Submission No 2

INQUIRY INTO CURRENT AND FUTURE PUBLIC TRANSPORT NEEDS IN WESTERN SYDNEY

Name: Mr John Morandini

Date Received: 11 August 2023

Inquiry into the current and future public transport needs in Western Sydney

Submission by John Morandini, 11th August 2023

Ms Cate Faehrmann, MLC, Chair,
Hon Sam Farraway, MLC, Deputy Chair, and Committee Members,
Parliament of New South Wales Legislative Council,
Portfolio Committee No. 6 – Transport and the Arts

Dear Chair, Deputy Chair and Committee Members,

Thank you for the opportunity to make this submission to the Inquiry.

For greater Sydney's vast low-density urban spread, of which Western Sydney is such a large and rapidly growing region, there is much to do to solve rising traffic congestion, high car dependence and public transport shortfalls.

I urge the Committee to include consideration of a largely overlooked and simple approach. In short road systems are colossal, largely by necessity to give everyone access, and they cater for the great majority of travel demand yet can handle much more by introducing new bus services, because each additional bus would take several cars out of the traffic mix.

The key point is that major bus service improvements across greater Sydney would transform road productivity, sustainability, public transport coverage and traffic flows, and positively impact all of Sydney. And Western Sydney is logically placed to be at the forefront of transforming roads to play this bigger role in new public transport operations.

That such improvements are yet to be investigated or even identified for comparative evaluation in (state and federal) project selection processes remain as an ongoing oversight which the Committee might reasonably flag.

I have advocated similarly in public, state, federal and local government, industry and academic contexts, after a career in NSW agencies, on public works and road and transport policy, planning and implementation, including for the Sydney Olympics transport strategy.

I have no vested interests in relation to this Inquiry or the matters in my submission and trust the Committee's Inquiry will consider the points made.

If there are any questions arising, I would be happy to answer them.

Yours sincerely,

John Morandini
BEng Civil (Hons) (UNSW 1971), MBA (UNSW 1975)

OVERVIEW

Far more people travel by car than by any other means of transport, across NSW in general and within Sydney too. Freight is more evenly carried on rail and road.

Sydney suffers seriously from ever-rising traffic congestion, a product of high car use and of project selection decisions that keep fuelling Sydney-centric growth. These are the main drivers of ever-rising traffic congestion and are central to the current and future public transport needs in Western Sydney.

Worldwide, travel delays per person are lower in smaller than in larger cities. Delays are also lower in cities with more public transport services than in cities of similar size with less public transport.

So, Sydney, Western Sydney and NSW as a whole stand to gain by:

1. Boosting public transport widely across Sydney, sooner rather than later, which can be done by operating Sydney's entire road system more productively with better bus options, as further explained in this submission; and

2. Shifting growth stimulus more to other NSW cities, including by giving priority to country aviation, road and rail schemes, raised here to clarify longstanding effects of cities policies on and directly related to transport outcomes.

Current cities policies assume higher densities along the main transport corridors will help to solve traffic and other issues in Sydney. However, that still leaves most Sydney residents, who live in less dense areas, highly car dependent.

And high-density dwellers remain largely car dependent too when accessing many destinations across greater Sydney. Clearly, this policy will only work well if good public transport reaches all parts of the metropolis.

For all practical purposes, the better bus concepts explained here (or developments of them) offer solutions; and a decade-long (10-year) objective would be within reach.

Achieving the changes would see an unprecedented turn for the better.

Change processes would need to address related challenges including the uncertainties around Sydney's undisclosed tollway contract conditions, workforce issues, and funding strategies, which would bring some infrastructure priorities and associated evaluation and project selection arrangements into consideration.

The following reference independently supports consideration of better bus approaches:
Why the humble city bus is the key to improving US public transit (theconversation.com)

BOOSTING SYDNEY'S PUBLIC TRANSPORT WIDELY AND QUICKLY

People are open to using public transport more but require better service levels to reduce car dependence. That is a basic, yet largely unfulfilled need, which can be addressed.

Persisting with Sydney-centric mega-infrastructure means other critical needs are secondary by default, as public funding only goes so far. A better bus network approach would enable public funding to go further and be more proportionately allocated.

Generally, bus service upgrades and walking and cycling get less attention, less priority and much less funding than the major infrastructure programs, and the potential for buses to provide whole-of-city road and transport solutions remains largely untapped.

Buses account for less than 1% of all road-vehicle-kilometres travelled in greater Sydney, a telling fact and a game-changing opportunity to trigger a traffic-shrinking effect, save road space, uplift road productivity, lower traffic congestion, and enable many people to leave their cars behind more often.

The Sydney Olympics demonstrated this effect, across greater Sydney.

Albeit short-lived, Sydney got the best out of its existing road and transport infrastructure. Around 5,000 buses were hired from other towns and cities, more than doubling Sydney's bus fleet, widely boosting public transport, and helping to (dramatically) reduce traffic congestion while more people than ever travelled across Sydney during that time.

Many questioned "Please, can this be done all the time?" It wasn't, but the point is any city can permanently replicate the traffic-shrinking effect by design, and upscale public transport capacity, with a better bus network, by comprehensively increasing bus fleets, and then:

- Raising service levels on existing bus routes; and
- Providing high-frequency (10-minute) bus services to all business districts, other activity centres, residential areas, and busy corridors; and
- Overlaying cross-city bus routes (crisscrossing the whole urban area, using the main-road system), with limited-stops, high-frequency, and interconnected services.

All these services would operate on existing roads, with cross-Sydney buses creating an easy-to-understand express bus network and a widely available alternative to using cars so much. It would complement Sydney's rail service network which is largely CBD centric and enable good public transport to reach all areas including lower density suburbs.

For greater Sydney, the cross-Sydney network might comprise up to eight north-south routes and six east-west routes, as hypothesised on pages 6 and 7, improving connectivity within Western Sydney and with the rest of Sydney. Bus service levels would be comparable to rail regarding service frequencies and long hours of operation from early morning to late evening. Some routes might run overnight, e.g., Fridays and Saturdays.

New bus-stops and bus-stopping bays can be built off-lane where practical, to keep through-traffic flowing past the bus-stops.

The traffic-shrinking effect would mitigate the need for some of the major road and transport infrastructure listed as future works, while the bus sector, including bus manufacturing, operations, and maintenance, would be invigorated. New or expanded bus depots would be required. New buses powered by net-zero fuels would contribute to making the road system environmentally sustainable, as would more walking and cycling.

All this is doable and is a positive way to achieve sustainability, whereas business-as-usual projects favouring new infrastructure over road productivity, aggravate project backlogs and fail over and over to reverse persistently rising traffic congestion, because the main effect of the new infrastructure is to stimulate Sydney's growth.

Again, once the focus is about optimising road productivity (i.e., getting the most out of the road system first and in choosing surer ways of easing traffic congestion in the foreseeable future), then major infrastructure options become less imperative.

Sydney could turn its unenviable position on traffic around, and take its Olympic transport success one step further, into the realm of a more liveable city, all the time.

CITIES AND GROWTH – GLOBALLY, NATIONALLY AND IN NSW

Globally, as reported by the Organisation for Economic Co-operation and Development, large cities with 1.5 million or more inhabitants typically generate proportionally more economic output (Gross Domestic Product per person) than their nations as a whole.

Yet OECD cautions that when cities grow to megacity proportions, size threatens their economic advantage. Usually, bigger means richer until a certain threshold, suggested by OECD at around a population of 7 million.

Traffic congestion is identified as one of the principal negative consequences.

The World Economic Forum advises it is up to cities to mitigate their negative effects, indicating (among other things) that governing authorities need to solve chronic problems like congestion and the unmitigated growth of very large cities.

By international comparison, Australia is highly urbanised (urban population as a proportion of total population). We also reside proportionally much more in large (1.5 million or more) than in medium (0.5-1.5 million) or small (0.1-0.5 million) sized cities, by comparisons across cities in the U.S., the U.K., Germany, Switzerland and in most other nations.

Our largest cities, the greater urban areas of Sydney, Melbourne and Brisbane, are on course to become megacities unless their growth rates are mitigated.

Of all the travel by people within Australia (in person-kilometres travelled, pre-pandemic, excluding freight transport), around 75% was by car, 14% by airline, 5% bus, 4% train and 2% other modes, including walk, cycle, tram, light rail, and ferry.

Other than Sydney, all NSW cities are small by international comparison. And in Sydney, massive infrastructure projects continue to be rolled out, including motorways and railways, a second international airport (Western Sydney Airport) and light-rail lines.

Public transport has dominated in and around Sydney's CBD. Yet for travel throughout Sydney (in person-kilometres), roughly 80% has been by car, 15% public transport, and 5% other modes, including walk and cycle.

Across smaller cities, the car share well exceeds 80%.

With the pandemic came higher than normal car share and lower public transport share. Working from home, online shopping and other factors have altered travel patterns and raised more questions about the prevailing capital-city centric focus.

Through country NSW, the Hume Highway (Sydney-Melbourne) and Pacific Highway (Sydney-Brisbane) are substantially upgraded after many decades of staged reconstruction.

Other long-term road upgrading endeavours, including the Great Western Highway (Sydney-Bathurst) and the Princes Highway (Sydney-NSW far south coast) are under way.

So too is the inland rail line, to create a new rail-freight corridor serving South-Eastern Australia (Melbourne-Brisbane via Parkes). Construction is progressing, despite difficulties including massive cost blowouts. However, the development of higher speed rail options for the four main rail lines out of Sydney (which encounter mountainous terrain and outdated track alignments), remains uncertain due to the enormous funding commitments required.

Twenty-two NSW towns and cities have daily air transport links to Sydney, with two of them (Ballina and Coffs Harbour) having domestic passenger jet services to Sydney. Some also have interstate flights (in an evolving market), with Albury-Sunshine Coast standing out as a highly successful new domestic jet service.

As a rule, lower air fares are available on the domestic jet services and, prospectively, new jet services may offer a relatively expedient and affordable means of helping to stimulate greater connectivity and growth for more NSW regional cities (recognising that renewing major roads and railways across the State will take much longer).

HYPOTHESISED NEW CROSS-SYDNEY BUS NETWORK, NORTH-SOUTH ROUTES:

- ***WINDSOR – CAMPBELLTOWN (VIA WESTERN SYDNEY AIRPORT):*** via Macquarie St [Windsor], The Northern Rd [Cranebrook-Penrith-Luddenham-Western Sydney Airport public transport interchange-Narellan-Campbelltown].

- ***RICHMOND – PICTON (VIA EASTERN CREEK):*** via Blacktown Rd [Richmond], Richmond Rd [Bligh Park-Dean Park], Rooty Hill Rd N, Woodstock Av, Westlink M7 [Rooty Hill], Great Western Hwy, Wallgrove Rd, The Horsley Dr, Cowpasture Rd [Eastern Creek-West Hoxton], Camden Valley Way, Narellan Rd, Camden Bypass, Remembrance Driveway [Hoxton Park-Picton].

- ***NORTH RICHMOND – APPIN (VIA WENTWORTHVILLE):*** via Kurrajong Rd, Windsor Rd, Old Windsor Rd [Richmond-Windsor-Rouse Hill-Bella Vista], Cumberland Hwy [Toongabbie-Wentworthville-Fairfield-Cabramatta], Hume Hwy [Liverpool-Casula-The Cross Roads], Campbelltown Rd [Denham Court-Leumeah-Campbelltown], Appin Rd [Bradbury-Appin].

- ***GALSTON – UWS BANKSTOWN CAMPUS (VIA GRANVILLE):*** via Galston Rd, Old Northern Rd [Galston, Round Corner, Castle Hill], Windsor Rd [Northmead], James Ruse Dr [Rosehill], Parramatta Rd, Woodville Rd [Granville], Henry Lawson Dr [Lansdowne-Milperra], Bullecourt Av [UWS].

- ***BEROWRA – HEATHCOTE (VIA SILVERWATER):*** via Pacific Hwy, Pennant Hills Rd (Cumberland Hwy), Marsden Rd, Stewart St, Silverwater Rd, St Hillers Rd, Olympic Dr, Joseph St, Rookwood Rd, Stacey St, Fairford Rd, Davies Rd, Alfords Pt Rd, New Illawarra Rd, Heathcote Rd, Princes Hwy.

- ***MONA VALE – KURNELL (VIA RHODES):*** via Barrenjoey Rd, Mona Vale Rd, Ryde Rd, Lane Cove Rd, Concord Rd, Homebush Bay Dr, Centenary Rd, Roberts Rd, Wiley Av, King Georges Rd, Princes Hwy, Port Hacking Rd, The Boulevarde, Captain Cook Drive.

- ***DEE WHY – BRIGHTON-LE-SANDS (VIA DRUMMOYNE):*** via Pittwater Rd, Warringah Rd, Babbage Rd, Boundary St, Pacific Hwy, Epping Rd, Centennial Rd, Burns Bay Rd, Victoria Rd [Drummoyne], Lyons Rd, Great Northern Rd, Parramatta Rd, Frederick St [Ashfield], Milton St, Brighton Av, Georges River Rd, Bexley Rd, Harrow Rd, Frederick St [Rockdale], Seven Ways, Bay St.

- ***MONA VALE – SYDNEY CBD:*** This is the existing B-Line Bus [Mona Vale-Sydney CBD], which establishes a model for creating other cross-Sydney bus routes, noting that the Council for the City of Sydney (in its Draft Access Strategy and Access Plan, June 2023), advocates for extending the B-Line services out of the City, to improve cross-regional connectivity and reduce road safety risk, around having buses terminating, turning and manoeuvring in the city centre.

HYPOTHESISED NEW CROSS-SYDNEY BUS NETWORK, EAST-WEST ROUTES:

- ***NORTH SYDNEY – CRANEBROOK VIA BAULKHAM HILLS:*** via Pacific Hwy [North Sydney-Lane Cove], Epping Rd [Macquarie Park-Epping], Beecroft Rd, Carlingford Rd, Ray Rd, Pennant Parade, North Rocks Rd, Barclay Rd, Renown Rd, Park Rd, Cook St, Windsor Rd [North Rocks-Baulkham Hills], Seven Hills Rd, Solander Rd, Botany Boulevarde, Vardys Rd [Kings Park], Quakers Rd, Breakfast Rd, Richmond Rd [Woodcroft-Dean Park], Rooty Hill Rd, Luxford Rd, Palmyra Av [Bidwell-Willmot], South Creek Rd, Eighth Av, Ninth Av, The Northern Rd, Borrowdale Way, Laycock St [Shanes Park-Cranebrook].

- ***FIVE DOCK – EMU PLAINS:*** via Great North Rd, Queens Rd, Gipps St [Canada Bay], Patterson St, Concord Rd [Strathfield], Great Western Hwy [Homebush-Sydney Olympic Park-Auburn-Parramatta-Eastern Creek-St Marys-Penrith-Emu Plains].

- ***ASHFIELD – HORSLEY PARK:*** via Hume Hwy [Strathfield South-Yagoona-Lansdowne], The Horsley Drive [Carramar-Fairfield Heights-Smithfield-Wetherill Park-Bosley Park].

- ***SYDNEY AIRPORT – WESTERN SYDNEY AIRPORT:*** via Keith Smith Av [Domestic Terminal], Airport Dr [International Terminal], Marsh St, Wickham St, Forest Rd [Bexley], Bexley Rd, Kingsgrove Av, Commercial Rd [Kingsgrove], Vanessa St, Tooranga Terrace [Beverly Hills], King Georges Rd, South Western Motorway M5, Fairford Rd [Padstow], Watson Rd, Sphinx Av, Doyle Rd, Beaconsfield St, Horsley Rd, Bullecourt Av [Revesby-Milperra], Henry Lawson Dr, South Western Motorway M5, Hume Hwy [Casula-Liverpool], Elizabeth Dr [Abbotsbury-Kemps Creek-Western Sydney Airport public transport interchange-Luddenham], The Northern Rd.

- ***SYLVANIA – BRINGELLY:*** via Princes Hwy [Sylvania-Sutherland-Engadine], Heathcote Rd [Wattle Grove], South Western Motorway M5, Hume Hwy [Casula-The Cross roads], Camden Valley Way [Horningsea Park], Bringelly Rd [Rossmore], The Northern Rd [Bringelly].

- ***APPIN – PICTON:*** via Menangle St, Picton Rd, Wilton Rd, Appin Rd.

NOTES ON THIS CROSS-SYDNEY BUS NETWORK:

The network would supplement other more localised bus services that operate and connect business districts, residential areas, other activity centres and busy roads.
Bus stops along the routes would be some 1 to 2 kilometres apart and interconnected with localised bus routes and with other intersecting cross-Sydney routes.
Buses would adhere to the main road system, to provide reasonably direct lines of travel.
For most places away from main roads, interchanging with local buses would be an option.
To facilitate access and interchanging, the network would operate mostly off motorways, however motorway bus routes can shorten travel times for certain non-stop trips and that option would warrant consideration as an enhancement of the network.