
September 27 2019

The Secretary
Legislative Council Select Committee – GHT
Legislative Council
Parliament House, Hobart 7000
ght@parliament.tas.gov.au

Dear Sir/Madam,

Re: Greater Hobart Traffic Congestion Submission to Legislative Council Select Committee

MRCagney welcomes the opportunity to provide this submission to the Parliament of Tasmania Legislative Council's Select Committee inquiry into Greater Hobart Traffic Congestion. Our submission seeks to assist inform the Legislative Council of transport policies and initiatives required to manage congestion and deliver better transport, better choices and better places for the city and its people.

MRCagney is a specialist transport planning and urban strategy consultancy. We stand for well connected, vibrant and liveable places giving people better, more sustainable travel choices. Our areas of expertise include transit planning, transport planning, traffic engineering and urban strategy.

Transport planning to us is about people, not numbers, and we specialise in providing pragmatic, advice that transforms cities from the automobile age to bring forward a redesigned and re-imagined city that helps people create better choices.

Since our formation in 2000, MRCagney has developed a reputation for delivering excellent outcomes on complex and challenging projects. The company has offices in Australia and New Zealand. We have also delivered a wide array of urban strategy and transport planning projects in Hobart in recent years.

Context

We understand that the Legislative Council has established a Select Committee to enquire into and report upon traffic congestion in the Greater Hobart area with the purpose of understanding in further detail:

1. The scope of Greater Hobart traffic congestion and its impact on the community and economy;
2. Causes of congestion, including physical and topographical barriers;
3. Strategic planning processes between Commonwealth, State and Local governments;
4. Future initiatives to address traffic congestion in the Greater Hobart area, and
5. Any other matters incidental thereto.

It has been widely reported that traffic congestion in Australian cities has been worsening over several decades and is now considered one of the greatest challenges affecting the productivity and liveability of cities. The Bureau of Infrastructure, Transport and Regional Economics (BITRE) estimates that traffic congestion will cost the Australian economy approximately \$27.7 and \$37.3 billion by 2030¹ and the report by the Australian Automobile Association² highlighted travel speeds are reducing while speed variability is increasing.

In Hobart car travel has been the predominant mode of transport, allowing easy and convenient movement, connecting people to and from jobs and services across the metropolitan area. Despite efforts to stem traffic congestion in the city, 83% of all journeys to work³ are still made by car, a higher proportion than any other Australian capital. Compounding this issue is the reduction in car occupancy, with the 2011 census data indicating car occupancy across Australian cities, for the journey to work trip now down as low as approximately 1.09 persons per vehicle, on average. Until recently, Hobart's road-based transport system has had the available capacity to adequately carry the level of demand. However, with population growth and the continuation of traffic congestion has recently emerged as a new challenge, unfamiliar the city.

Planning for future growth that maintains Hobart's liveability requires well-considered, integrated and sustainable transport solutions. Transport is one of the most important considerations for a growing city like Hobart and is critical to the city's long-term prosperity and liveability.

Within this context the need for an inquiry is understandable. However, transport is a derived demand and congestion should be view as a travel demand measure which needs to be managed. Accordingly, we caution against adoption of an approach of only providing more road capacity in order to '*reduce congestion*'.

Our view is that seeking to address congestion by simply building more road capacity is like loosening your belt to address obesity. The approach is unsustainable and unaffordable and fails to recognise underlying factors influencing travel including poor land use planning, lack of investment in alternate mode choice and the socialisation of the cost of parking which distorts travel cost and hence travel choice. Further, research has shown capacity improvements only reduce congestion for 7, possibly 10 years, before the adverse impacts re-emerge.

The emergence of the shared economy, the need to address the pandemic of physical inactivity and to put more emphasis on place making when delivering transport infrastructure is requiring us to *rethink how we deliver transport networks*.

Commentary on Inquiry Scope

This submission is based on our understanding and appreciation of the role transport plays in supporting active, healthy, vibrant, productive, connected and resilient cities. We have sought to provide comment in response to the strategic transport planning matters the inquiry seeks in more detail.

Greater Hobart traffic congestion and its impacts

The city's transport network is predominantly car-focussed, having been engineered during the 1950's to cater for the growing use of the automobile with capacity added overtime in response to increased demands. A primary cause of traffic congestion, which is most pronounced during the concentrated peak demand periods, does appear to be the result of the city's traditional low-density urban development patterns and recent population growth.

¹ Bureau of Infrastructure, Transport and Regional Economics, Information Sheet 74: Traffic and congestion cost trends for Australian capital cities (2015)

² Australian Automobile Association, Road Congestion in Australia, (October 2018)

³ Infrastructure Tasmania, Hobart Transport Vision, (2018)

The central business district (CBD) and surrounds attract a large volume of traffic particularly during the morning and afternoon peaks. Hobart’s CBD relies upon three major arterial roads for access: Tasman Highway; Brooker Highway; and Southern Outlet. These arterials are connected via the Davey Street / Macquarie Street couplet, which is connected to various major collector roads along its length providing access into the city (including Sandy Bay Road, New Town Road, Campbell Street and Murray Street).

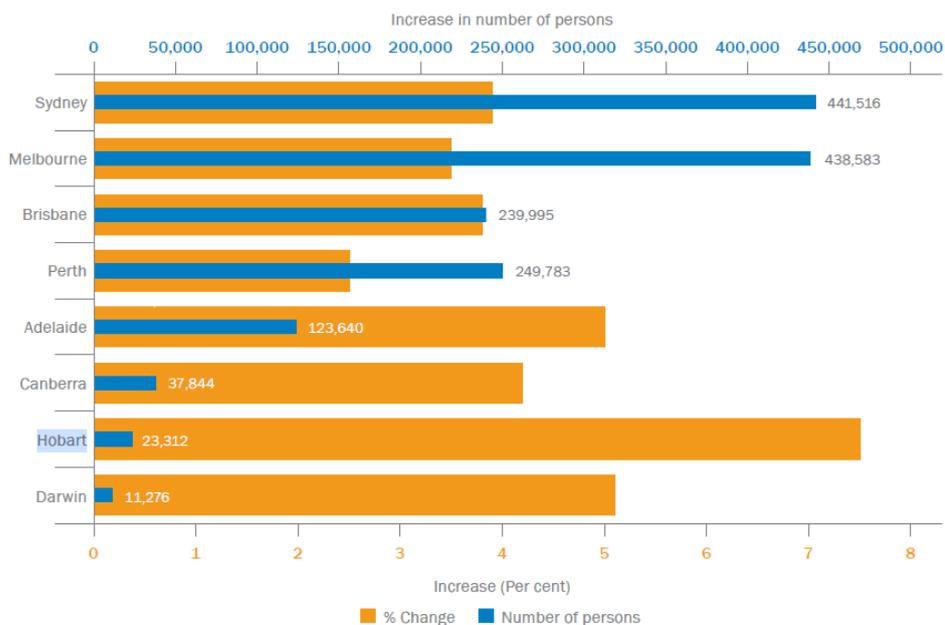
Over the last decade traffic volumes in Hobart have grown and the road network demand has grown to a point where traffic volumes are approaching network capacity at peak periods. There has been growing community concern regarding traffic congestion due to increased and variability in travel times. Whilst congestion is experienced throughout greater Hobart, the Hobart CBD is a focal point, with reduced travel speeds and times for those travelling on CBD roads.

Traffic surveys undertaken by government in 2016 reveal the origins of traffic movements through inner Hobart, which found that during the morning peak time more than three quarters of journeys that start in the east, north or south of Hobart, end in the city. Similarly, in the afternoon peak, more than two thirds of journeys that end in the east, north or south of Hobart, began in the city.⁴ This shows that, predominantly, commuters from all regions in greater Hobart are travelling to and from inner Hobart.

City of Hobart’s *Draft Transport Strategy 2018-2030* recognises the problem that peak hour weekday traffic congestion presents to the city’s liveability and economy. It puts forward a suite of initiatives to address traffic congestion through a series of land use planning, transit planning, active travel and car parking management measures while acknowledging the essential coordination required between all tiers of government to deliver these important transport projects. These initiatives provide the correct approach to managing congestion.

Additionally, changes to the proportion of different age groups in a city’s population growth has significant implications on the transport system. According to the *State of Australian Cities* report, it is anticipated that people aged over 65 years old will increase to 7.5 per cent in Hobart.⁵ This generation of people will need to be provided with new transport options, different housing options and employment choices in order to secure Hobart’s vibrancy into the future.

Projected change in people aged 65 years and over in capital cities, 2012–2031



⁴ Department of State Growth, Roads for our Future, Hobart Traffic Origin and Destination Report, (2017)
⁵ Commonwealth of Australia, State of Australian Cities 2014-2015; Progress in Australian Regions (2015),

Causes of congestion, including physical and topographical barriers

There are many State and Council policy documents providing best-practice approaches for transport and land use planning and development aimed at congestion management. We have extracted the key points from these documents which we believe will assist inform the inquiry.

Traffic patterns, management and circulation that lead to congestion

The *2016 Hobart Traffic Congestion Analysis* report details the high-level contributing factors to congestion:

- Increased traffic demands on the network as a result of the return of schools and University;
- Increased parking availability in Hobart, increasing traffic demands on the network within the city;
- Road works in various locations reducing capacity and/or reducing vehicle speeds in critical locations;
- Changed travel patterns in the network; and
- Changed land use patterns.

In addition to these, current traffic circulation patterns (one-way streets) in the CBD further add to the congestion problems due to queuing times. In addition, encourages unsafe travel speeds as well as being unfriendly to people on bikes.

Car parking management that drives congestion

The City of Hobart *Draft Transport Strategy 2018-2030* recognises that cheap and abundant car parking encourages commuter traffic into the CBD. Our understanding of the current regulatory parking management practices used in Hobart include:

- On-site parking provision as part of individual developments based on arbitrary minimum parking requirements;
- In-lieu fees for parking short-falls; and
- Unlimited, time-limited, priced or un-priced on-street and off-street public parking.

Insufficient public transport network

Public transport usage rates have fallen in Hobart over many years. The investment in large-scale highway infrastructure, while aiding private vehicle traffic, has also had an influence on the size of the city and patterns of suburban development, making high-frequency public transport provision in many parts of the city expensive to run for operators. Key issues with the existing public transport network include:

- Absence of operational heavy/light rail servicing the metropolitan area;
- Absence of public transport regular passenger ferry;
- Existing infrastructure, including the central city bus interchange is inadequate to accommodate existing and forecast demands;
- Limited rapid passenger transport (BRT);
- Limited out of peak services; and

- Issues associated with the coordination of investment and delivery of public transport assets between different authorities.

Insufficient cycling infrastructure

Leading cities across the world recognise the value of providing for and encouraging cycling, as part of a range of transport options for people. Although still car dominant, Australian cities are slowly building better cycling networks to combat traffic congestion and provide safe and amenable facilities for growing cycling populations. For Hobart, while the city has larger mode split of cyclists as a proportion of population compared to other capitals (refer to chart on page 7 from BITRE), many people choose to drive rather than choosing other active modes of transport due to:

- Poor network connectivity; and
- Safety concerns.

Need to improve Land use planning and policies

Land use planning has a direct link to how successful Hobart's transport network can evolve in the future. Understanding the major hinderances to better land use and transport integration in Greater Hobart need to be further investigated to highlight the key risks in the context of the city's growth trajectory and understand locations that are poorly accessed. Causes of congestion from poor land-use planning are typically:

- Urban sprawl;
- Lack of a coherent transport network; and
- Access to public transport services.

Future initiatives to address traffic congestion

In line with the identified causes of traffic congestion and consistent with established policy (City of Hobart's Draft Transport Strategy) MRCagney believe that the following initiatives should be further pursued and analysed as future initiatives to address traffic congestion in the Greater Hobart area:

Improving traffic circulation

Hobart requires a contemporary and holistic approach to the way traffic is managed through the city. Initiatives deriving from this task will be developed with the purpose of addressing traffic congestion and eliminating the impact to city amenity caused from traffic congestion in metropolitan Hobart.

Initiatives that could be further explored are:

- Reviewing one-way traffic circulation in central Hobart, including conducting scenario testing and modelling to consider options to introduce a two-way street network in parts of the city;
- Reintroducing two-way travel, in conjunction with people-oriented street designs, can help achieve a better environment for vulnerable street users (pedestrians and people on bikes) and ameliorate traffic congestion by rationalising traffic movements and distributing traffic more efficiently;
- Revising traffic circulation on Davey Street to develop interventions that would improve pedestrian amenity and active travel; and

- Developing a street design manual to outline the vision for the city's street network, including principles that underpin the design of liveable and multi-functional streets that serve the needs of all users.

Demand responsive car parking management

The MRCagney approach to parking management, consistent with our overall philosophy of mobilising communities for better cities emerges from an in depth understanding of:

- The economic, social and environmental impacts of current parking practices;
- The need for strategic parking reforms to be guided by a set of clear principles; and
- The importance of communicating the benefits of strategic parking reforms to different stakeholders.

We believe that parking management improvements must be tailored to specific local circumstances, as each situation has unique constraints and opportunities. For Hobart, we see an opportunity to conduct further analysis on the following parking management reforms, including:

- Developing a robust demanded management strategy for parking consistent with established policy to guide the future use and management of the City of Hobart's on street and off-street parking supply;
- Exploring opportunities to use technology including pricing signals to reduce peak hour traffic movements into and through the city centre, improve on-street parking payment systems and use of mobile apps to inform users of available parking;
- Developing a kerbside user hierarchy to provide direction regarding the allocation of kerbside space for different users (uber, loading zone, bus, disabled parking, metered parking)
- Investigating the issues and implications of introducing a city centre private car parking space levy as a demand management tool to kerb discourage commuter parking; and
- Reviewing the planning scheme standards for maximum and minimum parking provision in the central area of Hobart and conducting analysis to reform the parking rates and identify the most appropriate intervention (maximum parking rates or a reduced minimum).

Improving the public transport network

Public transport is critical to a growing city like Hobart and importantly links people to jobs and services in a sustainable and efficient way. Public transport is an enabler of social and economic activity and therefore should be prioritised as Hobart looks to plan for future growth.

As part of this submission, we see an opportunity to conduct further analysis on the following new and previously identified initiatives for Hobart relating to the city's public transport network:

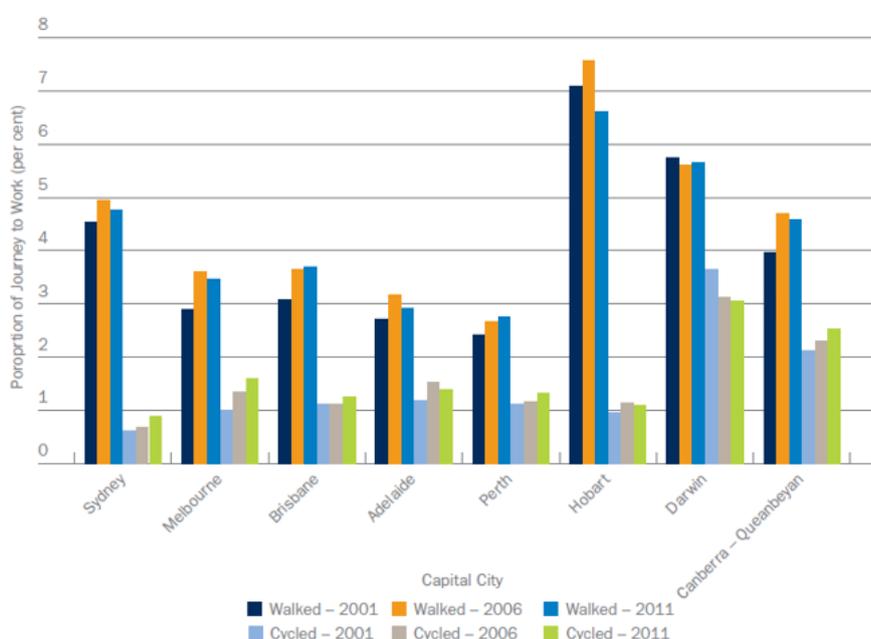
- Undertaking business case development or feasibility testing of identified public transport infrastructure projects, network development or operations;
- Developing plans for short, medium- and longer-term improvements for passenger transport facilities in the centre of Hobart, including bus, ferry and light rail facilities;
- Providing guidance and developing tools to promote engagement and collaboration with Infrastructure Tasmania, the Department of State Growth and Metro Tasmania to fully

understand the implications of the Hobart Transport Vision and public passenger transport in the Elizabeth Street midtown area and South Hobart;

- Understanding the impact of future technologies and the opportunities associated with Mobility as a Service (MaaS), autonomous vehicles and electric vehicles in the context of addressing traffic congestion in Hobart;
- Exploring opportunities for 'last mile' options can be provided by bus or bicycle services; and
- Identifying options to support bus infrastructure such as bus shelters, Bus Rapid Transit (BRT) lanes and real-time passenger information systems.

Cycling & Walking strategies and infrastructure

MRCagney believe there is an opportunity for active transport to play a greater role in resolving traffic congestion particularly in Hobart’s CBD. The BITRE report for active transport by commuting mode, compares 2001 to 2011 data for Journey’s to Work (see figure below). Significantly Hobart rates well in both walking and cycling and there is opportunity to reinvigorate and build capacity in these areas.



Source: BITRE (unpublished) analysis of Journey to Work (active transport).

Cycling can play a greater role in serving the needs of commuters to and from Hobart daily. MRCagney recommends an analysis that draw on examples from cities that enjoy strong participation in cycling as a mode split to identify effective and appropriate policy and infrastructure solutions for Hobart.

As a minimum, we would encourage:

- Using GIS analysis to rank areas within metropolitan Hobart most suited to investment in cycling infrastructure (criteria could include proximity to Hobart CBD, population density, suitable topography for cycling, high existing mode split etc);
- Developing a detailed bicycle plan that expands the contribution that cycling makes to the operation of the city and encourages an increase in the number of trips taken by bicycle;

- Identifying a new cycling network, with focus on introducing separated cycling infrastructure along key spines to boost participation in cycling for everyday needs, including commuting for work; and
- Undertaking a background paper to look at opportunities for a bike share scheme in Hobart and car share program in Hobart and in conjunction with UTAS.

Highly walkable environments, coupled with land-use planning, create cities that improve overall quality of life and economic prosperity.

MRCagney recommends that a detailed analysis be undertaken to review Greater Hobart's walkability. This would include addressing:

- Establishing a typology of street designs including 'streets as places', 'walking streets' and 'shared zones', and identifying locations for implementation of these improved street designs;
- Identifying locations for incremental space reallocation such as footpath widening around key public transport stations and kerb outstands at intersections;
- Understanding accessibility and connectivity due to topography of Greater Hobart and engaging with key stakeholder groups (e.g. residents, employees, walking groups and tourists) to understand barriers to walking in Greater Hobart; and
- Developing design guidelines to assess the safety and security of walking in Greater Hobart.

Future policies need to account for emerging mobility trends and services

New and emerging technologies offer significant new opportunities for congestion management. There are several real-world concepts in the application of new technologies to achieve sustainable development, including managing transport and travel demand objectives.

These include:

- Making better use of network capacity;
- Variable road pricing;
- Peak/off peak transit pricing;
- Parking management and pricing;
- Real-time information;
- Dynamic way finding;
- Expanded modal choices enabled by technologies (shared services etc); and
- Mobility as a Service (MaaS) subscription packages which incentivise 'access' over ownership and encourage the use of passenger transport and discourage single-occupant private vehicle trips.

Mobility as a Service (MaaS)

Modal integration and network efficiencies are fundamental reasons for governments' interest, and involvement, in the development of MaaS ecosystems. There is a general agreement that government has an important role to facilitate the innovation and delivery of MaaS and ensure societal benefits ensue. A major part of this role is ensuring that there is regulatory and legislative support for MaaS delivery and customer safety/security. It is important to use the potential of MaaS to address environmental, social equity and wider economic issues and to avoid the situation where MaaS providers only concentrate on commercial outcomes and delivery of services in higher density and higher income areas.

The keyways government may facilitate a successful MaaS deployment include:

- Regulations and standards to avoid monopolies and the development of closed systems;
- Development of uniform data standards and interfaces to facilitate connectivity and inter-operability;
- Ensure access to the mobility market for all operators, regardless of size;
- Work with open but secure architectures and standard interfaces;
- Take advantage of the opportunities offered by MaaS to improve the efficient operations of transportation services; and
- Collaborate with the private industry to develop innovative business models

Thank you again for the opportunity to make this submission on this most important and relevant topic. We look forward to reading the findings of the inquiry.

Please do not hesitate to contact me directly should the Committee further exploration of the concepts outlined here would be of value.

Yours sincerely,

Kathy Lazanas

Regional Manager, Victoria and Tasmania
MRCagney Pty Ltd