Submission to the Legislative Council Select Committee

on

Greater Hobart Traffic Congestion

N C K Evers Network

September 2019

The N C K Evers Network, which comprises Bob Annells, Damian Bugg, Don Challen, Dan Norton, Tony Pedder, Greg Ray and Mike Vertigan, is a group of highly experienced specialists in government, policy development, strategy and corporate administration who live in Tasmania and have worked here at the highest level.

Background

Hobart is currently enjoying an extended period of growth and development which, combined with positive business confidence and investment, holds promise for the future. Many describe it as a boom period. But more important is its prospective sustainability – and the signs are encouraging. There is a mood in the city that speaks of continuing prosperity.

Every surge in growth and development is accompanied by challenge. The rising cost of houses, the availability of affordable rental properties, access to medical and hospital services, traffic congestion and the adequacy of available tourist accommodation are just some of the issues currently being experienced in Hobart.

Some, such as the provision of more hotel beds for tourists, will be taken-up and resolved by private enterprise. An increase in the housing stock is a shared responsibility, with the Government needed to address the shortage of social housing. Others, however, are solely the responsibility of government to rectify, especially when it comes to basic infrastructure.

The Legislative Council Select Committee on Greater Hobart Traffic Congestion is addressing an issue critical to Hobart's future development. It is an issue that falls almost entirely to government to manage.

Geography

Hobart's traffic congestion is severe for a city of its size. It arises mainly from geography – the location of the city in the shadow of, and on the foothills of kunanyi, and stretched out along the banks of the Derwent River. It also arises from the early design of the city centre which did not contemplate traffic volumes now experienced. The consequence is that traffic is funnelled from the three main arterials – the Brooker Highway, the Tasman Bridge and the Southern Outlet – through Macquarie and Davey streets – designed as picturesque boulevards but now anything but, ensnared as they are with heavy traffic.

Poor Planning and Government Neglect

The planners of the 1960s were thinking ahead and planning for a future in which traffic to and from the south (in particular) could avoid passing through the centre of the city. Regrettably, their plans were shelved, ignored by local and state government, and land reserves allowed to be overtaken by residential development.

Despite very significant population growth and changing patterns of settlement out of the immediate environs of the Hobart CBD, there has been very little infrastructure investment in and around Hobart to help cope with growing traffic volumes and changing settlement patterns.

In the half-century since the completion of the Southern Outlet in 1969, hardly any development has occurred of the arterial infrastructure in the Hobart area. The main exceptions are the duplication of the Southern Outlet (1990), the Eastern Outlet city - airport link (1990s) and the Kingston Bypass (2011). This is a pathetically short list when compared with the arterial road infrastructure investment undertaken by other Australian States.

Hobart's current traffic woes are the result of years of government neglect – neglect of infrastructure planning for a growing city and failure of action to deal with the problem. All levels of government are culpable – State, Local and to a lesser extent Federal.

Population Growth and Lifestyle Choices[1]

Over the past half century, more than three quarters of Hobart's population growth has occurred in the southern suburbs of Kingborough and the eastern suburbs of Clarence and Sorell. In the northern suburbs, population growth has occurred mainly on hillsides, away from major traffic arteries. The city itself has dropped from having more than a third to less than a quarter of the greater Hobart urban population. The city's share of urban jobs and commercial activity has also fallen. More jobs and more people are moving out to the suburbs.

The rapid growth over the past 40 years in the proportion of women in the workforce has also had a considerable impact. Many women want to combine work with a family lifestyle. That lifestyle involves combining activities like getting to and from work, with shopping, getting children to childcare, to school and to after school activities. This is only possible with a car.

The go anywhere anytime characteristics of cars are superior to any form of public transport. Cars enable people to live more active and fulfilling lives according to their personal preferences. They are crucial for people to flexibly combine their trips to work with shopping, ferrying kids to school and recreation.

People have made a lifestyle choice to live where they can have a bit of space and easy access to beaches, the bush and recreation activities. Having made this choice, people need to use their cars to get to work and to go about daily family activities while using their limited time efficiently.

This lifestyle choice is not a passing trend. It is deeply entrenched and here to stay. It will not be wished away by hoping high density residential housing development will occur close to the CBD. Nor will it be wished away by the vain hope that people will abandon their cars in favour of walking, bicycle riding and more intensive use of public transport. These alternatives do not meet the lifestyle choices of most people and are impractical for those who have made their lifestyle choice to live in suburbs like Kingston and Margate, Geilston Bay and Howrah, Gagebrook and Rokeby, and Rosetta and Berriedale.

This outcome has been at odds with the advice proffered by many so called 'planners' who over the years, seem to have unduly influenced infrastructure decision making, much to the city's detriment. Sadly, some still seem to think there should be a social readjustment that will prompt people to change their lifestyle and start walking, riding or catching public transport to and from the city. To the extent these transport mode choices change over time, they are likely to be very modest. They will not materially impact the use of private vehicles for the many trips where public transport, riding and walking are completely unsuitable.

Through Traffic and Inadequate Data

As anyone caught in the peak-hour traffic clog on the major roads in and out of the city will attest, the issue of Hobart's traffic congestion is in large part due to the pressure of 'through traffic'. Through traffic constitutes journeys commencing south, north and east of the CBD which conclude (albeit perhaps with a brief drop-off in the CBD) in another south, north or east location.

Ordinary observation and experience of travelling these routes points to the fact that through traffic constitutes a significant component of the total traffic volumes on the Macquarie-Davey couplet.

Yet officers of the Department of State Growth (DSG) continue to assert that through traffic constitutes a relatively small proportion of the traffic volume of the couplet. We believe that the

data used by DSG is seriously deficient. Our belief is that it is based on an unrealistically large definition of the CBD and classifies a brief stop to drop children at school as a CBD destination even if the parent's journey continues beyond the CBD. Consequently, DSG has defined away a significant part of the through traffic issue. Reports prepared by that department and its predecessor the Department of Infrastructure, Energy and Resources (DIER) have both understated the problem and ignored potential solutions.

Recognition of the through-traffic component of traffic volumes on the Macquarie-Davey couplet, leads inevitably to the conclusion that at some time in the not-too-distant future, a major infrastructure investment will be needed to deal with Hobart's worsening traffic congestion. Claims that such investment can be delayed by other solutions are correct as far as they go. However, those making such claims fail to recognise that alternative measures can only buy a small amount of time before a major investment is needed.

Some of those who oppose major road infrastructure to cater for through traffic, point to the 2011 DIER report[2] which suggested that through traffic was not an issue, and therefore no justification for major road infrastructure development. Those critics overlook the fact that the report was based on 2008 data and written by people who were reluctant to recommend the expenditure of the level required. Cynics might suggest the report was designed to excuse inaction on what was then already a rapidly worsening congestion problem. In addition, as noted above, the definitions used seriously undermine the usefulness of the data on which the report was based.

A 2016 report[3] by the successor to DIER, the Department of State Growth (DSG) includes some interesting analysis of the congestion problem but is equally timid and unhelpful in proposing other than short-term band-aid solutions to the problem.

Better data is needed. Without better data, it will be difficult to design effective solutions to Hobart's traffic congestion and to establish, through objective business cases, that those solutions are cost-effective.

Role of Public Transport and Non-Infrastructure Initiatives

Many proposals have been put forward to deal with Hobart's traffic congestion. These include more public transport, ferries on the Derwent River, light rail to the north, a fifth lane on the Southern Outlet, and clearways. All have the potential to help a bit but none of them is a long-term solution and to pretend otherwise is irresponsible. To the extent that non-infrastructure solutions work, they will only marginally defer the point in time at which a major infrastructure option becomes essential and unavoidable.

However, Hobart is a growing city, and everyone wants it to continue to grow and prosper. A direct consequence is that traffic volumes around Hobart and especially through-traffic volumes on the Macquarie-Davey couplet will continue to grow.

Public transport has a role to play, especially as part of well-planned and executed park-and-ride arrangements. Park-and-ride has potential to reduce peak-hour CBD-destination traffic from the south and east in particular. Park-and-ride probably will offer little in terms of reducing through traffic on the Macquarie-Davey couplet.

Public transport accounts for only about 3.5% of all trips in the greater Hobart area. Consequently, it is inconceivable that public transport initiatives are likely to make much more than a minor dent in Hobart's traffic congestion. Public transport also serves contemporary lifestyle choices poorly because it is based on fixed timetables and fixed routes. Time poor families will not use public

transport, other than for fixed point-to-point trips like the journey to school or the journey to work because of the heavy commitment of time in walking to a bus stop, waiting for the bus to arrive, dead time on the bus while it visits destinations (to collect other passengers) which are of no interest to the traveller and then getting to the final destination.

Light rail to the north of the city is also unlikely to have any appreciable impact on traffic congestion. The experience of other places, particularly in North America, is that light rail is unlikely to be a cost-effective initiative. The existing bus system will serve the northern suburbs more flexibly and at lower cost than light rail. To the extent that light rail to the north attracts passengers it will be at the expense of the existing bus transport system. As such, an uneconomic light rail is also likely to make the bus system more costly to operate.

Much the same applies to ferries on the Derwent River. Given the expensive infrastructure that is required to establish and operate a ferry system (jetties and vessels), it is very hard to see ferries being cost-effective. Patronage would undoubtedly cannibalise the existing bus system. Given the open water involved, the wind and the swells, it would not take too many rough days for patrons to decide ferries are a poor option and to abandon them.

It is understood the State Government has committed to a Bellerive to Hobart Waterfront ferry service trial. If this is the case, it is hoped that the trial service will be operated for a sufficiently long period to constitute a real test of the efficacy and cost-effectiveness of the service. To expand beyond existing facilities will require a lot of costly infrastructure. The risk is high of investing in a white elephant. It is instructive that many commuters relied on ferries during the period from 1975 when the Tasman Bridge was being repaired. Once the road transport options returned, the ferries quickly disappeared. Against this evidence, it is hard to see a ferry system being economic.

Infrastructure Development

A traffic congestion solution is needed which directly tackles through traffic on the Macquarie-Davey couplet.

The couplet is among several examples in Hobart's traffic network which are at capacity (as noted in the DSG 2016 Report). Others include the Tasman Bridge, the Southern Outlet and the Brooker Highway. Growth rates on these arterials are very high, especially on the Southern Outlet. The DSG 2016 Report puts the compound growth rates per annum at Tasman Bridge 1.1%, Brooker Highway 1.5% and Southern Outlet 3.6%. Given the age of the data and the extent of residential subdivision activity occurring in Kingborough, the Southern Outlet growth rate estimated by DSG 2016 likely seriously understates growth on this arterial.

Infrastructure which permitted through traffic to bypass the Macquarie-Davey couplet would very significantly reduce Hobart's traffic congestion and create room for the future growth of Hobart's traffic volumes.

One potential bypass solution recently identified warrants closer examination. It is the same solution used the world over to resolve traffic congestion in cities – allow the through traffic to avoid the city altogether by sending it underground.

The solution lies in building two, interconnecting pairs of tunnels – one under the city, linking the Southern Outlet and the Brooker Highway, and a second under the Queens Domain, linking the Brooker with the Tasman Bridge. As bold as the idea might seem, it is within the state's capacity to finance, perhaps with appropriate Commonwealth Government and private sector involvement.

This concept is the brainchild of former Hydro Tasmania engineer, Tony Denne. Mr Denne has developed a design concept for the tunnel complex. He is supported by a group of experts with a wealth of international experience and expertise in tunnel design and construction; and by urban geographer and transport economist Bob Cotgrove.

The first tunnel, comprising two parallel underground roads 2.4 kilometres in length, would start from the Southern Outlet at Davey Street, pass under West Hobart with several exit and entry points along the way, joining the Brooker Highway at an interchange near the Campbell St. Primary School.

The second tunnel comprises two roads 1.3 kilometres long, starting at a Brooker interchange near Campbell St. Primary School, passing under the Queens Domain and joining the approaches to the Tasman Bridge at an interchange just south of Government House.

Each of the tunnels would carry two lanes of traffic in each direction with capacity for 4,000 vehicles an hour travelling at 80 km/hour.

Contemporary road tunnelling of this type is common through Europe and Asia using tunnelling machines. Standard machinery and tunnelling techniques can easily cope with the geology of the route – sandstone for much of it and dolerite particularly where the tunnels pass under the Domain.

The entire project is estimated by its proponents to cost less than $1 billion at today's prices. In terms of critical infrastructure development, such cost is entirely justifiable with the project potentially being financed through a mix of Federal and State funds potentially combined with private investment. If a modest level of tolls was accepted, it would be of great interest to existing toll road operators and would attract strong investor support.

Although the infrastructure cost seems a large sum, it is not when considered relative to other road projects and especially when its benefits are taken into account.

For instance, the new crossing of the River at Bridgewater is estimated to cost about $500 million. Traffic delays at that location are minor by comparison with the congestion clogging Hobart city and causing massive frustration to travellers on the major arterials.

Based on an initial assessment, the Denne bypass proposal appears feasible. But feasibility needs to be proven up.

This is a 'big picture' project, like those which inspired construction of Tasmania's renewable hydro-electricity grid and the state's rural irrigation schemes. It represents investment in essential infrastructure that not only enhances living conditions, but delivers sustainable, economic benefits to the community in general. It would be a proud and lasting legacy for any government.

Other infrastructure solutions also need to be examined. As noted above, the Tasman Bridge is at capacity. With another crossing of the River Derwent nearby at the Bowen Bridge, it has been suggested that a road link between the Tasman Highway at Mornington and the Bowen Bridge would significantly reduce the traffic volumes on the Tasman Bridge. This option is worthy of serious examination. There may be other options for reducing traffic volumes on the critical traffic network components. These need to be identified and explored.

It is usually the case that infrastructure needs and development follow population growth. In Hobart's case, following decades of neglect, the most urgent need is to unclog the city's main thoroughfares by removing through traffic. This will be achieved with the construction of a city bypass, such as that proposed by Tony Denne.

As greater Hobart continues to grow, traffic congestion problems will emerge in the major connectors in the outer suburbs. Problems are already apparent in Kingborough and the Sorell-Midway Point area. A separate but concurrent investigation is required into means by which improved travel times can be achieved on the city connectors from the outer suburbs. This form of planning for future needs and developing solutions, ahead of the problems becoming critical, is sorely needed and has been absent in relation to Hobart traffic during the past 50 years.

Recent Developments

Against this background, the Tasmanian Government is to be applauded for its recent decision to allocate funds to consider the feasibility of constructing a city bypass along the lines of the Denne proposal.

The Government's funding commitment to a feasibility study is the very sensible first step in evaluating the project. The study will provide the government with the information needed to begin considering how such a project might be undertaken and how it could be financed. Given a timeframe of years to bring such a bypass to fruition, work on the feasibility study is urgent.

Consequences of Inaction

The need for this type of visionary approach is unavoidable.

Hobart's traffic congestion is already severe, ridiculously so for a city its size. The costs of this congestion are very large in terms of added travel times and uncertainty of the time that must be reasonably allowed to reach a destination.

Hobart's traffic system is also very fragile. Minor vehicle incidents cause major and long-lasting holdups. An incident on one of the major arterials rapidly spreads, causing serious delays on the other arterials. Motorists on the Southern Outlet often experience severe delays caused by relatively minor traffic incidents on the Tasman Bridge. Grid lock is regularly experienced in the CBD. The managers of the city's traffic-signal system, especially during peak travel times, have no option but to create long queues on the Tasman Bridge, the Southern Outlet and the Brooker Highway because the CBD and surrounding streets cannot absorb larger traffic volumes.

Without a bypass to allow through traffic to avoid the city completely, these symptoms are going to worsen and rapidly so.

Unless a solution is implemented, there will shortly come a time when, say, a person living at Kingston will need to leave home well in excess of two hours before they are due at Hobart airport to catch a flight – a journey that in light, predictable traffic takes 35 minutes at most. There are undoubtedly many other examples of the frustration worsening traffic congestion will create for our city.

The result will be a severe brake on the city's continued growth and development. If the traffic congestion problem is not resolved soon, development in Hobart will come to a standstill.

Decision-makers need to be looking forward 10 years and more to understand the stresses our road infrastructure will be under in the future, not looking backward. Over the past decade, Hobart has enjoyed significant growth and development. As a result, the originally intended picturesque boulevards of Macquarie and Davey Streets are the embodiment of the city's traffic dilemma. Action by government to implement a city bypass can reclaim those boulevards and significantly enhance the liveability of Hobart city and its enjoyment by pedestrians – locals and visitors alike.

Recommendations

We recommend that the Select Committee:

1. Strongly endorses the Government's initiative to undertake a feasibility study into the Denne proposal to permit through traffic to bypass Hobart city;
2. Encourages the Government as part of the feasibility study to establish a framework for the collection of improved data about travel patterns around and through Hobart, focussing on the traffic volumes on the Macquarie-Davey couplet;
3. Calls on the Government to complete the feasibility study as quickly as possible;
4. Calls on the Government to establish the structures and frameworks (including legislative and regulatory) necessary to implement the bypass project;
5. Calls on the Government to allocate funding to progress the bypass proposal;
6. Calls on the Government to investigate private sector involvement in the bypass project as owners and operators;
7. Calls on the Government to ensure that advice and recommendations developed for it on traffic congestion issues are based on realistic and pragmatic assumptions about human behaviour and not idealistic beliefs;
8. Calls on the Government to explore other infrastructure options which will reduce the traffic load on the Tasman Bridge, including linking the Tasman Highway at Mornington with the Bowen Bridge;
9. Calls on the Government to investigate means by which improved travel times can be achieved on the city connectors from the outer suburbs; and
10. Calls on the Government to put in place effective systems to plan for future growth in Hobart's traffic volumes and to identify and implement solutions proactively.

Notes

1. The trends described in this section are identified and analysed in two excellent papers by Bob Cotgrove, *Urban land use/transport interactions and cultural development,* undated 2019 and *The future of urban land use and travel behaviour*, undated 2018.
2. Department of infrastructure, Energy and Resources, *Congestion in Greater Hobart; Response to Issues*, July 2011.
3. Department of State Growth, *Roads for Our Future: Hobart Congestion Traffic Analysis* 2016.

The N C K Evers Network

Mission Statement

Purpose

The N C K Evers Network currently comprises seven individuals with diverse expertise who share a common interest in applying their collective knowledge and experience in public policy towards the betterment of Tasmania and the Tasmanian community.

Intent

The intention of the Network is to apply an entirely independent, apolitical approach in expressing the views, opinions and ideas of its members where, by doing so, it is believed they may contribute to the future social and economic advancement of Tasmania through enhanced public policy.

While the Network will put forward positions on public policy matters, it does not intend to engage in active debate on any issues.

Accountability

Apart from the principles of good governance, social responsibility and common sense, the Network's sole reference point is – and will continue to be – its commitment to articulate only those views on which there is unanimous agreement amongst its members.

Membership

The current membership of the Network comprises:

- Bob Annells
- Damian Bugg
- Don Challen
- Dan Norton
- Tony Pedder
- Greg Ray
- Mile Vertigan