Comments on CARDNO report

David Hensher

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1. This report is very descriptive and while it does a good job in describing what is happening ('existing transport conditions' is in the title), it does a somewhat poorer job in offering future directions (except in a very general high level sense) that enhance the liveability of place. Ther Table 5-1 is clearly the important aspect and that is what we need to comment on. It does appear to be a wish list in part of ideals but how to translate into actionable outcomes is the big challenge. My question is – what do we do with this report? I assume we should comment on which aspects of Table 5-1 we like and should promote?
2. The report seems to be the classic marginal adjustment from what we now have (with the possible exception of promoting greater walking and bike activity) rather than any strategic vision of what we could have and how do we get there. If we are not careful we will get more of the same (with marginal improvements in some domains) plus developer monopoly rents from land side developments around key public transport hubs. What is the plan to ensure developers contribute to the value uplift proposition (i.e., value capture)?
3. An area where I see limited discussion is what we might do with the road network to develop more public transport access on a door to door basis, since building a metro is a corridor-specific initiative that does not ensure a system wide coverage. We must not focus only on corridor frequency but on connectivity and visibility system wide. This means that we must review the opportunities to be able to offer almost seamless transfer to high quality first and last mile transport, where the levels of demand justify specific investments. Two of the best instruments we have and which governments (of all persuasions at local and state levels) typically ignore are banning parking on arterial road and committing lanes of the arterial network to bus only services.
4. The report does allude to this where it states (page 69) that 'There is also support for bus lanes along Pacific Highway to provide buses with priority and increase bus throughput' when the Metro commences services. We need to find a way to ensure this happens. I strongly support this but history does not tell a good story. Indeed the risk is we get bus priority in selected parts and rest are a merge with all modes outcome (much like failures all over Sydney).
5. The 'corridor on the road' for public transport is as important as the service on it. In addition this will enable government to maintain road capacity for cars, undertake improved treatment of public transport (bus mainly) and improve the pedestrian environment. We know that local businesses on arterial routes may complain, but the cross-subsidy to their businesses is becoming intolerable – they benefit at a huge cost to society. We have access charges to freight rail networks yet businesses do not incur access charges to their shops!
6. An area where there might be significant opportunity to reduce car use and to move to a more sustainable multi model opportunity is MaaS – Mobility as a Service. The report somewhat ignores this opportunity overlaid by digital disruption (although it says in Table 5-1 that 'More car share facilities will help to reduce private vehicle ownerships and is an initiative supported by the three Councils.') This is an area that TfNSW and the government more broadly is very interested in and supportive to engage in opportunities that move the bar with the aid of technological change[1].

[1] The growing interest in smart cities and the role of digital-based technology in driving new agendas for how our cities will perform in the near and far future has opened up commentary on what this might mean for curbing road traffic congestion. Will, for example, autonomous vehicles (at levels 3 and 4 in particular) contribute to reducing

7. What is MaaS? It is a combination of public and private transport services within a given regional environment that provides holistic, optimal and people centred travel options, to enable end-to- end journeys paid for by the user as a single charge, and which aims to achieve key public equity objectives.
8. MaaS is well suited to the lower north shore because of the availability of most modes of transport (bus, train, Uber, taxi, car next door, Go get etc. and hopefully e-bike in the near future), as well as the demonstrated willingness to use the full mix by many residents (the only other area with a similar potential multimodal profile is the inner west). MaaS trials will be undertaken by TfNSW and others (including my group – ITLS) in 2019 to see what market potential there is.
9. MaaS is not new as an idea and construct:
    a. Uni modal offerings existed for a long time
        a. Dial a ride
        b. Taxis
    b. It must be multi-modal to recognise diversity of needs and delivery capability mindful also of societal goals
    c. We expect public transport to be at the centre, especially in high density settings like the lower north shore
    d. It offers an integrated pricing scheme across all (or many) modes (one stop payment)
    e. It is very adaptable to matching the needs of actual and potential users (through flexible packaging and pricing)
    f. It delivers greater choice than we have at present in an almost seamless way with ease of participating
    g. It opens up the real possibility of a shift to the sharing economy where asset ownership (i.e., the car) is increasingly not necessary, provided in guarantees access to preferred modes when required.
10. The Metro is often misunderstood. Unlike the existing rail network with trains that have lots of seats, a Metro will have far fewer seats and lots of standing space. There will be three doors per side per carriage and no internal doors between the carriages. In a 6-car configuration the trains will sit **378** people, with a total capacity of **1,100**. Seating arrangements on the Alstom trains will be longitudinal, in accordance with the style of most other metro trains. So what does this mean for getting a seat for lower north shore residents? My worry is that they will complain and prefer to use the existing trains or even buses, just like the experience in the outer suburbs of Singapore. Time will tell.
11. The strong almost excessive focus on pedestrians and cyclists is to be complimented, but I am not sure how this relates to the needs of through traffic? I would like to see more commentary on what is going to be done about that. In particular, I am not convinced that the Metro will assist significantly in reducing car use. Some will switch from existing rail and some from car but with car dominating. I doubt it will do any more than but a few years of growth. The absence of a road pricing reform agenda is disturbing.

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if not eliminating or better manage traffic congestion, and when might this occur? How might a move to a sharing culture with less private car ownership affect levels of congestion even without autonomous cars? What will all this mean for future investment in infrastructure, especially major highways, and might the design of such roads change in recognition of the safety outcomes associated with computer-controlled cars that can travel in platoons? Will lanes be narrower, with possibly autonomous intersection management? Under the sharing model, car-based movements might start to take on the feel of conventional bus public transport, albeit with smaller vehicles, offering improved public transport-like services that can stretch throughout suburbia under a point to point initiative, or as a first and last mile (almost seamless) connection with conventional line-haul high capacity public transport. These speculative assertions are eroding daily as we come to grips with the real possibilities of technology-enhanced mobility opportunities, driverless or otherwise. What this will mean for the changing landscape of service provision under the adage 'the customer comes first', and the implications for the governance of cities, are rapidly becoming priority agenda items.

12. There are many specific treatments in identified locations that seem, on balance, of value in improving the local amenity value but what is missing is a way forward to tame the car. My experience suggests that to make public transport more attractive you have to make the car less attractive. The only instrument that we have that is not blunt is, in my view, road pricing reform with some of the revenue hypothecated back to supporting the provision of non-car based travel. Furthermore we must be careful in the new digitally disruptive era not to end up with a revised car-based solution such as is the desire of Uber etc. which, while it can deliver point to point mobility services, could be catastrophic for congestion if public transport patronage declines and the sharing culture fails to take hold.

[Additional comments by ITLS PhD student]

Existing Transport Conditions Summary: St Leonards and Crows Nest Station Precinct Transport Study

Opportunities

Possibility of virtual (out of system) interchange between St Leonards and Crows Nest stations (as well as between North Sydney and Victoria Cross stations)—less than 500m walk distance

I have not seen modelling to show how existing St Leonards/North Sydney station footfall might change with Sydney Metro Stage 2

Need to improve passenger amenity on pedestrian network between these stations.

Consider station exit location and connections with existing and future developments (office blocks, shopping centres, residential towers, etc.). Should be potential for future exit on southside of Pacific Hwy at Crows Nest station.

Future use of platforms 1 and 4 at St Leonards station—previously earmarked for terminating trains from original Parramatta-Chatswood rail link.

Lots of RailCorp land north of Chandos St on east side of station platforms with development potential.

Need for better bus priority along stretch of Pacific Hwy through queue jumps and bus lanes. Opportunity to downgrade highway (since quite high average speed at peak of 40 kph) from *thoroughfare to place function*. Redesignation could focus on traffic calming, diet lanes (reduced lanes and narrower lanes—see Epping Rd above Lane Cove Tunnel example) and opportunity to allocate road space for emerging modes. These include a dedicated carriageway for *medium speed modes* including bicycles, e-bikes and e-scooters (i.e., Lime) averaging 20-30 kph. Presently they are placed with slow pedestrians or high speed traffic causing conflicts.

Better bus interchange facilities required at St Leonards, including consideration for microtransit/rideshare/on demand buses. There is presently limited pick up/drop of space with no ability to turn around. There is also the need to accommodate one way and roaming carshare (car2go-type) in the future.

Constraints

Slow T1 railway alignment of 40 kph on track between St Leonards and North Sydney. Huge travel time differential between Sydney Trains and Sydney Metro between Chatswood and CBD. Again, how might this impact demand and passenger behaviour (taking into account preferences for seating and one-seat journeys)?

No bus services at Artarmon station and limited coverage throughout industrial precinct and suburb (reliance on council-provided Artarmon Loop).

Access to M1 is via Reserve Rd but main distributor in the area is Hampden Rd—there is reasonable access via Frederick St in the south but the north is less clear via Jersey Rd or Barton Rd which are not designed to handle such a large throughput. Better signage and more formalised routes will take some load for traffic avoiding Pacific Hwy but with local consequences.

Errata

"Daily vehicle volumes from the traffic surveys completed on 17th November 2016 at 18 locations throughout the precinct confirm that the Pacific Highway is the main thoroughfare for drivers with over 20,000 vehicles using certain stretches of this road in both directions. There is also a high level of vehicles on Falcon Street, with approximately 10,000 vehicles in both directions. This is primarily due to Falcon Street providing direct access to the Warringah Freeway in both directions." (pg. 60)

Erroneous since Falcon St ramps to/from north are geared towards Northern Beaches travel. It is also tolled. Southbound travel from M1 to A8 westbound requires a U turn at Tramway Ln.