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AN ANSWER TO A TRAFFIC PROBLEM?

AN ANALYSIS OF AUCKLAND'S PROPOSED EASTERN MOTORWAY.

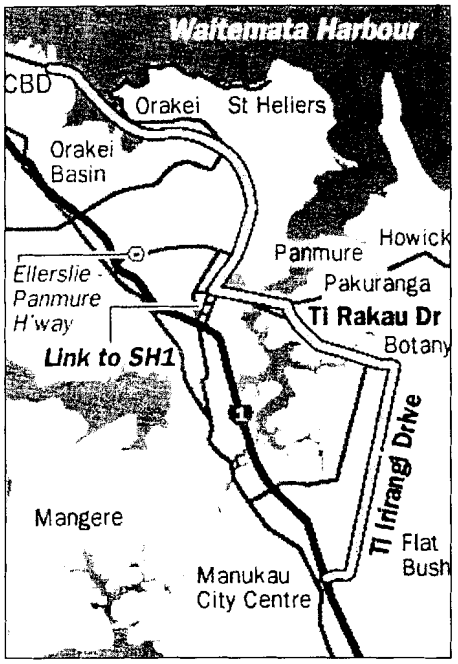


Figure 1: Eastern Motorway Route (Auckland City Council 2002, pg. 14)

When asked to define the number one issue facing the Auckland region, most Aucklanders would reply: TRAFFIC! The congestion of Auckland's roads has reached the point where we are forced to make difficult decisions concerning the future shape of New Zealand's largest city. The proposed Eastern Motorway (EM) is one such solution to this issue.

In this article, I will trace the background of the eastern corridor and briefly outline some of the issues that have been examined in local authority reports and in the media. Some tentative conclusions can be drawn. The EM will form an important section of the new rapid transit system. It will include two, bus-only lanes resulting in major improvements to public transport services in the Eastern suburb area. However, there are significant environmental risks associated with this proposal. These issues are discussed below in relation to the Auckland 2050 Growth Strategy.

HISTORY

The Eastern motorway concept of creating a roading link between the Auckland CBD and Panmure, first appeared as the South Eastern Motorway development project in a 1955 Master Transportation Plan for Metropolitan Auckland, produced by the then Auckland Regional Planning Authority, but was later discontinued.

The proposal was revisited in 1965 in a 20-Year Transport Plan prepared for the Auckland Regional Authority. The land to be used as a motorway was designated by the authority. This was later changed in 1967 to a limited access arterial road.

Table 1: Travel Demand

SGMA	2001	2021	Growth
Eastern	34,000	51,000	52%
Ellerslie-Panmure	6,000	8,000	30%
Remuera Road	18,000	25,000	39%

Source (Auckland City Council 2002, pg. 14).

In 1993, there was a renewed interest in the corridor when the "Eastern Highway" designation was carried over to the 1993 Proposed Auckland City District Plan. A legal challenge led by an interest group called STEM (Stop The Eastern Motorway) forced the council to seek a new designation on the eastern corridor before any construction could take place (Orsman 2002). This resulted in a ruling that forced Auckland City to undertake a more rigorous investigation and consultation before the council could build the highway.

In 2001, the newly elected council, led by Mayor Banks, gave priority to completing the city's strategic road network, including a road through the Eastern Corridor by 2007. It commissioned a new Eastern Corridor Strategy Study to investigate present and future transport demands and how the could best be met (Auckland City Council 2002).

MOTORWAY DESCRIPTION

The design of the motorway follows an initial Auckland City Council study into the project published in August 2002, which recommended four lanes for traffic and two lanes for buses, cycle and walkways, along the 27km eastern corridor. Constituting a 40m overall width, the motorway has the following features:

- Four 3.5m wide general traffic lanes.
- 2m wide bus/shoulder lanes.
- A 1.8m wide median.
- One combined pedestrian/cycle lane of 3m width and a 1m separation from traffic.
- 2m wide embankment / berm areas suitable for the treatment of road runoff (Auckland City Council 2002).

The corridor begins in the Auckland CBD at the junction of Quay Street and State Highway 16 and follows the railway tracks South through Orakei, St Johns, Panmure and joins the State Highway South of the Mt Wellington interchange (see figure 1).

LEGISLATIVE CONTEXT

The Auckland Regional Growth Strategy 2050 (ARGS), while remaining RMA consistent, is the central plan in a host of new, non-statutory planning instruments developed in the Auckland region. The ARGS provides the overall framework and future scope of population growth, employment, housing construction levels and public transport for the greater Auckland region (see figure 2). In general, the ARGS aims to:

...ensure the region can accommodate that growth in a way that enables it to be economically successful, enjoyable to live in, and which minimizes the adverse effects of growth on the environment. A key issue in the development of the Growth Strategy is the recognition of the need to develop land use patterns that support reduced vehicle demand and increased use of passenger transport (Regional Growth Forum 2001).

As part of the ARGS, the Auckland Regional Land Transport Strategy (ARLTS) is intended to meet the transport needs of the Auckland region up to 2021. The ARLTS has three primary purposes:

- To identify future land transport needs of the region
- To identify the most desirable means of responding to such needs in a safe and cost effective manner having regard to environmental effects
- To identify an appropriate role for each transport mode in the region (Auckland City Council 2002, p 7)

The document is intended to reduce Auckland's reliance on vehicle travel by encouraging cycling, walking and the use of public transport. In accordance with this objective, The Passenger Transport Action Plan (PTAP) is a sub-plan of the ARLTS. Its intent is to develop a regional passenger transport system of which the Eastern motorway forms an important part.

The *Liveable Communities Strategy* was also developed in the context of the regional growth forum for the purpose of planning for future growth in the Auckland region in 1996 (Auckland City Council 2000). In 1999, Auckland City signed the memorandum of understanding which committed the Council to implement its part of the Regional Growth Strategy, aimed at addressing growth in Auckland City.

ISSUES

In this section I would like to introduce a summary of what I see as the 'issues' facing this development and examine them in relation to the following objectives cited in the ARG Strategy 2050.

In a recent paper at the Department of Planning at Auckland University, Fookes (Fookes 2002) summarised three main outcomes identified by the ARGS, these are:

- Desirable communities, diversity and choice optimised
- Accessibility optimised
- Natural and physical environment optimised (p 20)

Auckland is New Zealand's largest urban concentration comprising of just over one million people. The area is experiencing major traffic congestion, population, and land-use pressures. By 2050, the population of Auckland is expected to double exacerbating these problems. The Eastern Motorway is one means of addressing these issues.

According to a recent article in the New Zealand Herald, a number of areas are subject to extreme congestion problems. The intersection of Reeves Road with Ti Rakau Drive is one of the worst bottlenecks in Auckland. In rush-hour, cars are backed up for hundreds of meters. It can take as many as seven or eight light changes to get onto the Pakuranga Highway. Closer to the Auckland CBD, "furious" residents see large trucks rumble along Kepa Road and Kohimarama Road, past Selwyn College, St Thomas' Primary School and the ASB Stadium (Orsman 2002).

Congestion problems can only get worse if Auckland continues to ignore this issue. The ARGS involves the concentration of approximately 70% of Auckland's growth over the next 50 years in Strategic Growth Areas (Regional Growth Forum 2001). Three of these areas are in the Eastern suburbs; Ellerslie, Panmure and Remuera. By 2021, the populations within the East Tamaki corridor are expected grow from 20,000 to 68,000, some 237% (Auckland City Council 2002). Over the next 20 years, suburbs along the route will increase in population by an average of 45 percent (see table 1: Travel Demand). Along Ti Irirangi Drive in the southeast, homes for 50,000 people will be built at Flat Bush over the next 15 years. Judging by Aucklanders' preoccupation with automotive transport, most of these new homes will have two or more vehicles causing unprecedented congestion (Auckland City Council 2002).

SO WHAT WILL BE THE IMPACT OF THIS PROPOSAL?

The impacts of the EM are part of a series of tradeoffs. On the one hand Auckland gains a more 'efficient' public transport system in the form of the rapid transit network; on the other hand, important ecosystems will be affected.

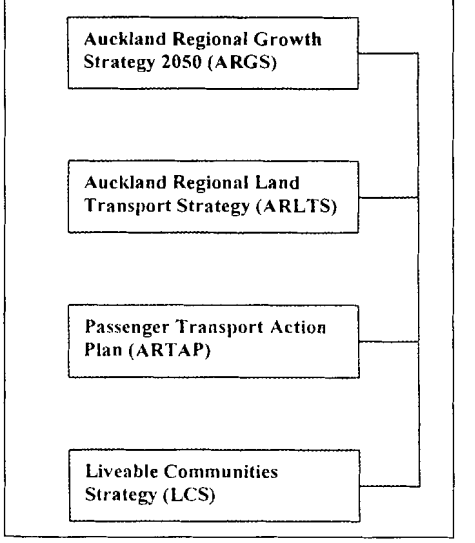
- Purewa Creek is classified as a vulnerable coastal environment needing protection. These areas exhibit considerable sensitivity. According to Eastern Corridor Strategy Study, "the impacts will be greatest through those habitats which are relatively unmodified and retain much of their functional integrity, such as Hobson Bay, Purewa Creek (Auckland City Council; Regional Growth Forum; Auckland City Council; Auckland City Council; Auckland Regional Council; Fisher, Rolfe et al.; Fookes; Orsman; Orsman) Purewa Stream" (Auckland City Council 2002, pg 34).
- Excavation along the slopes of Mt Wellington, pa sites may damage the Winifred Higgins Woodland.
- Mt Wellington Creek is classified as a vulnerable coastal environment needing protection.
- A six-lane motorway across Hobson Bay would have high visual impact, with little possibility of visual amelioration.

It is likely that the Eastern Corridor will reduce unsafe congestion in the Eastern suburbs, and public transport will be improved, however, the Eastern Corridor Strategy Study fails to mention the cumulative effects of carbon dioxide output on global warming. The Corridor essentially encourages the continued use and acceptance of cars as the primary mode of transport, a position that runs contrary to the Kyoto Protocol ratified by the present administration and the objectives of the 2050 growth strategy as outlined by Fookes (2002).

PRIVATIZATION OF NEW ZEALAND'S MOTORWAYS

The recent Land Transport Management Bill announced by Government has paved the way to achieving a new approach to roading development.

Figure 2: Planning Framework



In this country, Private Public Partnerships (PPPs) are touted as the key to beginning major roading projects that have been delayed by years of local authorities' inability to fund new roading initiatives.

Private finance has been flagged as a potential revenue generating mechanism for Auckland's proposed eastern corridor, the Hamilton-Pokeno motorway, Transmission Gully in Wellington and a link across the Weiti River to the Whangaparaoa Peninsula.

The jury is however still very much out on the benefits of road tolls. After a decade of operating in Britain, Canada and Australia, PPPs remain hugely controversial, with claims that the public ends up paying much more for services that decline in quality as the private sector extracts its profit.

Fiscal return to operators can also vary considerably with the contribution of tolls making up a lower proportion of the total cost. This can have the effect of putting pressure on operators to reduce costs and therefore roading quality.

Another concern about road privatization is that, if we create an industry that operates roads, we also create another pro-roads lobby group. Depending on which option is adopted, the Eastern Motorway will cost the taxpayer approximately one billion dollars to construct. This will have significant spin-offs for the local economy. Industries will line up to construct and operate roads and will add strength to arguments that favour roading development over other transport options. Do we really need to funnel large amounts of resources into non-sustainable industries when, for that price we could have an excellent public transport system?

The alternative option of road tolls intended to reduce traffic congestion has not been explored in any depth. Tolls are also touted as a means of reducing congestion by discouraging road-use through charging. There appears to be evidence that this system works and we may well see this option adopted in future for central city areas. An initiative recently introduced by 'Red' Ken Livingstone in central London has shown immediate reductions to congestion. The benefit, in the case of the Eastern Motorway is however dubious. Tolling to reduce road-use, only works where traffic has no option but to use the road. Road-tolls work only in area-wide scenarios. The Eastern Motorway is one of two main routes. The Southern Motorway will still be free of charge, as will other smaller roads. Consequently there will be little benefit in this respect. If road-tolls were to be introduced, it would need to be operated on a large and monopolistic scale, supported by camera surveillance and the police. Funding gained from such an initiative should be directed at improving public transport - mainly in terms of frequency and diversity of destination.

The main factor for encouraging a greater level of use of public transport is convenience to the consumer. One only needs to visit Melbourne to see how just how convenient trains can be. Auckland could easily have such a system.

On a positive note, however, road tolling should lead to less congestion in some areas and a greater use of public transport and therefore less CO_2 pollution, which is good for everyone.

We may also find that, as fewer cars enter the city, it could improve the overall ambiance of Auckland central in the sense that it will be less dominated by cars and more pedestrian friendly. If anyone has been to Amsterdam you'll know how economically successful and enjoyable that can be.

SOCIAL/COMMUNITY EFFECTS

The social effects of this development are both positive and negative. One potentially positive area will be reduced congestion in the eastern suburbs. Some roads are sub-standard in terms of safety and the motorway may well reduce the danger. For example, Ngapipi Road has three times the national average rate of crashes (Auckland City Council 2002). The Eastern motorway should reduce the traffic throughput.

One of the most talked about effects of the EM is the demolition of about 300 homes, mainly along Ti Rakau Drive, Pakaranga. This seems contrary to the ARGS's stated intent of supporting communities.

A letter to *The New Zealand Herald* (2002) stated the position of many residents along the proposed route - "My house is on the other side of Ti Rakau Drive that may not be bulldozed, and therefore, I may be subjected to a lifetime of traffic noise, pollution, loss of enjoyment and loss of value on my property."

Returning to the objectives of the Auckland Regional Growth Strategy, it appears that the benefits of this project are mixed. It is difficult to see how this motorway will enhance the "natural and physical environment" by effecting bush areas, encouraging a greater use of vehicles and polluting the atmosphere with more Co2. To its credit, the eastern motorway proposal will significantly enhance the use of public transport services. The Passenger Transport Action Plan mentioned above aims to capture approximately 25% of the transport market. The eastern motorway should support this objective through the creation of rapid transit (bus only) corridors. It is, however, difficult to see how bulldozing 300 homes in the name of progress will enhance effected communities.

Phase two of the proposal signals the beginning of the EM being subject to the Resource Management process and its assessment of environmental effects. The various regional and district councils have allocated thirteen million dollars to this and it will take roughly a year to complete. I for one will read the report with great interest. How will the report deal with the pollution caused by encouraging greater car usage? What measures will be needed to mitigate the damage caused to sensitive coastal areas?

This will be a fascinating process with an interesting number of parties with differing opinions. On the pro-EM side will be Ports of Auckland, Mayor Banks and Howick residents coalition, on the opposing side, there will be the affluent and educated residents of the Orakei Basin, Meadowbank, St Johns and Remuera who have been politically active since 1995 in the form of the lobby group STEM as well as anti-roads campaigner, Green Party MP Keith Locke.

So, watch this space.

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