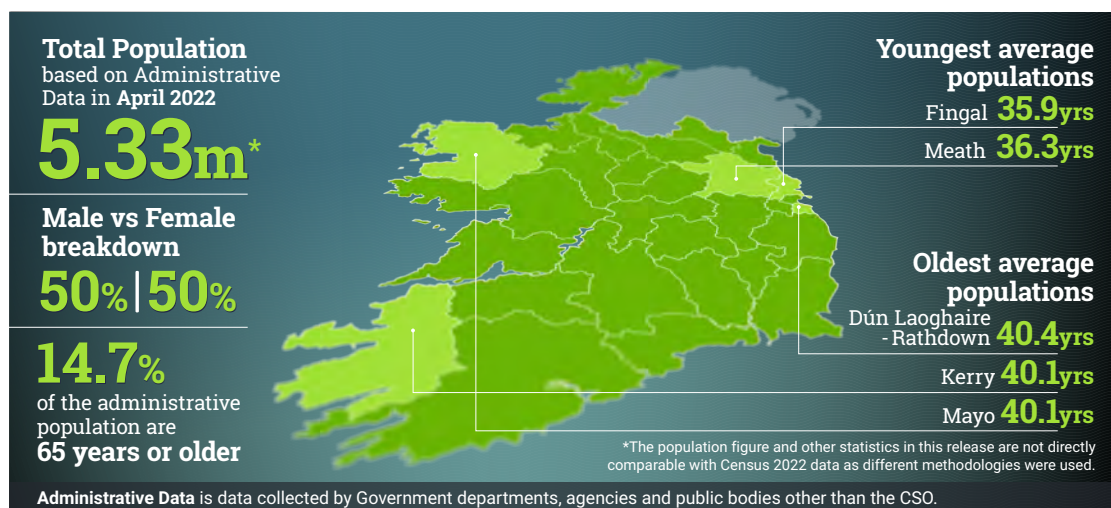
Despite implementing the new Secondary Data Model, it is a challenge to ensure that all administrative data adhere to the processes and standards necessary to maintaining data coherence and maximising data usability.

Integrating quality checks and common classifications into new data acquisitions involves coordinating across multiple government agencies. The ongoing challenge is to consistently apply quality management practices and integrate data from different departments to enhance the overall reliability of official statistics.

The success of the VDR pilot and future Government Data Rooms depends on strong interdepartmental collaboration and securing ongoing funding. A key challenge lies in ensuring these data rooms facilitate seamless data integration, provide accessibility across government organisations, and maintain strict compliance with data governance protocols. If the current VDR pilots are successful, the CSO will roll out a permanent, secure, and scalable VDR solution for Public Sector Organisations (subject to funding). Once in place and operating effectively for PSBs, the CSO will then consider, in consultation with key stakeholders, the feasibility of providing access to VDRs to the broader research community. While VDRs are being introduced to address specific policy research questions, broadening access to the wider research community could further expand the use of public sector data, generate deeper insights, and amplify the overall impact of VDRs, particularly when research is aimed at addressing specific policy needs.



Irish Population Estimates from Administrative Data Sources (IPEADS) April 2022



Source: Irish Population Estimates from Administrative Data Sources, 2022 - CSO statistical publication, 24 June 2024

Priority 4: National Data Infrastructure

Previous NSB strategies have recommended the implementation of a **National Data Infrastructure** (NDI) to facilitate the linking of data across the administrative and CSO systems by incorporating unique identifiers for individuals (PPS number), businesses (unique business identifier), and locations (Eircode) in all official data collection and administrative data sets.

The NSB views the **NDI champions**¹⁴ as well placed to drive the initiatives required to successfully implement the NDI by promoting the value of unique identifiers and common classifications on data holdings. It calls on the champions to explore the opportunities to improve coverage of these identifiers on administrative systems and processes.

The NSB welcomes the development of the **Unique Business Identifier** (UBI) by the Revenue Commissioners and recommends the completion and roll-out of phase one of the UBI project by end-2021.

The NSB recognises the importance of the CSO's **pathfinder projects** which are policy-relevant research projects that bring together data from CSO and administrative sources. As well as adding insight in particular areas, they also demonstrate the value of using the NDI to link different data sources. The NSB recommends that the CSO, public sector bodies (PSBs) and other stakeholders continue to identify useful research projects that harness linked data sets, and that deepen an appreciation of enabling such data linkages.

NSB Comment: The NSB recognises that significant progress has been made in the development of a National Data Infrastructure (NDI) by incorporating unique identifiers like PPS numbers, UBIs, and Eircodes into data systems to enhance data linking across administrative and CSO databases and its expansion to include standardised classifications.

The NSB welcomes the development of the NDI Dashboard by the NDI Champions Group which highlights the continued increases in PPSN coverage and huge strides made to integrate Eircode into public sector data holdings¹⁵. The NSB also welcomes the ongoing collaboration on pathfinder projects and frontier publications that leverage these linked datasets to improve data utility and understanding.

The NSB welcomes the Revenue Commissioners' implementation of the UBI. The Board recognises the complexities involved in establishing the UBI and now encourage the broad adoption of the UBI across the public service as part of the National Data Infrastructure.

Summary of progress

Previous strategies set forth by the NSB have emphasised the need for a National Data Infrastructure (NDI) to enhance data linking across administrative and CSO systems. This involves incorporating unique identifiers for individuals (PPS number), businesses (Unique Business Identifier or UBI), and locations (Eircode) in all official data collection and administrative data sets. The NSB recognises the NDI Champions Group as crucial to advancing these initiatives, aiming to drive the adoption of unique identifiers and standard classifications across data holdings.

14 The NDI Champions Group, chaired by the CSO with representatives from all Departments and agencies with high-value data, monitors and promotes coverage of the unique identifiers across public sector data holdings.

15 Across the key data holdings of Government Departments and agencies there has been strong growth in Eircode coverage in both new (73.9%) and active (70.5%) records in 2023. The corresponding Eircode coverage for 2018 was 32.8% and 32.9%. There has also been a continued increase in PPSN coverage in both new (80.9%) and active (84.7%) records in 2023. The corresponding PPSN coverage for 2018 was 79.9% and 82.2%. The CSO's data matching capabilities enables almost complete PPSN and Eircode coverage.

A new [CSO Metadata portal](#) has been developed and launched by CSO in 2024 to provide a comprehensive catalogue of data standards, including common classifications, code lists, and APIs. This portal will enhance the accessibility and usability of standards by public sector bodies.

A suite of data standards, supporting data stewardship, is being developed by CSO. Initial standards, such as marital status, full-time/part-time employment, economic status, gender, sex, sexual orientation and household relationship status were launched in 2024, with additional standards, such as religion, ethnicity, county, local authority, and country are being developed in consultation with stakeholders to address key policy areas.

The NDI Champions Group meetings have focused on data stewardship aspects, including classifications, data management, Eircode API services, the rollout of Eircodes and the Unique Business Identifier (UBI) and incorporating standards and classifications into the broader NDI+ framework. The Eircode subgroup of the NDI Champions Group published the Eircode Capture Best Practice Guide which assists Public Sector Bodies in the collection of Eircodes.

The NDI Champions Group developed the NDI Dashboard to monitor the coverage of record-level PPSN and Eircode metrics for key data holdings of Government Departments and agencies under their aegis. In 2023, the dashboard had 48 datasets with more than 47 million records and highlighted the continued increases in PPSN coverage and the huge strides made to integrate Eircodes into public sector data holdings.

The NSB is encouraged by the amount of pathfinder projects and frontier outputs that have been undertaken. The Board underscores the importance of these projects and calls for continued collaboration among the CSO, PSBs, and other stakeholders to identify and execute research projects that leverage linked datasets and enhance the understanding and utility of such data linkages. Pathfinder projects undertaken include analyses on outcomes for health graduates, support for Sláintecare, parental leave uptake, vacant housing using ESB Networks data, various equality initiatives, and new dwelling completions.

The NSB specifically supports the development and implementation of the UBI by the Revenue Commissioners. Revenue has advanced the UBI with four public sector bodies (PSBs) involved in the first Data Sharing Agreement. In September 2024 the Data Governance Board passed the Data Sharing Agreement.

The CSO has taken on the competent authority under Article 7 of the EU Data Governance Act (DGA) and Statutory Instrument 272/ 2024. As the DGA competent body, the CSO will work with other public sector bodies to support the continued protection of their data throughout any sharing and reuse activity. This includes providing for disclosure control techniques such as data aggregation and anonymisation, and secure processing environments which allow for data processing while minimising risk of a breach, and provision of templates such as model data sharing agreements between the data holders and end users.

Future Challenges

Key priorities include broadening the use of unique identifiers, such as PPS numbers and Eircodes, across all public sector data holdings to enhance data linking and increase the analytical value of the data. A strategic approach is essential when investing resources to extend the NDI+ to additional government departments, agencies, and third-party service providers. Priority should be placed not only on areas with the largest data holdings for maximum impact but also on data sources that offer variables essential to informing key policy decisions.

The NSB welcomes the Revenue Commissioners' implementation of the UBI. The Board now encourages the broad adoption of the UBI across the public service as part of the National Data Infrastructure.

Despite implementing standardised formats and developing new metadata portals, achieving uniformity across diverse data sources and government departments remains a challenge. Ensuring that all administrative data adhere to these standards and classifications is crucial for maintaining data coherence and maximising data usability.

Continued collaboration with public sector bodies on pathfinder projects is essential to leverage these linked datasets for critical policy analysis. Expanding the bi-lateral engagements between the CSO and public service bodies to assess data needs and enhance data stewardship practices across the public sector.

The CSO's role as a data steward and leader in the data ecosystem is crucial in driving the expansion of NDI+ to departments, agencies, and third-party service providers that are not traditionally recognised for their contributions to administrative data. By engaging with these entities, the CSO can help identify untapped data sources that, once integrated and enhanced, could offer valuable insights to address key policy questions and fill existing data gaps. This leadership involves encouraging collaboration, guiding improvements in data systems, ensuring that the collected data meets high standards for quality and assessing and reviewing ISSCoP compliance. Through these efforts, the CSO can significantly broaden the scope of data available for public good, ultimately enhancing evidence-based decision-making across a range of policy areas.

The Board supports the CSO's collaborative approach to accessing and utilising public sector data holdings, working closely with public bodies to gather essential data. However, the Board also recognises that under the Statistics Act 1993, the CSO has the legal power to demand access to these data when necessary for the public good.

The Board welcomes the CSO's relaunch of the National Data Infrastructure: *Developing Data as a National Resource* in November 2024 and supports the CSO vision to position itself as a data service provider to the civil and public service. The updated NDI, with its dedicated [website](#), builds on existing services and partnerships, organising them under three key pillars: Standards, Skills, and Services.

Standards: The CSO is developing a suite of data standards to ensure all data collected across the civil and public service is gathered using agreed standards so that findings can be defined, measured, and presented in a consistent way.

Skills: Data skills are foundational to every aspect of building and maintaining a data infrastructure for the civil and public service. The CSO continues to develop the range of supports available to the system.

Services: To complement the range of services CSO currently provides to the broader system, new and enhanced services will be developed through the NDI.



Bonneagar Sonraí Náisiúnta

National Data Infrastructure

Build In Standards



- ISS Code of Practice
- Standard Classifications
- CSO Data Standards
- Common Data Coders
- Quality Management Framework

Build Up Skills



- National Statistical Services
- Statistical Hit Squads
- Pathfinder Projects
- National Data Analysts Network
- Capacity Development

Build Out Services



- Data Services
- Virtual Data Rooms
- Research Microdata
- Anonymisation Services
- Open Data

National Data Identifiers

Priority 5: Embed Eircodes in all Public Sector Data Holdings

The NSB strongly supports the inclusion of the **Eircode** identifier on public sector data holdings and sees this as a critical part of progressing the NDI and providing the required level of geographic breakdown sought by many users of official statistics. In order to improve the collection and integration of the Eircode by PSBs, the NSB recommends that:

- it becomes mandatory for a PSB to adopt a **'just ask'** approach when interacting with customers and request an Eircode as part of an address (where an address is required and in line with the GDPR) and to facilitate this, PSBs should incorporate an Eircode application programming interface (API) to obtain and validate the Eircode when dealing with customers;
- Eircode integration becomes a mandatory requirement for all Information and Communications Technology (ICT) systems procurement;
- the frequency of Eircode assignment, dissemination and release of the Eircode database to licenced users is increased from a quarterly to a monthly cycle;
- the Department of the Environment, Climate and Communications (DECC) explores the feasibility of treating the **Eircode as a public good**, making it freely available to all users; and
- a sub-group of the NDI Champions Group is established to drive the adoption of the Eircode on public sector data holdings and that this group is chaired by an Assistant Secretary from a large data-holding government department.

NSB Comment: Good progress has been made to embed Eircodes in public sector data holdings. The 'just ask' approach when interacting with customers has been adopted by many PSBs. The NDI Champions Group published the Eircode Capture Best Practice Guide which assists Public Sector Bodies in the collection of Eircodes. The Board welcomes the progress made by DECC in approving a public sector licence for Eircodes. Significant work remains to progress the treatment of Eircodes as a public good.

Summary of Progress

The Eircode system provides essential geographic identifiers that enhance data management and service delivery. The NSB has identified the integration of Eircode into public sector data holdings as a crucial step in advancing the National Data Infrastructure (NDI). This integration is vital for improving geographic breakdowns in official statistics and ensuring comprehensive data linkage.

There has been a significant increase in the number of departments collecting Eircodes on their systems and the inclusion of Eircode on administrative datasets¹⁶. The transition to a monthly assignment cycle has been successfully implemented. The increased frequency is integral to improving data accuracy and timeliness.

The 'just ask' approach when interacting with customers is at the core of the Eircode Capture Best Practice Guide which has been adopted by many PSBs.

The NSB has engaged with DECC about treating the Eircodes as a public good and making it freely available to all users. The most recent communication from the DECC to the NSB in June 2024 was positive and warmly welcomed by the Board. In this correspondence, the Department

¹⁶ There has been strong growth across public sector data holding in Eircode coverage in both new (73.9%) and active (70.5%) records in 2023. The corresponding coverage for 2018 was 32.8% and 32.9%.

recognised that the Open Data Directive¹⁷ could allow Eircodes to be treated as a public good, which could promote data reuse for the benefit of both public and private sectors to enhance decision-making processes and foster a society empowered by data that allows individuals and organisations to make more informed choices. DECC also indicated that they are working on a long-term strategy for the Eircode system beyond the expiration of the current licence in December 2026.

In response to the discontinuation of the Eircode API service by Tailte Éireann, DECC has kept API users informed on the process of transitioning to third-party API providers and is working to resolve any issues that arise, to minimise the impact on Eircode capture. Additionally, to help address challenges related to data capture, procurement and usage of Eircodes, DECC progressed and launched a public sector Eircode licence for Eircodes in 2024.

Both the NSB and CSO have highlighted the importance of the public sector Eircode licence service, particularly for the NDI, and the Board welcomes progress being made on this.

The NSB welcomes the DECC's proactive response in addressing these matters.

Future Challenges

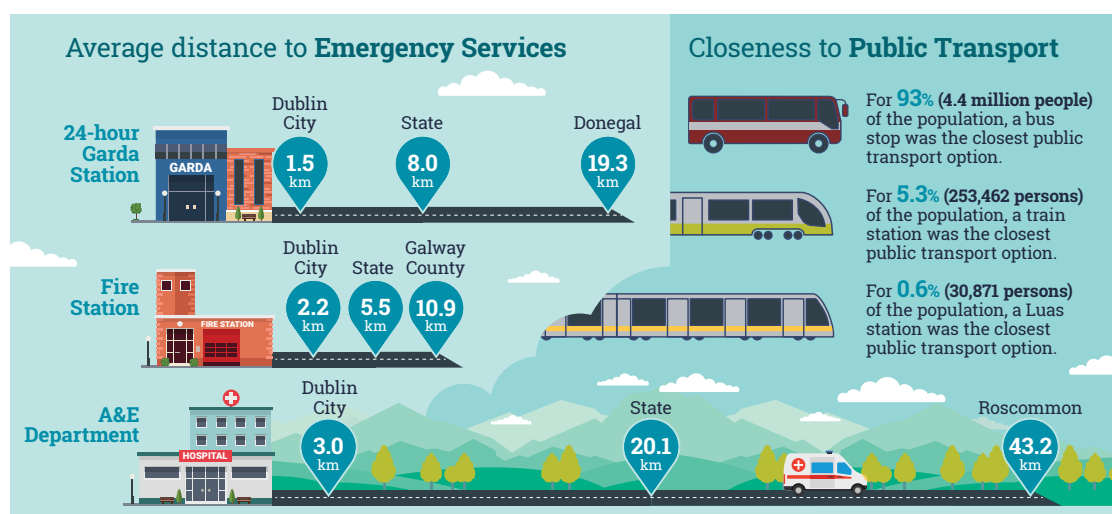
The development and provision of a free Eircode API for public sector bodies is critical. Ensuring a reliable and cost-effective API will be essential for continued Eircode adoption.

Establishing Eircode as a public good and making it freely available to all users is a key challenge, which DECC is currently considering post expiry of the existing commercial licence contract. The NSB will monitor progress.

Increasing the adoption of Eircode collection across all public sector systems remains challenging. All public bodies should collect Eircodes and adopting the 'Just Ask' approach is recommended by the Board. But ensuring consistent use across diverse bodies and integrating Eircode into all ICT systems will require ongoing effort, investment and leadership by CSO and other stakeholders.



Distance to everyday services in Ireland 2019



Source: Measuring Distance to Everyday Services in Ireland, CSO statistical publication, 27 November 2019

17 The Open Data Directive has the potential to enable Eircodes to be treated as a public good, as it aims to make public sector data easily available for re-use through [High-Value Datasets \(HVD\) Implementing Regulation](#) published 20 January 2023.

Priority 6: Potential of Big Data

The NSB views privately held **'Big' Data** sources as having a valuable role in the compilation of official statistics in the future and recommends that the CSO:

- invests further in the expansion of its Big Data Development Unit to establish the value added for official statistics;
- engages with big data providers to gain access to private data sources for statistical purposes; and
- engages in ongoing dialogue with the Data Protection Commission to address data protection concerns, where necessary.

NSB Comment: The CSO is making some progress in expanding its Big Data capabilities, with ongoing investments in the Big Data Development Unit and the Data Hub. The CSO has used Big Data in a number of publications, for example, analysing port traffic in Ireland and mobility during the pandemic using aggregated mobile phone data.

The NSB recognises the need for a legislative basis for sustainable access to privately held big data for the production of official statistics. The NSB notes that amendments to EU Regulation 223/2009 were signed into law by the European Council in November 2024.

Summary of Progress

Big Data sources hold significant promise for enhancing the accuracy and comprehensiveness of official statistics. The CSO has identified the need to utilise Big Data to support its statistical functions and improve data quality. This aligns with the NSB's view, over a number of its strategies, that integrating privately held Big Data sources is crucial for future statistical processes.

The CSO is making substantial investments in its Big Data Development Unit to leverage the potential of large datasets for official statistics. This investment aims to establish the value added by Big Data for statistical purposes and to support the development of new methodologies for data integration and analysis.

The Data Science division was established in 2024, which aims to enhance the Office's capabilities in Data Science and support development of projects in this area. The Data Hub, a key component of this initiative, is currently being expanded to incorporate larger administrative datasets. The first phase of the Data Hub Portal is live, and its use is being expanded to include more datasets and to include data ingestion activities. The Data Hub is designed to enhance the efficiency of data cleaning, editing, and integration processes across the CSO's statistical production areas.

The CSO has made notable progress in accessing and utilising scanner data from major supermarket groups. This data is being explored for its potential inclusion in the Consumer Price Index (CPI) and for compiling Purchasing Price Parities. Additionally, the CSO is assessing other private data sources, to support various statistical analyses.

The recent publication, [Port Visits Using Real-Time Shipping Data](#) by the CSO, applied Automatic Identification System (AIS) data to analyse port traffic in Ireland. This is a significant step in using real-time shipping data to produce faster maritime indicators, demonstrating the potential of Big Data to enhance statistical outputs.

Despite the progress, the integration of privately held data to the official statistical lifecycle faces significant challenges, primarily due to the lack of a legal framework for accessing

such data. The CSO is advocating for legislative changes to facilitate sustainable access to Big Data sources. This includes the amendment of EU Regulation 223/2009, and to address issues related to the EU Data Act, which currently does not provide a clear legal basis for accessing privately held data for official statistics. The European Commission's proposal for a Regulation amending Regulation (EC) No 223/2009 on European statistics was approved by Council (ECOFIN) in November 2024. The amended regulation enhances the legal framework for European statistics, including provisions for sustainable access to privately held data and improved data sharing mechanisms, while upholding strong confidentiality protections.

The CSO is actively engaging in EU discussions on data access and working with the Data Protection Commission to ensure that data protection concerns are adequately addressed. This engagement is crucial for developing a legal framework that supports the integration of Big Data while maintaining compliance with data protection regulations.

The CSO's commitment to Big Data is also reflected in its participation in international conferences and discussions, such as the UNECE Big Data conference and Eurostat meetings, where it shares insights and influences international methodologies for Big Data use in official statistics. The CSO is leading an UN ESSNet project on the use of Artificial Intelligence and Machine Learning in official statistics.

Future Challenges

Securing sustainable access to Big Data and privately held data is essential for enhancing its use in official statistics, promoting a transparent and responsible approach that prioritises citizens' welfare. Approaches governing access to privately held data, arising from amendments to Regulation 223/2009, must genuinely reflect the needs and rights of the public. They should address data protection concerns effectively while fostering public trust in the evolving use of data.

Incorporating big data into statistical production processes will require the development of infrastructure, expertise, and new methodologies and tools to integrate these non-traditional data sources into the CSO's existing statistical frameworks. This will involve revisiting data governance standards, privacy protocols, and ethical guidelines to ensure compliance with legal requirements such as GDPR, while also fostering public trust in the use of big data for statistical purposes. Ultimately, the successful incorporation of big data will allow the CSO to produce more timely, granular, and insightful outputs, enhancing the quality and relevance of its statistics for a data-driven world.

Incorporating big data into the CSO's production processes will necessitate substantial further investment in IT infrastructure to support the storage, processing, and management of vast volumes of data. This infrastructure must be robust, scalable, and secure to handle the diverse and dynamic nature of big data sources, including real-time data streams, large datasets from administrative records, and unstructured data from new technologies. Ensuring the successful integration of big data will also require specialised expertise in data analytics, data engineering, and advanced computing.

Data engineers will play a critical role in designing and maintaining systems that can effectively collect, clean, and structure big data, while data analysts will need advanced skills in machine learning, artificial intelligence, and statistical modelling to extract meaningful insights from these complex datasets. Additionally, the CSO must invest in training and upskilling staff to work with big data technologies, ensuring that the organisation remains at the forefront of innovation in statistical production.

Changes to the National Basket of Goods and Services 2023

The Consumer Price Index (CPI) measures the overall change in the prices of goods and services that people typically buy.

The CPI Basket will now contain **612** items

Spending habits and tastes change over time. The National Basket of Goods and Services is reviewed and updated regularly to represent Ireland's changing shopping habits.

Selection of some of the items added to the CPI Basket in 2023

- Disposable E-Cigarettes
- Smart Watches
- Gin
- Air Fryers
- Milk and Meat Substitutes

Selection of some of the items removed in 2023

- Landline Telephones
- Swiss Rolls
- Nightclub Admissions
- Digital Cameras

Source: Consumer Price Index January 2024, CSO statistical publication, 15 February 2024

Priority 7: Data Confidentiality

The NSB recognises data **confidentiality** as one of the most important values of the CSO and recommends that, as the need to move further towards alternative data sources for the production of official statistics increases, the CSO raises awareness of its values around confidentiality and the legal guarantee provided by the Statistics Act 1993. It is important that the CSO promotes **trust** in the organisation and clearly communicates the fact that the data it collects or accesses can only be used for statistical purposes and that the identity of an individual or business can never be divulged to another public sector organisation.

NSB Comment: The CSO has made good progress in reinforcing and communicating its confidentiality guarantees to the public, enhancing staff training, updating policies, and engaging with regulatory bodies. The development of a “Trust & Transparency” section on the CSO website and active involvement in legislative processes underscore the CSO’s commitment to upholding data confidentiality and maintaining public trust.

Regular and productive contact is maintained between the CSO, the ODPC and OGCI0 to ensure robust data governance and confidentiality process are upheld.

Summary of Progress

The CSO has continuously reinforced its commitment to data confidentiality, a core principle that underpins all its operations as an independent national statistics agency. In every stage of data collection and acquisition, the CSO guarantees that information is used solely for statistical purposes, as mandated by the Statistics Act 1993. This legal framework ensures that the identities of individuals, households, and businesses remain confidential, upholding the highest standards of data privacy. The CSO’s independence is key to maintaining public trust and ensuring impartiality in its work.

To further strengthen public trust, the CSO launched a “Trust & Transparency” section on its website (see priority 2 above) which serves as a central platform for communicating its values of confidentiality, transparency, and independence. In tandem with this, the CSO has made notable progress in enhancing data protection and governance training for its staff, along with training on Data Protection Impact Assessments (DPIAs), which ensures that key personnel are well-versed in both data protection laws and governance frameworks.

The CSO actively engages with regulatory bodies, such as the ODPC, on a case-by-case basis to address specific data protection concerns as they arise. This ongoing collaboration ensures that the CSO remains fully compliant with evolving data protection regulations and continues to strengthen its relationship with regulatory authorities. The CSO has also joined the Data Safeguarding and Transparency Committee established by the OGCI0 to align its efforts with national data sharing and governance priorities.

At the European level, the CSO has contributed to discussions around the amendment of Regulation 223/2009, which governs European statistics. The approval of the final text by the European Council in November 2024 underscores the CSO’s role in balancing the need for improved data access with the imperative of maintaining stringent confidentiality measures. This proactive engagement ensures that new legislative frameworks support both access to data for policy and research purposes and robust confidentiality protections.

Future Challenges

The CSO faces the ongoing challenge of balancing the need for increased data access with the imperative to maintain stringent confidentiality standards. As the CSO continues to participate in legislative processes, ensuring that new regulations support both data access and robust confidentiality measures will be crucial.

As data protection regulations evolve, the CSO must continuously adapt its policies and practices to remain compliant. This includes enhancing staff training on data protection and governance and ensuring effective collaboration with regulatory bodies like the ODPC and OGCI0.

Maintaining and strengthening public trust in how the CSO handles and uses data is an ongoing challenge. Initiatives like the “Trust & Transparency” section on the CSO website are steps in the right direction, and the CSO must continue to be proactive in communicating its commitment to confidentiality and transparency to the public.

Priority 8: General Data Protection Regulation (GDPR)

The NSB views the uncertainties around data protection and the varying interpretations applied by organisations to the implementation of the **General Data Protection Regulation (GDPR)** as posing a big challenge for official statistics in Ireland and recommends that:

- the CSO provides clear instruction and assurance to public bodies when they are providing information in order to allay data privacy concerns; and
- the CSO and Data Protection Commission should engage on issues impacting on the production of official statistics where appropriate and necessary, particularly in relation to the use of secondary data sources.

NSB Comment: The CSO has made good progress in communicating to PSBs its requirements and confidentiality responsibilities under the Statistics Act. The establishment of the Data Office, clear guidance provided to public bodies, and ongoing positive engagement with the ODPC are key components of the CSO's approach to managing data stewardship and GDPR compliance.

Summary of Progress

The CSO has made good progress in integrating GDPR requirements into its operations, reflecting a proactive culture of data protection. The establishment of the Data Office has been instrumental in creating a supportive environment for managing administrative data, which has improved staff awareness and adherence to data protection principles. This initiative has deepened the understanding of how the Statistics Act and GDPR intersect, empowering the CSO to effectively address data protection queries and ensure compliance across all its activities.

As part of its data stewardship role, the CSO has been actively working to provide clear guidance and assurance regarding GDPR compliance to Government Departments, ensuring they understand their obligations under the regulation. The recent data sharing legislation has further clarified these GDPR requirements to public sector bodies, facilitating more efficient data exchanges between public bodies while maintaining stringent privacy protections. Additionally, the CSO's participation in the CSMB Strengthening Policy Making Sponsors Group has been instrumental in embedding data needs and availability assessments early in the policy making process. This involvement underscores the CSO's commitment to integrating data stewardship principles into broader policy frameworks, ensuring that data governance is a foundational element of effective policy development.

The CSO's continued focus on clear communication about confidentiality and GDPR, as well as its proactive approach to engaging with the ODPC, supports the NSB's recommendations. These efforts are crucial for building public trust and ensuring that data collected for statistical purposes is used responsibly and securely.

To ensure that all staff members are well-versed in data confidentiality, GDPR and compliance requirements, the CSO has rolled out mandatory data breach and governance training. This training is essential for maintaining the integrity of the CSO's data handling processes and ensuring that all staff understand their responsibilities in protecting sensitive information.

Future Challenges

Continuing to address public concerns about data privacy and confidentiality is crucial, particularly in managing secondary data sources. This challenge involves ensuring that data handling practices comply with GDPR while maintaining public trust.

Embedding data needs and availability assessments in the policy making process is essential, requiring the CSO to play a proactive part in guiding government departments on data stewardship and GDPR compliance.

Ensuring that all CSO staff continue to be well-versed in data confidentiality, GDPR, and compliance requirements through mandatory training is vital for maintaining the integrity and security of the CSO's data handling processes.

Mid-term Review of

Quality Information for All – Numbers Matter

National Statistics Board Strategic Priorities for Official Statistics 2021 – 2026

Progress on Further Actions Building on the Existing Strengths of the Irish Statistical System



Progress on Further Actions Building on the Existing Strengths of the Irish Statistical System

Actions 1 to 3: Quality and Trust

A1. The NSB stresses the importance of **quality** in maintaining trust in official statistics and recommends that, in accordance with European Statistical Law¹⁸, the CSO extends its statistical quality role to incorporate all European statistics produced within Ireland, ensuring best practice and support for all producers of these official statistics.

A2. The NSB recommends that the CSO should implement a programme to advance the adoption of the **Irish Statistical System Code of Practice** (ISSCoP) across public sector data, with a particular focus on the largest data holdings and that PSBs producing official statistics should aspire to the ISSCoP with the aim of reaching a stage of compliance which would see their outputs branded with the ISSCoP quality assurance mark.

A3. The NSB supports the CSO's **data stewardship** role in the Irish data ecosystem, particularly in defining and supporting the implementation of data standards and recommends that a clear demarcation of the role of the CSO in providing insight for policy making, as distinct from policy commentary, is maintained.

NSB Comment on A1 – A3: The CSO is making significant progress in enhancing the quality of its statistical outputs and extending its quality and oversight role to include all European statistics produced within Ireland.

The CSO has made good progress in the roll-out of ISSCoP certification across public sector data. By continuously refining the certification process and providing targeted support to PSBs, the CSO aims to ensure that all certified organisations meet the highest standards of statistical quality and integrity.

The CSO's has made significant progress in advancing its data stewardship role. Through ongoing engagement with government departments, the CSMB, and international bodies, the CSO is solidifying its position at the heart of Ireland's data ecosystem to ensure that data-driven insights are effectively integrated into policy making, while maintaining the integrity and independence of the CSO's statistical outputs.

Key achievements - Action 1: Quality: CSO extending its statistical quality role to incorporate all European statistics

Public Trust

In 2024, the CSO launched a [Trust and Transparency Centre](#) on its website to provide clear information about data sources, how it is used, and the strong quality measures in place to guarantee confidentiality. This is already set out in the discussion of priority 2.

¹⁸ Regulation (EU) 2015/759 amending Regulation (EC) 223/2009. Official Journal of European Union, 19.5.2015.

European Statistics Code of Practice (ESCoP) Compliance

- Peer Review in February 2022 confirmed full compliance with ESCoP, with zero findings reported.

Quality Management Framework (QMF)

- Targeted support provided to ISS producers of official statistics to meet ESCoP and ISSCoP requirements, including assistance with process mapping, documentation, and metadata management and ISSCoP certification¹⁹.

Cyber Security

- Appointed a new Head of Cybersecurity complemented by the recruitment of additional roles within the security function.
- The CSO has made significant strides in its security assessment and framework initiatives having undertaken a comprehensive security assessment based on the NIST capability framework.
- The CSO achieved a notable success in 2022 by passing the European Security System (ESS) audit for Trade MicroData Exchange.
- Cybersecurity awareness within the CSO has been actively promoted through various initiatives.

Artificial Intelligence (AI)/Machine Learning (ML) in Official Statistics

- The One-Stop-Shop for AI and Machine Learning in Official Statistics (AIML4OS) was launched in April 2024. The CSO is responsible for the coordination and management of the 4-year ESSnet project involving 16 countries.
- The aim of the project is to produce a single point of entry for ESS staff to facilitate accessing and deploying AI/ ML solutions. It has 13 work packages, the first 6 of which are oriented towards supporting the operation of the project and coordinating the delivery of its outputs. The remaining seven WPs are use cases, each of which explores a specific tool or theme within AI/ML in the context of official statistics.
- The CSO are planning the Office's first AI Week in April 2025, to include a mixture of internal and external speakers and interactive events. The aim is to showcase the work of the office and to build capacity in this area.

Irish Statistical Work Programme

- Published in February 2024, [Irish Statistical Work Programme](#) showcases outputs from across the Irish Statistical System (ISS) and promotes engagement with stakeholders.

High Value Datasets (HVDs) Launch²⁰

- [Launched](#) in June 2024 by the Statistical System Co-ordination Unit and Digital Communications team as part of extending CSO's statistical quality role.

Key achievements - Action 2: Irish Statistical System Code of Practice (ISSCoP)

Guidance and Support

- CSO continues to provide guidance to as part of its Data stewardship role, focusing on those producing European statistics.

¹⁹ Details of PSBs that have been awarded ISSCoP certification are available [here](#)

²⁰ The themes of high-value datasets by listing six thematic data categories: 1) geospatial; 2) earth observation and environment; 3) meteorological; 4) statistics; 5) companies and company ownership; and 6) mobility.

ISSCoP Certification

- Nine PSBs have been awarded ISSCoP certification to date.²¹
- Seventeen other PSBs are actively working towards certification, with several nearing completion.²²
- CSO hosted a workshop in 2024 to gather feedback and present ideas for streamlining the ISSCoP certification process.
- CSO is developing a new model to extend quality assurance supports to ONAs.

Key achievements - Action 3: Data Stewardship: Progression of CSO's data stewardship role

There has been significant progress in Data Stewardship, which is already detailed in discussion of priority 1, 4, and 8 above.

21 The following have ISSCoP certification: Revenue Commissioners, Department of Finance, Environmental Protection Agency, Department of Enterprise, Trade and Employment, Department of Health, Department of Education, Higher Education Authority, Department of Social Protection and Health Research Board.

22 Road Safety Authority and Solas are expected to receive certification in early 2025.

Actions 4 to 6 - Users of Statistics

A4. The NSB views the practice of engaging with **users** to keep abreast of evolving needs as an important step in the production of official statistics and recommends that the CSO conducts a user and non-user survey at 3-year intervals in consultation with the NSB.

A5. The NSB views the **research community** as an important user of CSO data and recommends that:

- the CSO's approach should be to maximise access to data for researchers subject to the provisions of the Statistics Act 1993 and GDPR;
- the CSO explores ways to simplify procedures for researchers applying for access; and
- the CSO explores developing partnerships with researchers to broaden the range of insight provided to support the needs of researchers and policy makers.

A6. The production of consistent time series is important for users trying to understand the development of the economy and other key variables over time, and to enable good forecasting models to be built. Longitudinal data which follows the same individuals, households or firms over time, enables one to understand how behaviour adapts to changing policies and circumstances. The NSB recommends that the production of **time series and longitudinal** data should be high priorities in the ISS.

NSB Comment on A4 – A6: The CSO has improved its website usability and accessibility in response to feedback from a 2022 survey. Actions include a website redesign and the introduction of soundbites for broader dissemination of statistical findings.

The CSO has made good progress in its support of the evidence-based policy system and the research community through initiatives like Pathfinder projects, the VDR and the Researcher Online System for Applications (ROSA). These efforts aim to simplify data access, foster collaboration, and align data resources with evolving research needs. This will always be a work in progress within the overall requirement of compliance with legislative requirements and maintaining public trust in the system. Positive engagement and collaboration by users with the CSO is crucial in this regard.

The CSO continues to produce and improve the provision of consistent time series and longitudinal data, crucial for understanding economic and social trends over time. Recent projects leveraging Revenue's PAYE Modernisation data exemplify the CSO's focus on providing valuable insights into Ireland's labour market and population dynamics.

Key achievements - Action 4: User Survey

Survey and Feedback

- In 2022, the CSO conducted a survey of users and non-users to assess perceptions, needs, and experiences with CSO services.
- Survey results indicated a need for improved website usability and a stronger association of the CSO brand with values like trust, relevance, and timeliness. This is now in place.

Action Plan and Focus Groups

- Formation of focus groups in 2023 to explore user experiences with the PxStat platform and the CSO website.

Website Redesign

- The website was redesigned to be more intuitive and accessible to a wider audience.

Enhanced Dissemination

- CSO developed soundbites summarising key statistical findings.
- These soundbites are shared with radio stations and posted on the CSO’s YouTube channel to increase engagement and accessibility.

CSO Groups

- The CSO actively engages and collaborates with numerous organisations to fulfil its role. A list of the formal groups that the CSO partners with is [here](#).

Key achievements - Action 5: Research Community

Good progress has been made between CSO and the research community in terms of research collaboration and the provision of research microdata access.

Support for Evidence-Based Policy

- Ongoing collaboration between CSO and Departments on Pathfinder projects which utilise linked administrative data to develop novel evidence for the development and review of policies.

Virtual Data Room (VDR)

- Ongoing consultations, process mapping, and governance framework establishment for the VDR.
- VDR provides a secure and efficient platform for researchers to access and analyse data.
- Four VDR pilots were opened in 2024, supported by funding secured by the OGCI0.
- These data rooms will facilitate better integration and use of administrative data across government organisations whose research aims to address specific policy questions.

ROSA System

- Launched in 2022, to streamline applications for Research Organisation Registration, Researcher Registration, and RMF Project Applications.
- Successful rollout with internal and external testing, supported by four webinars attended by 140 members of the research community.

Table 1: ROSA Metrics Report

Year	Research Organisations accessing RMFs	RMF projects approved	Distinct Researchers approved	Total Researchers
2023	25	116	168	338
2024*	32	157	221	511

*up to 30th September 2024

Research Activity and Collaboration

- In 2024, up to the end of Q3, researchers from 32 research organisations have accessed RMFs through ROSA, under Section 20(c) of the Statistics Act, 1993, with 157 RMF projects approved, and 221 unique researchers engaged. The feedback is that ROSA is working well.
- There are currently 38 RMF datasets available for research to access. An RMF containing a 10% sample of the Revenue PMOD file has recently been made available and a new Census Longitudinal RMF dataset is due to be added in late 2024.

- There is active engagement between CSO and researchers and academics, for example:
 - CSO co-supervising a PhD on Marine Ecosystems with the Marine Institute and University of Galway.
 - Recruiting a postdoctoral researcher in recreational ecosystem services and open to recruiting others.
 - CSO Research Programme being developed including plans for an annual research conference which will provide an opportunity for researchers and CSO staff to come together and share their work.

Key achievements - Action 6: Time Series and Longitudinal Data

Consistency and Comparability

- CSO's commitment to producing consistent and comparable statistics over time to help users track changes in key variables.
- Provision of comprehensive documentation when there is a break in a time series, as per the CSO's revision policy.

Leveraging PMOD Data

- Use of Revenue's PAYE Modernisation (PMOD) data to produce longitudinal outputs, offering insights into Ireland's labour market.
- Notable publications include:
 - Earnings Analysis using Administrative Data 2022
 - Monthly Estimates of Payroll Employees using Administrative Data Sources
 - Irish Population Estimates from Administrative Data Sources
 - Econometric analysis of the public/private sector pay differential.
 - Quarterly job churn statistics.

Actions 7 to 10 - Enhancing CSO Capacity

A7. The NSB stresses the importance of continuing to build the **capacity of staff**, including seconded staff working in the ISS and recommends that:

- the CSO incorporates skills such as data engineering and data science into its recruitment model and statistical training framework where appropriate; and
- the public sector considers increasing its level of investment in the recruitment of people with data analytics and technical skills in order to compete with private sector companies and encourage graduates to consider a career in the public sector.

A8. The NSB recognises the importance of the **seconded statisticians** working in government organisations and recommends that:

- the Memorandum of Understanding (MoU), clarifying the role and responsibilities of the seconded statistical staff, the host organisation and the CSO, is implemented in full, particularly in relation to the progression of the NDI and the application of common classifications as well as the provision of methodological and quality management assistance by the CSO; and
- a more collaborative approach is taken between the Irish Government Statistical Service (IGSS) and Irish Government Economic and Evaluation Service (IGEES) staff working in government organisations which sees both groups working in a cohesive manner towards common goals supporting evidence-informed policy making.

A9. In its statutory role of advising on **resources**, the NSB recommends that sufficient resources be made available to the CSO to pursue data collection (whether from administrative data sources, surveys, censuses or a combination) to meet priority national needs. This should include collaboration with agencies such as the Northern Ireland Statistics & Research Agency (NISRA) to support a shared-island approach to official statistics, where appropriate.

A10. The NSB supports a multi-modal method of census data collection in the future, including internet options, to be considered in planning Census 2026 and beyond. In that context, it recommends that the CSO review its **cloud strategy** to consider the role of cloud services in the organisation in the future.

NSB Comment A7 – A10: The CSO has been successful in securing additional resources to expand its operations to meet demands. It is actively working to address the challenges related to statisticians/ data analysts and field force recruitment, while building a highly skilled workforce capable of meeting the evolving needs of data-driven decision-making in the public sector. The office remains committed to implementing its Employer of Choice strategy and enhancing its learning and development programs to support ongoing capacity building.

The CSO has made significant progress in enhancing the role of seconded statisticians within the public sector, ensuring that their expertise is fully leveraged to support evidence-informed policy making, and fostering a culture of collaboration between IGSS and IGEES to better serve the needs of government and the public. The NSB considers that this group of secondees are key enablers of the CSO's vision especially in relation to its data stewardship role.

CSO has been successful in securing funding to develop this stewardship role, expand its production of official and frontier statistics to fulfil both national and European reporting purposes.

The CSO has started the process to leverage cloud technology to enhance its operational efficiency and data management capabilities. A steady and risk averse approach has been taken.

Key achievements - Action 7: Building Capacity of Staff

Recruitment and Retention

- CSO is committed to addressing recruitment, retention, and capacity building challenges, especially for Statistician and Data Analyst roles.
- Targeted recruitment strategies implemented by CSO, including continuous recruitment models and new marketing campaigns.
- Development of “Employer of Choice” strategy.
- Revamping of the careers page and development of employee value propositions for key roles. Incorporation of data engineering and data science into recruitment models.

Capacity Building Initiatives

- The CSO launched its People Strategy, “Le Chéile” in 2020. This strategy, which will be updated in 2025, aims to foster a collaborative and inclusive workplace, aligning with the organisation’s long-term goals.
- CSO launch of the Learning and Resource Hub in 2023 for access to resources, peer support, formal training, and leadership development.
- Statistical Training Unit developed a Statistical Skills Awareness Programme to make training more accessible to staff.
- The CSO has achieved the Silver Accreditation from the Irish Centre for Diversity, recognising its efforts to embed equality, diversity, and inclusion into its daily operations.

Partnerships, Initiatives and Advocacy

- Partnerships with universities (e.g., UCD, UCC) and Taighde Éireann’s Centre for Research Training (CRT) in Foundations of Data Science to attract and develop technical talent.
- Involvement in initiatives like AIML4OS (AI and Machine Learning for Official Statistics) and exploration of a Data Analytics Apprenticeship programme with the OGCIO
- As part of its data stewardship role CSO advocates for increased public sector investment in advanced data skills to compete with the private sector.
- Development of partnerships with researchers and exploration of opportunities to collaborate under Ireland’s Research and Innovation Strategy, Impact 2030.

Key achievements - Action 8: Irish Government Statistical Service – Seconded Statisticians

Integration and Collaboration

- Significant progress in enhancing the integration and effectiveness of seconded statisticians within government organisations.
- Implementation of a Memorandum of Understanding (MoU) between CSO and host organisations as part of the Data Stewardship programme.
- 35 statisticians/senior statisticians on secondment across 18 government departments and agencies.

Collaboration with Irish Government Economic and Evaluation Services (IGEES)

- Proactive in fostering collaboration between Irish Government Statistical System (IGSS) and IGEES, including Formal Statistical Liaison Group (FSLG) meetings along with collaboration on pathfinder projects.
- Joint seminar on Disability between IGSS and IGEES in 2024 as an example of unified efforts in evidence-based policy making.

Key achievements - Action 9: Resources for National Statistical Needs

Resource Allocation

- CSO secured funding for approximately 40 new posts to support data stewardship and national statistical needs. However, there are difficulties in recruitment and retention.
- Increased budget allocation for 2024, supporting key projects like Census of Population 2027 and Growing Up in Ireland (GUI).

Strategic Recruitment

- Successful recruitment campaigns for GIS Specialists and Field Survey Coordinators.
- Expansion of Communications and Dissemination team with new roles in digital communications, press relations, and technical support.

Collaboration with the Northern Ireland Statistics and Research Agency (NISRA)

- Ongoing collaboration with NISRA, focusing on a shared-island approach to official statistics.
- Joint publications on “Stories from Census 1911: Wealth and Poverty” and Census 2022 results are planned for 2025.

Key achievements - Action 10: Cloud Strategy

Cloud Strategy Implementation

- Appointment of a new Cloud Services Manager in 2022 to refine the Cloud Strategy.
- Significant progress in cloud strategy, including a tendering process for a new Public Cloud Platform.
- Active involvement in international efforts, such as leading a UNECE project on cloud computing for official statistics.
- Several cloud-based projects underway, including Census 2027 CRM system, Census Survey Collection Portal and Census processing.

Mid-term Review of

Quality Information for All – Numbers Matter

National Statistics Board Strategic Priorities for Official Statistics 2021 – 2026

Appendices

—

Appendices

Appendix 1:

New Publications 2021 - 2024

Since 2021, the CSO has published the following new outputs, which have been grouped according to the themes of the NSB's strategic priorities.

Name	Reference Period for Publication
NSB Priority 1: Theme 1 - Environment and Climate	
Ireland's UN SDGs 2019 – Report on Indicators for Goal 6 Clean Water and Sanitation	2019
Ireland's UN SDGs 2019 – Report on Indicators for Goal 7 Affordable and Clean Energy	2019
Domestic Wastewater Treatment Systems	2020
Ecosystem Accounts - Peatlands and Heathlands	2018
Plant Phenology	2020
Environment Goods and Services Sector	2018
Domestic Building Energy Ratings from a Social Perspective	2016
Household Environmental Behaviours - Environmental Concerns	Quarter 3 2021
Household Environmental Behaviours - Visits to Nature Areas	Quarter 3 2021
Household Environmental Behaviours - Waste Recycling	Quarter 3 2021
Household Environmental Behaviours - Energy Use	Quarter 3 2021
Ecosystem Accounts - Grasslands and Croplands	2018
Metered Electricity Consumption	2020
Data Centres Metered Electricity Consumption	2020
Ireland's UN SDGs - Goal 11 Sustainable Cities and Communities	2021
Plant Protection Products	2020
Afforestation Area	2021
Ireland's UN SDGs - Goal 12 Responsible Consumption and Production	2021
Forestry Scheme Payments	2021
Sustainable Mobility and Transport	2021
Passenger Mobility and Road Safety	2021
Ireland's UN SDGs - Goal 13 Climate Action	2021
Household Electricity Consumption by Building Energy Ratings	2021
Ireland's UN SDGs - Goal 14 Life Below Water	2021

Ecosystem Accounts – Rivers and Lakes by Extent	2018
Ireland's UN SDGs - Goal 15 Life on Land	2022
Sustainability of Personal ICT Devices	2022
The Years in Numbers Part One: Society & Environment	2022
Economic Intensity of Greenhouse Gas Emissions	2021
Networked Gas Daily Consumption	Dec-22
Decoupling Emissions from Economic Activity	2020 & 2022
Ecosystem Condition Accounts - Rivers and Lakes	2021
Ecosystem Extent Accounts	2000-2018
Energy: A Value Chain Analysis 2020	2020
Regional EU Sustainable Development Indicators for Ireland	2022
Networked Gas Daily Supply and Demand	Sep 2023
Metered Electricity Generation	Oct 2023
Ecosystem Accounts – Forests and Woodlands	2012-2022
Environment, Social and Governance Reporting: Data for the Enterprise Economy	2024

NSB Priority 1: Theme 2 - Economy and Business

Food and Agriculture: A Value Chain Analysis	2018
Business Signs of Life Series One: State Support,	March 2020 to January 2021
Business Impact of COVID-19 on SMEs	2020
Ireland's UN SDGs - Goal 8 Decent Work and Economic Growth 2021	2021
Intention to Travel Survey	Apr-21
Business Impact of Brexit on SMEs	2020
Characteristics of Residential Property Purchasers	2010-2019
Ireland's UN SDGs - Goal 9 Industry Innovation and Infrastructure	2021
Forest Wood Removals	2019
Statistical Yearbook of Ireland - Part 2 Business and Economy	2021
Statistical Yearbook of Ireland - Part 3 Travel, Agriculture, Environment and COVID-19	2021
Wood Input Purchases by Industry	2019
The Rental Sector in Ireland	2021
Economic Life and COVID-19 in Ireland	2020-2021
Retail Sales Generated Online	Dec-21
Wood and Paper Exports and Imports	2020
Information and Communications Technology: A Value Chain Analysis	2019
Estimated Inflation by Household Characteristics	Mar-22
Travel Behaviour Trends	2021
Characteristics of Residential Property Purchasers - Prices, Ages and Incomes at Local Electoral Areas (LEA)	2019
Impact of COVID-19 on Travel Behaviour	2021

Household Expenditure on Digital Services	2020
Port Visits Using Real-Time Shipping Data	Q1 2021 - Q1 2022
Ireland's Tax Statistics	2021
Digital Transactions in the Irish Economy	2020
Trends in Metered Electricity and Gas Bills	2021
Smart Technology	2022
Fuel Oil Movements	2021
The Years in Numbers Part Two: Business & Economy	2022
Preliminary GDP Estimates	Q4 2022
Traffic Count Analysis Using TII Data	2019-2022
Ireland's Retail Economy	2022
Characteristics of Residential Property Purchasers - Estimates of Mortgage and Non-Mortgage Transactions	2021
Corporate Profits	Q1 2017 - Q4 2022
Irish Tourism Sector (Tourism Satellite Account)	2019
Inbound Tourism	Jun-23
Ireland and the EU at 50	1973-2023

NSB Priority 1: Theme 2 - Labour market, Quality of employment, and the Future of work

COVID-19 Income Supports - An Analysis of Recipients	March 2020 to May 2021
PULSE Survey Our Lives Online: Remote Work	Nov-21
Impact of COVID-19 Income Supports on Employees	2021
Personal and Work-Life Balance - Main Results	2021
Personal and Work Life Balance - Job and Life Satisfaction and barriers to work	2021
Personal and Work-Life Balance - Remote Working	2021
Distance to Remote Work Hubs and Childcare Services	Feb-22
Monthly Estimates of Payroll Employees using Administrative Data	Apr-22
Impact of COVID-19 on Business and the Labour Market	Q2 2022
The Earnings Background of Probationers	2014-2020
Diversity in An Garda Síochána	2023
Structure of Earnings Survey	2022
Job Skills	2022
Census of Population Profile 7 - Employment, Occupations and Commuting	2022
Distribution of Earnings by Gender and County	2022
Distribution of Earnings by Gender and County	2022
Higher Education Outcomes - Non-Progression	2021
Labour Market Churn	Q1 2024
Earnings among Parents in Ireland	2016 and 2022

NSB Priority 1: Theme 3 – Well-being and Social Cohesion

Early Learning Care Graduate Outcomes	2013-2017
COVID-19 Insight: Mobility During the Pandemic Week Ending 31 December 2020	2020
Survey on Income and Living Conditions (SILC) Report on Household Amenities and Access to Services	2004-2019
Impact of COVID-19 on the Debt Sustainability of Irish Households	Q3 2020
Social Impact of COVID-19 Survey February 2021: Well-being	Q3 2020
Social Impact of COVID-19 Survey: Impact of School Closures	Feb-21
COVID-19: One Year On	2020/2021
Social Impact of COVID-19 Survey February 2021: Vaccination Attitudes and Holiday Expectations	Feb-21
Migration Estimates for Ireland from Administrative Data Sources	2014-2020
Measuring Mortality Using Public Data Sources	2019-2020
Pulse Survey - Life at Home Snapshot of Results	May-June 2021
Pulse Survey - Life at Home: Renters, Lone Parents and Adults Living Alone or with a Parent	2021
Pulse Survey - Life at Home: Couples	2021
Review of the Quality of Recorded Crime Statistics	2020
A Profile of COVID-19 in Ireland - Using Census 2016 Household Data to Analyse COVID-19 Waves,	March 2020 - May 2021
Statistical Yearbook of Ireland - Part 1 People and Society	2021
Pandemic Unemployment Payment Recipients by Local Electoral Area	March 2020 to October 2021
Ireland's UN SDGs - Goal 10 Reduced Inequalities	2021
Income, Employment and Welfare Analysis of People with a Disability	2019
Household Internet Security and Information Integrity	2021
Household Digital Consumer Behaviour	2021
Poverty Insights - Income Reference Periods	2018-2020
Social Protection Expenditure	2020
PULSE Survey Our Lives Online: Remote Learning	Nov-21
Household Survey Response Burden Index	Q2 2021
COVID-19 Two Years On	2020-2022
Measuring Mortality Using Public Data Sources	2019-2021
Trust Survey	2021
Arrivals from Ukraine in Ireland Series 1	week ending 22/05/2021
Household Saving	Q1 2022
Census of Population - Preliminary Results	2022
Trust Survey 2021: International Comparisons	2021
Fertiliser Sales	2021
Pulse Survey - Our Lives Outdoors: Spending Time Outdoors	April-May 2022

SILC Module on Child Deprivation	2021
Pulse Survey - Our Lives Outdoors: Protection of the Environment	April-May 2022
Non-Domestic Electricity Consumption by Building Energy Ratings	2021
Pulse Survey - Our Lives, Our Money	Oct - Nov 2022
Intergenerational Transfer of Wealth	2020
Vacant Dwelling Indicators based on Metered Electricity Consumption	2021
Relationship Between Victims and Reported Suspects for Sexual and Assault Offences	Q3 2021-Q3 2022
Ireland's UN SDGs - Goal 16 Peace, Justice and Strong Institutions	2022
Household Distribution Accounts	2010-2015
Stories from Census 1911: Wealth and Poverty	1911
Sexual Violence Survey	2022
Poverty Indicators by Health Status - Survey on Income and Living Conditions (SILC)	2022
Ireland's UN SDGs - Goal 17 Partnerships for the Goals	2022
Sexual Violence Survey – Adult Experiences	2022
Census of Population Profile 1 - Population Distribution and Movements	2022
Sexual Violence Survey – Childhood Experiences	2022
Census of Population Profile 2 - Housing in Ireland	2022
Sexual Violence Survey – Disclosure of Experiences	2022
Census of Population Profile 3 - Households, Families and Childcare	2022
Census of Population Profile 4 - Disability, Health and Carers	2022
Sexual Violence Survey - Sexual Harassment	2022
Sexual Violence Survey - Attitudes to Sexual Violence 2022	2022
Social Housing in Ireland - Analysis of Housing Assistance Payment (HAP) Scheme	2022
Census of Population Profile 5 - Diversity, Migration, Ethnicity, Irish Travellers & Religion	2022
Circumstances of People Linked to Justice Sanctions	2015-2021
Higher Education Outcomes - Health Graduates 2020 Destination Outcomes	2020
Household Mortgage Affordability Analysis	2020-2023
Census 2022 Profile 8 - The Irish Language and Education	2022
Census of Population Spotlight Series: Volunteering in Ireland	2022
Stories from Census 1911: Literacy	1911
Cost of a Full Irish Breakfast	2024
Census of Population 2022 Profile 6 - Homelessness	2022
Deaths and Cause of Death at Local Electoral Areas (LEA)	2021
Births and Deaths at Local Electoral Areas 2021	2021
Rented from Private Landlords	2022
Education and Other Outcomes for SUSI Support Recipients	2012-2022

NSB Priority 1: Theme 3 – Health and Social Care

COVID-19 Vaccination Statistics Series 1	Dec 2020 to Sept 2021
COVID-19 Insight Bulletins: ICU and Hospital Admissions Series 1	July and November 2021
HSE Funded Primary Care Treatments and Claims	2017-2021
Deaths from COVID-19 by Location and Age groups	March 2020 - February 2022
Accompanying Conditions of Deaths from COVID-19	March 2020 - February 2022

Appendix 2:

National Statistics Board members

Ms Anne Vaughan (Chairperson)

Anne Vaughan is chairperson of the National Statistics Board since 2019. She was a member of the Commission on Taxation and Welfare and the Commission on Pensions. She retired from the Department of Social Protection in 2018 where she was Deputy Secretary for almost eight years and had responsibility for policy development and service delivery in relation to working age payments. During her civil service career of 38 years, she also worked in the Department of Finance and in the Department of the Taoiseach. Anne is a non-executive director of a number of charitable bodies. She is a member of the Audit Committee of the C&AG; Taighde Éireann - Research Ireland board and the ESRI Council. Anne is a graduate of UCD, TCD and the UCD Smurfit Business School. She holds a M.Sc. in Public Sector Analysis.

Ms. Eithne Fitzgerald

Eithne Fitzgerald is an economist and social policy analyst who has specialised in social policy and disability issues. Since 2018, she has worked as a Disability Policy Adviser to the Department of Health and subsequently to the Department of Children, Equality, Disability, Integration and Youth. Formerly Head of Policy and Research with the National Disability Authority to 2016, she previously lectured in Social Policy in both UCD and TCD. Eithne is a former Minister of State who has served in economic policy roles. Her research publications include work on employment, housing, social welfare, forecasting, statistical portraits and indicators. She has been a member of a number of expert policy groups including the Commission on Social Welfare, and the Make Work Pay group, and served on the board of the National Council for Special Education.

Mr. Jim Scheer

Jim Scheer is head of Data and Insights at the Sustainable Energy Authority of Ireland. Jim has over 22 years' experience working in the field of policy analysis and development related to environmental issues. He joined the Sustainable Energy Authority of Ireland (SEAI) in 2007 and is currently Head of Department (Data and Insights) with responsibility for energy statistics, energy modelling, behavioural economics, and programme evaluation. Prior to working with SEAI, Jim worked with the Government of South Australia in the fields of natural resource management and open space planning. He holds a Professional Diploma in Advanced Management Performance (Smurfit Business School), MSc. Economic Policy Studies (Trinity College Dublin), BSc. Environmental Science (Flinders University, South Australia). Jim is passionate about the potential for data and insights to support evidence-based decision making and accelerate climate action.

Dr. Martina Lawless

Dr, Martina Lawless is a Research Professor at the Economic and Social Research Institute (ESRI). Before joining the ESRI, she received her doctorate from Trinity College Dublin and worked as a research economist at the Central Bank of Ireland. Her research has focused primarily on firm-level dynamics and decision making, covering a range of topics such as access to finance for small and medium firms, effects of taxation and participation in exporting. More recently, she has investigated the potential effects of Brexit and COVID-19 on firms in Ireland. Her work has been published in a number of leading international academic and policy

journals. From 2017 to 2020, she was a member of the Irish Fiscal Advisory Council and spent 2023-24 on secondment to the Economics Division of the Department of Finance..

Dr. Clíona Saidléar

Dr. Clíona Saidléar is the Executive Director of Rape Crisis Network Ireland (RCNI), national policy specialists on sexual violence. She is social sciences graduate with an undergraduate from NUIG and an MScEcon and PhD from the Aberystwyth School of International Politics.

She currently chairs the Children Living with Domestic and Sexual Violence NGO coalition and is a member of the Health Research Board. She was a Ministerial appointment to the Higher Education Institutions' sexual harassment framework technical group and now sits on the HEA advisory body. She has represented Ireland at the UNCSW and was an adviser for a UNWomen project in the Western Balkans and Turkey on the Istanbul Convention as well as working with European NGO partners on developing sexual violence specialisation and trans-European indicators of same. She has chaired the National Strategy on Domestic, Sexual and Gender Based Violence Awareness Raising subcommittee, the Charities' Data Protection working group and the specialist group on retrospective reporting. She worked with the CSO on the Sexual Violence Survey.

Mr. John Shaw

John Shaw is Assistant Secretary General in the Department of the Taoiseach (Prime Minister) with responsibility for the Economic Division. From 2012 to September 2016, he was Assistant Secretary General responsible for Social Policy, Public Service Reform, and Corporate Affairs in the Department. He previously worked in a range of areas across the Department of the Taoiseach, as well as in the Department of Foreign Affairs. He has a Bachelor of Business Studies from Trinity College Dublin and a Diploma in Legal Studies from Dublin Institute of Technology.

Dr. Emma Cunningham

Dr. Emma Cunningham is the Assistant Secretary General with responsibility for International and EU Division in the Department of Finance. She is Ireland's representative on the EU's Economic and Financial Committee and on the Eurogroup Working Group. She was previously Assistant Secretary General with responsibility for Tax Policy Division and prior to that was Assistant Secretary General in the Banking Policy Division. Emma holds a PhD (History), a M. Econ.SC (Policy Analysis) and a BA (History & Economics) and has completed postgraduate training with the Institute of Banking.

Ms. Jennifer Banim (an ex-officio member)

Jennifer Banim was appointed to the role of Director General of the Central Statistics Office (CSO) on 31st May 2024. Jennifer has been a member of the CSO's Management Board since 2013 and before her appointment as Director General, was the Assistant Director General at the CSO responsible for Economic Statistics. Having joined the CSO as a Statistician in October 1991, Jennifer has worked in a number of areas including Balance of Payments and Financial Statistics, Statistical Methodology, and Technology. Jennifer is also currently co-chair of the Executive Board of the United Nations Economic Commission for Europe (UNECE) High Level Group on the Modernisation of Statistics. Jennifer studied at Dublin City University, graduating in 1989 with a BSc in Applied Mathematical Sciences and recently completed a Diploma in Strategy Development and Innovation at University College Dublin's Michael Smurfit Graduate Business School.

Appendix 3:

NSB Discussion Topics Summary

Since the publication of the National Statistics Board’s strategic priorities in 2021 the Board has held discussions with key academics and policy makers on relevant topics to assess progress being made and identify future challenges. Summaries of the NSB Discussion Sessions are presented below.

Health Data

On 9th September 2021, Muiris O’Connor (Assistant Secretary, Department of Health) gave a presentation on *Health Data in Ireland* which included the lessons emerging from the Covid-19 pandemic; the development of the Health Data Strategy; and how the NSB can assist.

Muiris welcomed the engagement by the NSB in developing their Statement of Strategy and particularly for highlighting the significant gaps in the data infrastructure and the importance of aligning the health geographical units so that they can utilize the wider national statistical infrastructure for population-based planning.

Among the key lessons which emerged from the pandemic response were the importance of unique identifiers in linking information and in authenticating the identity of citizens engaging with the health service; and the value of the public sector collaboration and innovation that emerged, including the support of the CSO under the Statistics Act 1993, and the development of the COVID-19 Data Hub.

The emphasis the NSB placed on the importance of finalising the Health Data Strategy was welcomed and the need for a basis for health data in primary legislation, which would be based on the GDPR concept of intentionality, was outlined.

The NSB, in its role in guiding the strategic direction of the CSO, was asked to assist with the following challenges by keeping a focus on the development of specific actions in the NSB strategy relating to health data:

- Defining Official Statistics for HSE outputs
- Developing the role of the Health Division within the CSO
- Building upon structures developed for COVID-19 data

Environment Data

On 2nd December 2021, Gerry Clabby from the Department of the Environment, Climate and Communications (DECC) presented the key features of the Climate Action Plan 2021 (CAP 2021) which includes targets such as a 51% reduction in greenhouse gas emissions by 2030 and net-zero emissions by 2050. The overall measures that need to be implemented by each sector to achieve these targets have been identified in the CAP 2021.

The need for data in evaluating the progress of the actions to be implemented by each sector as they work towards the emission outcomes which must be achieved was outlined.

Gerry Brady (Senior Statistician, CSO) gave a summary of the data already available from CSO in December 2021 and again presented in December 2022 to the Board on new developments and outputs from the Environment & Climate Divisions and the uses of environmental-related administrative data.

Outcomes, questions and actions from the discussion:

The Board agreed that a lot of data and research already exists in this area and that it is a complex and highly contested space. They highlighted the importance of identifying and understanding:

- the data which already exists;
- the specific data/statistics required to measure the progress being made towards the targets;
- the data gaps;
- the contribution CSO could make to bridge those gaps; and
- the resources required by CSO / other public bodies to fill data gaps.

The Board recognised the need:

- to support the whole data life cycle across the public service – collection, processing, analysis - to ensure that schemes collect information for data analytics, statistical purposes as well as administrative purposes.
- for CSO to utilise its data linkage capability to produce data others are unable to.
- to have the data needs clarified from DECC based on CAP2021.
- for appropriately detailed outputs that meet the needs of the policy system.
- to resource CSO adequately to fulfil these data needs.
- to have a coordinated approach between the organisations involved in this space from a data perspective including CSO, DECC, EPA, SEAI and Climate Action Unit in DT.
- to have a seminar, to bringing some of the key players in this space together, to clearly establish the data landscape, needs and gaps.

Housing Data

On April 27th, 2022, the Board received presentations on Housing Statistics from Siobhán Nic Thighearnáin and Martin Tully (Department of Housing, Local Government and Heritage); Dr. Rachel Slaymaker (ESRI); and Kieran Culhane (CSO).

The Department of Housing, Local Government and Heritage's Data Strategy includes 'joined up data' as a key theme which promotes the use of identifiers across the Department to facilitate data linking both within the Department and with other PSBs. The Department faces challenges managing data e.g., data governance and standardisation. The Department's current outputs include a suite of data to inform policy which they are working to make more timely; and they intend to offer a data and insight service in the future.

Challenges when using housing data were highlighted, such as issues with definitions e.g., housing tenure type and rental costs; discontinued series e.g., DHLGH Building Cost Index; other data gaps e.g., lack of data on land costs and land prices; vacancy data between censuses; data linking and improved access to link microdata access for researchers.

CSO highlighted the collaborations on housing statistics ongoing throughout the Irish Statistical System such as the CSO Housing Statistical Working Group and the CSO-Revenue Liaison Group. The CSO also indicated that resources are an issue along with discontinued and fragmented data sources.

Outcomes, questions and actions from the discussion

The Board sought clarification on issues including:

- data availability on the lag between planning permissions and completions.
- data on construction workforce and a breakdown of the skillset e.g., retrofitting.
- potential of data sources such as Revenue's Local Property Tax file to address gaps in vacancy data and using stamp duty returns to determine land prices.

The Board noted:

- the importance of designing data systems in Government Departments with data analytics in mind.
- data linking provides the scope for producing the much-needed insight in this area.
- CSO is well positioned to assist Departments with data linking and analysis to help deliver on the insight required to fill the data gaps in this area.
- CSO require sufficient funding to allocate requisite staff to this area, to undertake data linkage, and facilitate analysis across the system.
- there is a need for the system to react quickly to emerging data demands to meet the data needs of policy makers.

Data and information on disability and related areas

On March 29th, 2023, the Board received presentations from Cormac Halpin, Fiona O’Riordan and Kieran Culhane from Central Statistics Office; Prof Mary Mc Carron from Intellectual Disability Supplement to the Irish Longitudinal Study on Ageing; and Dr Rosalyn Tamming from the National Disability Authority on the disability data and statistics produced, disability strategies, data gaps and obligations. The presentations were followed by a discussion between the Board, presenters, and colleagues including Nicola Tickner and Gráinne Collins (DCEDIY); Dr Chloe Walsh and Dr David Hallinan (NDA); Dr Eimear McGlinchey, Dr Caitriona Ryan and Ms Margaret Haigh (IDS-TILDA). The discussion highlighted that data and statistics produced should inform society and policy and should reflect the lived experience of people.

Outcomes, questions and actions from the discussion

Data gaps exist between what is collected and what is needed for policy purposes on the topic of disability. Coherence and comparability issues are present over time and space.

- Are the multiple definitions of disability working for policy makers?
- What forum are definitions and data related challenges being discussed, progressed, and prioritised?
- Any prospect on a disability module being include on the LFS or other household survey?
- There is a need for disability statistics at a regional level to support budget allocation for the regional health authorities.
- There is a need for disability statistics for those persons classified by Not in Employment, Education or Training (NEET).
- Reports on disability statistics should be easy to read, interpret and be accessible to all users.
- Longitudinal analysis, that follow people with disabilities over time, would be beneficial.
- Potential collaboration between CSO and the Health Research Board to use National Ability Supports System (NASS) data to produce disability statistics and fill data gaps.
- Potential for CSO to link IDS-TILDA data to other CSO data holdings to possibly fill some data gaps.
- CSO and ISS should aim to get ahead of the curve and measure what will be required in 5 or 10 years’ time to reflect the lived experience of person with disabilities. Key stakeholders should collaborate closely to help achieve this outcome.

Labour Market Statistics

On May 11th 2023, the Board received presentations from Tara Davis (Central Statistics Office), Joan McNaboe and Nora Condon (SOLAS), and Seamus McGuinness (ESRI) on the current and future data needs for labour market statistics. This was followed by a discussion between the Board, presenters, and policy colleagues from DETE (Marcus Breathnach and Dermot Coates), DSP (Dermot Corcoran and Hugh Cronin) and DCEDIY (Nicola Tickner). The session highlighted the strides that have been made in labour market statistics in the last number of years and

illustrated the data gaps and need for further developments in particular areas. In what follows, items where progress is to be followed up on by the NSB are presented.

Outcomes, questions and actions from the discussion

Collaboration between CSO and Revenue on the provision of greater insight into the self-employment in Ireland.

- Greater collaboration between North and South to produce All Island statistics.
- Opportunity for the establishment of a Labour Market liaison group to continue the wide-ranging discussion on labour market data needs. An annual event that includes a larger number of stakeholders and users may be beneficial.
- Labour market employment statistics relating to persons with a disability could be expanded.
- Appetite for real time monthly earnings and job churn data to complement monthly administrative employment.
- Progress work on an administrative source of employee hours which is required to a number of policy requirements. The earnings data is currently available via Revenue's PMOD system. Employee hours from enterprises relating to the reported PMOD earnings is considered the most effective solution to fill the data gap.
- Better utilise available scraped data from online job sites and address the challenges of accessing (cost or skills gaps) the data and using the data (de-duplication, coding, coverage).
- Opportunity to measure Skills by searching for key words such as 'energy', 'renewable energy', 'sustainability' etc in the job description.
- Need to be able to collect and report on emerging and new technologies and sectors such as Artificial Interagency, Green Skills, Health and Social-care skills.
- Collaborate with SOLAS to define Green Skills and Green Jobs.

Macro-Economic Statistics

On 22nd February 2024, the Board received the following presentations:

- Current & Future Challenges of Measuring the Irish Economy from Chris Sibley, ADG for International Accounts, Trade & Government Financial Statistics, and Jennifer Banim, ADG for National Accounts and Prices, Central Statistics Office
- Use and misuse of Irish GDP from Patrick Honohan, Trinity College Dublin
- Discussion of Ireland's National Accounts from Seamus Coffey, University College Cork

The presentations and subsequent discussions highlighted the strides that have been made in in recent years in providing more timely estimates of the macro economy and more meaningful measures of the domestic economy.

It was noted that new standards currently being developed will likely focus on net measures of the economy, which will reduce the distorting effects of multinational activities. Challenges exist in valuing unpaid work in the home, natural resources, environmental services and capital formation (amongst others). It was emphasised that GDP is not a good measure of welfare.

Consideration must be given to how macroeconomic statistics are communicated to the public, with a reduced emphasis on GDP and increased emphasis on net and domestic measures.

Mid-term Review of

Quality Information for All – Numbers Matter

National Statistics Board Strategic Priorities for Official Statistics 2021 – 2026

