ALISTAIR KIRKBRIDE

Data, data everywhere, And not a space to think

In theory, the collection of robust and (where possible) impartial data allows people and organisations to make informed decisions about policy and investment. This could be about geographical patterns of travel demand, trends, and better understanding of what might drive demand into the future. In practice, this may not be borne out in reality, as shown elegantly in the Campaign to Protect Rural England's recent report *The end of the road? Challenging the road-building consensus* (*LTT* 31 Mar).

Before we get much further, it's worth being clear about what we mean by these different terms – data, evidence, and information. Confusion of terms here often leads to fuzziness when making arguments.

- Data is measured, collected and reported and often analysed, when it can be displayed graphically or within other modelling or data analysis tools.
- Information provides an answer to some kind of question. Information may be in the form of data that helps us to understand real or abstract concepts.
- Evidence refers to information presented to support an assertion.

The Romans recognised the importance of the distinction between these terms. The 'census' was developed to record information about men who were fit for military service; the data driving this only becomes useful information that helps make decisions when analysed for this purpose.

This has become especially relevant in recent years when thinking about 'big data'. Whilst the collection of large datasets is of some interest in itself, the real value is when it is analysed, enabling conclusions to be drawn.

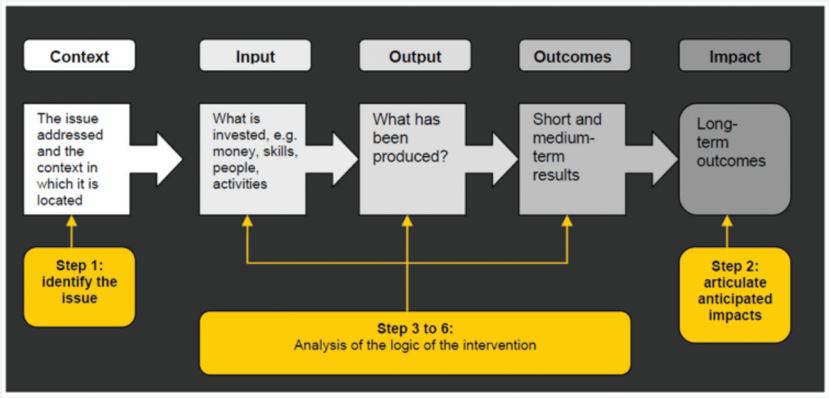
Data are the building blocks in the hierarchy between description and control. The hierarchy goes something like: description – understanding – explanation – prediction – control. Ruskin was probably responsible for the "field sketch" hated by generations of geography students; the argument is that sketching something forces a disciplined description that requires the viewer to try to understand the view. At the top of the hierarchy, there is a tension between trying to accommodate predicted changes (in traffic, travel behaviour, etc.) and trying to control them with transport policy and investment.

We can look at this in a different (and perhaps more pragmatically useful) way. I have always loved and hated in about equal measure (normally related to the time-distance before a DfT funding deadline) logic mapping *(see diagram)*. The related tools bridge between designing the best interventions to deliver desired outcomes and impacts whilst providing discipline in designing relevant monitoring and evaluation. It makes data collection strategic and intelligent and helps to combat the risk of "measure it because you can". The leap between step 1 and 2 to inform steps 3, 4 and 5 is beautiful, and is the main ingredient that gives subsequent data power.

At Carplus Bikeplus we have been gathering data on car clubs for about 17 years, and reporting formally via the annual survey for the last ten. In the last year we have also set up a UK-wide bikeshare survey in consultation with operators and the public sector. Together, the idea of these are to allow us to describe the sector, understand the people who use these services and (to an extent) why. We use this to help to understand broader impacts of car clubs and bikeshare, although this is usually in combination with case studies. Together, these provide a package of evidence for us to demonstrate the benefits of shared transport, and for others to mine in whatever way is appropriate to them.

We don't see this as 'just about shared transport'. Whilst shared transport is our focus as an organisation, step 2 of logic mapping leads to us needing to collect data in a way that allows for a broader understanding of current mobility.

This gets exciting in terms of what it indicates or suggests about spatial variations and emerging trends relating to mobility. For instance, the types of people using car clubs (through Mosaic profiling) is much narrower in London than in Scotland. Is this due to the more commercially-led focus in London targeting known near markets against the broader strategy of car club development across Scotland that follows Transport Scotland's policy objectives? If the Scotland evidence shows that a wider group of people use car clubs, shouldn't we be targeting these in London?



The steps of logic mapping (source: http://tinyurl.com/kvhuyko)

While I'm on it, about 75% of the people using car clubs come from just a few Mosaic profile groups. While there is a lot of people in these groups still left to target, a related question is so what about the broader population? Do car clubs just not fit their mobility lifestyles? If not, are there models that might fit (and what are the opportunities for innovation)? If they did start to use car clubs, what might the impacts be – and would the existing survey capture these properly?

> "The types of people using car clubs is much narrower in London than in Scotland. Is this due to the more commercially-led focus in London, against the broader strategy of car club development across Scotland?

With the emergence of Mobility as a Service and more automated vehicles, the car club data and evidence is starting to take on new value as a piece of the jigsaw in understanding new mobility.

A good test of the existence of something is to try to work out what the impact would be if good data and evidence didn't exist. Our surveys were mainly set up to inform public sector bodies of the policy benefits of car clubs and bike share, and complement guidance, best practice and case studies.

The development of the London car club strategy illustrated the hunger for robust and relevant evidence – not from five or ten years ago, and not from overseas. Initially, flexible car sharing had not been operational for long enough to be included in the annual survey. This year its inclusion did show the anticipated outcomes, and has weight precisely because the data is recent and London-based. I would doubt that the London car club strategy would exist in its current form and be endorsed as it is without quality evidence. As the mayor's transport strategy emerges, the value of robust and relevant evidence will be a key asset in outlining the contribution of car clubs to the strategy's priorities.

That's not to say data always trump anecdote and belief. Or that all data are equal. Or that data are always produced impartially. Pressures on budgets often mean that delivery probably trumps robust monitoring; whilst this might get infrastructure built and services delivered in the short-term, it rather weakens confidence in the medium-term.

Coupled with this, there are new ways of collecting data – such as via mobile phone tracking. Whilst this – and big data more generally – undoubtedly has huge potential, the data are mainly in the private domain. Without open access we may not understand how the difference in type and scale of data leads to a different understanding of mobility, and hence to different policy and investment decisions.

I suspect in a few years today's data-driven description of mobility is going to look like it was the dark ages. I am just a bit suspicious that bigger doesn't necessarily mean better, so understanding what we want to do with data will become even more important and we'll need to remain vigilant to the risk of "just because you can". LTT

Alistair Kirkbride is director of Carplus Bikeplus – the national representative body for shared transport in the UK. He works across the transport NGO, operator and Government sector as well as on community development in his Lake District home. Email: alistair@carplus.org.uk