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Friends of the Chair Group on Social and Demographic Statistics - Workstream 2

Promising Practices for Social and Demographic Statistics

Prepared by Statistics Canada

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## **Executive Summary**

An internationally agreed conceptual framework for social and demographic statistics offers an opportunity for better integration within the statistical pillar and across sectors to address complex global challenges like climate change, inflation, and geopolitical instability. The statistical community is seen as crucial in providing decision-makers with evidence to tackle these challenges. Despite considerable progress in measuring a set of distinct outcomes, there is a call for a more integrated approach.

The Friends of the Chair Group on Social and Demographic Statistics Workstream 2<sup>1</sup> has explored the shared foundations that underlie all social and demographic statistical programmes from its members and identified key building blocks. These basic building blocks are common across National Statistical Offices and thus can serve a foundational role in strengthening integration within the social statistics pillar. In addition to thematic building blocks, there are enablers for the production, dissemination and use of social statistics to advance social outcomes that should be carefully considered by this group to ensure the feasibility of any recommendations to strengthen social statistics. These may include international standards, data sources, legislative, regulatory and operating context, stable ongoing resourcing, etc.

The Workstream acknowledged that social and demographic statistics are about people and their **relationships** with one another and identified key building blocks. Demographic statistics serve as a crucial foundation for policymaking, offering evidence on the quantity and characteristics of **people** over **time** and across **places**. Social statistics typically seek to understand how **people** are doing, and standards of living in terms of a set of **outcomes** across multiple domains (e.g., health, education, income security, housing, access to food and basic services) in different **places** and measured over **time**. See the table below for a summary of the workstream 2 findings regarding these key building blocks.

<sup>&</sup>lt;sup>1</sup> The members of the workstream 2 are Canada, Indonesia, Lithuania, Mexico, and the United Kingdom. Observers include representatives of the Economic Commission for Latin America and the Caribbean, the Economic and Social Commission for Asia and the Pacific, the Economic and Social Commission for Western Asia, the International Labour Organization (ILO), the World Health Organization (WHO), as well as the Department of Economic and Social Affairs of the Secretariat (also serving as secretariat of the group), represented by its Population Division and Statistics Division.

BUILDING	PEOPLE	OUTCOMES	PLACES	TIME	RELATIONSHIPS
BLOCKS	are the 'unit of	Essential minimum	we grow up, live and	NSOs are increasingly	People do not survive in
	measurement' for social	conditions need to be	work profoundly shape	being called upon for	isolation; we are social
	and demographic	met for human survival;	our lives and there are	timelier as well as more	creatures that are
	statistics	while a focus on well-	important differences	frequent data. Stable	constantly interacting
	Averages mask	being goes beyond	between and within	time series are important	with and exist in relation
	important differences	deprivation to measure	nations that can be	to understand change	to one another. Families
	and characteristics of	standards of living.	illuminated through	over time which is	and household groupings,
	individuals as well as	Outcomes can be	place-based breakdowns	fundamental to the	communities and
	distributional differences	assessed based on both	and geo-spatial analysis.	concept of monitoring	institutions are salient
	matter in understanding	objective and subjective		progress	features of understanding
	people's experiences.	measures		Life perspectives are a	the social landscape.
				salient feature of social	Interactions between
				statistics, as are age-	individuals collectively
				specific lenses and	build up a society.
				cohort-based analyses	
				that surface demographic	
				changes over time and	
				intergenerational	
				inequities.	
Challenges	Collecting and	Frameworks related to	Outputs created for the	Historically, social	Changes in social
	disseminating data on	social statistics are often	dissemination of results	statistics have not	interactions require
	hard-to-reach population	domain-specific and tend	are disassociated from	necessarily been	collection techniques and
	groups and at lower	to be sensitive to the	this spatial component.	collected as frequently or	definitions to continue to
	geographical levels	domestic context and	Multiple geography	consistently as economic	evolve to keep up with
		evolving priorities.	concepts in play	statistics. Funding	emerging trends.
			concurrently	models do not	
			Data confidentiality and	necessarily support	
			treatment of sensitive	enduring time series.	
			data impose barriers to		
			the granularity		
		Household survey response	se rates are declining, which	leads to lower sample sizes,	data comparability issues,
		data quality issues, and the reduced ability to disseminate disaggregated data.			
		Survey costs continue to rise, and many NSOs are operating in tight fiscal environments. The funding			
		environment for social statistics is not always as stable and long term as for economic statistics.			
		Varying levels of com	fort around how administrat	ive data is collected and use	d, and the role of NSO

	PEOPLE	OUTCOMES	PLACES	TIME	RELATIONSHIPS
Promising	Using the same	Harmonization of	Geospatial analysis of	Standardizing collection	Administrative statistics
practices	categories of population	outcome indicators	social outcomes can link	and dissemination time	and data linkages may
	sub-groups and	allows for international	data collected from	intervals across	provide better
	geography breakdowns	benchmarking to focus	different sources, but is	indicators enables	opportunities to
	across outcomes.	international efforts in	also valuable to link	analysis of time effects	understand social
	Small area estimation	closing equity gaps.	social and environmental	and policy impacts, and	interactions and
	techniques		statistics	better integration across	interactions with services
				statistical pillars.	and informal supports.
Priorities for the	Unlock the population	Map common indicators	Identify international	Provide advice on	Identify international
workstream	spine' and advance work and thematic g	and thematic groupings	best practices for the	optimal collection and	best practices for
	on international	while retaining some	integration of social and	dissemination time	measuring relationships
	standards for a level of flexibility (for	level of flexibility (for	geographical data.	intervals (aspirational)	and interactions, e.g.,
	population data system	population data system in a demographic accounting framework.members to adapt to the specificity of their context).Map common populationInteractions between		for key social outcome	quality of measures of
	in a demographic accounting framework.		Discuss opportunities for	measures.	community health
			better coordination		(analogous to ecosystem
			between place based	Life course perspectives	health) and social
	Map common population		between place-based	are a more complex area	cohesion.
	sub-group breakdowns.	outcomes is a more	environmental and social	that could be further	
		complex area that could	statistics.	explored by the	
		be considered by the		Workstream	
		Workstream.			

The Workstream has acknowledged the importance of harmonizing logic across sectors and improving interoperability through the adoption of common standards and attention to building cohesive interlocking building blocks across social outcomes. This is deemed a crucial initial step in establishing a comprehensive "system" of social and demographic statistics. The success of the 2030 Agenda and Sustainable Development Goals in uniting sectors is recognized, and there is an expectation that the Friends of the Chair Group on Social and Demographic Statistics will contribute to the data foundation for a successor strategy for the Sustainable Development Goals (SDGs). The consistent use of the Generic Statistical Business Process Model (GSBPM) is highlighted as a method to inherently enhance consistency across data sets and strengthen interoperability. Additionally, leveraging technologies is a complementary approach to promoting data integration.

The Workstream expresses eagerness to collaborate with the UN Network of Economic Statisticians and emphasizes the importance of learning from existing frameworks. The intention is to identify elements that can contribute to a more systematic and coherent approach to social statistics, fostering collaboration with multilateral bodies to avoid the continued proliferation of social statistics frameworks. Additionally, the Workstream aims to explore the benefits of synchronized release of key economic, environmental, and social statistics over the same time interval, aiming to shed light on the multi-dimensional trade-offs among economic, environmental, and social objectives. There is recognition that charting the path is a starting point, and it may take time to adjust course towards the goal of greater interoperability between building blocks. Moreover, there will necessarily be areas of domestic flexibility, such as priority characteristics for population sub-groups. Fiscal constraints and differential starting points of members will also be a consideration.

The ideas summarised in this report are a work in progress as the Workstream will continue to learn from promising practices from other members of the Friends of the Chair Group and from the results of the work of Workstream 1, tasked with mapping and reviewing the collective global and regional work in the area of social and demographic statistics.

## 1. Introduction

The Friends of the Chair Group on Social and Demographic Statistics Workstream 2, with members from Canada, Indonesia, Lithuania, Mexico, and the United Kingdom, set out to:

- 1. showcase national practices for timely and granular data that have the potential to be scaled up at a global level; and,
- 2. identify concrete examples of integration within the social pillar of statistics, as well as across the economic and environmental pillars of statistics.

Ultimately, the workstream aims to develop a position paper with advice on the potential for a conceptual framework for social and demographic statistics. This work will also be informed by the work of the UN Network of Economic Statisticians (UN NES).

Over the course of its first year, Workstream 2:

- heard from experts on the economic and environmental statistical pillars,
- discussed approaches to population statistics,
- reviewed existing conceptual frameworks for social and demographic statistics that are used by members of the workstream,
- identified common themes that could serve as potential building blocks for a conceptual framework for social statistics; and,
- identified challenges and promising practices among members of the Workstream.

This report summarizes the findings of a survey (Annex A) completed by members of the workstream which begins by describing areas of **policy focus** supported by social and demographic statistics (Section 2) as well as existing **conceptual frameworks** members currently use to synthesize social statistics and/or look at relationships between social, environmental and economic statistical pillars (Section 3).

Section 4 discusses common building blocks for social and demographic statistics identified by the Workstream, as reported by the Report of the Friends of the Chair Group on Social and Demographic Statistics (E/CN.3/2024/13).

Fundamentally, social statistics are about people and their **relationships** with one another. Demographic statistics offer evidence on the quantity and characteristics of people while social statistics typically seek to understand how **people** are doing, and standards of living in terms of a set of **outcomes** across multiple domains (e.g., health, education, income security, housing, access to food and basic services), in different **places** and measured over **time**.

Highlights of members' approaches to each of these building blocks are summarized, including a discussion of common themes, challenges and promising practices. As a next step, the Workstream proposes to invite other Friends of the Chair Group members to complete the survey to give a more complete view of promising practices for timely and granular data that may be scalable on a global level. Members' approaches for each building block are summarized in a series of Annexes.

Social statistics have often evolved from domain-specific models (e.g., health, labour market, housing) arising for different practitioners' disciplines and areas of focus and are not necessarily well-integrated across domains within social statistics. Section 5 of this report discusses the

potential for strengthening integration within the social statistics pillar by moving towards greater **interoperability** between these building blocks (i.e., measuring stable outcomes through a regular time series, with standard group-level and place-based breakdowns). Bringing together the disparate statistical traditions and structures housed under the social umbrella of statistics as a system is a foundational step towards **better integration** of social statistics with environmental and economic statistics, which will be further considered by the Workstream over the next two years. Section 5 proposes next steps for the Workstream to advance this work.

## 2. Social and demographic policy priorities that inform data collection

This section describes priority policy issues that drive demand for social and demographic statistics, and how priorities for data collection are established.

Members identified different policy priorities and priorities naturally evolve over time even within the same country. However, it was clear that social statistics have an enduring and important role to support decision-making about social services, including investment decisions about allocation of public funding. These services and supports range on a spectrum from addressing basic needs, responding to disasters, and providing humanitarian support; to investments in early learning and childcare, education and human capital development; employment; health care; justice, safety and institutional stability; as well as culture and social cohesion.

All members identified equity gaps as a policy priority supported by NSOs through disaggregated data that provides insights into distributional differences in outcomes. This is not surprising given the focus through the SDGs on "leaving no one behind." As Lithuania identified, international benchmarking is also used by policymakers to situate each countries' experiences relative to others. International comparisons depend on comparable measures and therefore harmonization of international standards.

While policy responses may differ over time and between members, there are enduring policy areas such as policy settings over the life course for children, youth, working age adults and older persons. Barriers to participation and employment for working age adults, such as disabilities, and socio-economic stratifiers associated with equity gaps are of ongoing concern to effectively target service responses and close equity gaps. Members also identified linkages between social, economic, and environmental policy priorities, which in reality can be closely intertwined.

Members identified that production of some social and demographic statistics was rooted in ongoing legislated requirements, and often closely linked to government priorities. Indonesia, for example, highlighted that the production of social and demographic statistics was tied to priorities in the Mid-Term National Development Plan. Mexico has a highly integrated process to link policy and development goals to statistical systems. In Lithuania, all official statistics need to be regulated and mandated by laws that establish needs and priorities for data collection. Canada's demographics program is rooted in the Constitution because it is used to calculate equalization payments that maintain a consistent level of service nationwide, though other policy and data priorities are shaped by different orders of government in a highly federated system. The United Kingdom identified a nimble approach to prioritisation of statistical production, at the most fundamental level driven by user requirements but also embedded in a rigorous governance model based on promoting and safeguarding the production, and publication of official statistics that serve the public good.

There is a fundamental linkage between policy priorities and the production of social and demographic statistics as these are needed to evaluate and monitor progress and assess the impact of government investments to inform future investment priorities.

Further detail about members' approaches is provided in Annex B.

## 3. Existing Conceptual Frameworks

This section discusses existing conceptual frameworks that members are currently using for social and demographic statistics, as well as members' approaches to composite indices and domestic examples of integration with economic and environmental statistical pillars.

Canada, the United Kingdom and Indonesia each identified conceptual frameworks for social statistics. Indonesia, Lithuania and the United Kingdom identified approaches to composite indices. Lithuania, Indonesia and Mexico described approaches to their statistical programs that are closely embedded in National Plans and development goals. These are summarized briefly below, and described in further detail in Annex C.

Canada's Quality of Life Framework, introduced in Budget 2021, aims to measure what matters most to Canadians, to help drive evidence-based budgeting and decision-making at the federal level and for other interested governmental and non-governmental partners. This framework was originally designed to monitor high-level social, environmental, and economic trends 'beyond GDP' to influence priority-setting for investments in each annual federal budget cycle. The framework, released in Budget 2021 along with a related discussion paper, is based on global evidence of the determinants of well-being and has two central 'over-arching' measures of well-being: *Life satisfaction* and *Sense of meaning and purpose*. The determinants of well-being are measured by 20 headline indicators in five domains (Prosperity, Health, Society, Environment, and Good Governance), supported by a set of 84 social, environmental, and economic indicators. The framework also includes two cross-cutting lenses which are applied to all relevant domains and indicators of the framework to assess 'Fairness and inclusions' (distributional differences in outcomes, equity gaps) and 'Sustainability and resilience' (temporal and risk /resilience considerations).





Source: Quality of Life Framework for Canada

In terms of demographic statistics, the <u>Population and Demography Statistics Hub</u> features indicators, data and detailed analysis related to Canadian demographics from a wide set of data sources including population estimates and projections, and the census.

Statistics Indonesia produces social and demographic statistics based on ten main statistical domains illustrated in the Figure below, and organized under the individual, household, or community level.





The United Kingdom maintains a <u>National Wellbeing dashboard</u> comprised of 60 indicators across ten domains which allows for a diverse range of social, environmental, and economic outcomes to be captured in one place, which is discussed further in the 'Outcomes' section, and has put considerable thought into integration between social, environmental and economic statistical pillars. Progress on social measures is benchmarked internationally against the Sustainable Development Goals.

The United Kingdom has worked to achieve internal consistency in terms of definitions and concepts, both within the social and demographic sphere, but also in terms of data collected under the SEEA and SNA. The United Kingdom has elaborated proposals for consideration by the international community about how to better integrate economic, social and environmental statistical pillars, noting the need for country-specific tailored reporting. Domestic salience is key to securing the buy-in to enable the core dataset to be prioritized within constrained domestic budgets.

The United Kingdom Office of National Statistics (ONS) produces a number of composite indexes in the field of social and demographic statistics. These include the Health Index for England and National Wellbeing Indicators. In addition, the ONS uses the Index of Multiple Deprivation in some of its analyses.

Statistics Indonesia noted that it produces a number of indices related for social issues and social development. Some were developed locally for a country-specific purpose and are not available at the global level, while others adopt international measures to assess provincial comparison. Examples include the Human Development Index, Gender Development Index, Happiness Index, Anticorruption Index, Child Protection Index, Early Childhood Development Index, and Youth Development Index. Other composite indices developed without any reference from international measures, or for local country purposes include the Mental Revolution Achievement Index, Actualization of 5 Principles (*Pancasila*) Values Index, Community Development Index, and the Indonesian Democracy Index. All these indices were developed to measure provincial comparison and progress in social development.

Lithuania produces a national composite index called the <u>Lithuanian Society's Civic</u> <u>Empowerment Index</u> and the Gini coefficient of equivalent disposable income is calculated from the European Survey on Income and Living Conditions. The State Data Agency as an NSO, however, does not produce any indices in the field of social and demographic statistics. Despite this fact, the State Data Agency still monitors social and demographical issues based on variables included in different national planning documents, for instance through the National progress program for 2021-2030, following Lithuania's progress strategy "Lithuania 2030".

In line with Lithuania's progress strategy "Lithuania 2030," Lithuania monitors progress based on international composite variables in different areas. Vision implementation indicators include the Quality of Life Index, The World's Happiest Countries, the Democracy Index, the Sustainable Society Index, the Global Competitiveness Index, and the Globalization Index. Smart governance indicators are included in the Corruption Perception Index. These indices comprise the composite variables outlined in Lithuania's strategic document, but additional composite indicators are included in other national legislative documents. Moreover, EIGE's Gender equality index is included in different laws implementing the National Progress Program.

Mexico also has a tight integration between its long-term planning process and development goals and thematic priority-setting for social and demographic statistics generation.





Source: INEGI's elaboration.

Each of the programs must be approved by the Governing Board of INEGI, and together, they order and regulate the production processes. The Strategic Program for the SNIEG 2022-2046 has a projection of 24 years and is updated every six years. This program harmonizes all the components of the system to ensure the production of information that promotes national development. The National Program of Statistics and Geography 2019-2024 is a program that aligns with the Strategic Program but also with the National Development Program for each administration.

Some view the lack of an overarching internationally agreed conceptual framework for social and demographic statistics<sup>2</sup> as a concern and identify an opportunity for it to strengthen integration within the social and demographic statistical pillar and with the economic and environmental pillars. A more integrated approach could provide better visibility of interactions, trade-offs, and externalities, for instance, to support decision-makers in all sectors of society in grappling with the complex challenges that we face as a global community. These complex challenges, like climate change, inflation, and geo-political instability, for instance, cross disciplinary boundaries, jurisdictional boundaries, departmental boundaries, and sectoral boundaries. As a result, the statistical community plays a critical role in providing these diverse decision-makers with intelligence on the basis to make decisions.

At the same time, there has already been a lot of global and national progress in trying to measure these multi-dimensional trade-offs by focusing more directly on measuring a set of outcomes. The 2030 Agenda and its Sustainable Development Goals are an important example of this and have had great success as a rallying point across sectors. The Friends of the Chair Group on Social and Demographic Statistics can make an important contribution to this work by anticipating the data foundation that will be required for a successor strategy for the SDGs.

<sup>&</sup>lt;sup>2</sup> Similar to the System of National Account (SNA) to organize economic statistics.

Social and demographic indicators needed by line ministries/government agencies to address emerging social issues can often be difficult to measure. Challenges can arise when concepts or definitions for specific indicators have yet to be developed. Even when indicator concepts and definitions may be available, data gaps may be an issue where the data has not yet been collected or is not available. These could be collection gaps such as for hard-to-reach populations. There could also be gaps in terms of frequency, an important consideration given that frameworks are often established for the purpose of monitoring progress. While a time series based on consistent intervals is implicit in a monitoring framework, aspiration is not always accompanied with secure long-term funding.

It can be difficult to model social phenomena, and to build the sort of synthetic metrics that lead to tight conceptual integration. As social statistics are about people, we often learn about people by asking them questions through household surveys, but, as the United Kingdom flagged several times in their report, household survey response rates are declining, which leads to lower sample sizes, data comparability issues, and the reduced ability to disseminate disaggregated data. Moreover, survey costs continue to rise, and many countries are operating in tight fiscal environments. Even as technological innovation serves to advance new sources of data and tools to process and analyse data, and administrative data offers tremendous power to provide insights into social trends, there are varying levels of comfort around how this data is collected and used, and the role of the National Statistical Offices. Nevertheless, the prevalence of digital technologies in society is resetting expectations about the pace and disaggregation of data, even as challenges persist in the acquisition of timely, high-quality data with sufficient coverage and disaggregation capability.

## 4. Common Building Blocks

As noted in the Introduction, the Workstream acknowledged that social and demographic statistics are about people and their relationships with one another and identified key building blocks.

Demographic statistics serve as a crucial foundation for policymaking, offering evidence on the quantity and characteristics of **people** in **places** over **time**. Social statistics typically seek to understand how **people** are doing, and standards of living in terms of a set of **outcomes** across multiple domains (e.g., health, education, income security, housing, access to food and basic services). These are often benchmarked for **places** in relation to one another (either through international comparisons or regional breakdowns within countries) and measured over **time**. Consistency between these core concepts is integral to bringing together the social statistics pillar as a "system."

#### Figure 4: Common building blocks to organize social and demographic statistics.

**PEOPLE** are the 'unit of measurement' for social and demographic statistics; and thus the initial focus of the workstream will be to 'unlock the population spine' and advance work on international standards for a population data system in a demographic accounting framework. Characteristics of individuals as well as distributional differences matter

Essential minimum conditions need to be met for human survival; while a focus on wellbeing goes beyond deprivation to measure standards of living. Social statistics often focus on measuring objective and subjective **OUTCOMES** related to aspects of human wellbeing.

The **PLACES** we grow up, live and work profoundly shape our lives and there are important differences between and within nations that can be illuminated through place-based breakdowns and geo-spatial analysis.

Historically, social statistics have not necessarily been collected as frequently or consistently as economic statistics. Stable **TIME** series are important to understand change over time for key indicators.

Understanding **RELATIONSHIPS** is also critical to understand societies. Families and household groupings, communities and institutions are salient features of understanding the social landscape. Interactions between individuals collectively build up a society.

Source: Own elaboration.

The next five sections discuss members' approaches to each of these building blocks for social and demographic statistics.

## A. <u>People</u>

**People** are the 'unit of measurement' for social statistics and, thus, the initial focus of the Workstream is to 'unlock the population spine' and advance work on international standards for a population data system in a demographic accounting framework. Averages mask important differences and characteristics of individuals (including intersectional characteristics), as well as the distributional differences that shed light on people's differential experiences. This section summarizes promising practices and challenges arising from members' approaches to

demographic statistics as well as how they are typically disaggregated for insight into key population sub-groups. Further detail on each members' approach is included at Annex D.

In terms of demographic statistics, the Workstream sees an important opportunity to "unlock the population spine" by progressing work on international standards for a population data system in a demographic accounting framework. This work will continue in the coming year. Members may have different approaches and timelines for arriving at shared objectives for consistent reporting practices. For example, Lithuania has introduced a population register, a promising practice that leverages administrative data. The United Kingdom uses vital statistics, including birth and death registrations, to update population estimates. Birth and death data help in understanding population changes and demographic trends.

Canada has a well-established demographic function, but nevertheless faces challenges, as measuring the population on the basis of the usual place of residence only. There has since been increasing pressure to add new population-based measures to include other places of residence, such as secondary residences, for people who are living a significant period of the year at another address than their usual place of residence.

Member countries face pressure to disaggregate their data at lower levels of geography and at more granular demographic levels despite facing lower response rates to household surveys and greater levels of attrition.

Statistics Canada's Disaggregated Data Action Plan (DDAP) is a five-year initiative to support more representative data collection methods, enhance statistics on diverse populations to allow for intersectional analyses, and support government and societal efforts to address known inequalities and promote fair and inclusive decision-making. The DDAP includes data collection, the use of alternative data sources, methods and the development of standards, engagement and collaboration, and the dissemination of results with a current focus on (but not limited to) four groups identified in employment equity legislation: Indigenous peoples, women, racialized populations, and persons with disabilities. Through this initiative, Statistics Canada completed a proof of concept project called 'Unlocking the data' to identify potential standard population breakdowns that could be used consistently across data sets for better interoperability.

Strengthening interoperability across of population disaggregation among social outcomes is a promising practice that could be scalable at the international level and could potentially benefit from harmonization of international standards (while retaining domestic flexibility with respect to priority population sub-groups); as discussed further in later sections of this report. As a next step, the Workstream proposed to map common population sub-group breakdowns.

In the United Kingdom, the ONS employs a promising practice of nominating topic leads who are responsible for all statistical matters related to a 'topic' such as income, gender, age, race, and ethnicity, to name a few examples. These topic leads are primarily responsible for the dissemination of statistics from the census on those topics, though their responsibilities also extend to other surveys. The ONS also has an additional set of topic leads who research the viability of using admin data for use in official statistics on those.

Members face challenges collecting and disseminating data on hard-to-reach population groups like people who are homeless, or who experience hidden homelessness, and those who reside in institutions. Lithuania, for example, identified challenges obtaining data for those aged 75 and

older and for people with disabilities, as these population groups are not typically included in official statistical surveys, or data is very limited. In Indonesia's case, while most data are currently available at the national and provincial levels, they face the challenge of disseminating data at lower geographical levels, for instance at the district level. Promisingly, social and demographic indicators have been used intensively by Indonesia's governments to monitor the progress of development programs.

As a means to overcome the limits of data disaggregation of household surveys (due to small sample size or high variance coefficient for specific groups), ECLAC applies methods of small area estimation (SAE). These methods allow integrating data from surveys, population censuses and satellite imagery to disaggregate selected indicators by first-level administrative division and second-level administrative division. Intersectionality is considered by disaggregating indicators simultaneously for two dimensions plus the geographic domain (e.g., Poverty rate by gender and ethnic group, at the first-level administrative division), with a geoportal for the dissemination of results of these methods is currently under development.

## B. Outcomes

Essential minimum conditions need to be met for human survival, such as access to food, water and shelter; while a focus on well-being goes beyond minimum thresholds of deprivation to measure standards of living. Social statistics often focus on measuring **outcomes** related to these aspects of human well-being, sometimes with a view to improving these outcomes through effective public services. Outcomes can be assessed based on both objective measures (such as life expectancy) and subjective measures (such as life satisfaction). Outcomes enable comparisons to be made which highlight social inequities being experienced amongst different people over time, based on their varying geographical locations and formed relationships.

This section summarizes key social outcomes that are currently being monitored by members. Please see Annex E for further detail.

There are different approaches to consider in terms of how to group these domains and which are most relevant to members; but also, the relationship between outcomes - e.g., which may be correlated or determinant of one another. The workstream proposes to continue work to map common indicators and thematic groupings while retaining some level of flexibility (for members to adapt to the specificity of their context). It will be important to coordinate with other UN and multilateral activities, including the UNECE review of well-being measurement and the OECD Better Living Standards used for international benchmarking among some members.

In terms of members' experiences, Mexico maintains a national Catalog of Indicators, which gives an integrated overview of the data that is available and related specifications. Indonesia notes that it is promising the extent to which data on outcomes is actually integrated into policy and program decision-making. The United Kingdom's 60-indicator National Wellbeing dashboard is useful in providing social and demographic data, though it can be difficult for users to synthesize key information from such a large and diverse dataset. As a result, the NSO is currently considering ways to better represent the information and to simplify its presentation. Similarly, Canada's Quality of Life Framework 84-indicator and associated central Hub provides data users and policymakers access to relevant social and demographic data, as well as environmental and economic data in one place. However, Canada has a number of other conceptual frameworks in play to measure social outcomes, including, a Gender Results Framework and Anti-Racism Strategy as well as the Canadian Indicator Framework for the Sustainable Development Goals and the Federal Sustainable Development Strategy. Coherence between these frameworks can at times be a challenge.

Some thematic areas of shared interest can be anticipated. For example, life expectancy is an outcome measure that is quantifiable, with established international norms that was highlighted as a commonality amongst Canada, Indonesia, and the United Kingdom. It is an important social metric that illuminates health inequities and can also shed light on the extent to which various factors are determinant of and protective against health inequities.

Essential minimum conditions need to be met for human survival, such as access to food, water, and shelter. Understanding these thresholds and alleviating material deprivation has often been a central focus of social statistics and its intersection with economic statistics. Income security and employment/earnings and housing measures often feature prominently. Measures of poverty and deprivation have an important role in social statistics. Poverty can be understood both in absolute and relative terms, and while serious material deprivation is the first priority from a global perspective in terms of 'leaving no one behind', it is also important to understand the deleterious effects of relative poverty and social disadvantage and exclusion.

A focus on well-being and quality of life goes beyond minimum thresholds of deprivation to measure standards of living, which can vary in different cultural and economic contexts. Both objective and subjective measures of health, mental health, and well-being including learning, sense of purpose and contribution, and meaningful work are important to understand the human condition. There is a significant body of evidence examining the value of overall life satisfaction evaluations in assessing the relative importance of various determinants of well-being. Its potential for shedding light on the relationships between social outcome areas should be explored further in considering a more integrated 'system' of social and demographic statistics.

Distributional differences in outcomes are critical to understanding the social landscape; not just at a point in time, but over time to understand social and economic mobility and intergenerational equity. Social statistics often use stratifiers to illuminate and reduce differences in outcomes by age, income level, disability status, gender, ethnicity and for Indigenous peoples. Examples of potential stratifiers for sub-population groups and plans to work on mapping commonalities were discussed in the previous section.

Formal education, and in particularly post-secondary education, is correlated with higher levels of earnings, income security, and wealth. The term 'human capital' seeks to address the relationship between individuals' agency and capability and their collective potential as economic agents. There are existing definitions of human capital that can be leveraged to bring a 'systems' approach to social statistics. A definition that is inclusive of the different economic contexts of members could also be considered, reflecting individuals' ability to meet their needs.

Understanding the effectiveness and cost-effectiveness of public services in improving economic outcomes, but also social outcomes such as health and well-being is another key objective of social statistics. Life satisfaction valuations are one method that can be employed to understand the relative scale of the impact of different determinants of well-being to rank and optimize investments in social services.

Frameworks related to social statistics (often domain-specific, e.g., health, human capital, etc.) tend to also be sensitive to context and evolving domestic priorities, and some level of flexibility should be retained for members to adapt to the specificity of their context.

In addition to thematic building blocks, there are enablers for the production, dissemination and use of social statistics to advance social outcomes that should be carefully considered by this group to ensure the feasibility of any recommendations to strengthen social statistics. These may include international standards, data sources, legislative, regulatory and operating context, stable ongoing resourcing, etc.

As social statistics are about people, we often learn about people by asking them questions through household surveys. As underscored by this report, however, household survey response rates are declining, which leads to lower sample sizes, data comparability issues, data quality issues, and the reduced ability to disseminate disaggregated data. Moreover, survey costs continue to rise, and many NSOs are operating in tight fiscal environments. Administrative data and data linkages offer tangible solutions to this issue to provide insights into social trends. One challenge with administrative data and linkages, however, is the varying levels of comfort around how this data is collected and used, and the role of National Statistical Offices having access to this data.

## C. Places

The **places** we grow up, live and work profoundly shape our lives and there are important differences between and within nations that can be illuminated through place-based breakdowns and geo-spatial analysis. This permits data users and policy makers to evaluate place-based differences across different populations over time, and to observe where disparities lie in terms of social and demographic outcomes.

This section summarizes how members approach sub-national breakdowns of data and geo-spatial analysis of distributional differences in place-based statistics. Country-specific geographic breakdowns and practices are listed in Annex F.

For the most part, members reported using standard geographical breakdowns to better integrate geographical information with social and demographic data. For example, the standard geographical breakdowns for most data produced by Statistics Indonesia include the national, urban-rural classification, provincial level, and district level. Data resulting from censuses can be broken down into the lower administrative levels. For data resulting from sample surveys, the geographical breakdowns depend on the way the sample survey is designed. The survey design is determined by the need of disaggregation level and the available budget. However, as Indonesia follows a decentralized government system where the autonomous regions are at the district level, the provision of statistics is demanded at the lowest administrative level.

Mexico has had success in creating map visualizations that feature information from the Census, with varying degrees of granularity, on population density and national housing inventory. Indonesia, however, reported facing challenges creating map visualizations of their indicators due to challenges of data not being interoperable. Indonesia does, however, take advantage of using geography to enable data users to make comparisons between different regions for numerous indicators, to provide a more comprehensive understanding of phenomena being observed.

While one of Mexico's (INEGI's) notable strengths is associating demographic and social information with geographic units and creating corresponding map visualizations, challenges persist. For instance, one of the main challenges they face is having geographic perspectives incorporated from the outset of a product's design, well before the information is collected and disseminated. A contradiction INEGI faces is that, while the production process is associated with the geography from origin (sampling frame, cartographic planning, etc.), the outputs created for the dissemination of results are disassociated from this spatial component. Efforts are being made to improve the resources for presentation of results and facilitate the integration of demographic, social and geographic information.

In terms of geocoded data production, in Lithuania's case they experience challenges related to a lack of quality data at low levels of geography. For instance, there are inconstancies between Address Register and Real Property Register, so this combined information would be difficult to place in a map visualization. Furthermore, data confidentiality and treatment of sensitive data (for example, ethnicity, belonging to religious communities etc.) also imposes barriers to the granularity of data that can be made available.

For Canada, multiple geography concepts in play concurrently can mean that different data sources are broken down into different geographical classifications. This can limit the ability to look across outcomes for a specific area. As part of the 'Unlocking the data' project discussed in relation to disaggregated data about population sub-groups, Statistics Canada is also looking at which geography concepts best enable disaggregation of quality of life indicators consistently to better understand place-based differences in quality of life across a standard set of outcomes.

The World Health Organization (WHO) noted as a promising practice the growing interest and recognition of the importance of GIS in relation to place-based social data. They noted challenges can be accessing earth observation data – although the United Nations Office for Outer Space Affairs (UNOOSA), the National Oceanic and Atmospheric Administration (NOAA), and the European Space Agency (ESA) are very helpful in this regard.

## D. <u>Time</u>

Historically, social statistics have not necessarily been collected as frequently or consistently as economic statistics. In the context of accelerating social change, National Statistical Offices are increasingly being called upon for timelier as well as more frequent data. Stable **time** series are important to understand change over time for key indicators. Regular, frequent as well as timely data is growing in importance with an increased focus on using social and environmental indicators to monitor progress towards development and other goals. In contrast to macroeconomic trends, where key indicators are often updated on a consistent quarterly basis in near real time, many members have traditionally collected social data far less frequently, e.g., once every four or five years, or on an ad hoc basis in response to a specific policy need and these often take longer to disseminate post-collection.

Moreover, life perspectives are a salient feature of social statistics, as are age-specific lenses (childhood, youth, older people), and cohort-based analyses that surface demographic changes over time and intergenerational inequities.

This section provides an overview of members' approach to frequency (monthly, quarterly, yearly, etc.) in collecting social data, time to dissemination, and the extent to which they use longitudinal and/or life course analysis to understanding and anticipating changes in population, outcomes, and relationships. See Annex G for more information.

Not surprisingly, there was considerable variation among member countries in terms of the frequency of release of social data. The United Kingdom's quarterly releases of social and environmental data alongside economic data is a promising practice to strengthen integration between statistical pillars by aligning the time intervals under observation. Over time, this would allow for increasing insights into the relationships between social, environmental and economic trends, particularly if the approach were replicated elsewhere.

Statistics Canada launched the Canadian Social Survey (CSS) to provide more timely and frequent data on social indicators, including those in the Quality of Life framework. The Canadian Social Survey also releases data on a quarterly basis. Pooling waves of quarterly data allows better disaggregation; a promising practice to resolve the cost trade-off between timely and granular data on social trends. A challenge in generating data on a timely and frequent basis, even with the availability of CSS, is securing the secure, ongoing funding required for a stable, long term time series.

Amongst the country members, and among statistical products the time to disseminate social and demographic data varies substantially from between 1 month and 2 years post-collection. This variation in dissemination underscores the challenge of making social and demographic statistics available in a way where the data can be routinely anticipated, as is often the case with labour force survey data.

Mexico faces challenges in disseminating social and demographic information on a timelier manner due to the production process, especially as surveys and projects are being carried out concurrently. While the Quality Assurance Approach includes an *opportunity indicator*, reducing timelines for each phase in the production process has been challenging. Some surveys, such as the National Survey of Occupation and Employment, takes one month to publish the monthly information, or two months for the quarterly information. On the other hand, for projects such as the National Survey of Demographic Dynamics, the expected time to publish results is 6 months after the collection period. However, for large projects such as the 2020 Census, which took place during March 2020 (and an additional recollection period on July because of the COVID-19 pandemic) results from the short form were published in January of 2021, and the long form in March of the same year.

In the case of the United Kingdom, administrative data is expected to speed statistical production up for population estimates. Linking together multiple sources of administrative data is also anticipated to create an opportunity for increasingly innovative multivariate analyses. WHO notes that it is clear that big data could greatly enhance the quality of our results and models, and with implications for the frequency and timeliness of data. It can, however, be challenging getting access to those data.

Indonesia, Mexico, the United Kingdom, and Canada share a commonality where increasing attrition rates and decreasing response rates are concerned. This has a direct impact on the availability of granular disaggregated data on a regular basis, as it is difficult to disseminate this information if you do not have a sufficient sample size to do so, which results in estimate suppressions.

Recognizing constraints, the Workstream proposes as next step to provide advice on optimal time intervals (aspirational, to begin with) to work towards for key social outcome measures to build the necessary foundation for monitoring social progress.

Another concept of time that is relevant for social and demographic statistics is the life course. People's lives begin with birth, end with death; and feature important milestones in between such as childhood and youth, adulthood and family formation and retirement. Life course perspectives are a salient feature of social statistics, as are age-specific lenses (childhood, youth, older persons), and cohort-based analyses that surface demographic changes over time and intergenerational inequities. This is a complex area that could be further explored by the Workstream.

Indonesia's country-specific life course framework is an interesting approach and explicitly integrates the periodicity of data time intervals with a life course approach. Most social outcomes are reported twice per year or annually, and the dissemination of social data takes 3 to 6 months, on average, following its collection. With this process, Indonesia ensures timely and comprehensive social and demographic data provision for people over time, from their first 1000 days of life to old age.

Lithuania's two new longitudinal panel studies in process will reflect the most relevant national issues and have the capacity to unlock new insights for social and demographic data. In current practice, Lithuania uses innovative methodologies to conduct record linkage studies using population and housing census information and data from administrative data sources, that allow to measure the scale of demographic differentiation and identify population groups at risk and to observe the internal migration and social segregation.

## E. <u>Relationships</u>

Understanding **relationships** is critical to understanding societies. At birth, in childhood, in illness and sometimes disability (which increase in prevalence with age) people need to be cared for. Families and households, communities and institutions are salient features of understanding the social landscape. Groupings such as households, relationships such as parenting and unpaid caregiving, and overall social cohesion are examples of interactions between individuals that collectively build up a society. Ultimately, the objective of this building block is to highlight the presence of relationships between individuals, households, communities, and institutions over time to observe differences in social and demographic outcomes, across different geographical locations. Culture can be challenging to measure, but is integral to identity, strong community and social fabric, and the diversity of human experiences.

See Annex H for country experiences.

In terms of members' experiences, Indonesia groups its statistical products into those at the individual, household and community level, as illustrated in the conceptual framework section. While these groupings are articulated explicitly as pillars of social and demographic statistics in Indonesia's case, all members collect social and demographic data about each of these groupings of people. Additionally, INEGI has a subsystem for Information on Government, Public Safety and Law Enforcement, where statistics on relationships between individuals, institutions and communities are included.

Much like many, if not all country members, the United Kingdom faces the challenge of declining response rates. In the case of the ONS, this puts the reliability of marital status and family structure

statistics in jeopardy, hindering the ability to generate a fulsome snapshot of relationships. The United Kingdom also faces challenges imposed by changing family structures. With non-traditional arrangements, such as cohabitation without marriage or same-sex partnerships, it becomes increasingly difficult to capture and classify family structures in traditional statistical frameworks. As such collection techniques and definitions need to continue to evolve to keep up with emerging trends.

Members have different strategies for measuring the quality of relationships (e.g., someone to count on, satisfaction with personal relationships – friends and family). Care is provided through a mix of informal and unpaid relationships at home, formal paid service transactions, and public services. Care has historically been undervalued in ways that have gendered and racialized impacts on earnings and time use. Recent efforts to better understand and measure care, e.g., through the System of National Accounts satellite accounts, make an important contribution to making this work visible. Time use statistics could be a promising avenue to explore further to understand these and other dynamics, including work/life balance, and how leisure time is spent as a determinant of well-being.

Communities and institutions (including public services and civil society) play a vital role in human well-being. Environmental statistics measure the value of services ecosystems provide to humans and ecosystem health vs degradation; and similar approaches could be used to measure community-level well-being as well as the well-being of individuals. In addition to place-based statistics, quality measures of the health and vitality of communities could be an important feature of the next generation of social statistics. There are already well-established metrics that are internationally comparable, such as trust in others, sense of belonging to community, confidence in institutions and community safety. The term 'social capital' seeks to assess the value of interactions, networks and institutional stability, and this concept could also be leveraged in bringing a 'systems' approach to social statistics. Measurement of 'social cohesion' is an emerging topic that could add value to understanding the health of communities, regions and nations.

As part of its program of work, the Workstream proposes to identify international best practices for measuring relationships and interactions, e.g., quality of measures of community health (analogous to ecosystem health) and social cohesion.

WHO noted communicable diseases are a result of relationships. Contact tracing is an interesting example of mapping of interactions from a data standpoint. WHO further noted that even non-communicable diseases are the result of our relationship with society, our environment and communities; the sorts of quality indicators measured by a number of countries to assess the strength of social connectedness.

Transactions play an important role in economic statistics. Understanding interactions between people, and between people and services could be a promising avenue in developing a better understanding of societies and how they evolve. Administrative statistics and data linkages may provide better opportunities to understand social interactions and interactions with services and informal supports.

## 5. Next steps to strengthen integration within the social statistics pillar

Social statistics have often evolved from domain-specific models (e.g., health, labour market, housing) that emerge from different practitioner disciplines and are thus not necessarily well-integrated across domains within the social statistics umbrella.

This report identifies key building blocks that already underpin the social and demographic pillar of statistics. As noted throughout the report, social statistics typically seek to understand how **people** are doing, and standards of living in different **places** in terms of a set of **outcomes** across multiple domains (e.g., health, education, income security, housing, access to food and basic services) measured over **time**. Moreover, social statistics are not just about individuals, they are also about the **relationships** between people.

The goal is to "solve for" commonalities underpinning all social and demographic statistical programs in order to unify the logic of different siloes and build towards strengthening **interoperability** through common units. The Workstream proposes this as a necessary first step to build a "system" of social and demographic statistics. Ideally from the standpoint of interoperability, each "whole" (e.g., population, country) would be subdivisible into a tiered hierarchy with mutually exclusive and completely exhaustive categories at each level of the hierarchy (e.g., age breakdowns, regional breakdowns).

Leveraging the GSBPM consistently, as Mexico and Indonesia are doing, builds in a certain inherent consistency across data sets that can strengthen interoperability. Statistics Indonesia has conducted evaluation on a number of survey activities to look for some possibilities of integrating several surveys which have some similarities.

Statistical organizations must first and foremost serve their domestic needs; however harmonization of international approaches to measurement can build traction and stability. Annex I contains country perspectives on integration within the pillar, and identifies domestic sensitivities and areas where it would be important to for members to retain flexibility, while at the same time providing comment on the potential for an international conceptual framework.

This section identifies potential next steps for the Workstream to shape its report on a conceptual framework for social and demographic statistics.

- 1. An early step would be to share the template at Annex A with members of the Friends of the Chair Group who are not part of Workstream 2, to build a more complete view of challenges and promising practices that may be scalable, and commonalities and differences within each of the building blocks.
- 2. Workstream 2 recognizes the wealth of information collected by Workstream 1 during the mapping and reviewing of global and regional work in the area of social and demographic statistics. Workstream 2 will incorporate this knowledge into the analysis of existing standards and promising solutions as it works towards a potential conceptual framework for social and demographic statistics.
- 3. The Workstream has acknowledged the importance of refining and standardizing terminology and will direct efforts towards creating a glossary of terms to promote consistent and harmonized terminology across the social and demographic statistical pillar.
- 4. Given that "people" are the fundamental unit of measurement for social and demographic statistics, the Workstream recommends advancing work on Population accounts as an

enabler for greater integration. The objective would be to 'unlock the population spine' by advancing work on international standards for a population data system in a demographic accounting framework.

- 5. NSOs are seeing increasing demand for granular data, as well as intersectional data that enables understanding of distributional differences in outcomes. The Workstream proposes to map common themes in population categories with a view to making it easier to look holistically across outcomes for these population groups while retaining flexibility for specific population groups.
- 6. Similarly, the group proposes to map common indicators and thematic outcome groupings while retaining some level of flexibility for members to adapt to the specificity of their context. Harmonizing international outcome indicators allows for benchmarking to focus international efforts in closing equity gaps within and among countries. The Workstream notes many concurrent efforts and frameworks and recommends and emphasis on convergence rather than continued proliferation of social statistics frameworks which can drive competing demands for NSOs' resources.
- 7. Some outcomes travel together, while others are determinants of one another (e.g., social determinants of health). Interactions between outcomes is a more complex area that could be considered in future Workstream discussions.
- 8. Place-based statistics can serve an important role in integrating demographic, social and environmental statistical pillars, as well as related economic trends. The group proposes to continue identifying international best practice for the interface between social data and integrated geographical classification and discuss opportunities for better coordination between place-based environmental and social statistics.
- 9. Predictable time series are integral to monitoring systems and a meaningful feedback loop between policy action and impact; and NSOs are also seeing an increased demand for regular, frequent and timely data. The Workstream proposes to provide advice on optimal time series for key social outcome measures, noting that these will in some cases be aspirational unless accompanied by secure long-term funding.
- 10. Life course perspectives are a more complex area that could be considered in future Workstream discussions.
- 11. People are social creatures and exist in relationship with one another. Some interactions (e.g., families, households and communities) are relevant to how statistics are collected. Others are themselves the subject of social statistics. The Workstream proposes to continue its work to identify international best practices for measuring relationships and interactions, e.g., quality of measures of community health (analogous to ecosystem health) and social cohesion.

The recent pandemic had local and global impacts on social structures, and social statistics play an important role in making sense of these changes. Shocks can be catalysts for strengthening measurement because there is a strong demand to understand the nature of the changes. At the same time, many members have been affected by rising inflation and costs are an important consideration for many members.

Strengthening the integration between economic, social and environmental statistics offers tremendous potential to provide decision-makers with better visibility of multi-dimensional trade-offs. While the initial focus of the Workstream has been on integration within the social pillar, the Friends of the Chair Group Social and Demographics as a whole, and the Workstream as one of its sub-groups looks forward to receiving the report of the UN Network of Economic Statisticians

and considering the relevance of this work to a conceptual framework for social and demographic statistics, and opportunities for greater integration including inter-disciplinary coordination with economic and environmental statistics.

With a solid, stable and interoperable foundation in place for the social pillar of social statistics, there are opportunities to explore more complex interactions with economic and environmental pillars. The Workstream looks forward to continuing discussions with economic and environmental statisticians on how to strengthen these interactions.

## Annex A: Survey template

Members of Workstream 2 were asked to respond to a set of guiding questions to describe each country's experience of and approach to social and demographic statistics.

Part 1: General Information Country Name: Institution Name: Name and title of respondent:

### Part 2: Policy questions

Please list the various policy questions that your office seeks to answer in the field of social and demographic concerns. How did you arrive at these questions and how do you assign priorities in this vast field?

### Part 3: Social and Demographic Statistics

How is the production of social and demographic statistics organized in your office?

*People: Please describe your office's population data system including population stocks and flows. Which models and methods do you use to produce population estimates and projections? How do you include an intersectional perspective into the production of social and demographic statistics?* 

Outcomes: What are the social outcomes covered by the social and demographic statistics program in your NSO? Please include both objective and subjective measures of these outcomes.

Relationships: What social and demographic statistics are produced to reflect relationships between individuals, households, communities and institutions? (e.g., safety-violence, social cohesion and social capital, including trust in others, sense of belonging to community, confidence in institutions and community safety).

*Place: Please describe how your office utilizes geocoding of social and demographic data, and geospatial information and analytical tools.* 

*Time: Please describe how your office utilizes the time dimension to understand and anticipate changes in population, outcomes and relationships. This may include longitudinal studies, life-course approaches, projections, simulations, ...* 

Please indicate any other elements that you deem relevant.

Please describe any challenges encountered.

#### Part 4: Data Integration within and across Pillars

How does your office ensure integration of social and demographic statistics within the pillar? Please indicate if integration is achieved or performed at the various phases of statistical production (you may be guided by the phases in the Generic Statistical Business Process Model)?

Are there any links to economic and environmental statistics? Please describe. Please describe any challenges encountered.

### Part 5: Solutions

Have you implemented any solutions to address the challenges mentioned in part 3 and 4 above? Please provide details.

### Part 6: Additional Inputs

Please provide any additional comments, insights, or suggestions related to elements for an overarching conceptual framework for social and demographic statistics, and for better data integration within and across pillars.

# Annex B: Social and demographic policy priorities that inform data collection

## <u>CANADA</u>

As everywhere, social and demographic policy priorities shift over time in Canada. As a country shaped by immigration, an important demographic consideration is the annual immigration levels plan, by which the Cabinet agrees to set out the number of immigrants expected in Canada each year. In recent years, Canada has set high immigration thresholds in response to declining fertility trends and population aging.

Canada is highly federated, and Canada's provinces and territories have jurisdiction over important social policy areas such as the delivery of health care, education, and social services. The federal government is in some cases a funder, through equalization payments that ensure a consistent level of service nationwide (with payment levels linked to population estimates), and in establishing shared standards. This includes a role for Statistics Canada in collecting data to build an evidence base that is national in scope – including increasingly in recent years data standards to enable interoperability between provincial, territorial, and federal data sets. Municipalities are 'creatures of the province,' though the federal government partners directly with municipalities on some issues, for example homelessness.

Areas of federal jurisdiction include the tax and transfer system, which administers important poverty reduction benefits such as the Canada Child Benefit and the Canada Workers Benefit, and Employment Insurance and retirement pensions. In recent years, the federal government has leveraged its funding role to address social priorities in areas of principally provincial/territorial jurisdiction; for example, establishing a national early learning and child care program and a dental care program.

Indigenous peoples in Canada have a wide array of self-determination arrangements, including in some cases self-governance; in other cases, full administration of certain social services such as education, policing, or child welfare; and in others administration of programs such as social services under parameters that mirror those of the relevant province or territory. The federal government plays a role in the direct delivery of services such as health care to Indigenous communities.

Canada's social policy priorities are influenced by the federated division of roles and responsibilities; as well as an active civil society, economic/fiscal and tax-payer considerations, and a variety of mechanisms for engagement of citizens and participatory democracy. Notably, in recent years the federal government requires by legislation that each incoming government make public mandate letters from the Prime Minister to Cabinet ministers setting out the priorities for each term.

Priority-setting for the collection of social statistics is influenced by several drivers. Some aspects of data collection are set out in legislative requirements; for example, demographic statistics are rooted in constitutional obligations, and Statistics Canada's enabling legislation. For social data collection, requirements are sometimes set out in legislative requirements for partner departments, such as the *Employment Insurance Act*, which includes entitlements for recipients calculated based on an extension of the Labour Force Survey (LFS) to collect regional employment statistics. These create ongoing requirements for the collection of social data, revisited periodically through letters of agreement that govern the transfer of funding between departments. In other cases, when new programs are established such as Canada's Dental Care program, data requirements to monitor and

evaluate the program area are embedded in the design of the initiative. There are also many smaller, ad hoc funding agreements between departments and other governmental/non-governmental funders to address specific emerging social data needs.

## **INDONESIA**

At the national level, the production of social and demographic statistics is aligned with the government policies and programs referring to the Mid-Term National Development Plan, which has seven priorities:

- 1. Strengthening economic resilience for growth quality and equity
- 2. Regional development to reduce gaps and guarantee equality
- 3. Improving quality and competitive human resources
- 4. Mental revolution and cultural development
- 5. Strengthening infrastructure to support economic development and basic services
- 6. Building the environment, improving disaster resilience and addressing climate change
- 7. Strengthening the stability of political, law, and security affairs and the public service transformation

These policy priorities are used to prioritize the production of social and demographic statistics as these are needed to evaluate and monitor development progress.

Other policy priorities include the green economy, blue economy, and other issues at the level of line ministries or government agencies that have not been directly mentioned in the Mid-Term Development Plan. These issues are currently being prioritized by Statistics Indonesia with links to the development of social and demographic statistics.

At regional (ASEAN) and global levels, the production of social and demographic statistics is also aligned with the demand for indicators for cross-country comparison. For example, to monitor the achievement of SDGs targets, the production of social and demographic statistics has been prioritized to provide SDG Global Indicators. Statistics Indonesia has also attempted to fulfill the needs of international agencies on social and demographic statistics.

## **LITHUANIA**

In Lithuania, all official statistics need to be regulated and mandated by laws that establish needs and priorities for data collection. Once regulated, statistical surveys on different topics are included in the Official Statistics Programme based on the policy areas required by law. For example, as provided in the Official Statistics Programme of 2023 numerous statistical surveys covering social and demographic statistics were conducted partly or exclusively based on national legal grounds. These surveys cover different topics including population, international migration and asylum, illegal migration, unemployment, income, pay gaps, earnings, education and educational attainment, social protection, crime, and criminal justice, among other topics. Moreover, if an unexpected crisis occurs, like the COVID-19 pandemic or Russia's invasion of Ukraine followed by flows of war refugees, for instance, an operational statistic is prepared to respond to the data demands. The State Data Agency also participates in the field of state data management by managing and accumulating state data, providing information prepared based on these domains during the monitoring and analysis of the state's economic and social development, and ensuring effective information exchange between public sector institutions, in accordance with the State Data Governance Programme.

## **MEXICO**

In Mexico, the National Program of Statistics and Geography (PNEG) outlines the mid-term goals of the National System of Statistical and Geographic Information (SNIEG). To achieve this, the PNEG considers (1) the SNIEG's strategic objectives and (2) the national and sectorial priorities, as defined by the National Development Plan.

Public institutions and agencies that participate in the multistakeholder Committees that integrate the SNIEG represent a third source for identifying and defining sectorial priorities. Such stakeholders bring their information and data needs to the Committees, where topics are thoroughly discussed and, once agreed, priorities are defined and incorporated into the Committees' annual work programs.

The sum of the SNIEG's own strategic priorities, the National Development Plan, and strategic policy frameworks derived thereof, and the information needs as defined by the SNIEG's integrating institution, are the backbone for defining social and demographic sectorial and thematic priorities regarding statistics generation. A schematic depiction of the programmatic documents' alignment is presented in Figure 1.



Figure 5: Alignment of programmatic documents with the National Development Program

Source: INEGI's elaboration.

## UNITED KINGDOM

The production of social and demographic statistics by the Office for National Statistics (ONS) is driven by a range of policy issues aimed at addressing societal challenges, informing government decision-making, and facilitating evidence-based policy formulation. Below is a non-exhaustive list of key policy issues that ONS data helps address, including:

- 1. Population change
- 2. Health and Wellbeing
- 3. Social Inequality and Deprivation
- 4. Education.
- 5. Labour Market
- 6. Housing and Urban Planning.
- 7. Ageing Population
- 8. Immigration and Integration
- 9. Family Structure
- 10. Crime and Justice.
- 11. Social Trends and Attitudes

The prioritisation of statistical production, at the most fundamental level, is driven by user requirements. In practice, this manifests itself as a core collection of official statistics (ex. National Life Tables and Mid-Year Population Estimates) that satisfy a wide range of user requirements on a regular basis. Less regular statistics, particularly those which are not badged as official statistics, are subject to more pronounced prioritisation by the ONS' strategic outputs governance. The ONS' strategic outputs cover a number of themes, which include:

- 1. Migration and demographic change
- 2. Productivity and Economic Growth
- 3. Housing
- 4. Education, skills and the labour market
- 5. Crime
- 6. Levelling up
- 7. Cost of living and inflation
- 8. Environment
- 9. Government spending, tax and debt
- 10. Health

## Annex C: Existing Conceptual Frameworks

## CANADA

Canada's Quality of Life Framework, introduced in Budget 2021, aims to measure what matters most to Canadians, to help drive evidence-based budgeting and decision-making at the federal level and for other interested governmental and non-governmental partners. This framework was originally designed to monitor high-level social, environmental, and economic trends 'beyond GDP' to influence priority-setting for investments in each annual federal budget cycle. The framework, released in Budget 2021 along with a related discussion paper, is based on global evidence of the determinants of well-being and has two central 'over-arching' measures of well-being: *Life satisfaction* and *Sense of meaning and purpose*. The determinants of well-being are measured by 20 headline indicators in five domains (Prosperity, Health, Society, Environment, and Good Governance), supported by a set of 84 social, environmental, and economic indicators. The framework also includes two cross-cutting lenses which are applied to all relevant domains and indicators of the framework to assess 'Fairness and inclusions' (distributional differences in outcomes, equity gaps) and 'Sustainability and resilience' (temporal and risk /resilience considerations).



Source: Quality of Life Framework for Canada

Mandate letter in 2021 requires all Cabinet ministers to incorporate the quality of life indicators, alongside gender-based analysis plus, into their decision-making processes. From an NSO perspective, the framework provides policy guidance on high-priority indicators, which enables Statistics Canada to build a more coherent architecture that better integrates social statistics under a coherent conceptual framework, while also strengthening linkages with economic and environmental statistics.

The Framework was developed in 2020/2021 through meetings and consultations led by the Department of Finance Canada. It was publicly released in <u>Budget 2021 – Annex 4: Gender</u>, <u>Diversity</u>, and <u>Quality of Life Statement</u>, alongside the report <u>Measuring What Matters</u> and federal budget investments aimed at strengthening national datasets and better incorporating quality of life measurements into decision making and budgeting. The intention is that the Framework will remain evergreen and evolve over time to capture important issues as they emerge.

In March 2022, Statistics Canada launched the first version of <u>Canada's Quality of Life Hub</u>, bringing together key economic, social, and environmental datasets to support the measurement of Canadians' quality of life. The Hub includes quality of life indicators, definitions, metadata, and data, as well as relevant releases and data products.

In terms of demographic statistics, the <u>Population and Demography Statistics Hub</u> features indicators, data and detailed analysis related to Canadian demographics from a wide set of data sources including population estimates and projections, and the census.

#### **INDONESIA**

Statistics Indonesia produces social and demographic statistics based on ten main statistical domains including:

- 1. Population
- 2. Employment
- 3. Education
- 4. Health
- 5. Living standard
- 6. Housing
- 7. Household welfare
- 8. Socio-cultural
- 9. Social resilience
- 10. Environment.

This serves as the general framework for BPS-Statistics Indonesia to produce social and demographic statistics, with several social and demographic statistics falling under the ten main domains. Figure 7 denotes how the domains are organized based on falling under the individual, household, or community level.

#### Figure 7: Social and demographic statistics domains organization.



Source: Statistics Indonesia's elaboration

In addressing the ten statistical domains, before the data collection process is conducted, Statistics Indonesia invites line ministries/government agencies to provide input regarding their needs to support their programs and policies. This process ensures that all data collected is strongly connected to policy needs. Additionally, Statistics Indonesia identifies the needs of international organizations and takes current global development issues into account in the production of social and demographic statistics.

In implementing the framework to conduct statistical activities, which is guided by the Generic Statistical Business Process Model (GSBPM) to produce social and demographic statistics, there are several challenges that need to be overcome. Several social and demographic indicators needed by line ministries/government agencies to address emerging social issues can often be difficult to measure. Challenges also arise when concepts or definitions for specific indicators have yet to be developed. Even when indicator concepts and definitions may be available, data gaps may be an issue where the data has not yet been collected or is not available.

There are several indices that have been produced by Statistics Indonesia to fulfill the needs of the government in addressing social issues and social development. Some were developed locally for a country-specific purpose and are not available at the global level, while others adopt international measures to assess provincial comparison.

There are several composite indices developed in Indonesia based on international standard measures or concepts, with some adjustments. These include the Human Development Index, Gender Development Index, Happiness Index, Anticorruption Index, Child Protection Index, Early Childhood Development Index, and Youth Development Index. Other composite indices developed without any reference from international measures, or for local country purposes include the Mental Revolution Achievement Index, Actualization of 5 Principles (*Pancasila*) Values Index, Community Development Index, Family Quality Index, Special Index for Stunting Handling, Village Development Index, and the Indonesian Democracy Index. All these indices were developed to measure provincial comparison and progress in social development.

## **LITHUANIA**

Social and demographic statistics are organized based on the general principles of the organization of official statistics and management of state data that are established by the Law on Official Statistics and State Data Governance of the Republic of Lithuania. The activity of the State Data Agency is also regulated by other national and EU legislation. The connection of official statistics production to the policy and decision-making process can be closely linked, as legislative change or adoption of new regulations can directly affect the production of official statistics and serve as legal grounds to produce official statistics.

Lithuania does possess a national composite index called the <u>Lithuanian Society's Civic</u> <u>Empowerment Index</u> and The Gini coefficient of equivalent disposable income is calculated from the European Survey on Income and Living Conditions. State Data Agency as an NSO, however, does not produce any indices in the field of social and demographic statistics. Despite this fact, the State Data Agency still monitors social and demographical issues based on variables included in different national planning documents, for instance through the National progress program for 2021-2030, following Lithuania's progress strategy "Lithuania 2030".

In line with Lithuania's progress strategy "Lithuania 2030," Lithuania monitors progress based on international composite variables in different areas. Vision implementation indicators include the

Quality of Life Index, The World's Happiest Countries, the Democracy Index, the Sustainable Society Index, the Global Competitiveness Index, and the Globalization Index. Smart governance indicators are included in the Corruption Perception Index. These indices comprise the composite variables outlined in Lithuania's strategic document, but additional composite indicators are included in other national legislative documents. Moreover, EIGE's Gender equality index is included in different laws implementing the National Progress Program.

#### <u>MEXICO</u>

Three different programs define social and demographic sectorial and thematic priorities regarding statistics generation. The programs are interconnected but have different scopes.



## Figure 8: Programs guiding the production of information.

Source: INEGI's elaboration.

Each of the programs must be approved by the Governing Board of INEGI, and together, they order and regulate the production processes. The Strategic Program for the SNIEG 2022-2046 has a projection of 24 years and is updated every six years. This program harmonizes all the components of the system to ensure the production of information that promotes national development. The National Program of Statistics and Geography 2019-2024 is a program that aligns with the Strategic Program but also with the National Development Program for each administration.

INEGI is the coordinator of the National System of Statistical and Geographic Information (SNIEG). This system is divided into four specific subsystems, each one in charge of producing, integrating, and disseminating information on their topics. The subsystems help in the identification of information needs and help to organize the existing information. The social and demographic information is under the National Subsystem of Demographic and Social Information (SNIDS), but the four subsystems collaborate and operate in coordination.

Figure 9: Organization of SNIEG into subsystems.



Source: INEGI's elaboration.

As part of the operation of each subsystem, Specialized Technical Committees (CTE) are constituted. The CTEs are collegiate instances of participation and consultation created by agreement of the Governing Board of INEGI and are made up of representatives of the State Units (or ministries) and the Institute, which promotes their constitution and proper functioning. Each CTE has, among its functions:





Source: INEGI's elaboration.

The SNIDS is constituted of twelve CTEs overseeing different dimensions of the social and demographic components. Each CTE has a governing board where the presidency is held by the ministry or state unit with functions closer to the topic of the CTE. The technical secretariat function corresponds to INEGI, the General Direction for Sociodemographic Statistics, and the vocals are representatives from different ministries and departments of government closely associated with the topic in the CTE (see Table 1).

Specialized Technical Committee	e Presidency		
	Ministry		
Labor Statistics and Social Welfare	General Director for Research and Labor		
	Statistics		
	Secretariat of Labor and Social Welfare		
Geographic and Statistical Information on	General Director of Beneficiary Registries		
Social Development	Secretariat of Welfare		
Population and Demographic Dynamics	General Secretary		
	National Population Council		
Sectorial in Health	General Director for Information on Health		
	Secretariat of Health		
Housing	General Director of Urban Development, Land		
	and Housing		
	Secretariat of Urban Development and		
	Housing		
Information on Education	Head of the Office of the Secretary		
	Secretariat of Public Education		
Sustainable Development Goals	Head of the Global Economic Intelligence Unit		
	Secretariat of Economy		
Information with Gender Perspective	Executive Secretary		
	National Institute of Women		
Information on Culture	Undersecretary of Cultural Development		
	Secretariat of Culture		
Information on Disability	Director of Administrative Operation and		
	Acting Director General		
	National Council for the Development and		
	Inclusion of Persons with Disabilities		
Information on Youth	General Director		
	National Institute of Youth		
Information on Comprehensive Protection of	Acting Director of the Executive Secretariat		
the Rights of Children and Adolescents	National System for the Comprehensive		
	Protection of Children and Adolescents		

# Table 1. Specialized Technical Committees at SNIDS and Presidencies

Source: INEGI's elaboration.

#### UNITED KINGDOM

The United Kingdom statistical system is overseen by the United Kingdom Statistics Authority (UKSA). The UKSA is an independent body that oversees the United Kingdom's official statistics to ensure they meet high standards of quality and reliability. The authority was established by the Statistics and Registration Service Act 2007 and operates at arm's length from the government to maintain the integrity of statistical reporting. The primary functions of the United Kingdom Statistics Authority include promoting and safeguarding the production, and publication of official statistics that serve the public good.

The UKSA is connected to policy and decision-making processes in the following ways:

- 1. Providing Reliable Data
- 2. Supporting Evidence-Based Decision Making
- 3. Advising Government Departments
- 4. Promoting Transparency
- 5. Engaging with Stakeholders
- 6. Code of Practice for Statistics

The ONS produces a number of composite indexes in the field of social and demographic statistics. These include the Health Index for England and National Wellbeing Indicators. In addition, the ONS uses the Index of Multiple Deprivation in some of its analyses.

Progress on social measures is benchmarked internationally against the Sustainable Development Goals.

The United Kingdom maintains a <u>National Wellbeing dashboard</u> comprised of 60 indicators across ten domains which allow for a diverse range of social, environmental, and economic outcomes to be captured in one place, which is discussed further in the 'Outcomes' section, and has put considerable thought into integration between social, environmental and economic statistical pillars.



## Annex D: People

## CANADA

## Population counts and estimates

As a confederation, Canada has a long census tradition that supports many pieces of legislation designed to deliver programs and services to Canadians living in the ten provinces and three territories. The first Census of Population was initiated by Jean Talon in 1666, and from 1851 to 1956, Canadians were surveyed every 10 years. However, following a request from the prairie provinces to capture more rapid population changes, the Census has since been held every five years as a constitutional requirement.

The Census of Population and associated coverage studies are also the base of quarterly and annual demographic estimates and population projections, designed to monitor in between censuses population trends. Demographic estimates are also needed for annual transfer payments to be made from the federal government to the provinces and territories. Statistics Canada also uses demographic estimates for internal needs, such as total controls for surveys such as the Labour Force Survey, and as denominators for many key statistical indicators released by the Agency.



Figure 11: Canada's Census of Population Process - Socioeconomic Indicators and Population Projections

Source: Statistics Canada elaboration.

In terms of the process, the Census undergoes collection, dissemination, and coverage evaluations, as denoted in Figure 8. Collection usually transpires on a day in May of the collection year, where all Canadians across the provinces and territories are mandated to answer the Census, be it short-form or long-form. The majority of Canadians (75%) are sent the short-form Census, while the remaining portion (25%) are sent the long-form Census to complete, which provides a more comprehensive snapshot of demographic characteristics amongst the Canadian population.

Demographic statistics arising from the Census of Population are based on the concept of "usual place of residence," and tests are currently conducted to add alternative measures. These tests are conducted as Statistics Canada does not measure the de facto population, that is on the basis of where people are located on the enumeration day of the Census.

Statistics Canada disseminates various population statistics from the Census and then also computes demographic estimates in statistics between censuses, using population-adjusted census

counts as the base. These demographic estimates serve to fill legislatives mandates such as the Fiscal Arrangement Act and the Fair Representation Act. As a result, once Census counts have undergone all quality testing and have been updated with coverage adjustments, demographic estimates are produced on a quarterly and annual basis to meet these legislative requirements.

## **Population projections**

Statistics Canada uses two projection models to compute population projections, depending on the needs. One model is based on the cohort-component method, and the second model uses microsimulation (the model is called Demosim). The cohort-component method is used for projections by age and sex for provinces and territories, and microsimulation is used to project many characteristics of the population and lower levels of geography, including for First Nations, Metis, and Inuit populations, ethnocultural diversity, Employment Equity groups, official languages, and labour force characteristics. With these projection methods, annual population projection updates and custom projections can be made available, including for smaller geographic units.

## Demographic estimates

Using the Population Census and associated coverage studies as a base population, demographic estimates are produced on a quarterly and annual basis by Statistics Canada to meet several needs, among which legislative mandates.

Demographic estimates are also available by age and sex, and in 2024 for the first time, by gender. They are produced at various geographic levels, including the provinces and territories, large and medium urban centres, and for municipalities. Statistics Canada also released components of growth related to its demographic estimates, that is estimates of the number of births, deaths, permanent and temporary immigrants, emigrants, and internal migrants.

Statistics Canada's demographic estimates are based on a strong partnership with many key stakeholders, among which the provincial and territorial statistical focal points. Annual meetings are held to discuss methods, data sources, and available products from the demographic estimates program. Statistics Canada also works in close collaboration with many external data providers, such and Immigration, Refugees, and Citizenship Canada, the Canada Revenue Agency, the US Census Bureau, and US Homeland Security. These partners feed the demographic estimates with data on immigration, internal migrations, and emigration. Other data are used as well, such as births and deaths from Vital statistics.

On top of meeting several legislative mandates, demographic estimates are used by multiple users to feed programs and services delivery to Canadians, and by provinces and territories as well. Demographic estimates are also used by social surveys at Statistics Canada as total controls for weighing purposes, and as denominators for many social and economic key indicators, such as the unemployment rate from the Labour Force Survey. Custom demographic estimates are also available upon request to meet specific needs, for example in case of natural disasters, or for emergency responses to situations.

## Disaggregated Data Action Plan (DDAP)

Budget 2021 provided Statistics Canada with \$172 million over five years to implement the Disaggregated Data Action Plan (DDAP). This funding supports more representative data collection methods, enhances statistics on diverse populations to allow for intersectional analyses,

and supports government and societal efforts to address known inequalities and promote fair and inclusive decision-making.

The DDAP includes data collection, the use of alternative data sources, methods and the development of standards, engagement and collaboration, and the dissemination of results with a current focus on the four employment equity groups: Indigenous peoples, women, racialized populations, and persons with disabilities. Where relevant and possible (based on the subject at hand, data confidentiality, privacy, and quality considerations), disaggregation will extend to other groups (e.g., sexual orientation, children and youth, seniors, official language, immigrants, low-income Canadians). To better understand the inequalities of diverse population groups, the DDAP adopts a Gender-based Analysis Plus (GBA Plus) lens to critically analyze all intersecting identity factors.

## **INDONESIA**

To produce population counts, estimates, and projections over time, data from the population census is used. Three components of population change are used to form demographic estimates and projections, including total fertility rate (TFR), infant mortality rate (IMR), and migration. To measure the accuracy of population projection, the Bayesian method is used as a quality assurance. To increase the availability of high-quality, timely, and reliable social data to ensure "*no one is left behind*," Statistics Indonesia has developed and conducted several sample surveys collected on a regular basis using a random sampling method, in addition to conducting population census every 10 years. The following list outlines key data sources for social and demographic statistics:

- National Socio-Economic Survey
- National Labour Force Survey
- Population Census
- Intercensal Population Survey
- Anti-Corruption Behavior Survey
- Survey of Measuring the Level of Happiness
- National Women's Life Experience Survey
- National Children's and Youth's Life Experience Survey
- Village Potential Data Collection
- Other data collections conducted by other government agencies: Basic Health Research and Family Registration
- Other sources: Administrative data and Big Data

All the above data sources support the SDGs, and data resulting from these surveys can be mostly disaggregated by sex, age, education, marital status, migration status, disability, and geographic location, among other demographic variables. The National Socio-economic Survey, in particular, can provide disaggregated data by income or expenditure. Among the above data sources, there are two main sources that have provided several SDGs indicators including the National Socio-Economic Survey and National Labour Force Survey, which are both collected twice per year. The intersectional perspective in the production of social and demographic statistics is reflected in

population characteristics which can be disaggregated by sex or gender, age group, disability, and other characteristics that will give a comprehensive picture of outcomes (e.g., education, health, household welfare, social welfare and inequality).

## **LITHUANIA**

Since 2005, the number and composition of the resident population have been determined based on data from the population and housing censuses of the Republic of Lithuania, and the Population Register of the Republic of Lithuania (now referred to as the Population Register) since 2022, according to the data of the Statistical Population Register, managed by Statistics Lithuania. The Statistical Population Register is updated daily with data from the Population Register on births, deaths, and people who have changed their usual residence (i.e., those who have entered the country/left the country). A person is considered a usual resident if they are included in two or more registers or State information systems (excluding the Population Register). An encrypted personal code is used for the administrative data linkage.

Strategies to produce social data ensuring "no one is left behind" are mainly reflected in the production of SDG indicators. The official list of SDG indicators is frequently being supplemented by national indicators that include disaggregation by available relevant characteristics, for example, sex, age groups, place of residence (urban, rural), or a combination of sex and age groups (ex. women by age groups and men by age groups). The disaggregation possibilities are highly dependent on the availability of data and data type, as data collected using sample surveys cannot be disaggregated by all desired characteristics. Standardized disaggregation is prioritized but so too is having data that is as detailed as possible. If it is not possible to disaggregate data in a standardized way, disaggregation is provided by the levels that are available instead of not disaggregating at all.

## <u>MEXICO</u>

The production of population counts and estimates is based on the information resulting from products conducted by INEGI. These processes included:

- a) Population and Housing Censuses: Conducted every 10 years, the Population Census provides information on the volume and characteristics of the population in the country. The last Census was conducted in March 2020.
- b) Population Counts: Conducted in 1995 and 2005, these processes are conducted to update information on population size, composition, and distribution.
- c) Intercensal Survey: The 2015 Intercensal Survey was carried out to update the sociodemographic information to the midpoint between the Census 2010 and the 2020 Census.

In order to provide information on the characteristics of the population, some specialized surveys are conducted with different periodicity. For example,

- d) National Survey of Demographic Dynamics (ENADID): The last three rounds, conducted in 2009, 2014, and 2018, provide information on the components of demographic dynamics: fertility, mortality, and migration.
- e) National Survey of Occupation and Employment (ENOE): Starting in 2005, ENOE provides quarterly data on the labor force, occupation, labor informality, underemployment, and unemployment, as well as basic sociodemographic information.

INEGI also publishes vital statistics on registered deaths and births. While this information comes from the Secretariat of Health and the Civil Registration Offices, INEGI collects, integrates, processes, and publishes this information. Overall, all the information collected and published by

INEGI is utilized by the National Population Council to estimate the base population and to elaborate the population projections<sup>3</sup>.

As part of the commitment of INEGI to provide information for the measurement of the progress of the 2030 Agenda, the institution hosts the Information System on the Sustainable Development Goals (SIODS). This online platform provides information for each indicator, but it also allows for the exploration of the information at the national and regional levels. Also, as mentioned above, the SNIDS includes a Specialized Technical Committee on the SDGs, with the mission of tracking the publication and updating of indicators.

As a result of the interaction of many of the CTEs and the work of the General Direction of Sociodemographic Statistics, basic disaggregation is included in most of the statistics produced. Most surveys — and indicators — are reported or can be estimated for sex, age, indigenous language, educational attainment, income, and employment. The availability of these disaggregation depends on the scope of the survey, sample size, and the nature of the information being produced.

## UNITED KINGDOM

The ONS uses a variety of models and methods to produce population counts, estimates, and projections. Here are some common methods and models used:

- 1. **Census Data:** The United Kingdom conducts a national census every ten years, which provides a comprehensive and accurate count of the population. Census data serve as a fundamental input for population estimates and projections.
- 2. Administrative Data: The ONS uses administrative data from various sources, such as government records, to supplement and improve population estimates. This can include data from sources like the National Health Service (NHS), the Department for Work and Pensions (DWP), and other government departments.
- 3. **Vital Statistics:** The ONS uses vital statistics, including birth and death registrations, to update population estimates. Birth and death data help in understanding population changes and demographic trends.
- 4. **Migration Data:** The ONS uses data on international migration, including information from the International Passenger Survey (IPS) and other sources, to estimate net migration and its impact on the population.
- 5. **Household Surveys:** The ONS conducts household surveys, such as the Labour Force Survey (LFS) and the Annual Population Survey (APS), to gather additional demographic information and validate population estimates.
- 6. **Demographic Models:** The ONS uses mathematical techniques to estimate population dynamics, including fertility, mortality, and migration. These models help project future population trends based on historical data and assumptions about future demographic behaviour.
- 7. **Population Projections:** The ONS produces population projections using a cohort component model and assumptions about future trends in fertility, mortality, and migration.

<sup>&</sup>lt;sup>3</sup> Population Projections are to be produced by the National Population Council, according to the Population Law in Mexico.

Where possible, data is disaggregated in analysis such that an understanding can be gained from how population characteristics affect broader outcomes. This has been a particularly prominent approach for the dissemination of analysis of census data from the 2021 census.

ONS has been actively involved in the measurement and reporting of progress towards the United Nations Sustainable Development Goals (SDGs). These are some aspects of the ONS's work related to the Sustainable Development Goals:

- 1. **Measuring SDG Indicators**: The ONS has been working on incorporating SDG indicators into its national statistical system. This involves collecting, analysing, and reporting data on various indicators related to poverty, health, education, gender equality, climate change, and other key dimensions covered by the SDGs.
- 2. **Reporting on Progress**: The ONS produces regular reports and publications that assess the United Kingdom's progress towards meeting the SDGs. These reports provide an overview of the current status, trends, and challenges in areas covered by the goals.
- 3. **Inclusive Data Taskforce**: The Inclusive Data Taskforce is an initiative that aims to improve the inclusivity of data and ensure that data collection methods are representative of the entire population. The ONS has been involved in broader efforts to enhance data inclusivity, which aligns with the objectives of the task force.

## Annex E: Outcomes

## <u>CANADA</u>

Canada's Quality of Life Framework provides a set of harmonized outcomes that serve as an impetus to better organize the social statistics program to capture a stable set of social outcomes. The framework indicators are illustrated below.

Figure 12: Infosheet: Quality of Life Framework for Canada							
Quality of Life Framework for Canada							
Prosperity	Health	DOC Society	Environment	Good Governance			
<ul> <li>Increase and growth</li> <li>Standbald assess</li> <li>Standbald assess<td>Healthy people Health-adjusted life expectancy Set and end metal health Set your an ender health Set your an ender the set Set your an ender the set Set your and the set Set your and the set Health your and the set Health your and the set Uncert leads for mental health care Long Set on care set Uncert leads for mental health care Long Set on care and set Uncert leads for mental health care Long Set on care and set Uncert leads for mental health care Care set suggement in the set set of the set of the set of the set set of the set of the set of the set Health your and the set of the set of the set Health your and the set of the set of the set between the set of the set of the set of the set health your and the set of the set of the set of the set health your and the set of the set of the set of the set of the set health your and the set of the</td><td><section-header><section-header><text><text><list-item><list-item><section-header><section-header><section-header></section-header></section-header></section-header></list-item></list-item></text></text></section-header></section-header></td><td>Evitorment and people A drawing Drawing A crawing Drawing and the properties Drawing and the analysis of the a</td><td><ul> <li>Safety and security</li> <li>Prenoal safety</li> <li>Thermoal safety</li> <li>Thermoal safety</li> <li>Thermoal safety</li> <li>The source of englowarmod safety after data and englowarmod safety after data and thermoscience preparadress</li> <li>Condence on instatutions</li> <li>Wate transmission</li> <li>Thermoscience of the safety and the safety and dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the safety and the dispersion safety and the safety and the safety and the safety and the dispersion safety and the safety and the safety and the safety and the dispersion safety and the safety and the safety and the safety and the dispersion safety and the safety and the dispersion safety and the safety and th</li></ul></td></li></ul>	Healthy people Health-adjusted life expectancy Set and end metal health Set your an ender health Set your an ender the set Set your an ender the set Set your and the set Set your and the set Health your and the set Health your and the set Uncert leads for mental health care Long Set on care set Uncert leads for mental health care Long Set on care and set Uncert leads for mental health care Long Set on care and set Uncert leads for mental health care Care set suggement in the set set of the set of the set of the set set of the set of the set of the set Health your and the set of the set of the set Health your and the set of the set of the set between the set of the set of the set of the set health your and the set of the set of the set of the set health your and the set of the set of the set of the set of the set health your and the set of the	<section-header><section-header><text><text><list-item><list-item><section-header><section-header><section-header></section-header></section-header></section-header></list-item></list-item></text></text></section-header></section-header>	Evitorment and people A drawing Drawing A crawing Drawing and the properties Drawing and the analysis of the a	<ul> <li>Safety and security</li> <li>Prenoal safety</li> <li>Thermoal safety</li> <li>Thermoal safety</li> <li>Thermoal safety</li> <li>The source of englowarmod safety after data and englowarmod safety after data and thermoscience preparadress</li> <li>Condence on instatutions</li> <li>Wate transmission</li> <li>Thermoscience of the safety and the safety and dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the dispersion safety and the safety and the safety and the safety and the dispersion safety and the safety and the safety and the safety and the dispersion safety and the safety and the safety and the safety and the dispersion safety and the safety and the safety and the safety and the dispersion safety and the safety and the dispersion safety and the safety and th</li></ul>			
Canadia Canadia							

Links to further information about each indicator of social outcomes (e.g., definitions, data sources, recent data) is also provided:

- Life satisfaction
- Sense of meaning and purpose

## **Domain: Prosperity**

#### Income and growth

- Household income
- <u>Access to high-speed Internet</u>
- Household wealth

## Employment and job quality

- Employment
- Labour underutilization
- <u>Wages</u>

- Precarious or gig work
- Job satisfaction

### Skills and opportunity

- Youth not in employment, education or training (NEET)
- Access to early learning and child care
- Child, student, and adult skills (in progress)
- Postsecondary attainment
- <u>Future outlook</u>

### Economic security and deprivation

- Housing needs
- <u>Poverty</u>
- Protection from income shocks
- Financial well-being
- Homelessness (in progress)
- Food security

### **Domain: Health**

#### Healthy people

- <u>Health-adjusted life expectancy</u>
- <u>Self-rated mental health</u>
- <u>Self-rated health</u>
- <u>Physical activity</u>
- <u>Functional health status</u>
- Children vulnerable in early development (in progress)
- Fruit and vegetable consumption/healthy eating environments
- Healthy care systems
- Timely access to primary care provider (in progress)
- <u>Unmet health care needs</u>
- Unmet needs for mental health care
- Long-term care (access and quality) (in progress)
- Access to supplementary health insurance
- <u>Unmet needs for home care</u>
- Cost-related non-adherence to prescription medication

#### **Domain: Society**

#### Culture and identity

• <u>Sense of pride/belonging to Canada</u>

- <u>Positive perceptions of diversity</u>
- Indigenous languages
- Knowledge of official languages
- Participation in cultural or religious practices, recreation or sport

### Social cohesion and connections

- <u>Sense of belonging to local community</u>
- <u>Someone to count on</u>
- <u>Trust in others</u>
- <u>Volunteering</u>
- <u>Satisfaction with personal relationships (family and friends)</u>
- Loneliness
- <u>Accessible environments</u>

### Time use

- <u>Time use</u> headline indicator
- <u>Satisfaction with time use</u>

## **Domain: Good governance**

## Safety and security

- <u>Personal safety</u>
- Crime Severity Index
- <u>Perceptions of neighbourhood safety after dark</u>
- Childhood maltreatment
- Household emergency preparedness (in progress)

## Democracy and institutions

- Confidence in institutions
- Voter turnout
- Representation in senior leadership positions
- Misinformation/trust in media
- Indigenous self-determination

## Justice and human rights

- Discrimination and unfair treatment
- <u>Cyberbullying</u>
- Access to fair and equal justice (civil and criminal)
- <u>Resolution of serious legal problems</u>
- <u>Incarceration rate</u>

## **INDONESIA**

Data's level of usefulness and need for policymakers and data users form the basis for producing social and demographic statistics. As such, social outcomes that are covered at Statistics Indonesia include:

<u>Objective outcomes</u>: Education outcomes, health outcomes, housing conditions, environmental outcomes, household welfare, social welfare, and employment outcomes.

<u>Subjective outcomes:</u> Condition of social resilience, socio-cultural outcomes, perception of corruption, environment awareness behavior, trust in others, safety-violence, crimes, democracy. More comprehensively, Statistics Indonesia collects the following social and demographic indicators:

Population

• Population size and composition, population growth, fertility (TFR, ASFR, mean year of childbearing age, mean year marriage, average life born children, etc.), mortality (infant mortality rate, under-5 mortality rate, crude death rate, maternal mortality ratio), migration/mobility.

#### Education

• Early childhood education, enrollment rate, literacy, completion rate, out-of-school children, participation rate in organized learning, mean years of schooling, expected years of schooling.

#### Health

• Immunization, stunting, life expectancy, women giving birth at health facilities, and women giving birth attended by skilled health workers.

#### Employment

• Working population, labour force, unemployment, sector of employment, type of occupation, child labour, formal/informal jobs, wage, key indicators of labour market, decent work.

## Socio-Cultural

• Art and cultural statistics, mental revolution measure, sport, social interaction.

Housing

• Housing condition, secure tenure, backlog, water and sanitation

Living standard and household welfare

• Household expenditure, prevalence of undernourishment, food security

## Social Resilience

• Poverty, income inequality, deprivation, disability statistics, social protection, happiness statistics, corruption statistics, violence against women and children.

#### Environment

• Access to basic sanitation, access to safe drinking water, access to basic hygiene facilities, slum areas, environmental awareness behavior, disaster statistics

## **LITHUANIA**

State Data Agency does not monitor social outcomes directly. Data collection typically reflects the need for legislative changes or pressing national data needs. The direct linkage between legislation and data collection is believed to ensure that data production is aligned with the different social processes being observed and to meet the needs of data-based policymaking. Moreover, much of the statistical information that is produced in line with EU legislation is also included in the national policy-making process.

## **MEXICO**

INEGI, as coordinator of the SNIEG, keeps track of a series of indicators on the National Catalog of Indicators. For the Demographic and Social dimension, the indicators include:

- Quality of life and social security
  - Housing conditions (dwelling characteristics)
  - Poverty and marginalization
- Culture, sports and spare time
  - Sport engagement
  - Expenditure and promotion of sports
- Education
  - Students
  - Educational characteristics
  - Expenditure in education
- Population and demographic phenomena
  - Fertility
  - Households and family dynamics
  - Mortality
  - Population composition
- Health and nutrition
  - Health characteristics of the population
  - Expenditure in health
  - Mobility
  - Nutrition
  - Health Services
- Employment and labor
  - Employment and occupation
  - Productivity and labor costs
  - Labor relations

Many of these indicators are generated by the State Units using information from INEGI; however, some of them may include information from different sources.

## UNITED KINGDOM

The <u>National Wellbeing dashboard</u> comprises 60 indicators across ten domains which allow for a diverse range of social, environmental, and economic outcomes to be captured in one place. Within the dashboard, subjective measures of wellbeing alongside objective measures of output or outcome in key policy areas are captured, which are considered to have a direct relationship with the results of subjective assessments.

The dashboard covers ten domains which represent the spread of indicators we produce:

- Personal wellbeing
- Our relationships
- Health
- What we do
- Where we live
- Personal finance
- Education and skills
- Economy
- Environment
- Governance

## Annex F: Places

## <u>CANADA</u>

Canada's Population Census has a specific set of standard geographical breakdowns that are used to understand place-based differences in social and demographic outcomes. These are useful to disaggregate rich Census data with sufficient sample size to release at granular levels. However, between Census intervals there is typically insufficient sample size to disseminate geographical data for small communities, rural and remote areas.

In the case of Canada's Census of Population, geographic disaggregation standards exist and include the following concepts and hierarchical breakdowns:

- 1. Geographical region of Canada
- 2. Province and Territory
- 3. Census division and subdivision (municipalities)
- 4. Census metropolitan areas (CMAs) and Census Agglomerations (CAs)
  - a. Includes rural and urban areas.
  - b. Population of at least 100,000 with at least 50,000 living in the core (population centre).
  - c. A CA must have a population of at least 10,000.
- 5. Population centres
  - a. Small population centres: population between 1,000 and 29,999.
  - b. Medium population centres: population of 30,000 to 99,999.
  - c. Large population centres: population of 100,000 or more.
- 6. Rural areas
  - a. Areas outside population centres.
  - b. Rural areas are classified by proximity to a population centre, or, in other words, access to services.

For added context, geography concepts at Statistics Canada are built using dissemination blocs (a combination of street blocs). Population centres are constructed using these dissemination blocs and employment travel patterns determine the size of a city (census subdivision). A CMA is formed by one or many adjacent municipalities (population centres) and must have a population of at least 100,000. There are approximately 200 self-contained labour areas for rural areas in Canada.

## **INDONESIA**

The standard geographical breakdowns for most data produced by Statistics Indonesia include the national, urban-rural classification, provincial level, and district level. Data resulting from census can be broken down into the lower administrative level. For data resulting from sample surveys, the geographical breakdowns depend on the way the sample survey is designed. The survey design is determined by the need of disaggregation level and the available budget. However, as Indonesia follows a decentralized government system where the autonomous regions are at the district level, the provision of statistics is demanded at the lowest administrative level.

Geocoding and geospatial information have been implemented in Statistics Indonesia, particularly to analyze across statistical indicators from different themes and domains in one geographical

information system. Statistics-Indonesia has a Geospatial Information System which aims to present various statistical information connecting three aspects: statistical working area (*Wilkerstat*), geographical maps and statistical indicators.

The promising practice of using geography as an element to analyze is that data users can easily compare between regions for a number of indicators presented together and can be more comprehensive in understanding phenomena. One of challenges is that we cannot put together many indicators in one map, because this could make complicated if not all indicators are interrelated.

## <u>LITHUANIA</u>

Geographical breakdowns typically used to analyze social and demographic statistics are based off the Classification of Territorial Units for Statistics (NUTS). If possible, data disaggregated by place of residence (urban areas; rural areas) is also provided. In the social and demographic statistics area, only census data is geocoded, and varied sizes of grid data are provided, following the EU regulations. To respond to different social and demographic challenges, different GIS applications are produced, like dashboards on <u>international migration</u>, <u>schools</u>, <u>war refugees from</u> <u>Ukraine</u>, and <u>interactive maps on at risk of poverty rate</u>

### **MEXICO**

As INEGI integrates the statistical and geographic components in the same institution, the production of information is organized in standard geographic units. However, given the nature of many of the processes for generating social and demographic information, the breakdowns are limited. The usual breakdowns are as follows:

Geographic Unit	<i>Census</i> and counts	Intercensal Survey	Household Surveys <sup>1</sup>	Vital statistics
National	Х	X	X	Х
State	Х	Х	Х	Х
Municipality	Х	Х		
AGEB (Basic Geo-Statistical Area)	Х			
Lower (locality, block)	Х			

#### Table 2. Level of geographic breakdown by information process.

<sup>1</sup> Some exceptions in household surveys allows only for national estimates (ENASIC)

Integration of geographic information and social and demographic data is of major interest at INEGI. As promising practices, we have:

a) **Geostatistical Grid.** Based on polygons of different size, provides information from the 2020 Census to different degree of granularity.









Source: www.inegi.org.mx

b) **National Housing Inventory**. This tool integrates the results from the 2020 Population Census with the geographic component.



Figure 15: Example from the National Housing Inventory: pedestrian crossing Inventario Nacional de Viviendas 2020

Source: www.inegi.org.mx

#### UNITED KINGDOM

The ONS uses geocoding of social and demographic data regularly in its statistical releases where geographical information is linked. For example, almost all census publications provide geographical breakdowns. The Output Area Classification (OAC) is a geodemographic classification system developed by the ONS. It is designed to provide a detailed understanding of the social and economic characteristics of small geographic areas known as Output Areas (OAs). Output Areas are the smallest geographic units used in the dissemination of census and other small area statistics in the United Kingdom.

Here is a summary description of the ONS Output Area Classification:

- 1. **Geodemographic Classification**: The OAC is a geodemographic classification, meaning it categorises small areas based on various demographic and socio-economic characteristics. It helps identify patterns and trends in the population across different regions.
- 2. **Based on Census Data**: The OAC is constructed using data from the decennial census and other administrative data sources. It considers a wide range of factors, including demographics, housing, employment, and social characteristics, to group Output Areas into distinct classes.
- 3. Segmentation into Super Groups and Groups: The OAC classifies Output Areas into Super Groups, which represent broad categories of areas with similar characteristics. Each Super Group is further divided into Groups, providing more detailed distinctions within each category.

4. **Granular Level of Detail**: One of the strengths of the OAC is its ability to provide a granular level of detail, allowing for a nuanced understanding of local variations. This makes it valuable for policymakers, researchers, and businesses seeking to target specific communities or understand regional differences.

The <u>OAC</u> is periodically updated to reflect changes in the population and socio-economic landscape.

ONS also produces a Rural/Urban Classification that categorises geographic areas based on their rural or urban characteristics. This classification system provides a way to understand and differentiate between areas with different levels of urbanisation.

The Rural/Urban Classification divides geographic areas in the United Kingdom into different categories based on their degree of rurality or urbanity. This classification helps in understanding the distribution of population and settlements across the country. The classification is based on a combination of population size and settlement patterns. Areas are categorised as urban or rural depending on factors such as the size of the population, the extent of contiguous built-up areas, and proximity to urban centres.

The rural classification is not uniform, and it includes different categories to capture the diversity of rural settings. These categories may include "Rural – Village," "Rural – Town and Fringe," and "Rural – Hamlet and Isolated Dwellings." Each category reflects different levels of population density and settlement patterns. Urban Categories: Urban areas are similarly divided into categories based on their size and characteristics. These categories may include "Urban – Major Conurbation," "Urban – Minor Conurbation," and "Urban – City and Town," among others.

## Annex G: Time

## <u>CANADA</u>

Statistics Canada uses many different tools and methods to understand and anticipate changes in the Canadian population, its outcomes, and relationships. One such tool includes the Integrated Social Data Platform (ISDP). This particular platform uses many different ways to extract social and demographic data needed by Canadians to make informed decisions. For instance, the ISDP features traditional surveys (for specialized needs), Omnibus surveys (for general social data), RapidStat surveys (for quick and standalone data), web panel surveys (for rapid indicators), crowdsourcing (for "pulse checks" on emerging issues), and applications (for in the moment specialized data needs). Traditional surveys can take a year or more to develop, so they're not always the best option for timely data but they are highly useful for specialized needs. Omnibus surveys, like the Canadian Social Survey (CSS), provide Canadians with highly relevant, timely, and frequent data that is meaningful for policy making and decision making. Rapidstat surveys provide timely data during a 3-5 month period with data available readily after collection. Web panels are especially useful for a fast turnaround time, with the caveat being that the sample size is not always large. Three examples run at Statistics Canada to date include the Canadian Perspectives Survey Series (CPSS), Portrait of Canadian Society (PCS), and Survey Series on People and their Communities (SSPC). These web panel surveys include the same sample of respondents for up to one year and were initially recruited from the Labour Force Survey but are now recruited from the Canadian Social Survey (CSS). Crowdsourcing questionnaires do not allow for quality indicators that are typical with surveys, however, they operate well to gain a quick pulse check on points of data when they're most relevant.

Statistics Canada also employs longitudinal surveys to understand different dimensions of Canadian populations and how they change over time. Some examples include the Longitudinal International Study of Adults (LISA), the Longitudinal Administrative Databank (LAD) and, in the past, Statistics Canada has also employed the Longitudinal Survey of Immigrants to Canada (LSIC), and the National Longitudinal Survey of Children and Youth (NLSCY).

Population projections for Canada, provinces and territories are traditionally produced every five years, closely following the availability of adjusted population estimates based on the latest five-year census. These projections are produced by Statistics Canada's Demography Division and are intended to offer Canadians an opportunity to investigate what the Canadian population might become in the years ahead, according to various scenarios of possible future change.

In terms of simulations, Statistics Canada has developed several microsimulation models as well as general purpose tools that assist in their construction. These microsimulation models include the Social Policy Simulation Database and Model (SPSD/M), Demosim, Health Models, and Model generator (Modgen). The Social Policy Simulation Database and Model (SPSD/M) is a microcomputer-based product designed to assist those interested in analyzing the financial interactions of governments and individuals in Canada. It can help one to assess the cost implications or income redistributive effects of changes in the personal taxation and cash transfer system. Demosim is a microsimulation model developed and maintained at Statistics Canada that is designed to produce detailed population projections. Using the microdata file from the Census of Population as its starting point, Demosim produces dynamic population projections for the provinces, territories, census metropolitan areas and selected smaller geographies, based on a number of characteristics: age, sex, visible minority group, place of birth, generation status, Indigenous identity, registered Indian status, level of education, linguistic characteristics, and labour force participation, among others. It does so by simulating events such as births, deaths, migrations, and changes in level of education, according to various population growth scenarios.

Drawing from the rich banks of data within Statistics Canada and building upon the analytic work of academic colleagues and collaborators, the agency's health microsimulation models realistically represent the Canadian population with attributes such as risk factor exposures, health histories and demographic characteristics typical of Canadians. The models simulate histories for individual persons in continuous time and add the individuals up to create aggregate results for the total population. The models generate realistic future projections of status quo trends and provide users with the ability to test "what if scenarios" related to potential policy and program interventions. Finally, Modgen (Model generator) is a generic microsimulation programming language supporting the creation, maintenance, and documentation of dynamic microsimulation models. Several types of models can be accommodated, be they continuous or discrete time, with interacting or non-interacting populations.

#### **INDONESIA**

The production of social and demographic statistics relies primarily on household-based surveys conducted on a cross-sectional basis. Panel surveys are conducted for specific cases. For example, the National Socio-economic Survey is a panel survey that was collected during the period 2022-2024 for the need of monitoring extreme poverty. As another example, the National Labour Force Survey is paneled only for one year. The national labour force survey (SAKERNAS) is conducted twice a year in February and August. The sample size of the February SAKERNAS is 75,000 households, while the August SAKERNAS is 300,000 households. The sample of February SAKERNAS is paneled in August SAKERNAS in the same year, which means the sample of August SAKERNAS consists of 25% paneled sample. Then in the following year the sample is completely different (rotated). So, the implementation of panel sub-sample in the SAKERNAS is because of technical reasons, i.e., rotating selected households in the sample.

The presentation of social indicators describes more cross-sectional situations because the sample is not fully a panel sample. As a result, changes in population, outcomes, and relationships are measured at macro level, not at an individual level.

In principle the production of social and demographic statistics follows a life-course perspective, as follows, tailored to the needs of our country:



Figure 16: Life course perspective for the production of social and demographic statistics.

In this chart, there are several phases of life starting from the 1,000 days of first life until the period of old age, completed with its development programs in every phase of life. The production of social and demographic statistics aims to fulfill and measure every stage of life.

As changes in social aspects take place relatively slowly, most social outcomes are reported twice a year or yearly. After data collection, on average, it takes between 3 to 6 months to disseminate social data.

The promising practice is that producing social and demographic statistics based on above aspects and the life course perspective will ensure the comprehensiveness of data provision in a timely manner.

The integration of social and demographic statistics within pillar is achieved through the data collection process. As mentioned previously, in the specify need phase in the GSBPM process, all needed data or indicators are identified to ensure that all data collected meet the demand. The National Socio-Economic Survey (SUSENAS), which is often called the mother of surveys, collects a large number of statistics covering population stock and flows, education, health, income/consumption, housing and population characteristics such as gender, disability, and other characteristics in one integrated survey. A large number of indicators including SDGs indicators are derived from the SUSENAS.

Statistics Indonesia has attempted to align the production of social and demographic statistics with economic, environment and other needs. Linking the social and demographic statistics with economic and environmental statistics is conducted based on the need or demand from the current or rising issues in the economic and environmental statistics. For instance, the development of

green economy is being responded to with a study to produce green jobs statistics. Development of national accounts in the area of satellite account such as tourism satellite account, creative economy account, maritime account, and SME national account are followed by the production of statistics on the working population on tourism, creative economy, maritime, and SME sectors.

## <u>LITHUANIA</u>

Social outcomes are measured and reported at different time intervals.

• Monthly – consumers' intentions of spending and possibilities to make savings, as well as to gain information about their opinion about the economic situation and the impact thereof on their intentions (Consumer survey).

• Quarterly – employment and unemployment and to estimate the number of employed, unemployed and inactive persons, their distribution by age, sex, place of residence, education, economic activity, major occupational group (Labour force survey).

Yearly - household gross and disposable income, distribution of households by income source, income level, living conditions, including material deprivation, at-risk-of-poverty and social exclusion, their changes, the groups of the population most often affected by absolute poverty, at-risk-of-poverty and social exclusion (Income and living conditions survey); the availability of computers and Internet access in households, frequency and purposes of Internet usage, use of mobile devices, e-commerce and e-governance usage, digital skills, IT security and trust, the impact and challenges of IT use (Use of information and communication technologies survey).
Poverty and inequality forecasts are carried out by Ministry of Social Security and Labour

Together with other public institutions and experts in the following years, we'll conduct two longitudinal (panel) studies – Lithuania's long-term social study (LIST) about Lithuania's society and its development in different areas, and a study on family and fertility under Generations and Gender Programme.

## <u>MEXICO</u>

INEGI has committed to produce information in a timely manner. At the same time, different approaches in the production of information are utilized in different projects. Censuses are cross-sectional in nature, and most household surveys follow this same approach. However, demographic and social information is also generated with other perspectives. Two examples of this are:

- a) Demographic Retrospective Survey (EDER). Conducted in 2011 and 2017, EDER aimed to collect information about the temporary nature of sociodemographic processes on migration, education, work, marriage, residential arrangements, fertility and mortality, contraception and disability; as well as current living conditions and when the target population was 14 years and current subjective well-being and in different periods of life.
- b) Mexican Health and Aging Study (ENASEM). In coordination with The University of Texas Medical Branch, carried out the ENASEM 2021, which follows up on the information produced in the surveys of 2001, 2003, 2012, 2015 and 2018, on the population aged 50 years and over in Mexico, regarding the aging process, the impact of diseases and disability in carrying out their activities, whatever they may be. The study includes persons

aged 50 years or over, who was selected in 2001, 2012 or 2018, their spouse or partner, regardless of their age, as well as the people who join them and are detected in any of the surveys. Two types of study subject can be identified:

- > Follow-up: Study subject who was interviewed in previous operations.
- New partner: Any person linked to a follow-up study subject, whose union was detected during the operation of 2018.

The periodicity of the different sources of demographic and social information results from the nature of the information being collected, but also from the classification of the statistical project as Information of National Interest (IIN). According to the regulation from SNIEG, information can be classified as IIN if the project meets the following criteria:

- That covers one of the topics that are considered as part of one of the subsystems.
- It is necessary for the design and evaluation of policies at the national level.
- It is generated regularly and with stablished periodicity.
- It is based on sound scientific methodology.

Based on this, the following information regarding social and demographic indicators is produced with the following periodicity:

Project	Periodicity	Outcomes (selected)
Population and Housing Census	10 years	Population counts and characteristics
National Survey of Income and	2 years	Income, expenditures, and
Expenditures		sociodemographic characteristics
National Time Use Survey	5 years	Sociodemographic characteristics, time use
National Survey of Demographic Dynamics	5 years	Sociodemographic characteristics, mortality, fertility, migration, contraception, birth histories
National Survey of Occupation and Employment	Quarterly <sup>1</sup>	Sociodemographic characteristics, employment, unemployment, occupation, labor force participation, salaries, work characteristics
Job positions registered by employers	Monthly	Number of employees in formal sector (private)
Registered fetal deaths	Yearly	Counts of deaths by year of occurrence and registration
<b>Registered deaths</b>	Yearly <sup>2</sup>	Counts of deaths by year of occurrence and registration
Information on births by the Health Department	Yearly	Counts of births by year of registration

Table 3	Periodicity	of IIN	from	the	SNIDS
I able J.	1 ci iouicity		nom	unc	SUIDS

Notes:

1: Since 2021, information has been published every month.

2: Since 2020, information is published for the first semester of every year, before publishing the annual report.

Some projects, such as the National Survey of Occupation and Employment, take one month to publish the monthly information, or two months for the quarterly information. On the other hand, for projects such as the National Survey of Demographic Dynamics, the expected time to publish results is 6 months after the collection period. However, for large projects such as the 2020 Census, which took place during March 2020 (and an additional recollection period on July because of the COVID-19 pandemic) results from the short form were published in January of 2021, and the long form in March of the same year.

## UNITED KINGDOM

Social and demographic statistics are typically situated in a time context where the data is available. This is typically with a view to apply a narrative to the numbers we are publishing. The only instance where this isn't applied is where the data is new and there isn't comparable historical data. One such publication, where the time dimension is a core component, is for population projections where the key element of interest is probable population change over time. The perennial challenge here is the difficulty discerning future rates of the three components of population change.

In addition to time-series of aggregate data, the ONS manages the ONS Longitudinal Study, which is linked census and life events data for a 1% sample of the population of England and Wales. It contains records on over 500,000 people usually resident in England and Wales at each point in time and it is largely representative of the whole population. The LS is the largest longitudinal data resource in England and Wales.

In terms of turnaround times for data, it varies depending on the source. While most data are released within 1-2 years of its collection, some data are published in less than 1-2 years. Administrative data is expected to speed up statistical production for population estimates and linking together multiple sources of admin data is anticipated to allow to innovative multivariate analyses.

# Annex H: Relationships

## <u>CANADA</u>

The social and demographic statistics produced by Statistics Canada in the context of Canada's Quality of Life Framework that reflect relationships between individuals, households, communities, and institutions include:

Society

- <u>Sense of pride/belonging to Canada</u>
- <u>Sense of belonging to local community</u>
- <u>Someone to count on</u>
- <u>Trust in others</u>
- <u>Satisfaction with personal relationships (family and friends)</u>
- Loneliness

Good Governance

- Personal safety
- <u>Crime Severity Index</u>
- <u>Perceptions of neighbourhood safety after dark</u>
- <u>Childhood maltreatment</u>
- <u>Confidence in institutions</u>

## INDONESIA

Indonesia groups its statistical products into those at the individual, household and community level, as illustrated in the conceptual framework section.

Additionally, INEGI has a subsystem for Information on Government, Public Safety and Law Enforcement, where statistics on relationships between individuals, institutions and communities are included. As such, the subsystem has surveys in different topics, to mention some:

- Censuses on State and Federal Government
- National Survey of Governmental Quality and Impact
- National Survey of Urban Public Safety
- National Survey of Business Victimization
- National Survey of Victimization and Perception of Public Safety
- National Survey on the Dynamics of Household Relationships
- National Survey on Discrimination
- National Survey on Civic Culture
- Module on Cyberbullying
- Administrative records on:
  - o Labor Law Enforcement
  - Criminal Law Enforcement

### <u>LITHUANIA</u>

State Data Agency mainly reflects relationships between individuals. Relationships between individuals are covered by statics on births, marriages, divorces. The main data source on relationships between individuals is Population census, that provides marital status, family status in the household, type of household and etc.

The State Data Agency conducts the households and persons statistical surveys: income and living conditions, labour force, health, education and training, use of information and communication technologies, time use, consumption. Statistical information on job tenure, work biography and previous work experience; working conditions including working hours and working time arrangements; participation in education and training; income, consumption and elements of wealth, including debts; living conditions, including material deprivation, housing, living environment and access to services; quality of life, including social, civil, economic and cultural participation, inclusion and wellbeing; participation in the information society is prepared.

The State Data Agency prepared the statistical information on the number of recipients of social services according to social and demographic characteristics, the number of employees providing social services, the number of places in social service institutions.

Based on administrative sources State Data Agency produce statistical information on the number of beneficiaries of social protection cash benefits and expenditure on such benefits, on social assistance for low-income residents, benefits for families bringing up children, state social insurance sickness benefit, state social insurance pensions and state pensions.

#### UNITED KINGDOM

ONS regularly publishes social and demographic statistics related to legal partnership status, including marital status and family structure.

- 1. **Marital Status and Living Arrangements:** The ONS provides data on marital status, including the number of people who are single, married, divorced, or widowed. This information offers insights into the changing patterns of partnerships and relationships in the population.
- 2. **Family and Households:** The ONS publishes data on family composition, including the number and types of households. This can include information on nuclear families, extended families, single-parent households, and other family structures. Understanding family dynamics is crucial for policymakers and researchers.

# Annex I: Interoperability between the building blocks for social statistics

## CANADA

Statistics Canada is leveraging the Quality of Life framework as a tool to bring greater coherence across the social pillar of statistics. Beginning the framework's stable set of outcomes allows deliberate consideration of consistent time intervals for headline outcomes (with a goal of shifting to quarterly reporting where possible/relevant) and standard breakdowns by sub-population and geography across outcomes.



## Figure 17: Quality of Life Framework components.

Another way that Statistics Canada ensures the integration of social and demographic statistics is through the Integrated Social Data Program (ISDP). This particular program utilizes many different ways to extract social and demographic data needed by Canadians to make informed decisions. For instance, the ISDP features traditional surveys, Omnibus surveys, RapidStat surveys, web panel surveys, crowdsourcing questionnaires, and applications. Statistics Canada will continue the expansion and development of collection options to support direct collection and data integration through the ISDP, replacing some variables and making greater use of administrative data.

## **INDONESIA**

The integration of social and demographic statistics within the social pillar of statistics is achieved through the data production process. As mentioned previously, in the specify need phase in the GSBPM process, all needed data or indicators are identified to ensure that all data collected meet the demand. The National Socio-Economic Survey (SUSENAS) collects a large number of statistics covering population stock and flows, education, health, income/consumption, housing and population characteristics such as gender, disability, and other characteristics in one integrated survey. A large number of indicators including SDGs indicators are derived from the SUSENAS.

## **MEXICO**

All the mentioned projects help identify the relationships between the population, demographic and social characteristics and the different institutional contexts in the country. Moreover, many of the initial demographic characteristics (in surveys) are collected using the same or closely related questions from the demographic surveys, which allows for a better comparison between projects.

INEGI's adoption of the Generic Statistical Business Process Model through the Statistical and Geographical Process Model (MPEG, by its Spanish acronym), outlining standardized activities for information production. Additionally, the Technical Standard for the Production Process of Statistical and Geographical Information is the normative instrument currently regulating MPEG's implementation in INEGI, effective since September 2018. Thus, MPEG allows for the description and documentation of activities for both statistical and geographical information production processes.

While MPEG and its associated technical standard provide the groundwork for sound methodologies and approaches, their true efficacy is realized only when implemented in INEGI's day-to-day operations. This reality led INEGI to implement the Evidence Register System-PTracking, a system aimed at documenting evidence as per MPEG.

Well-documented evidence not only ensures compliance with MPEG but also fosters continuity by preserving institutional knowledge and best practices. PTracking's organized and systematic approach contributes to the overall effectiveness of operations as a comprehensive record of activities, providing traceability throughout all MPEG's phases. Not only does PTracking enhance efficiency by assigning specific roles, but it also facilitates timely information tracking as it provides a comprehensive dashboard, offering a cohesive overview of the progress achieved.

In principle, data integration within and across pillars is achieved –under MPEG's umbrella– through common practices and Information Infrastructure (catalogs, classifications, statistical and geographical registries, methodologies) at the design phase of each production process. For example, INEGI's Quality Assurance Committee has approved the Guideline for conceptual design of surveys, which describes the main activities to be developed for the subprocess of output and variable description design and specifies the formats that must be generated as evidence, which is used for the execution of the following phases of the process. Proper processes' documentation not only serves to demonstrate the execution of activities, but also helps to optimize resources and facilitates convergence of practices among lines of production. To support the implementation of the Guideline, a computer system is being developed to automatize the generation of these documents. This Guideline is transversal to the pillars, i.e., is the result of a consensus of the heads of social and demographic; economic; environmental, and government, public security, and law enforcement surveys at INEGI.

Data integration through processes' standardization is quite challenging and slow, given the operational and technological legacies, and the high-demand dynamics faced by areas in charge of production processes. A complementary way to promote data integration is through data lake technologies. INEGI has been building a data lake prototype to automatize data flows based on an information model (i.e., SDMX) and specific data governance criteria (security, statistical confidentiality, quality, and interoperability) to foster data integration and the provision of novel statistical and geographical information products and services.

# Annex J: From national perspectives to an international conceptual framework

## <u>CANADA</u>

Statistics Canada aims to advance further thinking through this Workstream and other multilateral activities such as the work of the OECD about more complex aspects of social outcomes and their integration with economic and environmental outcomes, for example life course perspectives and the relationship between determinants and outcomes.

The sustainability and resilience of the Quality of Life lens promotes long-term thinking about quality of life in Canada. This lens considers the trajectory of indicators associated with each domain to identify risks, build resilience, and ensure that policy choices are contributing to a higher quality of life not only now but in the years ahead. Systematic consideration of sustainability and resilience through policy development and decision-making aims to ensure that today's progress is not being achieved at the expense of future generations.

While this lens is intended to bring a long-term perspective to all dimensions of the Framework, it is perhaps most relevant to a subset of domains such as human capital, social capital, natural capital, health promotion over the life course and intergenerational equity, as well as environmental and resilience considerations, such as preparedness for future health risks. The application of the sustainability and resilience lens aligns with Canada's work on the <u>Canadian Indicator Framework</u>, which tracks Canada's progress as it works toward achieving each of the 17 goals of the <u>United Nations' 2030 Agenda for Sustainable Development</u>, the <u>Federal Sustainable Development</u> Strategy, and the <u>Pan-Canadian Framework on Clean Growth and Climate Change</u>.

## **INDONESIA**

In the context of Indonesia given a diverse country in terms of socio-cultural background and an archipelagic country, grouping population, social outcomes and geographic disaggregation are important to understand better the condition.

It may be important to consider local/country specific concerns in producing social and demographic statistics as certain issues have been relevant only for the country. For instance, in Indonesia the government has recognized that many young generations have left or neglected the values of 5 principles (Pancasila) as the foundation of national life. In this regard, the government needs a measure to evaluate and monitor programs of instilling Pancasila values. In addition to this, the mental revolution that have been a concern of government need a statistical measure, and this needs an operational concept that can be implemented in the data collection system.

#### MEXICO

The production of information and the organization of the SNIEG has been guided by the three documents mentioned in section III (Figure 4) and the National Development Program. However, international frameworks are also considered for the identification of information required. In this matter, the 2030 Agenda and the Montevideo Consensus on Population and Development are fundamental guides in the determination of priorities.

International frameworks such as Beyond GDP or the Quality of Live provide guidelines to rethink the global environment to produce Social and Demographic Statistics. While not adopted, these frameworks have guided the production of special surveys such as the Subjective Wellbeing Survey (ENBIARE 2021), National Survey for the Care System (ENASIC 2022), National Survey on Sexual and Gender Diversity (ENDISEG 2021). Nevertheless, all these projects are subject to budget considerations, and they can be conducted after the surveys and projects that are Information of National Interest have been covered.

Projects conducted by INEGI have to cover the National needs for information on key subpopulations and dynamics. At the same time, it is important to follow international recommendations for the coverage of topics and specific groups. As an example, there is a need to collect information on ethnicity, disability, gender, and socioeconomic status. All these characteristics are interconnected with information on social conditions, discrimination, employment, income, and demographic components of change, among others. Challenges arise from the balance between specificity (both thematic and geographic), timeliness, and resources to conduct all the projects.

## <u>LITHUANIA</u>

In line with societal, economic, and environmental changes as well as different global, regional and national challenges, there is a clear need for data that would integrate people, economy and environment in the broadest sense. The Sustainable Development Goals serve as a base for understanding the complexity of our societies and people's lives. The clear intersections with people, economy and environment require data-based policy making. The combination of data related to people, economy and environment requires an understanding of the complexity of the interconnections between these three areas and is followed by different methodological challenges, starting from conceptual and measurement issues. By closely cooperating with our national government, other institutions, organizations and users, Statistics Lithuania seeks to provide data that would serve as a ground for data-based policy making and would help to react to different challenges. Even though preparation of the legal ground for data production can take some time, operational statistics allow us to respond to different challenges using different types and sources of data in a relatively short period.

## UNITED KINGDOM

Three major issues require consideration:

• The United Kingdom has worked to achieve internal consistency in terms of definitions and concepts, both within the social and demographic sphere, but also in terms of data collected under the SEEA and SNA. There remain challenges in this sphere, particularly where these lead to multiple estimates of what may appear to the lay user to be the same concept. One example would be the estimate of workforce total hours (which is produced to ILO requirements on a residency basis – so workers who live in Northern Ireland and work in the Republic are *included*, whereas those who live in the Republic and work in Northern Ireland are *excluded*) and productivity total hours (which is produced to SNA standards and aligns to the production boundary so workers who live in Northern Ireland

and work in the Republic are *excluded*, whereas those who live in the Republic and work in Northern Ireland are *included*. This can be challenging to explain to users so suggests a need for standardization to cross the three statistical domains (environmental, economic and social).

- Clearly, there is a significant set of social statistics which are captured in satellite accounts under the aegis of the SNA. Where these may focus on monetary measure, measures in physical units are often collated too. How these align and where they can be built on is a core requirement for moving this area forward.
- There are clear overlaps between social statistics with environmental and economic statistics, but there are equally overlaps with all three in terms of wellbeing measures in general. There is a strong need for international agreement on what is in scope for each of these four domains.

Taking these as given there is a clear need for international co-operation, as the United Kingdom has proposed to better develop strategic-level statistical guidance to help close these gaps, but it is also important to consider that any such framework should be permissive rather than dogmatic. Countries each face specific circumstances which need tailored reporting. Whilst international frameworks should encourage the creation of a slimline set of core metrics that can be easily compared, there is a need for countries to be able, and encouraged, to tailor their products to meet local needs and importantly secure user buy-in. As the SDGs evidence, the twin challenges of too many metrics, often focused on things local users didn't consider as important (few developed countries need routine statistics on water quality, or primary age education take-up), not because they are unimportant topics, but a measure which consistently tracks close to 100% tells one little about the key changes impacting quality of life. Domestic salience is key to securing the buy-in to enable the core dataset to be prioritized within constrained domestic budgets.