

Scotland's Rural College

Stakeholder views on the small area-level evidence base for place-based policy in Scotland

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Print publication: 01/03/2019

Document Version

Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Hopkins, J., Wilson, R., Atterton, J., & Copus, A. (2019). *Stakeholder views on the small area-level evidence base for place-based policy in Scotland*.

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RESAS RD 3.4.2: Place-based policy and rural Scotland

Objective 5.3i

March 2019

Stakeholder views on the small area-level evidence base for place-based policy in Scotland

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March 2019



This report was funded by the Rural and Environment Science and Analytical Services Division of the Scottish Government



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Acknowledgements: We would like to thank colleagues at the James Hutton Institute for their assistance and advice related to the online survey. We also thank all people who participated in the online survey. This work was funded by the Rural & Environment Science & Analytical Services Division of the Scottish Government as part of the 2016-2021 Strategic Research Programme. Any views expressed are those of the authors and do not necessarily represent those of the Scottish Government or RESAS.

Key findings

- This report describes results from a survey, which has delivered insights into how to improve the accessibility of the ‘evidence base’ of information about Scottish communities.
- Stakeholders perceive economic, transport, housing and service access issues as most important to their local area, but also recognised issues related to community strength and personal wellbeing. The lower awareness of available local area-level data representative of the latter, and the broader interest in several issues, supports the need to publish small area-indicators related to several types of wellbeing, including more subjective issues.
- Associations between respondents’ backgrounds, experience with data use and analysis, and awareness of local-level data representing key issues, emphasise the need for data publishers to seriously consider the accessibility and usability of resources, in addition to publishing large volumes of reusable information. Removing barriers to accessing and understanding information about communities is essential, in the context of place-based policies and local initiatives.
- Online resources for accessing data should cater for users with diverse experience, and different needs: some users may need to view information for the location they are interested in, while others may need to retrieve data for more detailed analysis or produce maps. There is a need for improved communication, both in terms of interface design and the language used, and clarity over the areas which indicators have been calculated for.

1. Purpose of document

This report summarises the results of an online questionnaire, which was distributed as part of Objective 5 of research on ‘Place-based policy and its implications for policy and service delivery’, a research deliverable (RD3.4.2) within the 2016-2021 Strategic Research Programme.

2. Aims, background and survey methods

The data analysis presented in this report was produced using the analysis of an online questionnaire ("Place-based policy and rural Scotland: evidence base survey") released in November 2018 and following research and knowledge exchange activities related to the ‘evidence base’ required for effective place-based policies (see Hopkins et al., 2018 for a more detailed description). These included two blogs and a policy workshop held at the 2018 Scottish Rural Parliament, following which

reflections on the main discussion themes, and implications for research, were described in another weblog. The broad aims of this survey are to identify:

- a) what stakeholders perceive to be the most important issues and subjects which affect Scotland's rural areas and small towns, and whether data is available to measure them at the local level;
- b) how stakeholders use and analyse data about places and people, and how existing online resources for viewing and accessing data and maps can be improved.

This knowledge supplements earlier research which developed small area-level indicators of diverse types of wellbeing in Scotland from existing small area datasets and other resources (Hopkins and Copus, 2018) and broader research on place-based policy in Scotland. It will contribute to the design of an online resource, which will enable stakeholders, practitioners and the wider public to access small area-level indicators related to wellbeing and socio-economic development. In addition to increasing the size of the available 'evidence base' of information about Scottish communities (through the publication of new indicators), this tool will aspire to improve the accessibility of this data through consideration of stakeholder priorities, experience and expertise, and preferences. The online questionnaire therefore contributes to the latter aspects, and collected data on the following topics:

- Respondents' backgrounds (employment, or other type of affiliation, with different types of organisation)
- Past experience of using and analysing data, via viewing and calculating statistics and map creation
- Respondents' perceptions of the most important issues which affect their local area, and whether they are able to access data to measure them at the local level
- Views of ways in which the online resources used by respondents, in relation to data access and analysis, could be improved

The launch of the survey was publicised at the Scottish Rural Parliament workshop 'What is place-based rural policy, and what evidence base does it need?' which took place in Stranraer on the 15th November 2018. The workshop was run twice, and was attended by 33 people. Following ethical approval from The James Hutton Institute and RESAS, and building the survey using LimeSurvey software¹, the online survey

¹ <https://www.limesurvey.org/>

was released via the Institute's Online Surveys portal² on the 21st November. The survey was publicly accessible, but a conditional question structure prevented access to the later questions (on local issues and data availability, and online resources) for respondents who were not affiliated with a broad range of organisations, or those who had no relevant experience of using or analysing data³. This ensured that relevant stakeholders, with contributory expertise, were targeted. Information about the questionnaire is included in the Appendix at the end of this report, and more precise question wordings are included in the description of results.

The survey was publicised at the Scottish Rural Parliament workshop mentioned above, several times on Twitter⁴, and via news items published at the James Hutton Institute website ("Views sought on local issues and quality of life in Scottish communities"⁵), the Scottish Rural Network website ("Views from rural communities sought"⁶) and an article in Farming Scotland magazine ("We need your views about local issues in rural Scotland"⁷). It was also mentioned on the website of the Scottish Rural Health Partnership (University of the Highlands and Islands)⁸. Originally, it was planned to close the survey in December 2018, but the timing of further publicity and opportunity for further responses meant that this was delayed. Public access to the survey was withdrawn on the 31st January 2019, meaning that the survey was open for just over two months. Completed surveys were downloaded. Only respondents who had given full informed consent (i.e. those who had agreed to six provided statements: see Appendix) were retained for analysis. Comment (free text) responses were redacted where identifiable items (e.g. locations) were mentioned, and these were replaced with less specific descriptions. The final dataset for analysis⁹ included 40 cases, although due to survey structure and 'non-compulsory' questions, the numbers of responses for individual questions varied.

² <http://surveys.hutton.ac.uk/>

³ Out of 40 respondents, three were not associated with one of the organisation types provided in question 1. Question 2 (on experience of data use and analysis) was made available to all other respondents: 34 of these had done at least one of the four activities presented in question 2, and questions 3 and 4 were thus made available to them.

⁴ Accounts used to publicise the survey include The James Hutton Institute (@JamesHuttonInst), Social, Economic and Geographical Sciences group at the Institute (@HuttonSEGS), the Rural Policy Centre at SRUC (@RuralPolicySRUC), and the Scottish Environment, Food and Agriculture Research Institutes (@SEFARIScot)

⁵ <https://www.hutton.ac.uk/news/views-sought-local-issues-and-quality-life-scottish-communities>

⁶ <https://www.ruralnetwork.scot/news-and-events/news/views-rural-communities-sought>

⁷ https://issuu.com/atholedesign/docs/issuu_farmingscotlmagfeb2019/18

⁸ <https://www.uhi.ac.uk/en/research-enterprise/res-themes/school-of-health-social-care-and-life-sciences/srhp/news/>

⁹ Data analysis was carried out using R (R Core Team, 2018)

3. Results

3.1 Respondents' backgrounds

Survey respondents were firstly asked which type(s) of organisation they were employed by, or affiliated with, with six options to choose from. Overall, 37 people were associated with at least one of the organisation types given, of which 29 were linked to one organisation and eight were linked to more than one. Survey participants were drawn from several types of organisations (Table 1), but it is noticeable that many people had backgrounds in third sector and community organisations. Indeed, 17 out of 37 respondents were employed by or affiliated with organisations in the third sector and/or community, and were not associated with government, public sector or private sector organisations. The other 20 respondents were associated with government, public or private organisations; seven of this group had an additional link to third and/or community organisations.

Table 1: Summary of responses: “Are you employed by, or affiliated with, any of the following types of organisation?”

Type of organisation	n	%*
Local government	5	13.5
Scottish or UK Government	2	5.4
Public sector organisations (other than government)	7	18.9
Private sector	9	24.3
Third sector (e.g. charities, campaigning organisations, not-for-profit organisations)	16	43.2
Community organisations	14	37.8

*out of 37, to one decimal place

3.2 Experience of data use and analysis

Respondents who were associated with at least one type of organisation mentioned in the first question were asked how they had used and analysed data in the past, by considering four tasks related to accessing summary statistics and producing maps. The term ‘data’ was defined as “...any information about the population, social and economic characteristics, services and infrastructure, land and the environment, or any other issues which affect people”. In total, 34 respondents had done at least one of the four activities cited; most had done one (14) or two (10) activities, but eight people had experience of all four tasks.

Considering the activities provided to respondents in the question, two described the use of online resources to access summary statistics and create maps, while the other two tasks involved downloading data and then calculating statistics for areas of interest, and creating maps in GIS software. The latter pair of tasks involved a

comparatively higher level of technical skill. All of the people who had carried out at least one of these activities had viewed statistics online, while only slightly more than half had downloaded small area data and calculated the statistics of interest (Table 2). Experience of map creation was less common, but equal numbers had produced maps online, and by using downloaded data in a GIS program. Taking all four activities into consideration, 15 respondents had experience of one or both of the less technical activities, but had no experience of the more technical tasks; 19 others had carried out at least one of the two more technical activities. Considering the two activities related to accessing statistics, 18 people had experience of the more technical of the two activities (e.g. downloading small area data and calculation of figures), while 16 had viewed figures online, only.

Table 2: Summary of responses: “How have you used and analysed data in the past?”

Activity	n	%*
Used online resources to view summary statistics for an area/areas of interest	34	100
Downloaded data tables/spreadsheets for small areas (such as Data Zones), and used these to calculate summary statistics for an area/areas of interest	18	52.9
Created maps using online resources	10	29.4
Created maps using downloaded data and GIS software	10	29.4

*out of 34, to one decimal place

3.3 How could online resources used for these activities be improved?

Question 4 in the survey asked respondents if they could “...describe any ways in which the online resources which (they) have used for the activity (or activities) in Question 2 could be improved?”. This question was asked if people had carried out at least one of the four tasks related to data use and analysis in Question 2. In total, 22 comments were received, and a review of these comments revealed some common themes, which suggest the following limitations or problems with available internet resources for data viewing, download and mapping (the comments, or extracts from comments, are shown as examples):

- Website design hindering ease of access to data, or limited information available on websites
 - *“Some websites are easier to navigate than others, Scottish government sources vary in quality and ease of use, eg ones that require you to use a data cart are pretty awful...”*

- *"[Scottish local authority] website should be vastly improved, what little information I am able to find mostly comes from them, but there are huge gaps and they should be providing so much more."*
- Problems of scale: data is not available at a small enough scale, relevant to local communities, or hinders the accurate measurement of issues
 - *"Official data (Eg: Scottish Gov SIMD etc.) often not fine-grained enough down to local level. Data areas too large to be relevant to rural communities at very local level"*
 - *"I live on an island. Quite often data is only available for the entire island region and not broken down by island."*
 - *"Data needs to drill down to relevant data zones, which it does not currently..."*
 - *"...Even at Community Council level, there's a vast difference between in income/standards between holiday homers and wealthier retired people buying in to the area and local younger workers trying to raise families. When averaged out, the problem areas tend to be hidden in a way that is generally not the case in cities"*
- Data being distributed across several different resources, rather than being centralised in a preferred location
 - *"Perhaps all data relating to a particular geographic place could be made available in the same place, however who could do this?"*
 - *"would be good if more statistical info was available in a single place"*
 - *"more easily available e.g. through easily accessible local authority website"*
- Communication and usability issues, including unhelpful jargon/technical language
 - *"by not using any words like mean or standard deviation but using clear figures and/or %"*
 - *"Have used the SIMD resources and the public health portal. Not always easy to drill down to the locality. You really need an understanding of the jargon and context to make sense of them..."*

It is notable that some comments mentioned types of 'small area' other than Data Zones (community council area, ward, island) as preferred scales for access to information. This may suggest that while Data Zones are well understood and frequently used, other types of area may be more meaningful or appropriate to people who wish to access data.

3.4 Perceptions of important local issues and access to relevant local-level data

Respondents who had responded to question 2 were presented with a list of 20 descriptions of issues, which could potentially affect their local area (i.e. “the town, village or rural place where (respondents) live”). These issues were derived from two sources: a) the dimensions of wellbeing defined by the Organisation for Economic Co-operation and Development (OECD) (also drawn on in earlier work within this project: see OECD (2016a, 2016b) for reports), and b) the ‘Manifesto for Rural Scotland’ produced after the 2016 Rural Parliament (Scottish Rural Action, 2016). The twentieth option was ‘other issue’, for any not covered in the categories. Survey participants were then asked to select up to five of these issues as important. If an issue was selected, a second question was made available, asking whether respondents could access data to measure this issue at the local level: this could be answered with one of four response options (‘No data is available’; ‘Data is available, but is difficult to find’; ‘Data is available, and is easy to find’; ‘Unsure whether data is available’). Therefore, this question aimed to collect data on the issues perceived to be most important at the ‘local level’, and whether people can access detailed data to measure them.

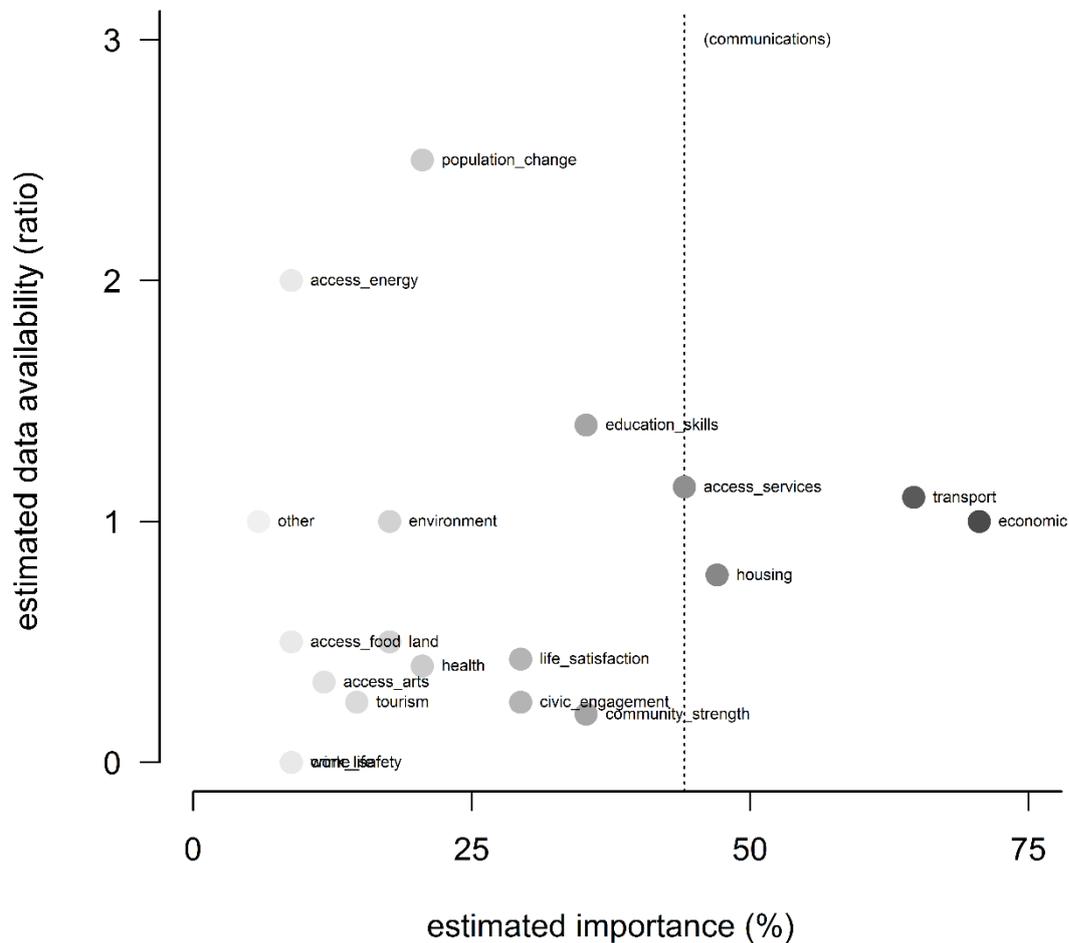
As a summary, 34 respondents chose at least one issue. Most (18) chose five issues, although eight respondents chose more issues than this: all are included in the analysis. For each issue, the proportion (%) of the 34 respondents who chose the issue provides a simple measure of perceived importance. Additionally, a ratio was calculated of the number of people who responded that local-level data was available to measure the issue (whether considered easy or difficult to find) to the number who considered no data to be available, or who were unsure whether data were available or not. This statistic forms an estimate of perceived data availability for each issue (Table 3, Figure 1).

Table 3: Estimates of perceived importance and data availability for twenty issues.

Issue	% chose issue*	n: local level data available – n: no data available or unsure
economic issues (e.g. income and wealth, jobs)	70.6	12 - 12
transport issues	64.7	11 - 10
housing issues (e.g. cost, access, quality)	47.1	7 - 9
access to services	44.1	8 - 7
communications issues (e.g. broadband)	44.1	14 - 1
education and skills	35.3	7 - 5
community strength	35.3	2 - 10
civic engagement	29.4	2 - 8
issues related to life satisfaction and mental health	29.4	3 - 7
the health of people	20.6	2 - 5
population change (decline or growth)	20.6	5 - 2
environmental issues	17.6	3 - 3
land issues (e.g. land ownership, access to land)	17.6	2 - 4
effects of tourism	14.7	1 - 4
access to arts and/or culture	11.8	1 - 3
crime and safety	8.8	0 - 3
work and life balance	8.8	0 - 3
access to energy	8.8	2 - 1
access to food	8.8	1 - 2
other issue	5.9	1 - 1

*% out of 34, to one decimal place; table is ordered based on this value.

Figure 1: Visualisation of estimates of perceived importance and data availability for twenty issues.



Note: colour shading based on ‘estimated importance’. The meaning of the two variables is described in the text above. The data points for issues of work-life balance and crime and safety (bottom left corner) overlap. The data point for communications issues (e.g. broadband) (ratio: 14) is not shown, but the estimated importance is shown (dotted line).

The data (Table 3, Figure 1) shows that issues related to the economy, transport, housing, access to services and communications were most frequently chosen as important issues, with the economy and transport selected by more than 60% of respondents, and the others chosen by more than four out of ten respondents. Compared with the number of people who chose issues as important, not all responded on the perceived availability of local-level data to measure these issues.

However, local-level data availability to measure the five issues described above (and education and skills) was good, in comparison with others. As an extreme value, almost all who provided a view of data availability for communications issues (14 out of 15) thought that small area data were available; for other issues, the number of respondents who felt that data were available was approximately the same as the number who thought no data were available, or who were unsure. Figure 1 shows these issues clustered from the centre of the diagram to the right hand side.

The next few issues on Table 3: community strength, civic engagement, and life satisfaction and mental health, cluster closely together on Figure 1. They were perceived as important by approximately three out of ten people (slightly fewer than most issues mentioned above) but the perceived availability of local-level data to measure them was much lower. These issues can be broadly summarised as more 'subjective' and perception-based than others, which potentially accounts for the lower estimated data availability. Other issues in Table 3 were less frequently marked as important (by approximately one in five respondents, or less) with some variation in the perceived availability of relevant local data; however, there is far more uncertainty in these figures as the numbers responding on data availability were small.

3.5 Associations between respondents' backgrounds, experience of data use and analysis, and perceived local-level data availability

Finally, it is important to gain an understanding of how respondents' backgrounds and experience of data use and analysis affects their awareness of local data availability. Therefore, these variables were cross-tabulated. **Respondents' backgrounds** were summarised within two categories ("Third and/or community sector background, none in public/private sectors", "Public and/or private sector background"). **Experience of data use and analysis** was summarised into two variables, with two categories each. The first split respondents based on their experience of the activities related to accessing and using statistics (Table 2) – people who only had experience of the less technical activity (i.e. viewing statistics online), and people with experience of the more technical of the activities (downloading small area information and calculation of statistics). The second variable created the same two categories from all four activities cited in Table 2. Finally, **perceived local-level data availability** for the issues most frequently selected (economic issues,

transport issues, and housing) was summarised (“Data is available”, “No data is available or unsure”) in three variables¹⁰.

Cross-tables based on the background of respondents (Table 4) show that people with a background in the public or private sector were more likely to have experience with more advanced types of data use and analysis, than respondents affiliated with third and/or community sector organisations and no affiliation with public/private sector organisations. For example, nearly two-thirds of respondents with a public or private sector background had calculated statistics for location(s) of interest, using downloaded data; however only c. 36% of other respondents had experience with this task. In addition, respondents associated with public/private sector organisations were more likely than others to be aware of available local-level data to represent some important issues. Considering economic issues, around seven out of ten public/private sector respondents were aware of relevant local-level data. By contrast, less than a third of respondents affiliated with the third and/or community sectors (but no affiliation with public/private organisations) were aware of local-level data. Furthermore, the association between respondents' background and perceived availability of local-level data to represent transport issues lies just outside statistical significance at the 95% confidence level¹¹ ($p = 0.086$, or at the 90% confidence level: highlighted on Table 4). Again, people affiliated with public and/or private organisations were more likely to be aware of relevant local-level data than other respondents.

¹⁰ Note that access to services and communications issues were also considered in the analysis, but these results are not presented (all p values ≥ 0.608).

¹¹ Association between variables assessed using Fisher's Exact Test. For a description of this test, see Freeman and Campbell (2007)

Table 4: Five cross-tables - respondents' backgrounds

Variable	Response	Respondents' backgrounds		
		Public and/or private sector	Third and/or community sector, none in public/private	n p-value
Experience of data use and analysis: accessing statistics	Less technical activity only	35.0	64.3	34 0.163
	More technical activity	65.0	35.7	
Experience of data use and analysis: all activities	Less technical activity only	35.0	57.1	34 0.296
	More technical activity	65.0	42.9	
Perceived data availability: economic issues	Data is available	69.2	27.3	24 0.100
	No data is available/unsure	30.8	72.7	
Perceived data availability: transport issues	Data is available	72.7	30.0	21 0.086
	No data is available/unsure	27.3	70.0	
Perceived data availability: housing issues	Data is available	50.0	37.5	16 1.000
	No data is available/unsure	50.0	62.5	

Cross-tabulated figures show percentages to one decimal place. n shows number of cases, p-value (to three decimal places) from Fisher's Exact Test.

The effect of experience in data use and analysis on awareness of local-level data is further emphasised by additional bivariate comparisons (Tables 5, 6). These analyses show that respondents with more advanced experience of using and analysing data are more likely to be aware of local-level data for measuring important issues. Less than a quarter of respondents with experience of viewing summary statistics online, but without experience of calculating statistics from downloaded small area information, were aware of local-level data for measuring economic issues. By contrast, two-thirds of respondents with experience of the latter (more technical) activity were aware of such data. This association (highlighted in table 5) fell just outside the threshold of statistical significance at the 95% confidence level ($p = 0.089$). If experience with data use and analysis is defined using these tasks and two additional means of creating maps, only 12.5% of respondents with experience of a

less technical activity only perceived local data on economic issues as available, compared with over two-thirds of those who had carried out a more technical task in the past. This association was statistically significant ($p = 0.027$, Table 6). Patterns of responses are similar for transport and housing issues, as people with more advanced experience with using and analysing data were more likely to be aware of local-level data.

Table 5: Three cross-tables - Experience of data use and analysis (1)

Variable	Response	Experience of data use and analysis: accessing statistics		n
		Less technical activity only	More technical activity	
Perceived data availability: economic issues	Data is available	22.2	66.7	24
	No data is available/unsure	77.8	33.3	0.089
Perceived data availability: transport issues	Data is available	45.5	60.0	21
	No data is available/unsure	54.5	40.0	0.670
Perceived data availability: housing issues	Data is available	22.2	71.4	16
	No data is available/unsure	77.8	28.6	0.126

Cross-tabulated figures show percentages to one decimal place. n shows number of cases, p-value (to three decimal places) from Fisher's Exact Test.

Table 6: Three cross-tables - Experience of data use and analysis (2)

Variable	Response	Experience of data use and analysis: all activities		n	p-value
		Less technical activity only	More technical activity		
Perceived data availability: economic issues	Data is available	12.5	68.8	24	0.027
	No data is available/unsure	87.5	31.3		
Perceived data availability: transport issues	Data is available	40.0	63.6	21	0.395
	No data is available/unsure	60.0	36.4		
Perceived data availability: housing issues	Data is available	22.2	71.4	16	0.126
	No data is available/unsure	77.8	28.6		

Cross-tabulated figures show percentages to one decimal place. n shows number of cases, p-value (to three decimal places) from Fisher's Exact Test.

4. Discussion and summary

The first aim of the survey was to identify what stakeholders perceive to be the most important issues and subjects which affect Scotland's rural areas and small towns, and whether data is available to measure them at the local level. Collectively, survey participants most frequently selected economic, transport and housing issues, access to services and communications issues, with the former two categories selected by over 60% of respondents. These issues (and education and skills, the joint sixth most important issue) represent particularly salient subjects and/or areas of major policy focus for the Scottish Government. However, a set of issues which reflect subjective judgements, and personal and local experiences (community strength, civic engagement, issues related to life satisfaction and mental health) were regularly mentioned but have far lower perceived data availability. This corresponds extremely closely with the detailed review of available small area-level datasets in Scotland which was undertaken as part of this project, which found that "...data availability is low for environmental wellbeing, and aspects of wellbeing related to personal judgements and perceptions" (Hopkins and Copus, 2018: 1).

Similarly, other work on local wellbeing indicators has identified differences between 'currently available' and 'ideal' groups of indicators, recognising the key question of how public bodies "...begin to effectively and efficiently collect subjective data on social capital and social relationships on a large scale at a local level" (Brown et al.,

2017: 38). The Office for National Statistics has published estimates of personal wellbeing for local government bodies in the UK, but these are not 'small area' in scale (n = 32 in Scotland) (Office for National Statistics, 2018). The review of Scottish datasets and indicators (cited above) also noted the need to consider stakeholder priorities when selecting indicators, and suggested that quantitative measurement of all dimensions of wellbeing may not be desirable or beneficial: proxy indicators to measure perception- and lifestyle-related issues at the level of small areas are harder to calculate and are relatively weak, compared with economic and other indicators (Hopkins and Copus, 2018: 63-4). As the survey suggests that issues related to community strength, engagement and life satisfaction are important, there is a need for researchers and analysts to revisit datasets and resources relevant to these concepts, and use creative methods to construct small area-resolution measures to reflect them.

As described in the 'Aims, background and survey methods' section, the survey which has been analysed in this report was released following a period of knowledge exchange activities, including a workshop attended by several people with an interest in place-based rural policies and the related evidence base. A good quality, 'local' or 'small area' evidence base is required to inform place-based policies, and also evaluate their progress and success. The workshop aimed to encourage discussion of these issues (Hopkins et al., 2018) and it is notable that some of the themes of the workshop discussions (Wilson, 2019) are supported by the results summarised above. In particular, the analysis above suggests that people with backgrounds in the public and/or private sector(s) are more likely have experience of more technical types of data use and analysis, than others outside of the public and/or private sector(s). Crucially, the survey results also found that people with experience of more technical forms of data use and analysis were more likely to be aware of small area-level data to measure important issues.

This point is a very important finding, if access to good quality data is associated with informed local decision-making, stronger planning and funding applications, and ultimately community empowerment (Wilson, 2019). Similarly, as noted by Crittenden (2013), "Making public data more accessible is an important goal and offers enormous potential to increase civic engagement. To make the most effective and equitable use of this resource for the public good, cities and other government entities should invest in the personnel and equipment — hardware and software — to make it universally accessible." This is further recognised by the OpenData Charter (2015: 7), which acknowledges "...the existence of a global digital divide in regard to

technological tools and expertise” and recognises that simply publishing data is not sufficient:

“Governments must also play an active role in supporting the effective and innovative reuse of open data, and ensuring government employees, citizens, and civil society and private sector organizations have the data they need and the tools and resources to understand and use that data effectively.”

Therefore, the survey results support the contentions that a) the current resources available for accessing and analysing fine-grained data about Scotland’s communities are not fully meeting the needs of stakeholders and practitioners involved in place-based policies and initiatives, and related end users; and b) the benefits of OpenData are not reaching everyone. The survey comments from stakeholders on Scotland’s online resources for using and analysing data, which described issues with website design, resources being scattered across several locations, and communication and jargon problems, would further support these arguments. Indeed, researchers interested in acquiring small area-level data on diverse aspects of wellbeing have to use several websites, from different providers, with considerably different functionality (Hopkins and Copus, 2018). In addition, a ‘digital skills divide’ in the UK has been recognised: in 2018, more than 11 million people cannot carry out tasks related to five ‘basic digital skills’, with differences in skills between socio-economic and demographic groups (Lloyds Bank, 2018). Given an increased policy emphasis on place-based and community-led approaches, removing barriers to accessing and understanding information about communities is particularly important.

Furthermore, survey respondents also commented on scale issues, which could hinder the accurate measurement of issues at a meaningful ‘local’ level. These issues are related to the modifiable areal unit problem, where the size and boundary shape of geographical areas influence indicator values (see Fotheringham and Wong, 1991: 1025). This may also be a cause of the mismatch between local experience and observations and recorded statistics, and the known limitations of quantitative indicators, including their simplicity (Wilson, 2019). In Scotland, Data Zones are widely used for the publication of socio-economic statistics, and provide a very high level of detail, with nearly 7,000 covering Scotland. However, the large difference in size between the small Data Zones within built up areas, and the much larger units in rural areas, means that statistics for the latter may result from aggregation of data from spatially distant settlements. It is notable that the first definition of the initial set of Data Zones found substantial variation in ‘compactness’ of Data Zones across Scotland’s local authorities: with low average compactness in remoter/island local

authorities with complex coastlines, and high average compactness in areas with a higher population density (Flowerdew et al., 2004). It is reasonable to suggest that stakeholder 'trust' in published statistics and data could be reduced by larger and/or less 'contained' spatial units which are less likely to represent meaningful local areas or communities. Although Data Zones are likely to remain a standard for a range of official socio-economic statistics and indicators, as well as in research, their limitations should be recognised.

References

Brown, H., Abdallah, S., Townsley, R. (2017) Understanding local needs for wellbeing data: measures and indicators. What Works Centre for Wellbeing. Available at <https://whatworkswellbeing.org/product/understanding-local-needs-for-wellbeing-data/> (Download link on webpage: Accessed 27th March 2019)

Crittenden, C. (2013) Public open data: The good, the bad, the future. Available at <https://blogs.berkeley.edu/2013/09/04/public-open-data-the-good-the-bad-the-future/> (Accessed 18th March 2019)

Flowerdew, R., Graham, E. and Feng, Z. (2004) The production of an updated set of data zones to incorporate 2001 census geography and data. Report to the Scottish Executive. In Scottish Executive: Scottish Neighbourhood Statistics Data Zones Background Information. Scottish Executive, Edinburgh: pp 9-40. Available at <https://www.gov.scot/binaries/content/documents/govscot/publications/publication/2004/02/scottish-neighbourhood-statistics-data-zones-background-information/documents/0027016-pdf/0027016-pdf/govscot%3Adocument?forceDownload=true> (Accessed 20th March 2019).

Fotheringham, A.S. and Wong, D.W.S. (1991) The modifiable areal unit problem in multivariate statistical analysis. *Environment and Planning A*. 23: 1025-1044.

Freeman, J.V. and Campbell, M.J. (2007) The analysis of categorical data: Fisher's exact test. *Scope* 16 (2): 11-12. Available at https://www.sheffield.ac.uk/polopoly_fs/1.43998!/file/tutorial-9-fishers.pdf (Accessed 12th March 2019)

Hopkins, J. and Copus, A. (2018) Identifying suitable measures of socio-economic outcomes and mapping geographical disparities in Scotland. Available at https://www.sruc.ac.uk/download/downloads/id/3872/report_rd_342_september_2018.pdf (Accessed 7th March 2019)

Hopkins, J., Copus, A., Wilson, R., Atterton, J. (2018) What is place-based rural policy and what evidence base does it need? Research and knowledge exchange activities. Available at https://www.sruc.ac.uk/download/downloads/id/4264/342_what_is_place-based_rural_policy_and_what_evidence_base_does_it_need.pdf (Accessed 7th March 2019)

Lloyds Bank (2018) Lloyds Bank UK Consumer Digital Index 2018. Available at https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/LB-Consumer-Digital-Index-2018-Report.pdf (Accessed 22nd March 2019)

Office for National Statistics (2018) Headline estimates of personal well-being from the Annual Population Survey (APS): by counties, local and unitary authorities, year ending March 2012 to year ending March 2018. [Excel workbook]. Available at <https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/wellbeing/datasets/headlineestimatesofpersonalwellbeing/april2017tomarch2018localauthorityupdate/headlineestimatesofpersonalwellbeinglocalauthorityupdateapril2017tomarch2018.xls> (Accessed 27th March 2019)

Open Data Charter (2015) International Open Data Charter. Available at https://opendatacharter.net/wp-content/uploads/2015/10/opendatacharter-charter_F.pdf (Accessed 22nd March 2019)

OECD (2016a) OECD Regions at a Glance 2016. OECD Publishing, Paris. http://dx.doi.org/10.1787/reg_glance-2016-en

OECD (2016b) Better Life Index 2016: definitions and metadata. Available at <http://www.oecd.org/statistics/OECD-Better-Life-Index-2016-definitions.pdf> (Accessed 7th March 2019)

R Core Team (2018) R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>

Scottish Rural Action (2016) A Manifesto for Rural Scotland. Scottish Rural Action. Available at <http://www.scottishruralparliament.org.uk/wp-content/uploads/2016/09/SRA-Manifesto-Final.pdf> (Accessed 7th March 2019)

Wilson, R. (2019) Big data, small places: building a better evidence base. Available at <https://www.hutton.ac.uk/blogs/segs/big-data-small-places-building-better-evidence-base> (Accessed 12th March 2019)

Appendix: Online Questionnaire

This appendix shows the online questionnaire which was used to collect data which has been analysed in this report. The survey contained three question groups: a research consent form and privacy notice, the questionnaire questions, and an optional feedback form. This document does not show the questionnaire as it appeared on screen. Note:

- Question 1 was made available if a respondent agreed to all six statements on the research consent form.
- Question 2 was made available if a respondent chose at least one option in question 1.
- The first part of question 3 was made available if a respondent chose at least one option in question 2.
- The comment box for 'other' issues in question 3 only appeared if the 'other issue' option was chosen in the first part of the question.
- The "Can you access data..." subquestions only appeared if the relevant box was chosen in the first part of question 3. The 'other issue' subquestion only appeared if the 'other issue' option was chosen and data were added to the comment box.
- Question 4 was made available if a respondent chose at least one option in question 2.
- The feedback section was available to respondents who agreed to all six statements on the consent form.

Place-based policy and rural Scotland: evidence base survey

There are 27 questions in this survey

Research consent form and privacy notice

Welcome to the "Place-based policy and rural Scotland: evidence base survey".

This online form consists of an information sheet, privacy notice and research consent form (see below), the questionnaire survey, and an optional feedback comment. None of the questions in the questionnaire survey are compulsory.

Please read the information sheet below.

Information sheet

Date produced: 20/11/2018

As part of research funded by the Rural & Environment Science & Analytical Services Division of the Scottish Government, within the RESAS Strategic Research Programme 2016-2021, staff at the James Hutton Institute and Scotland's Rural College are carrying out research into place-based policy and rural Scotland. Our aims are to improve current understanding of (i) the main reasons for differences in economic performance and social outcomes across rural areas and small towns of Scotland, and (ii) how policies can help to deliver positive outcomes and address these disparities.

As part of this project, we would like to collect information on:

- What stakeholders perceive to be the most important issues and subjects which affect Scotland's rural areas and small towns, and whether data is available to measure them at the local level
- How stakeholders use and analyse data about places and people, and how existing online resources for viewing and accessing data and maps can be improved

Note that 'issues' noted in question 3 have been adapted from dimensions of wellbeing (OECD) and the Manifesto for rural Scotland (<https://www.scottishruralparliament.org.uk/manifesto/>).

Data collected in this survey may contribute to research outputs for this project. These outputs may include reports, journal articles (and other articles), presentations and knowledge exchange events. In addition, responses received may help to inform the content and design of an online portal/tool.

Our existing research outputs from this project are available at https://www.sruc.ac.uk/info/120671/our_projects/1806/strategic_research_programme3.

In order to participate in the survey, the privacy notice and research consent form are provided on this page, below.

If you have any questions about this data collection or the research project, or if you would like any further information, please contact the researchers by email (jonathan.hopkins@hutton.ac.uk, andrew.copus@hutton.ac.uk)

Please read the privacy notice below.

Privacy Notice

This survey is anonymous, and we do not intend to collect personal data. However, should personal data be inserted into any of the survey responses, The James Hutton Institute ("Hutton", "us" or "we") confirms we will use your personal data for the purposes of the research undertaken in this project "Place-based policy and rural Scotland". Our legal basis for processing your data is that it is necessary for the performance of a task carried out in the public interest in relation to research funded by the Rural & Environment Science & Analytical Services Division of the Scottish Government.

We are the Data Controller over your personal data. We will only share your data if required by law and we may also share redacted question responses with project researchers at Scotland's Rural College (SRUC). We will only retain your personal data for as long as is necessary to fulfill the research undertaken on the project and deliver project outcomes. You have rights in relation to your personal data. Please see our Privacy Notice at www.hutton.ac.uk/terms for further information or contact our Data Protection Officer on DPO@hutton.ac.uk.

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RESEARCH CONSENT FORM

Title of Project: Place-based policy and rural Scotland

Principal Investigators: Jonathan Hopkins, Andrew Copus

In order to participate in this survey, please complete the consent form below. You must agree to all six statements to participate.

To indicate agreement with a statement, select the 'Agree' option alongside it.

* - note that the clause in brackets in the first statement only applies if you asked questions.

Please choose the appropriate response for each item:

- | | Agree |
|---|-----------------------|
| I confirm that I have read, or had read to me, and understand the information sheet dated 20/11/2018 (see above) for the above study. I have had the opportunity to ask questions (and these have been answered fully and explicitly)*. | <input type="radio"/> |
| I understand that my participation is voluntary, and I am free to withdraw at any time, without providing any reason and without my legal rights being affected. | <input type="radio"/> |
| I understand that the study is being conducted by researchers from The James Hutton Institute and Scotland's Rural College at the request of the Rural & Environment Science & Analytical Services Division of the Scottish Government. | <input type="radio"/> |
| I understand that it will not be possible to identify me from any publications/outputs. | <input type="radio"/> |
| I acknowledge that I have read and understood the privacy notice (see above). | <input type="radio"/> |
| I agree to take part in the above study. | <input type="radio"/> |

Questionnaire

Question 1: Are you employed by, or affiliated with, any of the following types of organisation?

Please tick any options which apply.

If you do not tick any options, then no further responses are required.

Please choose all that apply:

- Local government
- Scottish or UK Government
- Public sector organisations (other than government)
- Private sector
- Third sector (e.g. charities, campaigning organisations, not-for-profit organisations)
- Community organisations

Question 2: How have you used and analysed data in the past?

'data' refers to any information about the population, social and economic characteristics, services and infrastructure, land and the environment, or any other issues which affect people.

Please tick all activities which you have done in the past.

If you do not tick any activities, then no further responses are required.

Please choose all that apply:

- Used online resources to view summary statistics for an area/areas of interest
- Downloaded data tables/spreadsheets for small areas (such as Data Zones), and used these to calculate summary statistics for an area/areas of interest
- Created maps using online resources
- Created maps using downloaded data and GIS software

Question 3: In your view, what are the most important issues which affect your local area?

'local area' refers to the town, village or rural place where you live.

Please select up to five issues by ticking up to five boxes below. If an important issue is not covered by one of the given categories, please tick the box 'other issue' and provide a comment to describe this issue in the box which will pop up.

Please choose **all** that apply:

- economic issues (e.g. income and wealth, jobs)
- housing issues (e.g. cost, access, quality)
- the health of people
- education and skills
- access to services
- crime and safety
- environmental issues
- civic engagement
- issues related to life satisfaction and mental health
- community strength
- work and life balance
- communications issues (e.g. broadband)
- transport issues
- access to arts and/or culture
- population change (decline or growth)
- access to energy
- access to food
- land issues (e.g. land ownership, access to land)
- effects of tourism
- other issue

Please describe the 'other' issue in a short comment.

Please write your answer here:

Can you access data in order to measure economic issues (e.g. income and wealth, jobs) at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure housing issues (e.g. cost, access, quality) at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure the health of people at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure education and skills at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure access to services at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure crime and safety at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure environmental issues at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure civic engagement at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure issues related to life satisfaction and mental health at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure community strength at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure work and life balance at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure communications issues (e.g. broadband) at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure transport issues at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure access to arts and/or culture at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure population change (decline or growth) at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure access to energy at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure access to food at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure land issues (e.g. land ownership, access to land) at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure the effects of tourism at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Can you access data in order to measure the 'other' issue (as described in your comment following Question 3), at the level of your local area?

As before, 'local area' refers to the town, village or rural place where you live.

Please select one option.

Please choose **only one** of the following:

- No data is available
- Data is available, but is difficult to find
- Data is available, and is easy to find
- Unsure whether data is available

Question 4: Can you describe any ways in which the online resources which you have used for the activity (or activities) in Question 2 could be improved?

Please provide a comment.

Please write your answer here:

Feedback

The part of the survey used for data collection has ended. If you would like to provide any feedback about this questionnaire, please do so here.

Please provide a comment in the box below.

Please write your answer here:

Thank you for participating in the survey.

We will produce a short report containing the findings of this survey, which will be published at the project webpage (https://www.sruc.ac.uk/info/120671/our_projects/1806/strategic_research_programme/3). Existing research outputs are also available from this webpage.

If you have any questions about this data collection or the research project, or if you would like any further information, please contact the researchers by email (jonathan.hopkins@hutton.ac.uk; andrew.copus@hutton.ac.uk)

Submit your survey.
Thank you for completing this survey.