National Statistician's Inclusive Data Advisory Committee

NSIDAC(23)05

ONS Subnational and Local Developments: Ensuring inclusivity whilst meeting the ambitions of the GSS Subnational Data Strategy

Purpose

1. Through collaboration and funding from the Department for Levelling Up, Housing, and Communities (DLUHC), ONS has a huge opportunity to improve subnational data, statistics, analysis, and local intelligence. This paper outlines how ONS is delivering on the Inclusive Data Principles whilst protecting the identity and confidentiality of those sharing their data across a range of geographies.

2. Core to this is optimising ONS's new local analytical advisory service across the four nations of the UK (referred to as 'ONS Local') in meeting the needs of local areas, improving the impact of our outputs, and embedding place-based thinking across the statistical system.

Recommendations

3. Members of NSIDAC are invited to:
   i. Note progress made to date, and the explicit links between subnational and inclusive data.
   ii. Advise on how we might best use the newly established ONS Local service to ensure that we are connecting with the right networks.
   iii. Consider how we can overcome some key challenges around local economic statistics, linking people to businesses, and businesses to places.

Background

4. ONS is on a journey to make its data, statistics, analysis, and insights as inclusive as possible. Place-based data are a vital part of this to support users to build their understanding of areas, and connect people and places across the UK, and we aim to provide suitable technology solutions to enable this. We have just completed Year One of a three-year collaborative project supported (with funding) by DLUHC.

5. During 2022/23, we have created a new local analytical advisory service (referred to as 'ONS Local') across the four nations of the UK, as well as making huge strides in developing and using methods to publish more granular statistics and analysis in meaningful geographies, for example towns and high streets. We are also making these more accessible through platforms and data visualisation tools that support collaborative working.

Progress

6. We have made excellent progress against the [ONS subnational workplan](#) and are meeting the ambitions of the Government Statistical Service (GSS) [Subnational](#)

[Data Strategy,](#) launched in December 2021. This is centred around inclusivity and accessibility of local data, statistics, and analysis. The strategy was launched across the entire UK statistical system and we continue to ensure cross-government delivery through the Senior Subnational Data Group, which includes representatives from both central and local government.

7. We supported the development of the evidence base for the [Levelling Up (LU) White Paper](#), where our approach was based on systems thinking, framed around "[six capitals](#)". It reflects that reducing regional inequalities requires changes across multiple policy areas; for example, improving access to jobs is likely to require improving skills and transport in the same area.

8. Alongside the White Paper, we launched the [Subnational indicators explorer](#), to improve access to relevant data from across government in a single place and are building on this by developing Explore Subnational Statistics (ESS). The aim is to understand local areas better, helping users find, visualise, compare, and download a wide range of statistics in one place. A key aspect of developments to date is improving self-service and associated digital products, such as scrollytelling articles (for example, [on productivity and income](#)), [Census maps](#), [Create a custom dataset](#), and [build your own area tool.](#) These are being used to develop the Beta version of ESS, so we can re-use great products with a wider range of data.

9. We have also created the Levelling Up Data Analysis (LUDA) cross-government platform to build capability and capacity across government through collaboration with a strong network of users from central and local government.

Discussion

Part 1 – ONS Local advisory service; ONS's eyes and ears in local areas

10. ONS Local is a place-based analytical advisory service with ONS analysts in every region and every nation of the UK. Our aim is to ensure local leaders and subnational organisations can access data, statistics, and analysis to support their decision making. We act as a bridge between ONS and analytical communities, particularly in local, regional, and national government across the UK, helping them to navigate what already exists and what is in development. This local intelligence, feeding in the "on-the-ground" truth of local areas, gives a unique opportunity to bring their priorities into ONS's decision making and future planning.

11. We have co-designed our England service with local analysts, who we expect will be our primary users, through a series of hybrid roundtables since July 2022 to ensure it meets their needs. Attendees have come from a range of organisations, from Combined Authorities, Unitary Authorities, and District Councils to local transport organisations, locally based central government organisations such as the Office for Health Inequalities and Disparities and the Cities and Local Growth Unit, and researchers from local universities. Sam Beckett, our Second

Permanent Secretary has also held bilateral meetings with CEOs of some particularly influential local councils, such as Birmingham and Leeds.

12. Our offer for Scotland, Wales, and Northern Ireland is less mature and is bespoke for each nation. We are developing these services with each Chief Statistician and working closely with the Union and Constitution Group in DLUHC.

13. We have received extensive positive feedback on the fledgling ONS Local offer generally, but also particularly how much less remote ONS feels with staff based everywhere beyond our main Titchfield and Newport bases. We have also heard the ask for more timely and more granular data in every roundtable, alongside requests to help build local analytical capability, and provide more "off the shelf" products, reflecting the varied (and sometimes very limited analytical) capability and capacity across local areas. We have also had requests for more local data on specific themes, such as the cost of living and green issues.

14. We are also working to provide online and in-person networking platforms and forums for local users to share knowledge and best practice across the country, with ONS acting as a convener as much as content creators.

15. Questions for NSIDAC:

    i. How might we be able to utilise ONS Local further to fill gaps and improve the inclusivity of data?

    ii. Are there any locally based networks the Committee would suggest we join up with in particular?

    iii. What advice might the Committee have for the best means to reach local people and decision makers to ensure local voices are considered in all our subnational work?

Part 2 – Improving accessibility and granularity of subnational statistics

16. Improvements to subnational social statistics (people and households) have been predominantly supported through programmes such as Census and Health. For example, ONS produces a [Health Index for England](#) that includes a combination of metrics to understand 'Healthy People, Healthy Lives and Healthy Places' (with plans to expand to the other UK nations). It provides insights into how people interact with the places that they live in the heath domain but provides less insight on intersectionality. These sorts of local statistics that relate to people or households are conceptually easier than those that relate to businesses and the local economy.

17. We have made progress on developing local economic statistics, despite facing challenges. These challenges predominantly relate to business structures with multiple sites where metrics need to be apportioned to local units and account for nuances, such as headquarters. For example, the LU Research & Development (R&D) mission required baseline regional estimates expenditure for both business and UK government on R&D to measure progress. We used innovative methods, such as estimating businesses' number of operating locations based on employment figures, modelling whether a business performs R&D at specific

locations, or across all operating locations and apportioning R&D by employment numbers in local units for certain businesses.

18. Another challenge has been the disaggregation of gross value added (GVA), where we used administrative data (VAT turnover and the inter-departmental business register) to apportion GVA to each site; a key assumption in this method is that employees are equally productive, which is not ideal. We are considering more sophisticated methods. These experimental statistics, however, disaggregate GVA figures to the smallest geographic areas possible (Lower Super Output Area – LSOA), so they can be used as "building blocks" for flexible and bespoke areas of interest to our users across the UK. We found that data at such levels of granularity is at a high risk of statistical disclosure for some businesses. To solve this issue, we developed an innovative automated algorithm for treating the perceived risk of statistical disclosure that is based on averaging the data for two areas when one of them has a dominant business.

19. Developing statistics at the intersection of social and economic statistics is more problematic as linking people to businesses and understanding the business structure in various locations adds complexity and nuance to the methodological and analytical questions. This is a key challenge for improving inclusivity of data locally. For example, we might consider linking together Census and Tax data, to create a Linked Employer Employee Database (LEED). This work has significant barriers that include:

    i.   Legal gateways and permissions: Most of this data is considered too sensitive for departments to share without "hashing" identifiable variables (both for businesses and people) to protect the identity of those in the data. Where we are able to get data for the purposes of linking it to other sources, each use case has to be agreed on its own merits. We have had some success in getting data with business identifiers available, because it could be argued that these have less sensitivity (although legally they are treated the same) than identifiers relating to people. These data, however, are limited in terms of characteristics, despite being at the transactions and person level.

    ii. Big Data: These large datasets, often far from perfect, require a long learning curve to get sufficient knowledge to understand and make optimal use of them.

    iii. Disclosure Control: We run into disclosure control issues with business data even at the regional level due to some businesses being economically dominant in their local areas. When we look at intersections with different groups of people, those issues multiply.

20. These challenges are not insurmountable and we have made good progress utilising the ready-linked Longitudinal Education Outcomes (LEO) dataset, that has information at a person level on education, benefits, and earnings along with characteristics of people and geographic identifiers. Our work investigates the educational and earnings outcomes, and geographical mobility trends of young people with a focus on towns and cities. Furthermore, there is another paper on

today's agenda that discusses the prototyping of publicly available business data (from Companies House) to Census data and how that can give us different insights.

21. Question for NSIDAC:

    i.   How might we address some of these issues to better understand locally how different types of people interact in their local economy?

Conclusion

22. This paper sets out the background to the development of the GSS Subnational Strategy and the recent focus in ONS, in collaboration with DLUHC and the Devolved Administrations, on improving subnational statistics and analysis, and access to these, across the four nations of the UK. The establishment of ONS Local has been an important part of this. 'Local' is a key aspect of achieving more inclusive data, facilitating understanding of intersectionality, and now is a great opportunity to maximise our impact, making the most of the Committee's expertise.

23. We have co-designed ONS Local with regional authorities and decision makers with the aim of meeting local needs and build on the inclusivity of our data. We welcome the Committee's advice on how to optimise this service further to deliver the overarching goal of ensuring that everyone in society is represented across the full range of groups and at differing levels of geography. We also welcome advice on overcoming the challenges associated with better understanding how people from different population groups interact with their local economy.

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