



Australian Government

Department of Communications



Bureau of
Communications
Research

BUREAU OF COMMUNICATIONS RESEARCH (BCR) LEADING INDICATORS

The Head of the BCR and Chief Economist, Dr Paul Paterson, provides insights into the early work of the BCR since its establishment in September 2014. The BCR has been established to support the development of good public policy and informed policy discussion and debate, through sound, fact-based policy development and advice, relying on economical and statistical research and analysis.

This is the driver of the BCR's strategic focus, an element of which is an information hub to make readily available key statistics, research reports and other information on the communications sector, including the results of its own research.

As part of this, the BCR is working on the development of Leading Indicators or LI's for the communications sector.

Leading indicators are measures that foreshadow where things will go in the future – how things will unfold as we go forward. They're different to trend analysis, which involves looking back and projecting forward from what you see in the rear vision mirror.

This is not to say that trend analysis isn't useful and important, however the work on leading indications is concerned with early alerts on changes, switch-points, in trends rather than assuming their continuation.



There are two kinds of leading indicators:

- the first kind is looking at measures that signal change because they're a necessary pre-condition for the change to occur, for example, in the construction industry forecasting changes in building activity by looking at changes in building approvals;
- the second kind is looking at trend data for communications activities but in a different way – changes and rates of change in the most recent periods relative to the trend, or changes at the margin or cusp.

The BCR will use, scan and acquire data when needed, including from the Australian Bureau of Statistics, Industry, the Organisation for Economic Co-operation and Development and private and commercial research.

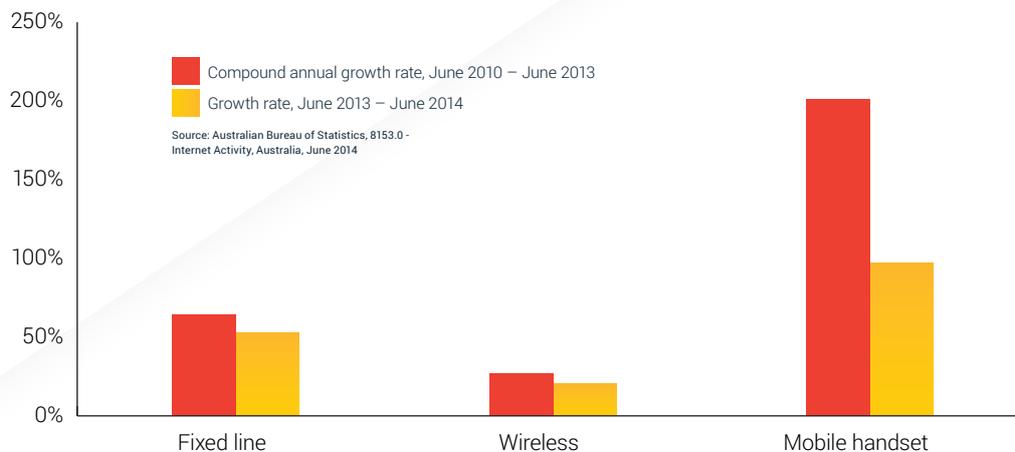
Over time the BCR will publish indicators on measures like NBN take-up by speed tiers, market shares and traffic quality to show emerging broadband trends.

One example of the leading indicators in consumption patterns which shows the rate of download growth slowing across fixed line, wireless and mobiles over the last year (June 2013 to 2014). For fixed line and wireless downloads there is a slight slowing in the growth rate over the past year compared to the compound annual growth rate for the past three years.

For mobile handsets the data signals a more dramatic slowing growth, down from around 200 per cent compound rate to around 100 per cent over the past year. That is, it appears volumes of traffic over mobile handsets is easing.

This may reflect greater use of WIFI, where download traffic is handed off to fixed networks. This suggests an insightful indicator for future examination is the number of mobile hotspots.

Volume of data downloaded – growth rates



Another example of changes to Consumption Patterns is the government data on data.gov.au. Towards the end of last year, there were only 451 datasets available on data.gov.au. Now, there are 4,762 publicly available datasets on the site, that's a 955 per cent increase.

This is an important LI as it foreshadows much wider use of government data than was possible less than 12 months ago.

Publicly available data sets on data.gov.au



let's communicate

The BCR is new and evolving fast. Its focus is digital, and it will continue to appear in a number of forums.

Let us know your views on Leading Indicators. Is it a worthwhile exercise?

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