ABSTRACT

for

Conference of Australian Institutes of Transport Research 2014

Research Centre for Integrated Transport Innovation
University of NSW, Sydney.
17-18 February 2014

KEY PERFORMANCE INDICATORS FOR FREIGHT NETWORKS

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A key step to improving the performance of the network for freight users is to establish appropriate performance indicators. A large literature addresses performance measurements in transport. This predominantly covers defining and measuring performance of transport infrastructure, or transport systems operated by or for the public sector. There is an even larger range of reports, books and web applications covering performance measurement for private sector organisations. Thus the task of developing freight network performance indicators for New South Wales might have been expected to be a case of recipe selection. It was instead necessary to go back to basic principles to set a research framework and develop a set of network indicators suited to their purpose.

This paper first briefly outlines requirements for performance measurement in general. The context for performance measurement of freight networks in NSW is then described. This considers the viewpoints of business and industry who value freight network efficiency and capacity, and the NSW community at large which values freight network sustainability. Selection of a set of measures, large enough to cover key aspects of performance but small enough to be manageable, is then discussed. An example key performance indicator illustrates issues of indicator selection and measurement, including initial measurement where data limitations may lead to satisficing rather than optimal indicators. Options for indicator update and extension conclude the argument.

This paper thus highlights the general importance of setting up transport research frameworks to fully reflect context as well as providing insights into measurement of transport network performance from a freight perspective.

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