

ASSESSING NEW APPROACHES TO ESTIMATING THE ECONOMIC IMPACT OF TRANSPORT INTERVENTIONS USING THE GROSS VALUE ADDED APPROACH

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Current transport appraisal methods, with their focus on the economic welfare benefits and costs of transport investment, are well grounded in theory and widely used, including by the NZ Transport Agency when it comes to prioritising transport interventions in New Zealand. However these methods do not provide estimates of extra gross domestic product and extra jobs, nor the spatial distribution of any economic gains and losses. Gross value added (GVA) models have recently been applied in the United Kingdom and variations also exist in the United States. This study developed a GVA model for New Zealand using 2001 and 2006 census data from the 72 sub-national TA areas, and applied the model to a proposed additional Waitemata Harbour crossing in Auckland. Promisingly the model revealed productivity gains from local agglomeration and pointed to some productivity gains from wider connectivity as well. However the building and use of the model also revealed shortcomings with the measurement of effective densities and the ability to reach inferences about regional distribution. Nonetheless the model did prove insightful in highlighting where the benefits of another harbour crossing would likely lie.