
TRANSPORT & URBAN PLANNING IN NEW ZEALAND

A CONSTANT BALANCE OF CONFLICT OF INTERESTS

A COMMENT FROM JEAN-PAUL THULL*

Tim Cheesebrough's article – Two cars or not two cars? captured my interest in the previous edition of the Lincoln University Planning Journal, but I missed a clear answer to the question he posed.

The debate on the number of motor vehicles per household can be perceived as irrelevant as only one person can drive one vehicle at a time. Why not compare motor vehicles with shoes? Some women and men are known to have a tendency to like shoes and collect them. The same can be said about motor vehicles in New Zealand: some people collect them or just have one for each family member holding a driving licence as cars are cheap to buy, register and run. The availability of motor vehicles sitting in the garage or drive-way makes it easy for most people to just hop in, turn the key and drive off. Most people will not consider any other options unless the costs of running a car rises or they have to walk 500m to access their car or they cannot find easily a free car park at the end of each trip. This is not uncommon in many European cities and possibly the 500m induces people to choose different modes of transport in relation to the purpose and distance of their planned trip.

Well is it as simple as it looks? In principle yes, as the low density planning regime of quarter-acre sections set the standard on everyone's property at the time to enable sufficient garden space including multiple parking/garaging. This has changed over the years through further subdividing such properties to make financial gains: however, the double garage concept (in some cases three garages plus off-road parking) and sealed drive-ways still seem to be the minimum standard for the modern architecturally designed residential housing box. The current planning regime is not well inter-connected with all the New Zealand strategies that involve urban and transport planning, as the basics of the urban design protocol or the Resource Management Act (RMA) are often ignored by private developers. In the example mentioned above, any adverse effects caused by rain water unable to infiltrate into the soil is exacerbated by diverting the rain water from the sealed driveway directly into the storm water system. Some have suggested that the algae in McCormack's Bay in Christchurch are largely related to nitrates from storm water discharges into the bay (e.g., as a result of car wash liquids). This could easily be mitigated if the Council required permeable drive-ways similar to designs of 50 years ago.

The RMA encourages authorities to consider the adverse affects of development and these should include the effects of sealed drive-ways. Best practice design has incorporated limits on impermeable surfaces in new subdivisions (e.g., the Bay of Plenty) and the Christchurch City Council's draft Surface Water Management Strategy (released 13 July 2009 for submissions (<http://www.ccc.govt.nz/environment/healthyenvironmentstrategies/surfacewater/>)) includes porous pavements as a preferred site management technique.

Sustainable development is also one of the five main objectives of the 2002 and 2008 New Zealand Transport Strategy (NZTS). Missing, however, is consideration of the interactions of local authorities and even super-authorities (e.g. Greater Christchurch) dealing comprehensively with sustainable development. In European countries, (e.g., Germany, an example I know well), new subdivisions will be granted permits within 500-1000m of public transport services, ideally along light rail systems. Naturally the geography of the terrain and existing structures play a role, but the main objective is to minimise peak private motor vehicle transport that leads to congestion and excessive pollution (air, noise) and energy demand. Subdivisions are not usually allowed in rural areas far from existing public transport routes. For example, it is doubtful a subdivision like Pegasus, north of the Waimakariri river would be allowed in Germany, unless they included the provision and costs of a light rail system in their development. Christchurch's practice of allowing existing urban properties to be subdivided to a point that the section is virtually fully covered with dwellings and sealed driveways that speeds runoff and ease of rolling out the rubbish bins is also impractical.

Looking at the south Christchurch Transport Strategy and the future developments the Urban Development Strategy (UDS) is foreshadowing, Rolleston township is going to double in size over the next few decades. It is therefore rather frustrating to see transport consultants backed by government authorities and politicians going ahead with such a proposal without a parallel consideration of a modern public light rail transport system. At the time of the study, in 2006-2007, the Peak Oil debate had not hit the headlines and the potential of high oil prices were not adequately taken into the equation. In mid-

2009 the fall in prices has meant the media no longer highlights these issues, but oil prices will rise again as major economies recover in 2010 and beyond. The European truck manufacturers Man, Mercedes, Volvo and Scania are readying themselves to respond to future logistics demands in India as they see the Indian peninsula as one of the first economies in the world to recover from the economic world crisis.

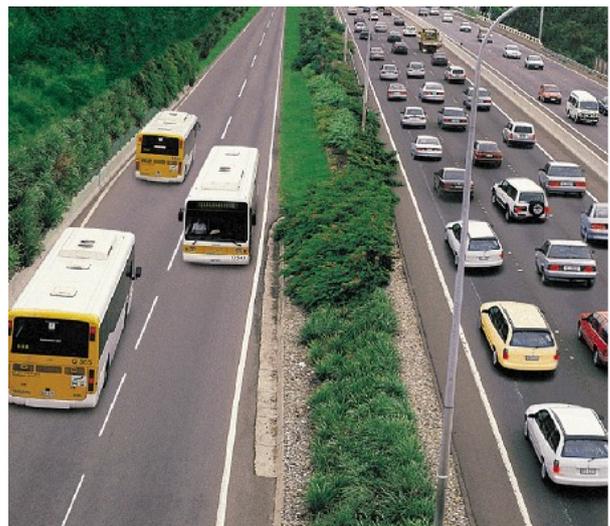
The whole energy supply should not be underestimated, despite the big oil companies investing heavily in growing and diversifying their energy sources. With an increased future world-wide demand for energy, it is most irresponsible to neglect the adverse affects of induced energy demand from large developments 20-40km outside main centres without planning and securing funding at the same time for appropriate public transport that can compete successfully with private motor vehicles. This public transport funding should be a cost attached to the development of these new centres to reflect the real costs to society. It is largely unfair that residents living currently within the urban area should suffer from increased commuting traffic and hence noise and air pollution exacerbated by dwellers who bought cheap land outside the cities. It would be different if they all used public transport when commuting to and from the city.

I am not saying that regional authorities who are in charge of public transport planning in their regions are not planning to extend bus services and frequencies to these growing centres however, in practical terms, the majority of people moving out to suburbia or the countryside, clearly have no love-affair with buses. There are many cost benefit analysis studies on light rail systems assessing the minimum patronage required to make such systems viable, but there is no study to my knowledge that indicates for how long or what distance New Zealanders are prepared to happily take the bus when they have alternatives. I strongly believe that a 30 minute rule may apply: bus transport is fine for trips under 30 minutes: if exceeding that time, commuters may opt to use their private motor vehicle. Light rail public transport can extend the 30 minute range.

Many politicians would like to see light rail being developed in their city. It requires capital funding from the Crown and/or rate payers' money. None of the public financing sources look very promising as the road transport industry is not keen to see their Road User Charges allocated to finance light rail. The running of the public transport system in New Zealand is funded by central government (25%), property rates (25%) and the remaining 50% is covered by fares. Depending on the type of bus contract, this is a challenge, with bus fares being increased at the same rate fuel prices go up. This does not encourage increased patronage. As a consequence, each new residential subdivision outside the main Christchurch area (> 10-15km) will face a double or triple zone bus fare. This fact, in addition to a bus trip that will take more

than 30 minutes, is not contributing positively to encourage the shift from private motor vehicles to public transport. One option would be to start introducing electronic road user charges directly related to the time of driving and specific road corridor used. Singapore has been operating this system for a few decades by introducing first class public transport.

Can the system be applied to New Zealand? It will be difficult, as the planning regime in Singapore is heavily regulated through intensification of 5-7 story buildings along public transport corridors to ensure sufficient public transport demand. The New Zealand quarter-acre section culture cannot be changed overnight, possibly especially not in Canterbury. However, some changes could happen relatively easily through strict quality requirements in the bus tendering process. A regional council, like Environment Canterbury, could request high quality buses for routes that cater for more than one zone. These buses could be similar to the coaches used for Bus Rapid Transit (BRT) routes overseas, allowing far more seat spacing, folding tables and TV screens (as used in aircraft), WiFi connections, low noise interiors, air conditioning, leather seats, special bus lanes for by-passing congestion, and bus drivers with increased social skills.



Bus Rapid Transit, Brisbane

If New Zealand wishes to commit to a reduction of 10 - 40% CO₂ by 2020 – as the Minister for the Environment, Dr Nick Smith, is currently indicating - the private 'vehicle kilometre travelled' (VKT) will be need to be reduced. Public transport will be one measure to mitigate private VKT. However, a voluntary modal shift is the best option. This can only be achieved through a high quality service that is adequately funded. The current funding system is not appropriate as there is no real financial incentive to use public transport.

Funding a modern public transport system is probably one of the biggest challenges faced by governments around the world. A recent OECD report on PPPs (Public-private partnerships) judged the franchising PPPs in the UK and

Australia to be a failure due to a lack of skills in the design, implementation and monitoring of such franchising systems. It is crucial for public transport management to be backed up at all times by government: long-term political leadership is required. For instance, the German city of Luebeck experienced a PPP public transport failure recently and had to be rescued by government. Motorists just preferred taking 5 minutes longer did not pay the fee to use a tunnel. At the end of the day, private companies are not focusing on their customers, but have a legal responsibility to put the interests of their shareholders first. In terms of sustainability, the results are farcical.

The complexity of the situation can be highlighted by considering the motor vehicle fleet entering New Zealand. The import of Japanese second-hand cars drove the price down to a level such that dealers were hardly making a profit on their sales; instead they make money through the maintenance schemes that accompany these sales. By comparing the price of a similar second-hand VW Golf in Europe, the New Zealand price tag is about 50% under the European price tag. Hence it is pretty easy to buy your own car (\$1 is often enough to get started) and to increase your own mobility and advance your social status by owning a motor vehicle. The New Zealand government saw it as the best solution as Kiwis have a love affair with motor vehicles and there was no need to extract substantial funding from the budget for implementing modern public transport. The New Zealand government does not even require drivers of motor vehicles to hold third party insurance, unlike most of the developed world. But the objectives of the NZTS regarding increasing mobility and economic development are met.

So is it all good as Tim Cheesebrough seems to suggest? I am not sure whether Tim is fully convinced that the current situation deals with the real issues or if he just wishes to highlight the positive developments that have happened over the last decade. High crude oil prices in 2008 only shifted a few New Zealand commuters to public transport and encouraged some others to carpool. This was largely supported by Auckland investing in a modern bus-way from the Northshore and an upgrade of the Western commuter rail line to Britomart. The popularity of the Northshore bus-way is pertinent as it quickly demonstrated that planned Park & Ride facilities were too small and feeder bus frequency to the bus-way is too low. However, I am convinced that the North Shore Bus-way will be viewed internationally as a worthwhile system. Ideally, we would have seen a light rail system (the commuter numbers are there) adjacent to the motorway being constructed, similarly to the light rail system in Perth (WA). The integration of bus fares and smart cards was another positive move to reduce the image of public transport being 'just for losers', to put it bluntly. The CO₂ value of buses with low patronage is

certainly not ideal; car pooling may need more encouragement, or trialling more free buses in times of low frequency to increase patronage and to reduce the energy demand should be considered.



Bombardier Guided Bus System, Nancy, France

The 2008 NZTS supports Travel Demand Management (TDM) to decrease the demand for private motor vehicle use as a sustainability measure. TDM funding is currently used for promoting public transport, walking school buses, and parking strategies just to name a few initiatives. However, the energy demand is not monitored, nor has it any impact when it comes to urban planning principles. Generally speaking, the RMA deals with adverse affects relating to resources. Unfortunately, energy demand does not seem to be perceived as an adverse affect and is therefore not an issue when new subdivisions are being granted a resource consent (e.g. Rolleston, Pegasus Bay, rural properties north of the Waimakariri River).

Back to our beloved motor vehicles, keeping running costs low to the general public will ensure re-election of our politicians. Indeed, the registration fees of a petrol 3,000cc rating Mercedes Benz cost as little as a modern economic 1,400cc VW Polo or Peugeot 208. Just imagine if we had graduated registration fees and having to tell your mates at the pub that you could only afford a 1,400cc rating and not a 5,000cc Holden Commodore or Ford Falcon? Yes, the Kiwi culture is to blame for the way we act and we will not be able to shift behaviour quickly, unless we are forced to through having to pay for environmental externalities (as opposed to meeting profit targets in PPPs) or by mandated government legislation. Only strong leadership committed to sustainability will bring about change. The Local Government Act and RMA can both be seen as promoting sustainability, but only slowly. Hence the proposed changes by the current New Zealand government with modifications of the RMA and the introduction of a Supercity may see interesting times in the future.

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