SUSTAINABLE TRAVEL OPTIONS FOR COMMUNITIES NOT SERVICED BY PUBLIC TRANSPORT

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Abstract

Travel behaviour change initiatives in New Zealand generally focus on cities and on reducing the negative effects of peak hour congestion. In our main centres, many car drivers have the option of taking a bus, train or ferry.

But what about areas such as rural communities and small towns which are not serviced by public transport? In identifying options to address high levels of private car dependency, this paper will seek to describe the problem by examining:

- community demographics
- groups most affected by a lack of transport options

It will then propose possible solutions including:

- community transport and other shared modes, including licensing issues
- bringing goods and services into communities
- reducing the need to travel

Finally, the paper will look at how this policy area can be integrated with other government initiatives in order to achieve better outcomes.

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Introduction

The title of this paper may, at first glance, appear counter-intuitive, since the phrase "sustainable travel options" implies that those in rural areas and small towns have, like many of their urban counterparts, the luxury of being able to choose more sustainable travel modes, whereas this is often not the case. Driving a car to access employment, medical care, education, shopping and other essential services is the primary option for many households in such areas.

However, while it is clear that private vehicles have an essential role to play in less densely populated areas, their use may be described as "sustainable" when they meet people's travel needs without undue costs to the environment and to the health, safety and social and economic wellbeing of themselves and their community. This may mean sharing vehicles, sharing costs or bringing goods and services to people. Many communities in New Zealand are already coming up with flexible and sustainable transport solutions which make better use of existing resources such as car pooling, home delivery services, dial up shuttle services and walking and cycling, to name just a few.

The New Zealand Transport Agency's role

If it is already happening, why does the New Zealand Transport Agency need to get involved? Firstly, the New Zealand Transport Agency has a role in providing the connection between the Government's wider objectives and the operation of the transport sector. The NZTA is responsible for turning high level national targets and policies into deliverables at the regional and local level. The Government's vision for transport in 2040, as set out in the New Zealand Transport Strategy 2008 (NZTS), released in August this year, is that:

"People and freight in New Zealand have access to an affordable, integrated, safe, responsive and sustainable transport system".

The strategy also identifies seven key components which will be given special priority, including:

"Increasing the availability and use of public transport, cycling, walking, and other shared and active modes".

The NZTS also states:

"...Supporting traditional public transport is likely to be more costeffective in larger urban areas and for travel between cities. Elsewhere, less traditional forms of shared transport (such as voluntary and community transport, ridesharing and car clubs) will need to be explored to address accessibility and social exclusion in a cost effective way."

Secondly, regional council staff have been pointing out, for some time now, that much of NZTA's effort (and before that, Land Transport New Zealand's), in terms of changing travel behaviour, has focussed on our main cities where the socio-economic, environmental and health effects of peak hour congestion are all too obvious. School and workplace travel plans, BikeWise events, walking school buses, neighbourhood accessibility plans and other activities all tend to be urban-based.

Yet there is little guidance for those living in small towns and rural areas where an over-reliance on private car travel is also causing problems, but perhaps in a less visible way. The Household Travel Survey¹ reports that the 24% of New Zealanders who live in small towns (fewer than 10,000 inhabitants) and rural areas drive, on average, one and a half times further in a year than those living in larger towns and cities. They account for 30% of the total distance driven by New Zealanders. Travelling long distances by car to access services is known to contribute to financial pain, community breakdown and environmental damage.

An additional reason for NZTA's work in this area is the current economic climate: households are being squeezed by high food prices and mortgage rates, coupled with rising transport costs. The Rural Expert Advisory Group's report, *Implementing the Primary Health Care Strategy in Rural New Zealand*, has indicated that high levels of deprivation are a feature of some rural regions in New Zealand, and that the extra travel costs that rural people incur make access to primary health care particularly difficult for people in these communities. Deprived communities are likely to feel the current squeeze more acutely.

For the above reasons, NZTA is working to develop policy and guidelines relating to sustainable transport options for areas not serviced by public transport. This paper will examine the different types of need within the communities targeted by this policy work; it will give a brief overview of a range of options for community transport (and non-transport) initiatives, and will touch briefly on the licensing implications. The paper will then

² Rural Expert Advisory Group (2002). *Implementing the Primary Health Care Strategy in Rural New Zealand:* A report from the Rural Expert Advisory Group to the Ministry of Health

IPENZ Transportation Group Conference New Plymouth Nov. 2008 Published: ipenz.org.nz/ipenztg/archives.htm

¹ Ministry of Transport. v1.4 revised January 2008, Comparing travel modes. http://www.transport.govt.nz/assets/NewPDFs/Comparing-travel-modesv1.4.pdf

look at some examples of successful community transport services in operation in New Zealand and finally, how this policy area fits with other NZTA and cross-government initiatives.

Differing levels of need

The purpose of this paper is not to identify areas of the country where community transport solutions³ are needed, since the very nature of successful schemes is that they are established in response to gaps identified by the community they serve. It is, however, useful to describe some of the groups within such communities that are particularly impacted by a lack of affordable, sustainable transport.

The phrase "communities not serviced by public transport" clearly covers a range of disparate communities: there are relatively affluent rural areas where the majority of the population works in a neighbouring urban area and thus has access to health, recreational and other services. On the other hand, there are rural areas that are remote from both employment opportunities and essential services. At the last census (2006), 64,182 people were found to be living in highly rural/remote areas, a further 220,470 in rural areas with low urban influence, and 154,968 and 124,251 in rural areas with, respectively, moderate and high urban influence⁴. This represents approximately 14% of the total population of New Zealand.

Inhabitants of small towns and rural areas often pay more for their fuel and drive further to get it. As the cost of the diesel, which petrol tankers run on, increases, so too does the cost of transporting petrol to remote areas. Another factor is the fact that the lower volumes of petrol the tankers deliver to smaller service stations cost more per litre. This cost is passed on to consumers, and, for example, in early August, drivers were paying \$2.50/litre for 91 octane in Te Puia Springs on the East Coast.

While longer travel distances and times impose a considerable burden on all the inhabitants of communities without public transport, this burden is felt more by some groups than by others. In order to identify the groups within small towns/rural areas that are the most disadvantaged through a lack of travel options, we can borrow from a closely related discipline: accessibility planning, which involves assessing the location and delivery of key activities and transport links to and from them⁵. The following table shows some of the problems encountered by vulnerable groups:

³ The term "community transport solutions" is used here in its widest sense and may cover anything from carpooling to online shopping.

⁴ For further information on urban/rural profile classification, see Statistics New Zealand. 2006. New Zealand: An Urban/Rural Profile, http://www.stats.govt.nz/urban-rural-profiles/default.htm

⁵ CHAPMAN, S, and WEIR, D. 2008. Accessibility Planning Methods, Land Transport New Zealand Research Report.

Table 1: Groups at risk in communities not serviced by PT⁶

Group	Issues	
Low income households	Includes working/non-working people (e.g. unemployed, sick, single parents, care-givers, retired people etc.) Access to employment opportunities very important to this group. Census statistics show that many low income households have high car ownership.	
Households without access to a car	Travel less than those with cars. In order to be able to walk or cycle, must live close to work, school, shops etc. Otherwise must rely on others to provide transport.	
Disabled people	Transport can be a major problem for those living outside Total Mobility scheme areas (at present these areas are those with PT and a taxi service)	
Children and young people	High mobility needs. Good quality walking and cycling infrastructure important for those living close to school. For those living in areas not serviced by school bus, heavy reliance on parents for transport to and from school. Young adults may have fewer employment opportunities if they don't have/can't afford transport.	
Minority groups and new immigrants	May have language problems. May need to access religious venues and food shops.	
Elderly people	Our population is aging: at the last census 12.3% of the population was aged 65 and older; this is projected to rise to 15.5% by 2016. Many elderly stop driving and need to find alternative means of getting around. Access to healthcare is important for this group. Good quality walking and cycling infrastructure may also be important.	
Those living in remote locations	Poor roads and isolated locations add to the difficulties such households have in accessing services. Lower population density means fewer local services.	

In many cases, groups represented in this table may overlap; e.g. elderly people may suffer from impairments which prevent them from driving; new immigrants may have low incomes etc. In addition, it is important to remember that even those households which do not fall into any of these categories still experience some disadvantage in terms of high financial and time costs for travel.

Options for sustainable transport

The options for communities without public transport basically fall into three categories: sharing transport, bringing services and goods to households, and providing non-transport solutions.

⁶ Adapted from CHAPMAN, S, and WEIR, D. 2008. Accessibility Planning Methods, Land Transport New Zealand Research Report, Table 3.1

The first category, sharing transport, involves making better use of existing capacity within the community. The table below explores some of the options:

Table 2: Sharing transport⁷⁸

Operator	Type of vehicle	Comment
Vehicle owners/volunteers	Private car	Car pooling may be used for specific events, or on a regular basis for travel to work or school. Volunteers often drive patients to hospital (e.g. Cancer society drivers) or elderly people to appointments. Service could be expanded to transport other groups.
District Health Board/Primary Healthcare Organisations (DHB/PHO)	Van	Generally used to provide transport to medical appointments for high need groups.
Rural postal delivery agent	Car, van, bus, truck	Travelling a set route each day. In some cases also able to carry passengers/goods (e.g. prescriptions).
School bus service	Bus	Term time – travelling set route each day. May be able to carry passengers and travel other routes during day/holidays – must be registered with regional council to ensure there is no competition with existing services.
Car share clubs	Car	May be suitable in small towns. Members are able to rent car by the hour at low cost.
Marae, church, sports club, pubs	Van	Often own a vehicle which lies idle for much of the time. May potentially be used by community groups
Private business	Van	Vineyards, freezing works and other large employers sometimes provide transport for their workers, particularly seasonal workers who may not have access to other transport. These vehicles may be available for other purposes out of season.
Taxi company	Car/van	Where they exist, taxis may act as demand responsive off-peak door to door transport.

Bringing goods and services to people

Those living outside urban areas are able, in varying degrees, to access a number of services close to home, or, without leaving home at all, thanks to the existence of mobile services in their area. Some mobile services have been around for many years: mobile libraries have existed for more

⁷ Adapted from STEER DAVIES GLEAVE AND TRANSEPT. (2001). *Rural Community Transport: A guide to good practice*, Table 1: *What vehicles might already be available*? ⁸ For details of the licensing rules relating to shared transport, see the **Licensing** section below.

than 30 years. The Whangarei mobile library, for example, visits 46 rural locations within the Whangarei District each month.

Mobile medical services also travel far and wide, and the recently released *Atlas of Socioeconomic Deprivation in New Zealand*⁹ provides a useful tool for DHB's (and others) to monitor health indicators across their regions and target services to those most in need. Mobile services include a state-of-the-art surgical bus which visits 21 rural communities all over New Zealand on a 5-week cycle to perform day surgery. It also uses communications technology to consult medical specialists in New Zealand and overseas. This means that rural patients are treated close to home, and local medical staff have the opportunity to have hands on clinical training.

Eleven breast screening buses cover most of New Zealand, visiting marae and other community centres.

There are many other examples of services which reduce the need for travel: Farmers' Markets are now held in over 30 rural/semi-rural locations throughout the country; Heartland Services is a government funded interagency initiative, established in 2001, to provide people in provincial and rural New Zealand with access to Government services. Local coordinators arrange appointments with visiting representatives from a range of agencies, including ACC, Housing New Zealand, Department of Corrections¹⁰, free access to government websites, and toll-free access to government phone lines.

Non-transport solutions

Internet access enables many rural and small town households to carry out errands such as paying bills, banking, shopping, booking travel, registering vehicles and to access educational and employment opportunities, without leaving their homes. A 2006 Statistics New Zealand survey¹¹ reported that 64.2% of rural households had internet access. Although the quality of the internet connection is below par in many areas, this looks set to improve with increasing competition and the \$75 million fund announced in this year's budget to extend the reach of broadband into underserved rural regions over the next five years.

⁹ White, P. et al. *Atlas of Socioeconomic Deprivation in New Zealand NZDep2006.* (2008). Prepared for the Ministry of Health, New Zealand.

For the full list, visit http://www.heartlandservices.govt.nz/our-services/index.html
Tor full report see *Household use of information and communication technology survey*
2006, at: http://www.stats.govt.nz/NR/rdonlyres/BA872497-4B85-4386-8395-3ACBEBDA7C4A/0/householduseofict2006hotp.pdf

Meanwhile, technology is replacing travel for some patients. In Westport, for example, patients will be saved a one hundred kilometre drive to Greymouth to see a specialist, thanks to a video-conferencing trial which will enable remote diagnosis. If successful, this technology is likely to be rolled out to other areas.

Other examples of non-transport solutions for areas without PT include the rationalisation and coordination of existing transport services – e.g. ensuring timetables and routes for community transport schemes are coordinated with inter-regional passenger services or airline flight schedules; making sure services don't compete with one another.

In the same way, regional hospitals could greatly facilitate transport for outlying communities by coordinating appointments so that all patients in one area could be seen on the same day, at roughly the same time. They could then share transport to the hospital.

Integrating active modes is another way of providing non-transport solutions. One example of this is equipping community transport vehicles with cycle racks.

Examples of successful community transport schemes

There are many successful community transport schemes operating in different parts of the country. Perhaps unsurprisingly, the most widespread services are those run by DHB's and others to transport patients to medical appointments. Patients missing medical appointments cost hospitals millions of dollars and may endanger the patient concerned. Providing transport is one way of improving attendance for at-risk groups. Appropriate transport is needed for some groups, including frail, unwell, vision-impaired and neurological patients. Some examples of DHB services include:

- Counties Manukau DHB health bus to Manukau Superclinic, from Otara/Mangere and Manurewa/Papakura/Takanini
- Taranaki Base Hospital/Hawera Hospital shuttle bus
- Golden Bay Community Service Vehicle Trust Inc. transports people to and from GP clinics and hospital appointments.

The best community transport schemes appear to be those which are flexible, e.g. combining set routes on some days, with door to door services at other times, and maximising use of the vehicle, and those that have grown out of a real need within the community. Some examples follow.

The Bluff Community Board launched a new bus service in mid August, on a six month trial basis. The bus will run on Tuesdays and Thursdays, with a door to door service. The Returned Services Association (RSA) will provide volunteer drivers and will house and maintain the vehicle. In exchange, the RSA will have free use of the bus for their patrons on Friday nights and extended evenings.

In the Wanganui area: the rural mail delivery agent provides a commentary for tourists as he delivers the mail to residents of the Whanganui River Valley. Tourists can also opt to canoe back down the river.

A free community bus has operated in Karori for the past 15 years. It takes rest home residents shopping and preschoolers and primary school children on outings. It may be used at weekends and in the evening if people can provide a driver. It survives on donations and sponsorship.

The plight of Inglewood women made world headlines when a local clothing shop stopped selling women's underwear. The "Knicker-Run Bus", a subsidised return bus service from Inglewood to New Plymouth each Thursday was launched in November 2007.

In July this year, the Motueka Community Board voted to start a trial bus service to bring people from Motueka to regional facilities like the Richmond pool. A spokesman commented that Motueka ratepayers contributed to these facilities, but lacked ways to access them. The service will work to coordinate the service with the transport needs of local schools and job training providers.

In Marlborough, local business people are looking to utilise the spare capacity in the minivans used to transport seasonal vineyard workers.

Licensing

When establishing a community transport initiative, it is essential to ascertain whether or not it is subject to the requirements of the *Land Transport Rule: Operator Licensing 2007* which came into effect in October 2007. The rule covers situations where people are transported as part of a service offered by others; i.e. a passenger service.

The rule sets out what is required of a passenger service operator, in terms of the vehicle used and its driver. The Vehicle Standards Compliance Rule 2002 requires vehicles used in a passenger service to pass a more comprehensive vehicle safety check; the Passenger Service Vehicles Rule 1999 describes vehicle requirements; and finally, the Driver

Licensing Rule 1999 requires drivers of such vehicles to hold a P (passenger) endorsement on their driver license.

The Operator Licensing Rule also sets out the passenger services that are exempt from holding a passenger service licence, and many community transport schemes may fall into this category. Drivers of vehicles used in an exempt passenger service don't require a P endorsement and the vehicles used only require a warrant of fitness. Exemptions include¹²:

- car-pooling where costs (covering fuel and vehicle wear and tear) are shared between occupants and the vehicle is able to carry 12 people or fewer, including the driver;
- a service provided by an organisation offering liquor or food on licensed premises, where the passengers don't pay a fare;
- services operated by, or under the control of a district health board, local authority, an incorporated charity, or an incorporated organisation registered under the Charities Act 2005 where:
 - o the vehicles used can carry 12 or fewer people; and
 - o the vehicle is provided by the organisation or the driver; and
 - the driver is a volunteer or a staff member of the organisation whose primary responsibility is not driving; and
 - the only payments made to the organisation or the driver are for the running costs of the vehicle (not the driver's time);
 and
 - the only payment made by the passenger is for the running costs of the vehicle.

While this is a complex area of law, in general, there are two fundamental criteria that determine whether a passenger service is exempt from holding a passenger service licence, regardless of the purpose of the service:

- vehicle size: able to carry 12 or fewer people (including the driver),
- payment: the driver is not paid for his or her time and the passengers are not charged a fare.

If these two criteria are met, the service is likely to be an exempt passenger service

Relationship to other initiatives

When considering a new policy area, it is important to take account of other government initiatives in order not only to avoid overlaps and/or competition for resources, but also to benefit from synergies. There are currently two projects which are closely related to the sustainable travel

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¹² For a full list of exemptions and the exact wording used in the rule, see Section 12 of the Operator Licensing Rule.

options for communities not serviced by public transport policy area. They are:

- the Targeted Community Fund, and
- the Integrated Approach to Planning project.

The Targeted Community Fund has been included in the 2008/9 National Land Transport Programme¹³ and is designed to provide financial assistance to improve access and mobility for communities that are isolated or have poor access to the rest of the land transport system. It is intended to address unmet transport needs in areas with high levels of socioeconomic deprivation, based on the Ministry of Health Index of Deprivation referred to above. It is proposed that activities considered for funding will include new passenger transport services and infrastructure, walking and cycling infrastructure, and improvements to and preventative maintenance of local roads. The fund will provide up to \$10-million per annum. Regional Councils with communities which meet the criteria will be able to apply through the standard funding allocation process. Approved activities will receive financial assistance at the mid point between the construction financial assistance rate (FAR) and 100%. The targeted fund is likely to be able to be used to establish or extend shared community transport schemes and other sustainable transport options.

The Integrated Approach to Planning (IAP) project is a joint initiative between transport sector agencies and Ministry for Environment¹⁴. Its purpose is to identify barriers to achieving better integration, both within and between transport and land-use planning, resulting in a faster resolution of issues, significant cost savings and social and environmental benefits. The role of integrated land-use and transport planning has been recognised by central government in a range of strategic documents, including the New Zealand Energy Efficiency & Conservation Strategy, the New Zealand Energy Strategy and the New Zealand Transport Strategy (2008).

The IAP project proposes to use the Gisborne region as a pilot study to provide cross-agency support in developing an integrated planning model. Gisborne is one of the most isolated regions in the country and has the highest percentage of residents in the lowest deprivation grouping. There is great potential for developing community transport solutions within the context of the pilot study.

Conclusion

The New Zealand Transport Strategy (2008) identifies shared transport, including community transport, ridesharing and car clubs, as a key focus to

¹³ See http://www.landtransport.govt.nz/funding/nltp/2008/docs/nltp-book.pdf#page=15

¹⁴ http://www.transit.govt.nz/planning/iap.jsp

be explored to address issues of accessibility and social exclusion in areas where public transport may not be cost effective. This gives NZTA a clear mandate to develop policy in this area.

This paper seeks to begin the task of developing policy by identifying some of the groups most disadvantaged by a lack of transport options and proposing possible solutions based on sharing transport, bringing goods and services to communities and providing non-transport solutions.

By early 2009, policy work on travel options for communities not serviced by public transport will culminate in practical guidance for community groups and regional council staff that have identified a need within their community.

In addition to working with other transport sector initiatives, such as the IAP, to deliver coordinated solutions in key locations, the NZTA will also be looking to work with government social agencies. Providing sustainable transport solutions in deprived areas is the key to unlocking access to employment and educational opportunities, and improving health outcomes.

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