

A Broader Perspective on Social Outcomes in Transport

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ABSTRACT

While the importance of including the interface between transport and the social environment has been acknowledged in the past few decades, application of this remains limited in transport policy and project evaluations. At present, consideration is largely given to impacts of the infrastructure construction and future operation on people living in the vicinity, without looking at social outcomes in terms of personal/societal wellbeing, nor the economic impact of the changes in these conditions. New research has added a further dimension to the social impact of transport, the value that may be added in rural communities. This relates to the leadership role adopted by some bus operators, and their willingness to support the good functioning and vibrancy of their local communities, with important social and economic outcomes that should be included in both CBA evaluations and taken into account in bus service contracts. The authors argue that it is important that these wider benefits are taken into account in transport evaluations, broadening the potential value to both encompass social and associated economic outcomes.

1. Introduction

In Europe, Australia and to a lesser extent North America, transport planning has been dominated by the economic paradigm for many decades. This has seen extensive valuable research undertaken into costs and benefits of transport infrastructure and services, with a focus on quantification in money terms. From relatively humble beginnings valuing time and fuel savings expected from road improvements, for example, the practice of transport planning and project/policy appraisal has developed considerably, now frequently including (for example) assessment of wider economic benefits (WEB) and environmental impacts computed in monetary terms (e.g. through health impacts). Laird and Venables (2017) recently outlined the circumstances in which WEB might be relevant to project appraisal, with a focus on what they call *context specific appraisal*, a subject to which we return on frequent occasions. Their focus was on context specific economic evaluation, noting that social and environmental matters were beyond their scope.

Government urban land use transport strategies usually elaborate some variant of triple bottom line (TBL) outcome goals, such as:

- improve economic productivity
- reduce social exclusion
- lower environmental footprint,

with health/safety outcomes sometimes listed separately and sometimes included within the TBL. Yet when it comes to transport planning and policy, two of the three legs seem to be somewhat stunted. Strategic transport plans and project appraisals, for example, commonly report expected marginal environmental changes, such as reductions in greenhouse gas emissions or particulate emissions, but are seldom designed to deliver what might be seen as sustainable long term environmental outcomes, such as GHG emissions consistent with commitments made at the 2015 UN Paris Climate Change Conference (COP 21). Thus Australia, for example, is committed to reducing its GHG emissions by 26-28% on 2005 levels by 2030 but we are not aware of any Australian urban land use transport strategy that shows how this will be achieved, with respect to its transport component, one of the largest sources of Australian GHG emissions.

Of the three legs of the TBL, the social is the weakest in terms of representation in transport planning and policy. Pickup and Guilano (2005), for example, argue that:

While the two policy areas [transport policy and social policy] are clearly inter-related, there appears to be an absence of dialogue between the transport profession (trying to clarify the link between transport strategies and social exclusion) and mainstream social policy makers, who currently pay scant attention to transport related issues. (Pickup and Guilano 2005, p. 40).

In somewhat similar vein, Geurs et al. (2009) list a range of potential social impacts in the assessment of transport infrastructure projects, noting that they are ignored, but they do not mention social outcomes. They also note, however, that the social importance of transport has been of research interest. The Social Exclusion Unit (2003), for example, stated that 40% of job seekers in the UK reported a lack of personal transport or poor public transport was a crucial barrier to getting a job.

A recent report by KPMG notes that:

Whilst much has been done over the last 10 years to improve our understanding of the wider economic impacts of transport investment and policy decisions, much less has been done to develop a better understanding of the wider social and environmental impacts of transport investment and policy decisions (KPMG, 2016, p.5).

It would seem that little has changed. The new environmental effects statement for the planned West Gate Freeway in Melbourne (Victorian Government, 2017) discusses the impact of the freeway construction and operation on the community through which it passes, but does not mention the social outcomes likely to be associated with this new infrastructure.

Some efforts over the past decade to increase the focus on the social leg, such as research by two of the current authors (e.g. Stanley et al., 2011, 2012), and new research by the third author (reported in this paper) has developed connections between transport/mobility and a range of indicators of inclusion and wellbeing, and the role of the transport provider in rural settings in contributing to stronger communities. These findings are summarised in Sections 2 to 4. Some of this work has been expressed in monetary terms, to increase the opportunity for its inclusion in economic cost-benefit analysis, as a valuable transport contribution to wellbeing (understood in this setting as economic welfare). As demonstrated in Stanley and Hensher (2011) and Stanley and Stanley (2017), such monetisation enables economically-based social safety-net public transport service levels to be developed, bridging in some ways the social and economic legs in the TBL. Any such monetisation, however, should not distract attention away from the social outcomes that are being, or could be, pursued through

transport policy and planning. Our experience is that these social outcomes are not widely recognised or understood.

The purpose of the current paper is to elaborate our understanding of social outcomes from transport, particularly public transport, and to illustrate ways in which such social outcomes might be more effectively represented in transport policy, planning and project appraisal. This inevitably shifts attention towards the *policy/project generation* level and away from *impact assessment* (of initiatives that may have little or no grounding in desired social outcomes). In our view, too much transport appraisal/evaluation research and application is in the impact assessment area and not nearly enough thought is given to the ultimate societal purposes which the initiatives being assessed are intended to achieve. This is the stuff of project generation, the main focus of the current paper and a clear illustration of the call for context specific assessment.

US legislation in areas such as civil rights, disabilities and environmental justice, goes some way towards placing social outcomes at the policy/project generation stage in that country (Rosenbloom, 2007). At the delivery end, however, there is little demonstrated understanding of social outcomes as purposeful goals in most US urban land use transport plans. This is evidenced by the low level treatment of accessibility in such plans noted by Boisjoly & El-Geneidy (2017) , accessibility being a key influencer of social outcome formation.

Section 2 elaborates our understanding of social outcomes from urban transport, with a primary focus on public transport, summarising key literature in the field and illustrating application. Section 3 outlines research by two of us on connections between mobility, social inclusion and wellbeing, a central contributor to what most urban land use transport plans suggest as their social goal (social inclusion). Some of the policy and planning implications of that research are presented. Section 4 explores a new social research area for transport, that of the contribution which a transport provider might make to their community. We are not aware of this social outcome having previously been included as an influence on transport policy and planning, other than perhaps in a de facto sense through the continuation of negotiated contracts with existing private service providers for local/regional public transport services. Section 5 presents the paper's conclusions.

2. Key literature on social outcomes from transport

The social impact of the ability to be mobile has been of research interest in the past couple of decades. This includes topics such as the role of transport in social inclusion, the importance of accessibility, the interface between social capital and transport, the place of

transport in meeting human needs, the influence of transport on personal wellbeing and health, and a new contribution as to how the organization and governance arrangements of transport can influence the local community, especially in a rural/regional setting.

This body of social research largely grew from an interest on the idea of social inclusion, where policy can influence the capability of people to be engaged in mainstream society. Early thinking around social inclusion was particularly in relation to employment as an exclusionary factor (Lenoir, 1974). Sen (1985) made important contributions to the philosophical thinking around social inclusion, arguing that the standard of living cannot be measured by the ownership of goods but by the capabilities these goods provide in terms of social functioning.

The concept of social exclusion spread throughout Europe and the UK, and became important in research and policy with the 1997 Labour Government in the UK, which established *The Social Exclusion Unit* (SEU). A 2003 report from the SEU established strong connections between the capacity to be fully engaged with society and the ability to be mobile. Links were drawn between the exclusion of people who do not have access to a car, and their needs for education, employment, access to health and other services and to food shops, as well as to sporting, leisure and cultural activities. SEU (2003), and a subsequent related book (Lucas, 2004), argued that, to remove these barriers and reduce social exclusion through transport improvements, there is a need to understand how people access key activities and link this with planning to improve such accessibility.

Contracting for social values is one way governments might be able to achieve some of their social objectives and contribute towards achieving a net social benefit. Sometimes understood as 'sustainable procurement', social procurement serves to ensure that government purchasing decisions incorporate consideration of social value and, in so doing, ensure that government purchasing power maximises opportunities to achieve outcomes and benefits for the people and communities they serve.

The consideration of social values as a 'pillar' of procurement reflects the elements of the TBL. *The Economist* (2009) states:

...companies should be preparing three different (and quite separate) bottom-lines. One is the traditional measure of corporate profit—the 'bottom-line' of the profit and loss account. The second is the bottom-line of a company's 'people account'—a measure in some shape or form of how socially responsible an organisation has been throughout

its operations. The third is the bottom-line of the company's 'planet' account—a measure of how environmentally responsible it has been. The triple bottom-line (TBL) thus consists of three Ps: profit, people and planet. It aims to measure the financial, social and environmental performance of the corporation over a period of time. Only a company that produces a TBL is taking account of the full cost involved in doing business.

Eversole and Martin (2005) acknowledge that triple bottom-line approaches generally posit that regional development has social and environmental, as well as economic components. While definitions of social value are broad, they refer to wider non-financial impacts of programmes, organisations and interventions, including the wellbeing of individuals and communities, the extent of social capital and the environment. Being able to demonstrate social value can be beneficial, especially during times of spending cuts and increased competition over scarce financial resources (Eurodaconia, 2011).

A couple of problems have hampered research on transport and social exclusion. Firstly, social science has historically largely taken a 'personal pathological' approach to understanding poverty and disadvantage. The fault was seen to lie in the individual rather than their environment, therefore working with the individual to bring about a change in their circumstances was the major form of intervention (Stanley et al., 2017). However this viewpoint is now changing, particularly associated with urban planning and place-based research.

Secondly, to a large degree, the work on transport and social exclusion was a conversation about accessibility in a narrow sense, about the need for people to obtain goods and services and get to work, school, services and recreation. There was little systematic attempt to understand a more complex systemic pattern of relationships as to how transport, and social exclusion related thereto, can impact on personal and societal wellbeing outcomes. The European Mobilate project was important work in this regard, examining some of the associations between transport, the built environment and a number of personal characteristics and beliefs on the quality of life (wellbeing) of older people living in rural areas in five European countries (Mollenkopf et al., 2005).

The evidence continues to grow on the importance of transport for social outcomes. The KPMG report (2016) reports a strong statistical association between UK local bus service connectivity and participation in economic and social activities as reflected in an Index of Multiple Deprivation. A 10% improvement in connectivity (expressed as journey time to some

key services) of bus services was associated with a 3.6% improvement in the Multiple Deprivation score. They note the link between education and employment services, a reduction in numbers of people claiming benefits and a reduction in potential life lost (years). The fact that improved bus connectivity can improve numerous outcomes for residents in the most deprived neighbourhoods is significant, and in contrast to the success of many social welfare interventions. Such important associations have been investigated in Australian research, reported further in section 3.

The concept of social exclusion has been slow to be adopted in industrializing countries. The Sustainable Development Goals make perhaps the first links between transport and social inclusion in five of the 17 sustainable goals (Sustainable Development Solutions Network, 2016).

3. The place of transport in achieving social outcomes

One of the main purposes of government policy and action is to meet personal and societal needs in circumstances of market failure where there is a common good to be achieved. This common good is sometimes embedded in the concept of a social welfare function (SWF). A SWF describes what outcomes are valued by the society and should include some information about socially acceptable trade-offs between valued outcomes. Thus, policy needs to consider collective goals and distributional outcomes and take account of the social and environmental impacts of that policy, not just economic outcomes, with such matters forming the basis of a SWF.

Options for tackling policy problems and opportunities, and impacts expected to be associated therewith, are most commonly judged by use of cost benefit analysis (CBA), with monetary values being placed on valued (positive/negative) outcomes as far as possible, complemented by physical outcome measures, and qualitative descriptions of outcomes where quantification is not possible. In short, policy/planning around transport and new transport initiatives needs to take consideration of how this will impact on people: will it make some people better off and others worse off and what is the opportunity cost of one project over another; what are the value judgements embedded in the projects; and, most importantly, what valued societal outcomes is the policy/project initiative intended to advance. This goes to the matter of context.

Reflecting the idea of a SWF underpinning policy/planning directions and the associated role of context, some recent transport and urban research in the US and Canada has focussed on forming 'complete communities'. This is viewed as:

Our communities need basic elements to support economic opportunity and health for all people, regardless of income level, cultural background or political persuasion... These elements include a quality education, access to good jobs, an affordable roof over our heads, access to affordable food and health services... and affordable transportation choices that get us where we need to go (Ohland, 2012, p.3).

This moves the social outcomes from the *individual* to also include the importance of the *community of individuals*. Investments in access and amenities are said to make the area more attractive for development and increase the residents' satisfaction with their community, said to be crucial for maintaining tolerance and support for change (Pivo, 2005).

The influence of communities on personal outcomes is probably the least-understood dimension, although it has been shown that place-based contextual attributes have a greater impact on health than the influence of aggregate individual characteristics (Macintyre et al., 2002). The development of 'strong' communities has been a policy goal in the past decade, where the building of communities was viewed through a social welfare lens, particularly in the UK and Australia (Shields & Wooden, 2003). However, while some positive short-term changes occurred with a community development intervention, this approach has been largely unsuccessful in bringing about permanent change in a particular location (Vinson & Rawsthorne, 2015).

The importance of the community was demonstrated in research undertaken by Australian researchers (see, for example, Stanley, 2011). Drawing on and extending international research (Burchardt et al., 2002), the Australian study used five dimensions to indicate a person's risk of being socially excluded. Thresholds were set to indicate whether or not a particular risk factor was likely to be operative. These risk factors, with relevant thresholds (2008), were:

- household income – less than a threshold of \$A500 gross per week;
- employment status – not employed, in education or training or looking after family or undertaking voluntary work;
- political activity – did not contribute to/participate in a government political party, campaign or action group to improve social /environmental conditions, to a local community committee/group in the past 12 months;
- social support – not able to get help if you need it from close or extended family, friends or neighbours; and

- participation – did not attend a library, sport (participant or spectator), hobby or arts event in the past month.

Interview surveys were undertaken in both Melbourne and in a Victorian regional area to gather data on these risk factors. A separate survey focused on people who are highly socially disadvantaged.

A number of variables were found to be significantly associated with risk of social exclusion and affecting wellbeing. These variables were social capital, sense of community, household income and the number of daily trips undertaken (Stanley et al., 2011, 2012). Importantly, and perhaps not surprisingly, mobility was also found to be sitting behind the ability to achieve the components relating to social capital, sense of community and income.

Because the research indicated that a person's household income and their trip rate are both significant influences on risk of social exclusion, the relative influence of these two variables can be used to impute the value of an additional trip. The resulting value is \$AUD19.30 (2008 prices) for a person whose household income level is at the sample average.

What does this mean? Essentially, it means that anyone who is able to undertake an additional trip because of the availability of new or substantially improved public transport services (or because of any other mode being available on a much improved basis, since the value attaches to a trip rather than to a mode) implicitly values that trip at about \$AUD20 (2008 prices). Or alternatively, if a government is interested in reducing social exclusion amongst at risk people, enabling them to undertake an additional trip is equivalent to giving them an additional \$20. Thus if a new or substantially improved bus or rail service leads to new trips being undertaken by people at risk of social exclusion, a value of about \$AUD20 per trip can be ascribed to these new trips in evaluating the case for the improvement. With the household income explanatory variable being expressed as household income squared, the value of an additional such trip increases in inverse proportion to reductions in household income (i.e. halving household income doubles the value of an additional trip).

To illustrate the application of this research, transport analysts occasionally seek to estimate the value of public transport to society. "Mass transit" type services are mainly associated with user benefits and "externality" benefits such as congestion cost savings, greenhouse gas reductions, a lower road toll, and cleaner air, together with potential agglomeration benefits attributable to public transport service provision (primarily radial rail services to a CBD). The Australian social exclusion research indicates that public transport services

whose purpose is more “social transit” in nature, in the sense of providing basic access opportunities, should be credited with the value imputed above, for trips that would not be undertaken if those public transport services did not exist (or which might have otherwise required a lift giver).

Stanley and Hensher (2011) showed that, at a service cost of around \$100/hour, a boarding rate of around 8 passengers per hour would be sufficient to provide an economic justification for the service in an outer urban Australian setting. Stanley and Stanley (2017) suggest that this ‘break-even’ boarding rate is about five passengers per hour on regional town route bus services, given the user profile of such services. Such services would recover only a small proportion of their direct service cost, in financial terms, but are of significant social value, to both users at risk of exclusion and the wider society, in terms of savings in flow-on costs, such as crime, unemployment, adverse health outcomes, etc.

Reflecting on these (implicit) *minimum service levels*, it is interesting to note that an average boarding rate of seven passengers per revenue hour seems to be the minimum acceptable level for service on Translink’s community shuttle (bus) services in Vancouver, with boardings per hour falling below this average rate for some time periods (e.g. down as low as 1-2 for some 3 hour blocks) (Translink, n.d.). This apparent service floor has not been based on application of the trip values developed by Stanley et al. (2011) but seems to reflect a similar societal judgement about service value. It is also noteworthy that Vancouver is another metropolitan area that, like Portland Oregon, seeks *complete communities* as one of the goals of its integrated Regional Growth Strategy (Metro Vancouver, 2011), a goal that has been in the respective regional land use strategies for two decades. The Metro Vancouver conception of complete communities refers inter alia to *walkable, mixed use, transit-oriented communities* (Metro Vancouver, 2011, p. 45), reflecting an understanding of the links between mobility, social inclusion and strong communities.

The next section outlines new research that takes a different approach to adding social value and building community, the role of the transport business in building community in rural Australia.

4. The social impact of the transport operator on their local rural community

A further phenomenon that realises a social impact on the assessment of transport projects is a transport operator's contribution to community prosperity. Lowe (2016) explores the social contribution of various bus operator governance models in the Australian bus and coach industry by identifying and placing a monetary value on the ways in which family and

non-family firms interact with their communities and contribute towards community prosperity.

Some scholars have written of community prosperity (Brooks, 2007; Cava & Mayer, 2006) but they do not refer to any explicit definitions. Up until now, there has been an absence of a broad academic acceptance of the determinants of community prosperity; these scholarly articles discuss what community prosperity represents in their field of interest, as opposed to what it actually is or might be. Lowe (2016) defines community prosperity as an overarching term that describes the state of economic, environmental and social flourishing, thriving, good fortune and success of both a geographic community and a relational community of interest. These include factors associated with health, wealth and happiness. The economic and social concepts that could contribute to community prosperity might be local employment opportunities, income equality, community capacity, resilience, viability, connectedness and social cohesion.

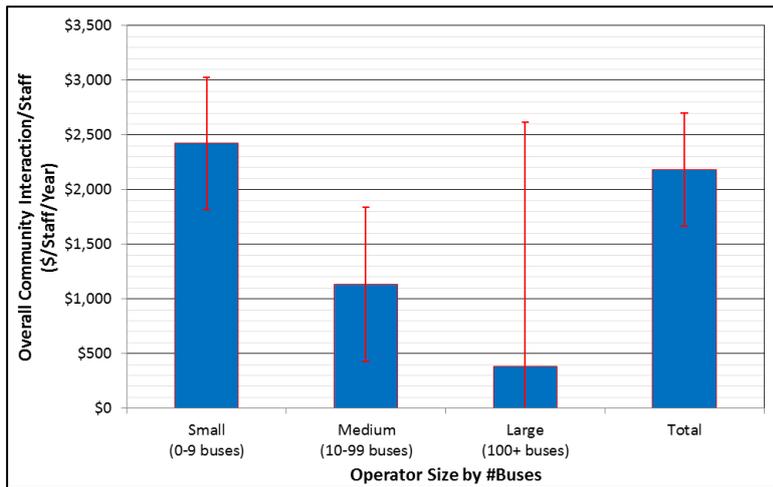
The value various types of firms bring to community development (or prosperity) has previously received little attention. Often framed through the guise of corporate social responsibility, quantifying how governance affects community prosperity is a variable that could be included in government cost benefit analysis, as well as social inclusion. Cennamo et al., (2012) generally discuss firms' philanthropic endeavours with the community. Niska et al., (2016) consider this phenomenon through a psychological lens, asserting rural small business owners are most of all driven by personal autonomy and economic profit; however, only few are oriented towards business growth. Employing others and maximising profit are among the least valued variables and there are a large number of social/community entrepreneurs who are mostly guided by social goals.

Lowe (2016) defines eight interactions (ways in which forms interact with their communities): discounted services; financial and non-financial donations; sponsorships; time contributions; safety and security contributions; purchasing behaviour; sharing resources; combining resources. Analysing these interactions in a study of the Australian bus industry, Lowe noted that the first six community interactions demonstrate bus operators' contribution to their community stakeholders, including bus passengers, parents, schools, residents and staff. The last two community interactions show how bus operators interact with fellow bus operators.

Lowe's (2016) study also examines why bus operators might interact with their community; the factors significantly associated with an operators propensity to interact with the community in which they operate, being: firm size; operator type; operator location; residence of operator (in or out of the community in which the bus service operates); form of service contract (negotiated or tendered); sense of community; social capital linkage between operators and their voluntary professional association. It was subsequently found (Lowe, Stanley, Stanley, 2016) that sense of community responsibility (Nowell & Boyd, 2014), as opposed to sense of community, is probably a better predictor of a firm's propensity to interact with their community. This is another field where little research has been previously undertaken and this knowledge could be of value to local, state and federal governments, as well as industry and community groups seeking a greater sense of corporate social performance, community viability and prosperity.

Lowe's (2016) study finds that:

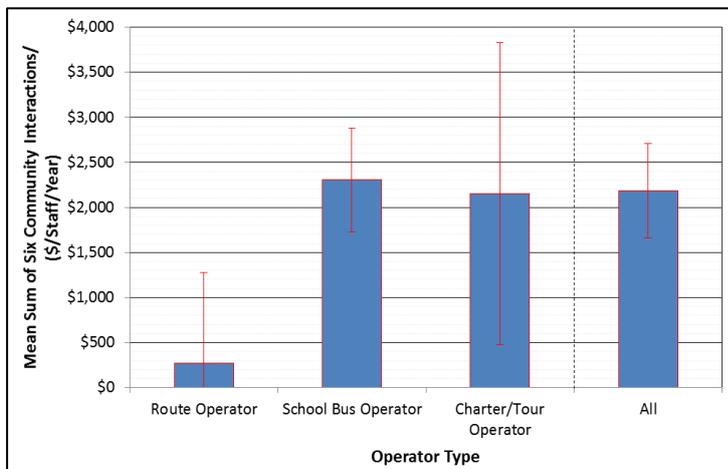
- small firms interact with their community on a per-staff-member basis more than medium or large sized firms (Figure 1). * and ** indicates the result was statistically significant.
- school bus operators interact with their community on a per-staff-member basis more than charter/tour and route bus operators (Figure 2);
- regional/rural operators interact with their community more than metropolitan operators on a per-staff-member basis (Figure 3); and that
- operators with negotiated contracts interacted more with the communities in which they operate on a per-staff-member basis than operators with a tendered contract (Figure 4, although this finding was not statistically significant).



Contrast (Operator Size by #Buses)	Sig. value for One-Way ANOVA Contrast Test (Linear data values)
[Small – Medium]	.007**
[Small – Large]	.143
[Medium – Large]	.551

Figure 1: Combined Sum-of-Six Community Interaction Per-Staff-Member, Resolved by Operator Size, and Corresponding Contrast Test Results

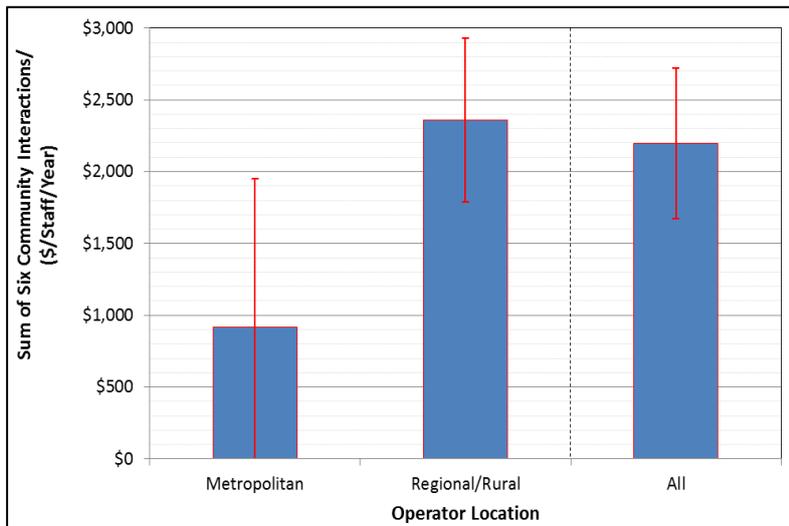
** significant at the 1% level



Contrast (Operator Type)	Sig. value for One-Way ANOVA Contrast Test (Linear data values)
[Route] - [School]	.003**
[Route] - [Charter/Tour]	.066
[School] - [Charter/Tour]	.865

Figure 2: Overall Sum-of-six Interactions Per-Staff-Member, Resolved by Operator Type, and Corresponding Contrast Test Results

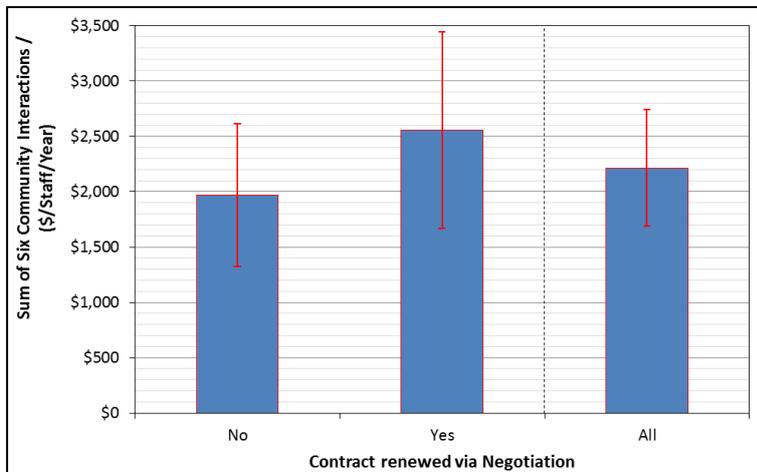
** significant at the 1% level



Contrast (Operator Location)	Sig. value for Independent Samples t-Test (Linear data values)
[Metropolitan] -[Regional/Rural]	.020*

Figure 3: Overall Sum-of-six Contributions Per-Staff-Member, Resolved by Operator Location; and Corresponding Contrast Test Result

* significant at the 5% level



Difference (Contract renewed via Negotiation)	Sig. value for Independent Samples t-Test (Linear data values)
[No] -[Yes]	.286

Figure 4: Sum-of-Six Community Interactions Per-Staff-Member, Resolved by Form of Contract, and Corresponding Contrast Test Result

The results reveal, amongst other things, the potential community benefit foregone in the event of a government bus service margin reduction. The results show that, in a Victorian bus service context, if the state government reduced the value of the negotiated margin of a bus service contract by one third, a regional and rural Victorian community would be

adversely affected by involuntarily accruing external costs in the form of reduced community interactions, the sum total of which is projected to exceed the value of the cost saving to government associated with the reduced bus service contract price. Considerable sponsorship, financial and non-financial interactions, safety interactions, local expenditure, time contributions and donations would not occur, or would occur at lower levels, weakening the resilience of the affected community and, in some cases, possibly contributing to the economic and social decline of the community. This is shown in Figure 5.

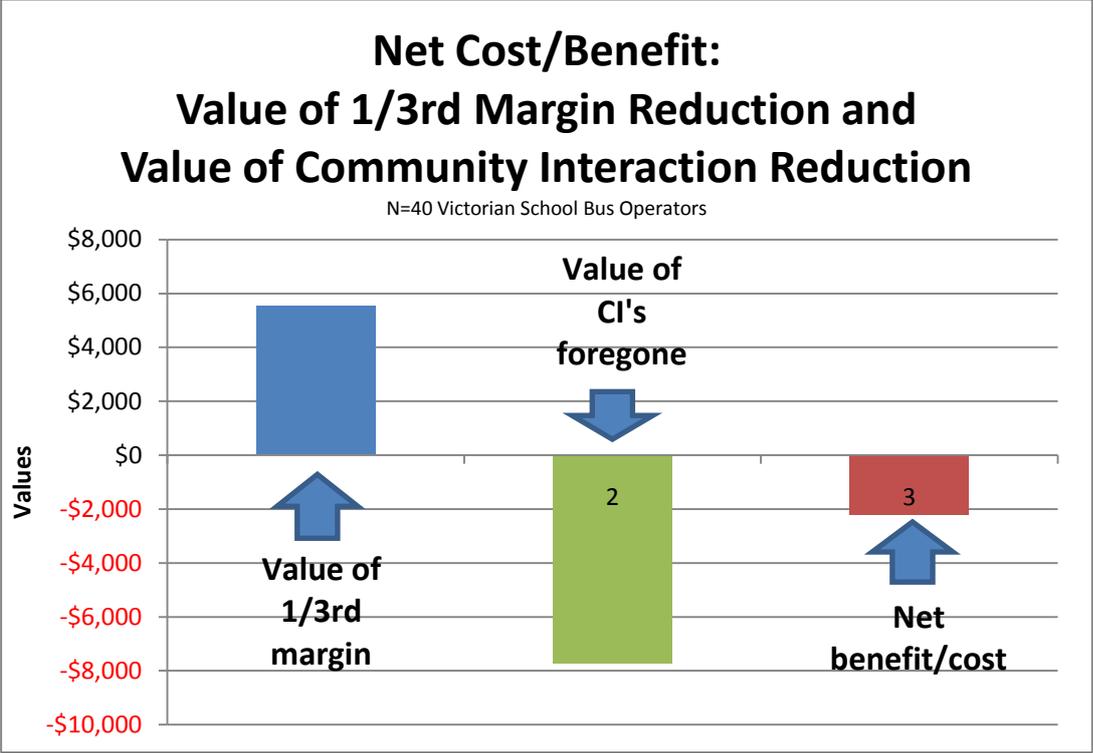


Figure 5: Net Benefit/Cost Associated with 40 Victorian School Bus Operators Margin Reduction and Reduction in Community Interactions

The results also reveal that, in the event a Victorian school bus contract is terminated and not replaced, the foregone external benefits, in the form of a reduction in the defined community interactions, exceeds the cost saving to government and is likely to diminish the viability and prosperity of the affected community.

Lowe's (2016) work confirms that small, family, regional/rural bus operators have a much greater propensity to invest in, and interact with the community in which they operate on a per-staff-member basis, than large, multinational (non-family) firms.

Ongoing operator consolidation has seen many bus operators disappear from many Australian regional communities; however, local bus and coach operators still exist where other businesses, such as newsagents, hotels, hardware shops, butchers, bakers, and medical practitioners have disappeared. Bus operators have a large stake in the local area and, because of the nature of their purpose and their trans-generational tenure, they cannot easily relocate. Operators also have a varying degree of influence on their local area pursuant to their history, activities, resources, associations, the political landscape and their community's socio-economic situation.

Given a firm's interaction with its community can now be valued, Lowe (2016) asserts there needs to be a recalibration or reformulation of the social contract between business, government and society. In moving towards a recalibration of a social contract, it appears unlikely that only top-down ideas and theories will work. For example, a government that decides to competitively tender bus services and award contracts to firms based solely on price will most likely see contracts go to large, non-family firms. As Lowe's (2016) study has shown, such firms are less likely to interact with a community on a per-staff-member basis than small and medium family firms. Such a prospect could, therefore, run counter to endeavours to improve community prosperity, particularly in a rural/regional setting. Further, any financial savings realised by Government transport department's contracting with a few MNE operator's could be lost in the form of increased external costs accruing to the departments responsible for community and regional development.

Government requirements that metropolitan-centric policies be adopted universally (state-wide) probably will not work either. To improve community prosperity, both government and industry have responsibilities. Government will need to increase its preparedness to understand the potential ramifications of how policies can adversely affect some communities and positively impact others. One way to help do this is to consistently value and account for external costs/benefits. In regard to responsibilities of industry, some bus and coach operators, working with their voluntary professional association, would be well placed to participate in a new social contract and accept some form of contractual responsibility to maintain the extent of external social value they add to the communities in which they live and operate. Making operators contractually obliged to this would be consistent with contracting for social values. Adding social inclusion and community prosperity (development) to cost benefit analyses would be advantageous and could result in government making different procurement decisions.

6. Conclusions

While the importance of public transport to the achievement of social outcomes has been recognised for many years now, there has been little incorporation of these in transport projects and evaluations. While this is pointed out in the literature, such as by a review of social inclusion and transport by the European Union (Lodovici & Torichio, 2015), the concept of social outcomes remains limited and short-sited. This paper argues that it is important that social outcomes, the subject of this paper, including relevant externalities, are included in transport policy and project appraisals and evaluations. Indeed, it is argued that a failure to do this not only omits how public transport services can improve outcomes for people at risk of social exclusion (along social justice lines), but it also fails to account for the associated economic value for both individuals and communities. The failure to maximise the capabilities of all individuals reduces both the opportunities for individuals themselves, but also places a cost on society in the form of welfare costs, the risk of poor health outcomes and communities that may struggle to prosper and function well, to support social cohesion, resilience to adverse events, participation in good decision-making, vibrancy and innovation and strong business opportunities.

The new research findings presented in this paper reveal a further social value in relation to the provision of transport, being the contribution that may arise from the governance and corporate arrangements of bus operators, particularly in rural/regional areas. Given the declining economic prosperity of many rural towns, seen in Australia and in many other nations, such as Japan, the community value of an operator who is embedded in their community and acts as a community leader supporting the viability of the community has been shown. This contribution is at risk with competitive tendering contracting, which commonly fails to take into account the total contribution of bus services. Current CBA analysis tends to ignore wider social (and environmental) benefits associated with the procurement of bus services, given bus services, indeed public transport, is a social asset as well as an economic asset. Planning for the social return in transport procurement, as well as an economic (and environmental return), is necessary, given the extent of social, economic and environmental ills facing society today.

References

- Boisjoly, G. & El-Geneidy, A.M. (2017). How to get there? A critical assessment of accessibility objectives and indicators in metropolitan transport plans. *Transport Policy*, 55, 38-50.
- Brooks, K. (2007). Social capital: Analysing the effect of a political perspective on the perceived role of government in community prosperity. *Rural Society*, 17, 3, 231–247.
- Burchardt, T., LeGrand, J. & Piachaud, D. (2002). Degrees of exclusion: Developing a dynamic, multidimensional measure. In J. Hills, J. Le Grand & D. Piachaud (Eds.), *Understanding social exclusion*, Oxford, Oxford University Press (pp.30-43).
- Cava, A. & Mayer, D. (2006). Integrative social contract theory and urban prosperity initiatives. *Journal of Business Ethics*, 72, 263–278,
- Cennamo, C., Berrone, P., Cruz, C. & Gomez-Mejia, L. (2012). Socioemotional wealth and proactive stakeholder engagement: Why family-controlled firms care more about their stakeholders. *Entrepreneurship Theory and Practice*, 36, 6, 1153–1173.
- Eurodiaconia. (2011). *Social value: What do we mean by measuring social value?* Retrieved from http://www.eurodiaconia.org/files/Eurodiaconia_policy_papers_and_briefings/Briefing_-_Measuring_Social_Value.pdf
- Eversole, R. & Martin, J (2005). *Participation and governance in regional economic development: Global trends in an Australian context*. Aldershot, UK: Ashgate.
- Geurs, K., Boon, W., & Van Wee, B. (2009). Social impacts of transport: Literature review and the state of the practice of transport appraisal in the Netherlands and the United Kingdom. *Transport Reviews*, 29, 1, 69-90.
- KPMG (2016). *A Study of the Value of Local Bus Services to Society*, August, UK.
- Laird, J. & Venables, A. (2017). Transport investment and economic performance: A framework for project appraisal. *Transport Policy*, 56, 1-11.
- Lenoir, R. (1974). *Les exclus: un Français sur dix*. Paris: Le Seuil.

Lodovici, S. & Torichio, T. (2015). *Social Inclusion in EU public transport*, Policy Department B: Structural and Cohesion Policies European Parliament: Brussels.

Lowe, C. (2016). *The Social Externalities of Australian Bus and Coach Operators: How Governance Affects Community Prosperity*. Thesis. Monash University.

Lowe, C., Stanley, J. & Stanley, J. (2016). Sense of Community Responsibility as a determinant of corporate social responsibility. *Sociology Study*, 6, 10.

Lucas, K. (Ed.) (2004). *Running on empty: Transport, social exclusion and environmental justice*, Bristol: Policy Press.

Macintyre, S., A. Ellaway & Cummins, S. (2002). 'Place effects on health: How can we conceptualise, operationalise and measure them?' *Social Science & Medicine*, 55, 1, 125–139.

Metro Vancouver (2011). *Metro Vancouver 2040: Shaping our future*, Vancouver: author.

Mollenkopf, H., Marcellini, F., Ruoppila, I., Szeman, Z & M. Tacken (Eds.) (2005). *Enhancing mobility in later life: personal coping, environmental resources and technical support. the out-of-home mobility of older adults in urban and rural regions of five European countries*, IOS Press: Amsterdam.

Niska, M., Vesala, H.T., Vesala, K.M. 2016. The Use of Psychology in Rural Development? Two Readings of Rural Business Owners' Values. *Journal of Community & Applied Social Psychology*. 26: 581-595.

Nowell, B., & Boyd, N.M. (2014). Sense of Community Responsibility in Community Collaboratives: Advancing a Theory of Community as Resource and Responsibility. *Am J Community Psychol*, 54, 229-242

Ohland, G. (2012). *Are we there yet? Creating complete communities for 21st century America, Reconnecting America*, October http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/report-ohland-brooks_0.pdf
Accessed March 2015

Pickup, L. & Guilano, G. (2005). Transport and social exclusion in Europe and the USA. In Donaghy, K.P., Poppelreuter, S & Rudinger, G. (Eds) *Social dimensions of sustainable transport*, Aldershot: Ashgate.

Pivo, G. (2005). Creating compact and complete communities: Seven propositions for success, *Practicing Planner*, American Institute of Certified Planners, Chicago, IL.

Rosenbloom, S. (2007). Lessons for Australia from the US: An American looks at transportation and social exclusion'. In G. Currie, J. Stanley & J. Stanley (Eds.) *No way to go: Transport and social disadvantage in Australian communities* (03.1-03.9), Clayton: Monash University Press.

Sen, A. (1985). *Commodities and capabilities*, Amsterdam, New York: Elsevier Science Pub.

Shields, M. & Wooden, M. (2003). *Investigating the role of neighbourhood characteristics in determining life satisfaction*, Melbourne Institute Working Paper No. 24/03, Melbourne: The University of Melbourne.

Social Exclusion Unit (2003). *Making the connections: Final report on transport and social exclusion*, February, UK: Social Exclusion Unit.

Stanley, J. (2011). Social exclusion, in G. Currie (Ed.) *New perspectives and methods in transport and social exclusion research* (27-44), Bingley UK: Emerald group Publishing.

Stanley, J. & Stanley, J. (2007). Public transport and social exclusion: An operator's perspective. In G. Currie, G., J. Stanley, & J. Stanley (Eds.) *No way to go: Transport and social disadvantage in Australian communities* (13.1-13.17). Clayton: Monash University Press.

Stanley, J K, Hensher D., Stanley, J R & Vella-Brodrick, D. (2011). Mobility, social exclusion and well-being: exploring the links, *Transportation Research A*, 45, 789-801.

Stanley, J. & Hensher, D. (2011). Economic modelling. In Currie, G. (Ed.) *New perspectives and methods in transport and social exclusion research*, Bingley, UK: Emerald.

Stanley, J.K., Stanley J.R., & Hensher, D. (2012) Mobility, social capital and sense of community: What value? *Urban Studies*, 49, 16, 3595 - 3609.

Stanley, JK, Stanley J.R. & Hansen, R. (2017). *How great cities happen: Integrating people, land use and transport*, UK: Edward Elgar.

The Economist. (2009, 17 November). *Triple bottom line*. Retrieved from <http://www.economist.com/node/14301663>

Sustainable Development Solutions Network (2016). *Getting started with the SDGS in cities*, July <http://unsdsn.org/wp-content/uploads/2016/07/9.1.8.-Cities-SDG-Guide.pdf>

Translink (n.d.). 2015 *Transit Service Performance Review*, Volume 2, Appendix C4: Bus route summaries routes C1-C99.
http://www.translink.ca//media/Documents/plans_and_projects/managing_the_transit_network/2015%20TSPR/2015%20TSPR%20Appendix%20C4%20Routes%20C1%20C99.pdf
Accessed 20 June 2017.

Victorian Government (2017). *Environmental Effects Statement: Volume Two West Gate Freeway*, April, Melbourne: author.

Vinson, A. & M. Rawsthorne (2015). *Dropping off the edge 2015: Persistent communal disadvantage in Australia*, Victoria: Jesuit Social Services.