

## Access to knowledge – supporting information

“..., knowledge connotes the confident theoretical or practical understanding of an entity along with the capability of using it for a specific purpose. Combination of information, experience and intuition leads to knowledge which has the potential to draw inferences and develop insights, based on our experience and thus it can assist in decision making and taking actions.” [Keydifferences.com]

### Advice is an expert’s knowledge...

All advice to Councils and committees is expected to be authoritative – within practical bounds, like those caused by time and resource limitations. But it must go further; where practical, it should draw on the specialised knowledge<sup>1</sup> available to the advisor – which in many local authorities includes an array of engineering, transport and environmental experts. Then support these views with appropriately selected and apt evidence. Securing this may require research, evaluation or engagement.

### ...backed up by what evidence is available

Because much useful advice is operating at or close to the boundary of what is known (otherwise, the issues would be well threshed out with little for the Council or committee to debate), information and data are often at a premium. For instance, previous attempts to grapple with the same issues may differ significantly or have aspects that render them non-comparable, and they thus have limited value as examples.

If nothing else is available, carefully hedged anecdotes can be deftly employed as long as their weaknesses are signalled clearly to the decision-makers.

The rest of this brief focuses on the practical side of knowledge gathering (distinct from new research) in decision support advising.

### Knowledge is not the same as information

An important distinction is that between information and knowledge – see Table 1. Good advice is based on the advisor’s ability to deploy their knowledge on the advisee’s behalf.

**Table 1 Comparison between information and knowledge**

Basis for comparison	Information	Knowledge
Meaning	When the facts obtained are systematically presented in a given context, it is known as information.	Knowledge refers to the relevant and objective information gained through experience.
What is it?	Refined data.	Useful information.
Combination of	Data and context.	Information, experience and intuition.
Processing	Improves representation.	Increases consciousness.
Outcome	Comprehension.	Understanding.
Transfer	Easily transferable.	Requires learning.
Reproducibility	Can be reproduced.	Identical reproduction is not possible.
Prediction	Information alone is not sufficient to make predictions.	Prediction is possible if one possesses required knowledge.
One in other	All information need not be knowledge.	All knowledge is information.

Source: <http://keydifferences.com/difference-between-information-and-knowledge.html#ixzz4ZMjn2iFl>

<sup>1</sup> For the practical difference between knowledge and information see Table 1.

## Information sources have a natural hierarchy

One way of thinking about sources is from the local/specific – especially valuable in the local government context – to the global/general – useful but less powerful. So, there is a list.

### Own experience within the Council

Typically, data gathered in Councils is material related to actions taken for other purposes – what is normally called ‘administrative reasons’. So, the building permit system is a rich source of material about what is happening locally in the construction industry.

This character means locally held data can be very valuable as it is:

- **Unique** – no other body will have full, ready access to this data.
- **Accessible** – as long as suitable arrangements to code, store and retrieve are in place and reliable.
- **Relevant** – as it is coming from the population and/or activity of interest.

But it can also have drawbacks:

- **Scale** – in some cases, the available data may be small and thus not representative. (An example might be using recent home alterations applications to assess buildings' stock.)
- **Applicability** – under the Privacy Act, data can only be used for the purpose stated when it is collected. So, if the source has not been told about the usage envisaged, it is forbidden.
- **Bias** – the primary purpose for which it is gathered may skew the answers provided. (As valuations drive rates bills, those without an interest in selling may be comfortable with an understatement of their property's value.)
- **Attribute poor** – as the initial data collection is not usually designed for subsequent uses, the material collected may lack or be associated with dated material (age, ethnicity or income, say).

## Specialised Local Government material

Two sources stand out:

- **The DIA Local Government data**<sup>2</sup> – which has material available for downloading covering:
  - Financial information (including coverage of LTPs and reports from the AG)
  - Local authority election statistics and
  - Dog control information.
- **Local Government New Zealand**<sup>3</sup> – work is being done to build more comprehensive data sets. This has been based on data collected for recent programmes of work. Thus, there happens to be material on-site on compliance monitoring and enforcement.<sup>4</sup> Always worth checking.
- **Taituarā** – also has data and information resources.<sup>5</sup>

## Specialised national agencies

Stats NZ (SNZ),<sup>6</sup> as you would expect, their holdings are majestic. Aside from the full range of national data, like population broken down by region, including forecasts, they also collect and publish the official local authority statistics.<sup>7</sup> These can be useful to provide your own area's data, ideas about other areas and local body context.

The scale of their holdings and their desire to make online access as flexible as possible means their site is not the easiest to navigate for a beginner. But it repays the effort to learn how to find your way around.

Beyond SNZ, other agencies can be helpful for specific research or enquiries. The list includes:

- Waka Kotahi (NZTA)<sup>8</sup> has loads of information, including traffic, travel and transport material.
- The Ministry of Health (MoH)<sup>9</sup> for a range of health data and other material.
- The Ministry for Primary Industries (MPI)<sup>10</sup> has material relevant to rural communities and what might be expected about the agricultural, fishing and forestry sectors.
- The Ministry of Social Development (MSD)<sup>11</sup> has a variety of statistics and research papers on topics including beneficiaries and housing.

<sup>2</sup> [https://www.localcouncils.govt.nz/lgip.nsf/wpg\\_URL/Resources-Download-Data-Index](https://www.localcouncils.govt.nz/lgip.nsf/wpg_URL/Resources-Download-Data-Index)

<sup>3</sup> <https://www.lgnz.co.nz/equip/dot-dashboards/>

<sup>4</sup> <https://www.lgnz.co.nz/assets/Uploads/bc9da4d6cd/CME-Regional-Sector-Metrics-Report-FINAL.pdf>

<sup>5</sup> <https://taituara.org.nz/>

<sup>6</sup> One set of data available from Stats NZ is the Integrated Data Infrastructure (IDI). It is a large database, holding microdata about people and households. This includes education, income, benefits, migration, justice, and health, from government agencies, Stats NZ surveys, and non-government organisations. There are steps to gain access, but its content makes it a worthwhile source.

<sup>7</sup> <https://catalogue.data.govt.nz/dataset/local-authority-statistics>

<sup>8</sup> <https://www.nzta.govt.nz/traffic-and-travel-information/>

<sup>9</sup> The Ministry of Health coordinates health data from a variety of providers. These statistics conform to international (WHO) standards in most cases to allow for comparisons. <https://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets>

<sup>10</sup> <https://www.mpi.govt.nz/funding-rural-support/>

<sup>11</sup> <https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/statistics/index.html>

These are handy in providing a wider background to local issues and are usually valuable for showing where your locality fits against New Zealand norms.

As agencies of central government, these will usually have appropriate working protocols and standards that assure quality.

Other advantages are:

- **Ease of use** – the organisations concerned generally have well-functioning accessibility channels.
- **Credibility** – the source's standing assists when the aim is to develop an independent evidence case.

On the other hand, there are possible downsides:

- **Availability** – on occasion, there are gaps in the official datasets, either through missing material or because the type of data gathered does not fit the issue of concern adequately.
- **Selectivity** – as official data, their collection policy will have been determined some time ago and may not fit the current purpose.
- **Matching** – in many cases, the areas covered by these national bodies may not line up with local government boundaries.<sup>12</sup>

#### Authoritative and available overseas data collections

As always, in this type of search for relevant material, Australian sources are worth looking at. The Australian Bureau of Statistics (ABS)<sup>13</sup> is strong on local and regional data.

Canada is a fascinating example of a place where each province has put together its own bewildering set of arrangements. These make it a great source of comparative material. The starting point is Statistics Canada.<sup>14</sup>

Looking wider, many organisations bring together what the OECD calls 'subnational government bodies' across national boundaries. Depending on their motives and enthusiasm, they can provide compilations of their work, including potentially useful case studies and associated data. These are of varying quality and accessibility, and the user should be careful in using such material without checking.

One or two that seem to provide a selection of material include:

- Local Government Association (LGA),<sup>15</sup> which is a UK organisation of local authorities. It has many case studies.
- ICLEI (Local Government for Sustainability)<sup>16</sup> is an international body focused on sustainability. It has numerous publications on its site.
- United Cities and Local Governments (UCLG)<sup>17</sup> is an international organisation with the strengths and weaknesses one might expect. But there is plenty of material – including case studies on the site.

Other international groups have specific roles and goals – such as promoting the 'twinning' of towns. These can, nevertheless, be helpful depending on the topic.

Beyond these bodies focused on local government, there are more general international background data sources. These are helpful for producing context and comparisons – what is the global situation on a country-by-country basis?

The list of prospects is long, but the usual economic suspects include:

- OECD – aside from regular reporting on local government key data, they have a wide range of economic and social information on their members (and beyond).<sup>18</sup>
- IMF – very good on basic macroeconomic data and more widely. Local body financial information is included in the public finance reporting.<sup>19</sup>
- EC – the European Commission carries out surveys of policy issues from time to time. These can include local body issues.<sup>20</sup>
- UN data – a search engine that brings together the resources of the UN system, like population.<sup>21</sup>
- World Bank – an eclectic set of data covering many countries and many areas of policy. Many publications on local government, with a focus on developing country settings.<sup>22</sup>
- WTO – good international trade material.<sup>23</sup>
- CIA – useful information in the World Factbook.<sup>24</sup>

<sup>12</sup> For instance, around Wellington, one DHB (Capital and Coast) covers the territory of both WCC and KDC, while the Hutt Valley Board includes both HCC and UHCC areas.

<sup>13</sup>

<https://www.abs.gov.au/websitedbs/d3310114.nsf/home/finding+data+for+local+government+areas>

<sup>14</sup> <https://www.statcan.gc.ca/en/start>

<sup>15</sup> <https://www.local.gov.uk/case-studies>

<sup>16</sup> <https://iclei.org/en/publications.html>

<sup>17</sup> <https://www.uclg.org/en/resources/publications>

<sup>18</sup> [oecd.org](http://oecd.org)

<sup>19</sup> [Data.imf.org](http://Data.imf.org)

<sup>20</sup> [ec.europa.eu/commission/index\\_en](http://ec.europa.eu/commission/index_en)

<sup>21</sup> [data.un.org](http://data.un.org)

<sup>22</sup> [worldbank.org](http://worldbank.org)

<sup>23</sup> [wto.org](http://wto.org)

<sup>24</sup> [cia.gov/library/publications/the-world-factbook/](http://cia.gov/library/publications/the-world-factbook/)

The data from these organisations is valuable as the data is:

- **Credible** – they are well-known, and their reputation reflects the power of their data as evidence.
- **Pre-digested** – in many cases, the information has been standardised before collection.

It also should fit the local use – as many of these organisations receive their material about us from the New Zealand national statistics producer, it should be consistent with other local data. But there are still things to bear in mind:

- **Choice** – their selection of series reflects their interests and may omit the very data required.
- **Coverage** – for various reasons, New Zealand data is sometimes not provided.
- **Timeliness** – often, the material is not up to date.

### Using information is often a matter of compromise, so the choice must be clear<sup>25</sup>

It is often difficult to locate a data source with precisely the right material. So, if it is not, to a fair degree, what is required, the user must decide whether it is ‘close enough’ to be useful. The alternative is usually to go without supporting data – so there is a bias toward including material and explaining its faults.

Virtually all uses of information are a matter of judgement about the quality of communication. Typical trade-offs with data are between availability and accuracy or between types of bias.

In public data sources, the latter might be a choice between Census information and administrative data.

The former has all the weaknesses associated with individuals filling in their returns, like relying on recall, while the latter is collected for a primary purpose often distinct from the new use.

#### The user needs to know the limits of the material

High-quality advice always discusses how drawbacks apply, and it will cover appropriate ‘health warnings,’ possible weaknesses and drawbacks in the evidence. Ideally, this is in an apt technical form: confidence intervals, sample size, collection method, likely biases and other relevant background.

This should then flow into an assessment of the qualifications that need to accompany the use of the information and the strength of conclusions reasonably able to be drawn from it. In best practice, this will take the form of useable text/script for the Mayor or councillor being advised to employ in public when discussing the matter.

### Using information means having the capacity to make it do what is required...

To best use available data, your organisation needs the capacity to ‘work’ through it and make the most of it.

In practice, that means having at hand (inside your organisation or readily contractible):

- The competence to process the available information, so it is relevant to the task, including:
  - A full suite of quantitative methods
  - Other analytics – including simple ways of describing a situation without numerical data
  - Big simple, robust models and other ‘chains of support’ that can take a factual position and make it an implication.
- The ability to develop and discuss the crucial implications of the data in simple language – including the means to pass such insights on to the relevant audience.

### ...and then present the key points convincingly

To do this well demands care and attention to detail. Communicating supporting information is all about achieving a match between the material and the audience. Different people take in knowledge in different ways. To be successful with large groups means putting the data in front of them in a variety of formats. So, while for some, a picture (or graph or chart) is worth a thousand words, for others, it is the opposite.

We have some helpful ideas about presentation in our Masterclass on A3s.<sup>26</sup>

### There are a few practical hints that can be used

Do:

- Gather your own data and intelligence – unique material that can help make your advice better.
- Annotate all information to ensure other users are aware of sources, weaknesses and quirks.
- Think of new sources of data – this can provide unusual slants on problems of interest.
- For new policies or programmes, develop and implement a monitoring and evaluation strategy so you will have relevant information to assess effectiveness when required subsequently.
- Create special ways of processing the information – often merely using a striking comparison can give existing information new life.

<sup>25</sup> For a more detailed discussion on the way information is used in supporting advice see Local Government Masterclass Brief No 8 Presenting evidence. [https://www.nzier.org.nz/hubfs/Masterclasses/Local%20Government/brief\\_8\\_presenting\\_evidence.pdf](https://www.nzier.org.nz/hubfs/Masterclasses/Local%20Government/brief_8_presenting_evidence.pdf)

<sup>26</sup> See Local Government Masterclass Brief No 17 Getting the best from A3s. [https://www.nzier.org.nz/hubfs/Masterclasses/Local%20Government/local\\_government\\_brief\\_17\\_a3s.pdf](https://www.nzier.org.nz/hubfs/Masterclasses/Local%20Government/local_government_brief_17_a3s.pdf)

- Build linkages and networks to test ideas and supposition/speculation with people who have practical experience or insight.

Don't:

- Build private/personal databases (they are as bad as private filing systems and undermine the organisational strengths of local government).

- Use material that cannot be sourced and debated in public as it is useless in the logical (political) setting where policy operates.
- Save material without attaching details of origin, date, and its strengths, weaknesses or biases.

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