Submission on:

Infrastructure: Facts and Figures – Towards the First National Infrastructure Plan

1st October 2009

This submission is from the Campaign for Better Transport. The Campaign for Better Transport is an incorporated society with the declared objective of advocating public transport, cycling, walking and other alternatives to the private car. Membership consists of paid up members throughout New Zealand, with a mailing list of over 3,000 at present. The Campaign for Better Transport is a voluntary group and is politically independent.

The Campaign for Better Transport believes it is a major stakeholder in the development of the First National Infrastructure Plan and wishes to be consulted in the drafting and finalisation of that document.

General Comments

We note that the "Facts and Figures" document does not discuss the potential impacts of oil scarcity or peak oil, and that no scenario planning appears to have been done to investigate the impact of high petrol prices on the efficiency of New Zealand's transport infrastructure.

It is also noted that Treasury's oil price predictions seem increasingly at odds with those of the International Energy Agency. In a recent interview[1], the chief economist of the IEA, Fatih Birol, states: "that the public and many governments appeared to be oblivious to the fact that the oil on which modern civilisation depends is running out far faster than previously predicted and that global production is likely to peak in about 10 years – at least a decade earlier than most governments had estimated". The CBT considers that the potential impact of 'peak oil' needs to be taken into account to a far greater extent in the National Infrastructure Plan.

We also note that the importance of alternatives to the private vehicle have not been considered in the context of New Zealand's aging population – as more New Zealanders are unable to drive themselves, they will increasingly rely on friends, relatives or taxis for their mobility if public transport or pedestrian options are not provided for them.

The Campaign for Better Transport would like to stress that if families in urban Auckland were not so car dependent, they would be able to invest the money saved (through not needing to buy cars for each adult family member, and through fuel savings) in local companies, in the education of their children, and in saving for their retirement. Our currently transport infrastructure is therefore somewhat of an economic drag on New Zealand as a whole.

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[1] 'Warning, Oil supplies are running out fast' *The Independent*. http://www.independent.co.uk/news/science/warning-oil-supplies-are-running-out-fast-1766585.html 3/8/2009

Strategic Direction

The four immediate priorities listed on page 5 in *Strategic Direction* include "roads of national significance". What is missing here is an objective explanation of what makes a road of national significance – is it its economic benefits? is it its environmental benefits, or perhaps its urban development benefits? etc. In short, what should we measure to assess whether a road is of national significance, and how should we measure it? A far more robust analysis of whether it is appropriate to spend such significant amounts of money on these roads is required.

It is remarkable that there are no quantifiable measures of success identified for roading projects, considering the billions of dollars involved. In our view infrastructure projects need to be assessed to determine if targets have been met after they have been implemented, but in practice this is rarely done, in particular for roading projects.

In *Roads of national significance* on page 6, it is stated that "Highways provide the main links between our major business centres, facilitating the efficient transport of goods and people. Congestion creates inefficiency and makes it more difficult for businesses to operate and grow". This statement appears to make the assumption that building new highways is a major solution to congestion. However, there is significant evidence from international peer reviewed research that the travel time savings and congestion-reduction benefits of most highway construction is minimal because of induced traffic and changes to the urban form induced by new highways[2]. It is our concern that *Infrastructure: Facts and Figures* might start with the unproven assumption that constructing new highways will ease congestion. In reality, alternatives to road building (such as travel management schemes, increased investment in public transport, and construction of pedestrian paths or cycle ways) are often more effective in reducing congestion and freeing up the roads that already exist for business traffic and freight.

There has also been little economic evaluation of many of the Roads of National Significance, particularly the 'Puhoi to Wellsford' link. The CBT considers that if public transport projects are to be subject to high scrutiny with regards to their cost-effectiveness, the same vigour should be applied to all transport projects.

In *Rugby World Cup 2011* on page 7, we note that no mention is made of the fact that visitors to New Zealand will be exploring the cities in which the games will be taking place. Integrated ticketing – in particular, an integrated ticketing system that is contactless, and offers considerable savings for multi-modal travel over individual fares – would make travelling around cities such as Auckland considerably more cost effective and convenient. The target that integrated ticketing should be in place in time for the 2011 rugby world cup should be included in the National Infrastructure Plan, and this should be considered an important "legacy for the nation". The CBT is disappointed that so much focus on 'getting transport right for the RWC' has been on building roads, when it is actually most likely tourists will travel around the city via public transport. The RWC will put Auckland's public transport system under the international spotlight, so in the CBT's opinion there should be more focus on ensuring the public transport system is up to the task.

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[2] Metz, David(2008)'The Myth of Travel Time Saving',*Transport Reviews*,28:3,321 — 336

In *Auckland Transport Planning and Urban Form* on page 10, we applaud the acknowledgement that "Major transport projects of this type have a significant impact on the location and form of economic activity — they tend to shape urban development rather than follow it". However we would suggest that prioritising "those strategic [transport] projects that will produce the most desired pattern of household and firm location, reduce aggregate travel times and enable connectivity" is too narrow a range of considerations for prioritising transport infrastructure development. Consideration should be given to a number of other factors including:

- Environmental considerations – what are the carbon/emissions implications of planned transport infrastructure projects?
- Health considerations – will planned transport infrastructure make it more or less likely that the populations concerned will walk/cycle on a regular basis? Will local air quality be better or worse?
- Economic implications for individuals as well as for businesses – as a result of a given infrastructure investment, will it be possible for individuals to work and live without owning a car? Will families need to purchase second or third cars due to changes in the urban form?

The Campaign for Better Transport also notes that provision of public transport infrastructure in new development suburbs in and around Auckland, such as the Flat Bush subdivision, has tended to be very poor, and that putting in bus priority lanes and rail lines into suburbs is easier during the early stages of development rather than when suburbs (and community travel patterns) are already established. Early construction of public transport infrastructure in areas targeted for future growth saves later expense and reduces road congestion and car dependence.

Furthermore, over the past 10 years, Auckland has planned for urban development in a very different manner from in the past, along the lines of what was laid out in the 1999 *Auckland Regional Growth Strategy*.[3] This strategy calls for 70% of Auckland's growth over the 50 years of 2000-2050 to be within the existing urban area (as it was in 1999), and only 30% to be through greenfields development areas. Furthermore, within the existing Auckland area the Regional Growth Strategy envisaged intensification around activity nodes and corridors, rather than general infill. It is the CBT's opinion that transport projects which support this growth model (which was established after an exceptionally detailed process) should be encouraged and prioritised while those that would work against this strategy should be discouraged and not prioritised.

The Campaign for Better Transport agrees with the statement in *Road funding and pricing* page 10 that "building our way out of congestion is unlikely to be an affordable or efficient strategy". We believe road pricing should reflect real user costs, as far as is possible. These costs should include the negative health implications (through car crashes and reduced air quality) of private vehicle use. Alongside road pricing changes, however, quality alternatives to the private vehicle should also be developed so that potential road users have a genuine travel choice.

[3] Auckland Regional Growth Forum, (1999) *Auckland Regional Growth Strategy: 2050. A Vision for Managing Growth in the Auckland Region,* Regional Growth Forum, Auckland.

When considering the cost of transport, the CBT is of the opinion that the 'big picture' is often ignored in favour of a simple belief that 'user-pays' is the best option. While private vehicles might pay for state highways through petrol taxes, when one compares the percentage of income spent on transport it appears as though the most auto-dependent cities are those that end up spending the most on transport. This is detailed by the fact that the average American family spends 20% of its annual income on transportation plus hidden costs (like parking and vehicle depreceation), while Japanese families spend 9% of their income and Europeans only 7%.[4] Auckland's auto-dependency suggests that it would be at the upper-level of this comparison.

Policy Context

In *Government Services*, in principle 2b, the statement that "Charges should not exceed the cost of providing the service" seems somewhat narrow and restrictive. In the case of transport, charges on road users could (and should) be used to improve alternatives to road use such as coastal shipping, passenger and freight rail services and public transport. Improving non-road freight and passenger services also maximises the efficiency of road use through reduced congestion and reduced wear and tear on road surfaces, and it is therefore appropriate for road user charges to be diverted from direct roading use (and for road user charges to exceed the direct cost of building and maintaining roads). Road charges should also take account of other indirect roading costs such as health services, environmental degradation and storm water run off.

In *Project Evaluation, Prioritisation and Decision-Making* on page 15, we applaud the wide ranging definition of welfare that includes "economic growth, environmental and health considerations". Furthermore, we hope that all infrastructure projects will be prioritised in a framework that recognises the importance of these considerations.

For transportation, a major weakness in the way projects are currently analysed relates to induced demand. The World Bank's *'Notes on the evaluation of transport projects'* [5]dedicates a significant amount of analysis to how induced demand needs to be taken into account when estimating the benefits of transport projects. It appears that many roading projects are not adequately taking into account induced demand, as Auckland's motorways (for example) remain congested even though many hundreds of millions of dollars have been spent on widening them over the past few years.

Sectoral Analysis

In *Transport: Roads* on page 23, we applaud the statement "Measuring the adequacy of roading infrastructure is inherently difficult…Measuring congestion is not entirely useful or at least sufficient". We agree that congestion is not in itself an argument in favour of building more roads.

In *Transport: Roads* on page 24, in relation to the statement "Proposed changes to the vehicle mass and dimension rules (allowing heavier and longer trucks on certain routes) will compound the challenges for councils as well as NZTA, which is trying to establish the adequacy of state highway

[4] Jane Holtz Kay, (1997) *Asphalt Nation* University of California Press, Berkeley.

[5] World Bank (2005) *Notes on the Economic Evaluation of Transport Projects –treatment of induced traffic'* Washington DC.

bridges for this purpose. Preliminary analysis suggests that there will need to be increased investment of around $85-100 million to strengthen or replace bridges on candidate routes for heavy vehicle permits", the Campaign for Better Transport stresses the need to include these costs in any cost-benefit analysis for the proposed changes to vehicle mass and dimension rules.

The Campaign for Better Transport notes that no mention was made of diminishing oil stocks or peak oil in the section *Transport: Roads* – increased oil prices have the potential to reduce road usage (as they did during 2008, when the price of petrol rose dramatically). Also, if New Zealanders respond to increased oil prices by purchasing more fuel efficient cars, the cost to NZ GDP/capita associated with mass investment in new fuel efficient cars needs to be calculated. It is probable that it would be more cost effective for NZ society as a whole to encourage people to take public transport (through investment in public transport infrastructure) than to encourage everyone in NZ to purchase new hybrid/electric cars (through investment in new roads in an era of increasing oil prices). The importing of cars and fuel makes a significant negative contribution to the country's balance of payments.

In relation to *Transport: Rail* on page 26, the statement "New Zealand's difficult topography, together with budget considerations, resulted in the adoption of a narrow-gauge track standard, which has constrained the average speed of rail services ever since." – the Campaign for Better Transport points out that the narrow-gauge is not the major reason average speeds for rail services in NZ are so low. Japan's rail system (excluding the high speed Shinkansen system) is also on the narrow gauge, as is the rail system in Queensland. In New Zealand, rail speeds are often reduced due to poor track maintenance, and average speeds could be considerably increased with minimal expenditure. In the longer term speeds could be further increased through targeted improvements in particular parts of the network.

In relation to *Transport: Rail* on page 26 "Despite these efficiency improvements, successive owners (whether private or public) have still failed to generate sufficient revenue to cover the long-term capital costs of the rail network", the Campaign for Better Transport questions whether it is appropriate for the rail system to be self financing, given the benefits of rail (through reduced environmental impacts and reduced road congestion) are enjoyed by road users and indeed all other New Zealanders.

In relation to *Transport: Rail* on page 29 "The argument for ongoing public subsidisation of the network tends to rest on the premise that rail offers positive externalities (e.g., reduced congestion, emissions and accidents) and that road transport does not pay for its full social costs, reducing the ability of rail to compete. There is little current evidence to support this" – we believe this is an ill considered statement. There are many positive externalities for rail, and the evidence for them is plentiful. Rail freight reduces the need for large trucks to carry coal, raw milk and other bulk commodities on our roads. When large trucks crash there is often a fatality. The carbon footprint for rail freight is much lower than is the case for road freight. What is meant by the statement that there is "little evidence to support this"?

If the government does intend to reduce the size of the rail network, we would argue that it is important not to remove the rail tracks that currently exist. Given it is difficult to accurately predict future passenger or freight demands, it would be unfortunate if a rail line that is currently considered uneconomic was to be removed, and then for market conditions to change in such a

way that it would be a highly valued infrastructure asset. We advise that any closed rail lines should be mothballed rather than removed.

In relation to *Transport: Air Services*, the Campaign for Better Transport believes that the importance of public transport travel options to and from major international airports needs to be stressed. Auckland International Airport is a major destination for travellers and for workers, yet it is poorly serviced by affordable transport options within the Auckland region.

Planned Investment

In relation to *Transport: Roads* page 77, the statement "The government has signalled its commitment to the advancement of seven roads of National Significance. These are considered essential routes for New Zealand to reduce congestion, improve safety and support economic growth", we ask, what is the evidence that these roads are actually "essential" to "reduce congestion, improve safety and support economic growth"? or is no real evidence needed because the government believes that that is the case? Does this mean that infrastructure prioritisation is actually politically motivated rather than evidence driven?

While some of the 'roads of national significance' have been subject to a rigorous cost-benefit analysis (such as the Victoria Park Tunnel project) others have not been tested yet in any way as to whether they would offer an acceptable return on investment or not. This is particularly the case with the Puhoi-Wellsford road of national significance. The CBT is sceptical that a road which currently only carries between 10,000 and 15,000 vehicles a day can justify a $2 billion project.

Contact details

The Campaign for Better Transport would like to be consulted in relation to the future development of the First National Infrastructure Plan.

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