Submission on the NZTA draft Investment Assessment Framework for the 2018-21 National Land Transport Programme

# Introduction

This submission is made on behalf of the New Zealand Grey Power Federation Inc.

The Grey Power New Zealand Federation(GPF) is a non-sectarian and non-party political, advocacy organisation that aims to advance, promote and protect the welfare and well-being of older people. Made up of some 75 individual Associations with an overall membership of approximately 68,000, GPF is the premier organisation representing older New Zealanders.

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# Summary

Our main concern with the draft Investment Assessment Framework (IAF) is the extent to which the framework provides an effective mechanism to implement the Government Policy Statement (GPS).

In our view the currently proposed two factor assessment, promotes a single supporting objective of the draft GPS (value for money) to an unwarranted prominence. We further consider that the use of a Benefit to Cost Ratio (BCR) based entirely on proxy dollar values has to date demonstrably failed to deliver the outcomes identified in the GPS, and is at odds with current economic analysis including the Treasury’s Living Standards Framework.

We consider that a ‘whole of system’ approach is necessary not only to deliver the outcomes identified in the GPS but to effectively evaluate true costs and benefits to society as a whole. We are particularly concerned that even when expanded to include a socio economic analysis Cost Benefit Analysis (CBA) many of the costs of transport system remain externalities.

Therefore, and in line with the ethos espoused in the GPS for transformative change, we suggest that this is an opportunity for the IAF to embrace an inclusive multi criteria assessment.

We also suggest that the whole of systems approach identified as a key factor in the delivery of GPS outcomes, does not sit well with the proposal to maintain funding assessment within ‘activity classes’.

Similarly, whilst we fully support a ‘mode neutral’ approach to funding, we note that this can in reality only be considered appropriate within the context of the GPS. For example major investment in public transport necessary to remediate persistent underfunding in previous years will inevitably disadvantage that mode if this retrospective ‘catch up’ is considered within an IAF BCA.

# Detailed comments

## Two factor assessment

In the proposed two factor analysis we note that in the GPS ‘Value for money’ is a supporting objective. As such we consider that alignment with this objective - determined by BCR within the IAF - should have a lower weighting, and that in line with the requirement for a transparent decision making process this should be explicit.

However, we contend that the proposed two factor assessment is inadequate to capture the true alignment of a project with the GPS strategic priorities. It preferences monetary, or monetised values over intangible and qualitative values, a methodology that has failed to deliver the required outcomes to date. We consider that a multi factor assessment based multi criteria decision analysis should be adopted.

## Results alignment

We consider that the whole of systems approach identified as a key factor in the delivery of GPS outcomes, does not sit well with the proposal to maintain funding assessment within ‘activity classes’.

We are concerned at the lack of specificity in the proposed results alignment. We acknowledge the need for qualitative criteria in all strategic objectives, including we would argue, value for money since value cannot be interpreted as a direct corollary for a positive BCR. This lack of specificity although adequate for allotting a theoretical priority order means that any decision on the degree of ‘significance’ is always going to be subjective and open to argument. Again we do not consider this an issue of itself, however it becomes an issue when used as a single criterion to offset against a qualitative figure for BCR.

This is exacerbated by the lack of applicability of BCA in complex social systems such as transport. We explore the shortcomings of BCA below.

## Cost benefit appraisal

We acknowledge that BCA is a robust tool for decision making where all factors are directly comparable. However in a system such as Transport which is as much a social and environmental construct as economic this methodology is inadequate. As the Productivity Commission notes, land use and transport planning “…*poses a challenge to conventional economic assessment methods that focus on short-run impacts and put heavy emphasis on travel time savings*”.[[1]](#footnote-1) We note that this short term emphasis and skewed weighting towards travel time as a determining factor is counter productive for social outcomes and for any transport modes other than motorised private vehicles. The Institute of Transport Economics noted in 2010 that “*Several of these measures reduce mobility for private cars. However reduced mobility can also be seen as a measure to promote more environmentally friendly urban transport. Measures that result in poorer conditions for private cars are therefore no disadvantage when the objective is to promote environmentally friendly urban transport.*”[[2]](#footnote-2) We would contend that this remains true for any part of the land transport system where there is not a separate contiguous journey path for different modes.

We conclude that the CBA methodology is too sensitive to both *a priori* assumptions and to the dollar proxy values attributed to both costs and benefits. We further note that the assumptions and values chosen hitherto have failed to meet the objectives of the GPS[[3]](#footnote-3), a fact implicitly acknowledged in the draft GPS which ‘…identifies a need to investigate the appropriateness of current evaluation practices…’.

We consider the BCA modelling assumptions and in particular the use of dollar proxy values in previous investment appraisals is fundamentally flawed[[4]](#footnote-4), and have vastly over valued the economic cost of traffic delays compared to the social and personal costs to individuals and especially to the development of community through the loss of safe movement in any active mode. We also strongly support the inclusion in any transport strategy of the costs of health related harm from noise and exhaust emissions noting the well-established link between traffic density and increased mortality and morbidity from respiratory disease[[5]](#footnote-5). We note that this has a particular impact on older people. We therefore fully support the IAF’s commitment to ‘…[take] account of the **full range** of benefits and costs over the whole life of investments.’

We therefore consider that a much broader set of criteria are required and that these cannot easily or effectively be represented by proxy dollar values[[6]](#footnote-6).

We therefore strongly recommend the adoption of an assessment based on multi criteria decision analysis to provide the needed step change in outcomes and to improve the quality and transparency of the decision.

We concur that to achieve a step change in safety for users of all modes of land transport the assumptions and values used in IAF BCA need to be addressed. In particular we consider that the example quoted in the penultimate paragraph on page 8 of the IAF encapsulates our concerns that the current proxy costs[[7]](#footnote-7) assigned to travel time delays and public safety are at odds with the actual human values.

We have consistently criticised that the dominance of travel time as a determinant and note that not only is the cost attributed over estimated but practical experience of projects justified *inter alia* on travel time savings consistently fail to meet this objective through new trip generation.

As noted above we believe that a whole of system approach is required to fully address the GPS outcomes and that an ‘… integrated holistic approach across a range of measures.’ is necessary. We also believe that matching maximum speeds necessary for safe travel to the local road environment is an expected output from the Safety stream of the GPS, so it would be counter productive to use anything else in assessing future projects. We consider that to meet the objective of safety the IAF must place greater prominence on the hierarchy of treatments and to that end we believe that the move to provide greater integration between transport and urban planning, and the goal of ‘liveable cities’ should also have a major prominence in any assessment.

## Prioritisation

We have serious concerns over the derivation of the priority order shown in the table on page 10. This arises largely from the fact that one factor (BCR) is not only over prioritised (see above) but quantified whilst the other and we would argue primary factor is qualitative. Nonetheless with the caveat that a plain BCR should be replaced by a multi-criteria assessment, we consider the order given largely appropriate apart from priority two. Here we consider that the weighting given to the BCR is too excessive, and suggest that category two should be restricted to proposals that have a medium or high alignment factor and a BCR of very high. Proposals that have a BCR of very high but only a low alignment to GPS outcomes should we consider have a priority of 6, equivalent to a medium results alignment and a BCR of low. We consider this change is more appropriately aligned to the strategic objectives of the GPS and that value for money is a supporting objective

## Public transport, rapid transit and rail improvements.

We note and concur with the inclusion of a perception of safety as a criterion of high alignment and that access to public transport is a prime example of the problems with an activity based approach, given the high level of importance assigned to convenience by people.

## Road Safety promotion and demand management

We agree that demand management proposals should be treated for funding purposes as improvements rather than continuous programmes for the reasons given in the IAF.

We also consider that demand management proposals should be included in the potential ‘Safety BCA’ suggested previously. We are particularly concerned that both direct and indirect health effects of congestion need to be addressed since these disproportionately affect older people as well as the very young. We consider demand management as a key tool in achieving this.

In the associated table for this activity we would note that the dot point ‘promotes opportunity to establish and promote active modes **or** public transport access to new housing priority areas’ that active mode and public transport are not necessarily alternatives but may be complementary.

1. Productivity Commission, 2018, draft Low-Emissions Economy Report, Wellington, https://www.productivity.govt.nz/sites/default/files/Productivity%20Commission\_Low-emissions%20economy\_Draft%20report.pdf [↑](#footnote-ref-1)
2. Institute of Transport Economics, 2010: Measures for Pedestrians and Public Transport in City Intersections [↑](#footnote-ref-2)
3. The outcomes desired by the GPS are used here to represent the same outcomes outside ie prior to the current GPS [↑](#footnote-ref-3)
4. eg Bronsteen, J., Buccafusco, C., Masur, J., 2013, Well-being Analysis vs. Cost Benefit Analysis, Duke Law Journal, 62:1603

Baram, Micheal, 1980, Cost-Benefit Analysis: An Inadequate Basis for Health, Safety, and Environmental Regulatory Decision making, Ecology Law Quarterly, Vol 8:3 [↑](#footnote-ref-4)
5. eg Zhang, K., & Batterman, S. (2013). Air pollution and health risks due to vehicle traffic. *The Science of the Total Environment*, *0*, 307–316. <http://doi.org/10.1016/j.scitotenv.2013.01.074>

Health effects institute.Traffic-related air pollution: a critical review of the literature on emissions, exposure, and health effects. <http://pubs.healtheffects.org/getfile.php?u=5532010>. [↑](#footnote-ref-5)
6. Barfod, M. B., & Leleur, S. (Eds.) (2014). Multi-criteria decision analysis for use in transport decision making. (2 ed.) DTU Lyngby: Technical University of Denmark, Transport [↑](#footnote-ref-6)
7. ‘Cost’ is used here in the sense of a monetary proxy and has no implication as to positive or negative balance. [↑](#footnote-ref-7)