Addressing common myths about Auckland's transport

Myth #1. "New roads are good for the economy"

In order to investigate this commonly held assumption, the UK's Department for Transport commissioned the SACTRA Report[1], it concluded that the linkage of new roading with economic growth is "weak and disputed".

Furthermore, the study found that economic effects of a roading project are significantly affected by local circumstances and conditions. A new road may actually make areas worse off, as businesses use the new link to relocate out of the region and residents are encouraged to drive further a field for their shopping, work and recreation.

The urban sprawl encouraged by new motorways can mean significant infrastructure costs for local councils and their ratepayers, who may struggle to afford the additional infrastructure required such as stormwater, sewerage, footpaths, lighting, libraries, etc.

FAST believes a strong and resilient economy requires a balanced transport network that provides for each mode of transport through using a transport planning hierarchy which prioritises the sustainable transport modes before building new roads.

Myth #2. "New roading reduces congestion and is good for the environment because emissions are reduced".

Unfortunately, the opposite is more likely to be true. The US Transportation Research Board[2] found new roading capacity generally contributes to increased travel, overall emissions and more urban sprawl.

The increase in travel is called 'induced traffic'; it is caused by new roading capacity encouraging people to drive more often and further a field. Induced traffic is typically 10% in the short term and 20% longer term[3].

Research into 100 cities around the world[4] found that the result of road-building is more traffic, more fuel consumed, total emissions increase, and the extra traffic causes worse congestion elsewhere on the roading network.

FAST supports the Ministry of Transport's "Surface Transport Costs and Charges"[5] report that recommends:

> *"It is increasingly clear that congestion can only be tackled by new pricing systems combined with new road construction; better management of existing roads; provision of high quality alternative public transport systems; and encouragement of walking and cycling."*

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[1] UK's Standing Advisory Committee on Trunk Road Assessment (SACTRA) commissioned a 3 year study which searched for and reviewed the research and found "Empirical evidence of the scale and significance of such linkage is, however, weak and disputed." The final report is known as the 1999 SACTRA Report, it is available at: http://www.dft.gov.uk/pgr/economics/sactra/transportandtheeconomyfullre3148

[2] TRB Special Report 245 "Expanding Metropolitan Highways: Implications for Air Quality and Energy Use" reviews existing research on the links among highway capacity, traffic flow characteristics, travel demand, land use, vehicle emissions, air quality, and energy use in metropolitan areas.

[3] The 1999 SACTRA Report concluded: "An average road improvement… will see an additional [induced] 10% of base traffic in the short term and 20% in the long term."

[4] Kenworthy and Newman's *Millennium Cities Database for Sustainable Transport*

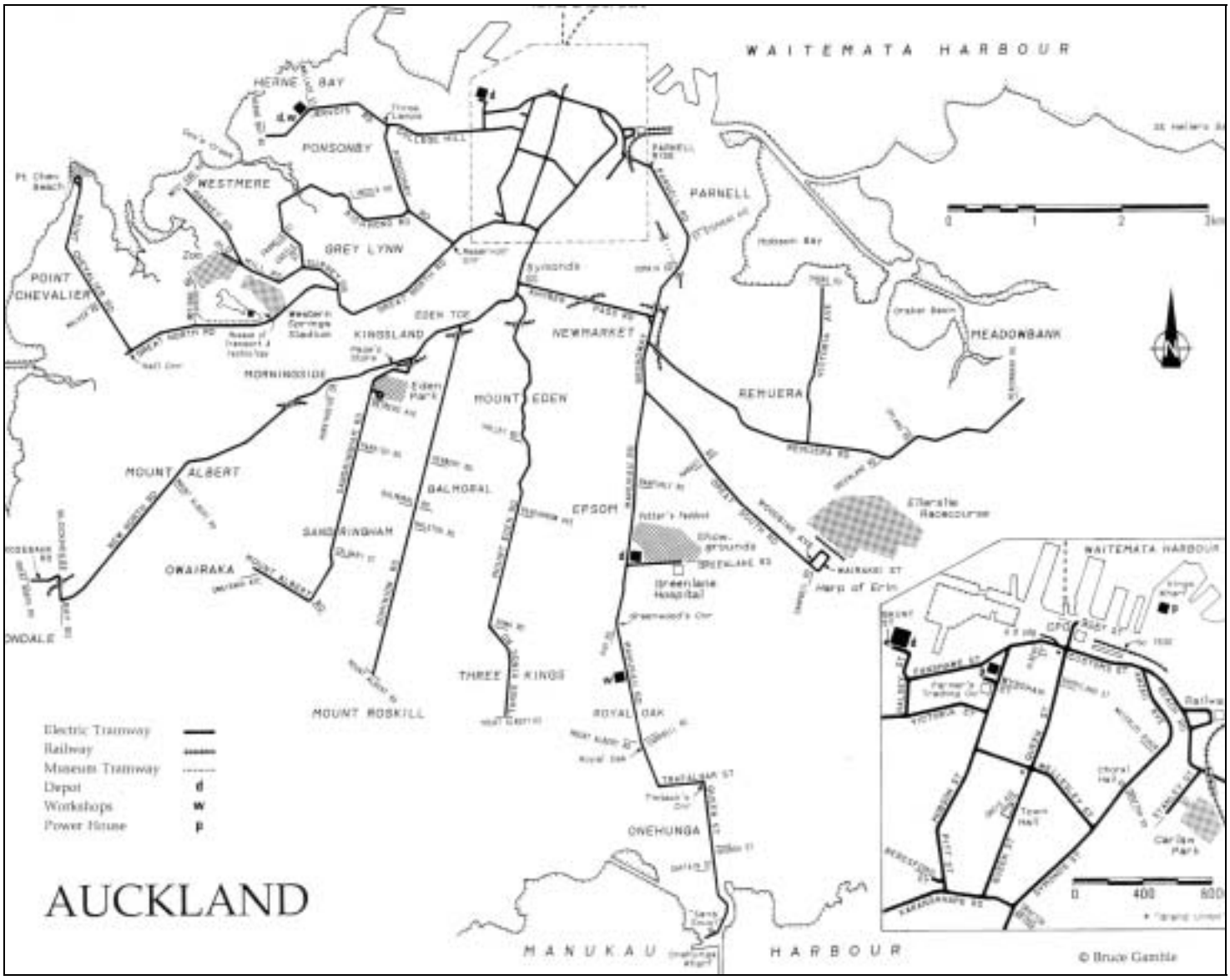
[5] Ministry of Transport, March 2005: Surface Transport Costs and Charges, the full report is available here: http://www.beehive.govt.nz/Documents/Files/STCCS%20Main%20Report.pdf

Myth #3. "You'll never get Aucklanders using public transport, they have a love affair with the car. "

Many Aucklanders have lived and worked in overseas cities where they have relied on good public transport. But too often in Auckland, the public transport options are inconvenient, slow or non-existent.

However, the success of enhanced Western rail commuter service and the Northern Bus way clearly show that if convenient and rapid public transport is provided, then Aucklanders will use it.

In 1956, when Auckland had an extensive electric tram network, 58% of all motorised trips were by public transport[6]. Auckland's world-class electric tram network was dismantled in the late 1950's and replaced with a private car orientated transport policy that continues into the 21st century.



Auckland's electric tram network[7] before it was dismantled in the late 1950's

[6] The American Heresy: Half a century of transport planning in Auckland, Paul Mees and Jago Dodson, University of Melbourne.

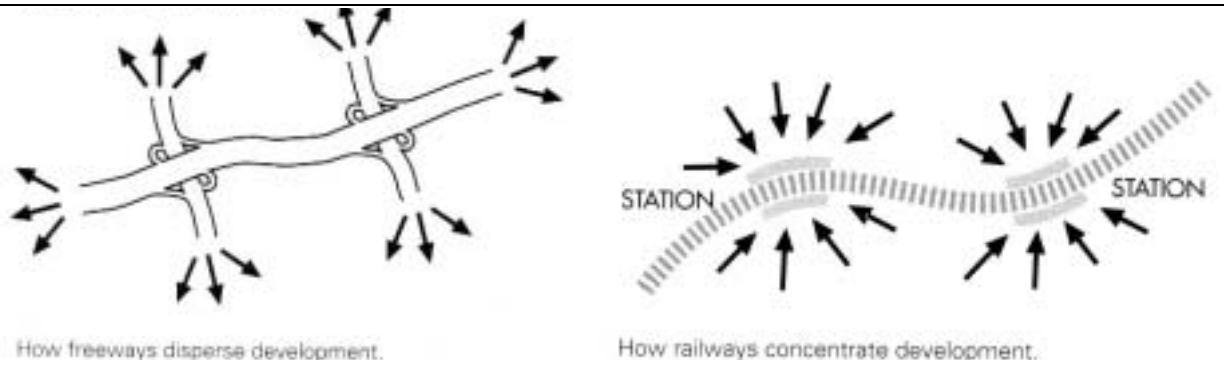
[7] Diagram from "The End of the Penny Section: When Trams Ruled the Streets of New Zealand" by Graham Stewart © Bruce Gamble.

Myth #4." Auckland's geography makes it difficult to provide good public transport across the region."

This is simply not true. Auckland's geography is very well suited for providing public transport - the isthmus creates corridors that can be well served by high quality rapid public transport services, which are fed by local bus services, park & ride, cycling and walking.

Myth #5. "Auckland doesn't have the population density to sustain a good public transport network such as rail."

Perth has lower population density, yet it is proving how successful rapid rail can be, with new lines having been commissioned. Rapid public transport needs to be implemented before new roading to encourage the Auckland region's policy of 'smart growth' - and rail does this best.



Rail supports the Auckland region's smart-growth mixed-use strategy, whereas motorways or bus ways do not[8]. This is why the concept of "multi-modal corridors" such as Auckland's AMETI[9] project are flawed.

Myth #6." There isn't enough money to solve Auckland's transport issues"

There is actually plenty of money, the problem is we keep putting it into major roading projects such as the Western Ring Route, Puhoi Motorway extension, Greenhithe Bridge duplication, the Manukau Harbour bridge duplication. New projects being planned include the Victoria Park duplication, widening of the North-Western motorway, AMETI highway ($1.5 billion), a third Harbour Crossing ($3 billion).

All of these projects encourage Aucklanders to drive more often (most often in single occupancy motor vehicles), making the congestion problem worse. If this money was allocated to providing high-quality public transport, safe walking and cycling, then we would see a lot less cars on our roads, lower emissions, healthier communities and reduced travel times.

Myth #7. "Improving public transport does nothing for tradesmen or trucking companies"

Improved public transport gets commuters in single occupancy motor vehicles off the roads, providing better access for commercial road users, such as tradesmen, delivery vehicles and sales representatives.

Myth #8. "Improving motor vehicle fuel efficiency will reduce NZ's consumption of fossil fuels"

In reality, the opposite is true. The Jevons Paradox[10] explains how an increase in the efficiency which a resource is used, tends to increase (rather than decrease) the rate of consumption of that resource.

Any efficiency gains in the motor vehicle fleet are overwhelmed by the increase in motor vehicle usage.

[8] Diagram from "Winning back the Cities" by Peter Newman and Jeff Kenworthy
[9] See AMETI Fact Sheet: www.fast.gen.nz
[10] In addition to reducing the amount needed for a given output, improved efficiency lowers the relative cost of using a resource – which increases demand and therefore consumption of the resource.

Myth #9. " We shouldn't be concerned about the environmental impacts of traffic, or fluctuating oil prices, as there will soon be a replacement fuel which will be environmentally friendly."

There is no obvious replacement for petroleum, and if there were, the issues of traffic congestion, safety for cyclists and pedestrians, and community severance remain.

Some believe that New Zealand can replace its vehicle fleet with electric vehicles. However the logistics and cost to replace our 3 million vehicles with yet to be commercially released electric equivalents makes this an unrealistic proposition. Extra electric generation capacity will need to be built which if it does not from renewable sources will create more fossil fuels emissions.

Myth #10. " The number of cars increases every year, so they have to be planned for with more roads provided."

This does not need to be the case. In 2006 the traffic volume on Auckland's State Highways fell by 0.3% from the previous year, whilst public transport use increased by 2.5%. Enlightened cities around the world are working to reduce the numbers of single occupancy vehicles whilst maintaining mobility. Paris has a goal of 40% less cars by the year 2020, the city of Portland, USA has a target of 10% less cars each year and London reduced car trips from 1999 to 2002 by 18%.

Myth # 11. "The safety of Auckland's roads has improved over the last decade as the number of fatalities and crashes have declined"

Despite the improved crash statistics, Aucklanders roads are generally regarded as being 'fast and furious'. Only 1% of Aucklanders regard cycling as "always safe"[11] and cycling numbers have fallen to rock bottom. Similarly the numbers walking have been in steady decline over the last decade.

A more meaningful measure of road safety takes into account people's perception of safety and the health effects of traffic emissions, such as noise and air emissions.

Myth #12."Reducing road space or reallocating it bus lanes or cycle lanes will cause even worse congestion."

UK research into 70 case studies from 11 countries showed that reducing road space can bring about significant reductions in traffic levels[12]. This because people have a far wider range of travel choice responses than has been traditionally assumed. The research also highlighted that well-designed schemes to reallocate road space often contribute to a multiplicity of different policy aims and objectives – for example less traffic creates a safer and more pleasant environment for walking and cycling.

Myth # 13. "Public transport doesn't pay for itself (so why should we invest in it?)"

In narrow accounting terms, this may be true but when the external costs such as motor vehicle emissions, noise, community severance, reliance on cheap oil, safety for active modes, etc. are included, then a well implemented public transport system typically presents a positive return on investment and supports a higher standard of living. This in turn attracts skilled people which is a key determinant to a well-performing economy.

The Ministry of Transport's Surface Transport Costs and Charges[13] study found that cars and trucks only pay 64% and 56% of their total cost respectively, whilst rail paid 77%.

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[11] ARC's *Community Perceptions Report* 2007

[12] "Disappearing traffic? The story so far" studies the successful of international road dieting projects. A copy of this report can be found at www.fast.gen.nz

[13] NZ Ministry of Transport's March 2005 'Surface Transport Costs and Charges' study: http://www.transport.govt.nz/assets/Images/NewFolder-2/Overview-for-pdf.pdf

Myth # 14. "Public Transport won't work for rural communities"

Many rural communities already use public transport to get their children to school by bus. Public transport in rural areas can work by providing 'park & ride', flexible routes using mini-buses, on-demand services (using internet or mobile phone), and support cycling and public transport integration by providing bike racks on buses, storage on trains and bike lockers at transport stations.

Myth # 15. "Walking and cycling are not significant forms of transport"

Due to a bias towards the private motor vehicle over the past 50 years, walking and cycling have declined greatly. However these active modes have the potential to return as a significant mode of transport, especially for urban commuters, and school and university students.

Furthermore, with the provision of bike racks on buses and bike lockers at transport stations, cycling significantly increases the catchment area of public transport services, providing a viable alternate for many commuters.

Myth #16. "At least in the short term, it appears that both public and private transport options will need to rely on improved road infrastructure"

As explained in myths 1 and 2 above, the last thing Auckland needs is more roading. To address Auckland's transport issues we must prioritisation the more efficient and sustainable transport modes, this was identified as a key recommendation in the ATSAP Report[14]:

> *"the need for a substantial shift to public transport over the next 30 years, starting immediately"*

Building new roads rather than improving the rapid transit network, walking or cycling, encourages Aucklanders to remain highly dependent on single occupancy motor vehicles.

It is time to recognise that it is not financially or physically realistic to expect to be able to efficiency move the vast majority of Aucklanders around the region in single occupancy motor vehicles. The longer we try to do so, the worse affected is our environmental and social well-being, along with growing economic inefficiencies and costs.

FAST's 6 Point Action Plan describes how we should move forward. This report is available on-line at: www.fast.gen.nz

FAST
Forum for Auckland Sustainable Transport

FAST is an umbrella group of organisations and individuals who support sustainable transport solutions to improve Auckland's economic, environmental and social well-being.

Prepared by Bevan Woodward Ph (09) 425 1928 E: bevan@fast.gen.nz

[14] April 2007: Auckland Transport Strategic Alignment Project