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A Brief Reply to Ernest Albuquerque

Mr Albuquerque challenges my article in *Policy Quarterly* (Volume 9, Issue 3, 2013) on three main grounds. Firstly, he uses the well-known limitations of standard cost-benefit analysis (CBA) in transport project appraisals as the basis for claiming that the 'strategic fit' and 'effectiveness' criteria adopted by the NZTA lead to a better estimation of the total economic impact of the proposed activity than using the 'efficiency' criterion alone. He implies that these criteria attempt to capture the impact of large transport schemes on long-term land use development and on induced traffic effects. However, he does not substantiate this claim, and it is unclear how use of these criteria could achieve that goal.

A better argument would be that the NZTA is addressing the limitations of conventional CBA by including the wider economic benefits (WEBs) in the appraisal. In doing so, NZTA is implicitly no longer assuming perfect competition in markets, and so this limitation can no longer be held against CBA.

Mr Albuquerque disagrees with my contention that the 'strategic fit' and 'effectiveness' criteria lead to a doublecounting of the benefits already included in the 'efficiency' evaluation. However, the double-counting is obvious. For example, the Wellington Northern Corridor RoNS was given a 'high' rating for strategic fit on two grounds: that it was identified as a RoNS in the GPS of May 2009, and that it was an important freight route.1 The first adds no new information other than that the Government wanted the road built, and the second was based on a benefit already included in the efficiency analysis. The road got a 'high' effectiveness rating on similar grounds.

Mr Albuquerque's second main criticism relates to NZTA's view that a

RoNS should be viewed as a 'package', because of the interrelations between the component road sections. He argues that evaluating each individual component of the RoNS separately would be 'contrary to good project appraisal practice'.

I disagree. It would be economic folly to focus only on the best cost ratio (BCR) for an arbitrarily-defined RoNS, and to ignore the low BCRs of individual components. A component project's BCR can be developed using a base case which assumes that the rest of the package is implemented. If the incremental benefit added by a component relative to its incremental cost is low, then that component should be excluded from the package. His argument about interrelationships provides no defence. This incremental approach is consistent with section 2.10 of the NZTA's Economic Evaluation Manual, Volume 1.

The NZTA does not always act in the way that Mr Albuquerque advocates, for it sometimes focuses on incremental BCRs in the refinement of packages of work. In 2009 the Wellington RoNS was defined as

the expressway from Wellington airport to Levin. In 2012 the Otaki-Levin section was abandoned in favour of a lower cost road upgrade because the BCR was reestimated to be only 0.29.²

Finally, Mr Albuquerque challenges my view that the WEBs are controversial. He cites the building of the Auckland Harbour Bridge, which facilitated the city's expansion on the North Shore, as an example of the development benefits that can result from major transport projects. However, it is perhaps not surprising that the bridge had this effect, as it facilitated the first direct road connection. The are different, because generally involve replacing existing state highways with expressways, which offer only incremental improvements on the existing connections. Consequently, the benefits are limited, and combined with high costs, result in only modest BCRs.

Further, even accepting the NZTA's WEB estimates, the numbers are often relatively small. For example, the Wellington RoNS's conventional BCR of 1.0 increases to 1.2 with agglomeration benefits added, and to 1.4 with WEBs (2009 figures). These BCRs still fall well below the average of about 4.0 for state highway projects in the recent past (even though WEB assessments were not then included).

My view remains that even with the WEBs included, the BCRs of NZTA's state highway projects are suffering because the goals of 'strategic fit' and 'effectiveness' are given greater weight than economic efficiency, resulting in hundreds of millions of dollars of benefits annually being sacrificed.

See: NZTA, "NZ Transport Agency: (SH1) Wellington Northern Corridor RoNS Endorsement and Funding for Investigation, Design and Property Purchase", Board paper 09/11/0292, 27 November 2009.

² See: NZTA, 'Otaki to Levin Staging Options', DMT Paper, 12 January 2012, page 4.