

Superficial reading acceptable

Minors there

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In direct indirect p2

Comments on SMW stations 3.5.22

I take this rushed opportunity to comment here mainly on the Parramatta station by 4.5.22

1. Parramatta station and SW links direct - deterrence rail planning- road vehicles favored with SW road upgrades

Covid interrupted a paper I was doing over 2 years ago that I wanted to eventually have published. My paper included rail trip forecasting. In part it was on future related rail capacity vs demand with Sydney Metro West.

Uncertainty about earlier population increase estimates stopped my forecasting of trip demand relating to rail links between the south west and the SMW now being implemented.

The Covid arrangement changes on seating capacity on trains also impacted with train and rail system capacity lowering it and affecting my projections about rail demand capacity relativities even further.

Work from home (WFH) also would and will impact negatively on rail trip generation /demand for the rail components. These could all impact accumulatively and significantly on the future demand capacity relationship projections. This uncertainty was previously not an issue in my partial report draft to late 2019. The report was about 70% complete pre covid based on my data and modelling to then, but with no progress on it in the last 2 and a half years.

I have extracted some key points out of it that indirectly relate to the invitation for SMW comments by 4.5.22. The following captures as best I can in these few paragraphs. I have no time to refresh from my partial draft report and this is based on my recall and understanding of the points presented that can perhaps be revisited later (no time for graphics, sorry). These points relate as much to future considerations of SW links with Parramatta directly, a wider scope than just Sydney Metro West Stage 1 ?

My findings noted a conceptual future link directly between the SW, north of the WSA station and Parramatta to be considered at a future time. Based on current thinking and what is being implemented now there is evidence of a lock in /lock out strategy unfolding. This happens often in the traditional Australian piece meal planning approach to adding new Sydney rail links and sub networks.

It is assumed that no Parramatta link stub is included at the underground WSA station to be directly linked to St Mary's and that any direct Parramatta link would be from a point outside of WSA station about 6 kms north of it apparently (scaled) on the WSA / St Marys link. Label this Noname for simplicity.

Similarly, no link stub toward WSA or Noname is planned for the Metro rail station at Parramatta. These are lock in present strategies that would lock out any future terminal connections of links between WSA and the new Parramatta metro station of the current SMW project.

More positive decisions would have been needed now for any chance of direct links in the future. Call this the (WSA north) Noname – Parramatta link (Noname/P). It is the hypotenuse as it were of what I call the St Mary's triangle the other 2 sides being Noname /StMarys and St Marys/T1/P.

Noname at say 6 kms North of the airport station would involve another interchange for the Airport Patrons (AP/P) including baggage. If going to the CBD another at Parramatta. So, 2 Baggage interchanges (I/Cs) CBD via Noname. In using the other St Mary's triangle links there would be 1 bag IC at most to Parramatta and only the same single IC for CBD linked trips. One IC time is saved via the St Marys triangle, but there is likely greater travel and station stop time.

If the Noname/St Marys link with T1 Parramatta was made seamless there would be no baggage IC WSA to Parramatta albeit a more circuitous route with a significantly longer trip time compared to a direct Parramatta link via an IC at **Noname**.

However, the T1 line would require an upgrade and extra metro line for a seamless IC and is not assumed in a stage 1 SMW. The AP/P passengers at St Marys would therefore experience 1 baggage IC to Parramatta or the CBD whilst for the Parramatta/ Noname link it would also be 1 for Parramatta but then 2 for the CBD trip.

However direct links for AP/P and non AP/P will be a significant gain for users of this link to Parramatta only and even the Non-AP/P which would be the majority of users in the longer term. There still would be a small time savings vs going via the St Marys triangle.

I would see a Parramatta station from 'Noname' under the installed existing bus interchange with a 200 m walk link with the new proposed SMW metro station and to the other existing T1/T2 line stations there.

I would see an overland rail between Noname to say 10 kms south west of Parramatta and tunnel from there to the southside of the Parramatta station.

This indirect link of St Marys triangle less the hypotenuse would be a rail mode deterrent toward road modes of the private MV, hired vehicles, buses and mini buses. These will again dominate for the SW and NW where car ownership and affinity for the private vehicle has been meaningfully high in the past. Major upgrades of the road system connecting the SW area and WSA along this arc to the west and NW have been implemented now in any case.

I see the MW and SW links to St Marys on each side of the western line T1 as similar partly in principle to the 'orbital' transport link M7, but not with anything like this Aerotropolis of course. I see it as a rail arc or circumferential link not as a direct radial with the airport and major SW centres. Parramatta/Noname represents essentially a radial link with Parramatta and the CBD even though it's not directly linked to the Western Sydney airport station at Badgerys Creek.

There are many other patronage categories for this rail link in the future so that the airport demand is only a minor part of the total rail demand for a direct link of WSA Noname Parramatta and CBD. Non - airport rail patrons don't mind 2 interchanges as it does not include major baggage transfers with time savings the main attractor. Even with 1 extra interchange there is a time savings with the CBD via Noname /Parramatta.

The Noname link would also connect Noname with areas, Permulway, Prospect, Smithfield and nearby areas that have no mass transit rail links with Parramatta and T1 line west of it.

Car parks near such stations would also benefit a mix of SW car usage with bi modal rail links. Bus services could also complement these new stations with the south west.

If the Noname/Parramatta link was implemented it would be a passenger shuttle and a time saving link to Parr5amatta then CBD and many other linked suburbs more efficiently than the 2 legs of the St Marys triangle.

This summarises my comments on the Parramatta SMW station. There appears little provision for any positive thinking for a direct link by Parramatta with the SW under these continuing traditional strategies.

This is less than perfect longer term rail planning for Sydney.

Predicting further rail patronage for new rail has long been a 'fear' process with rail always beckoning the question, **will there be sufficient patronage to justify the new rail project expenditure ?**

Using simple gravity model principles, a demand of many rail trip categories relates to the WSA Aerotropolis SW region and Parramatta as well as numerous other linked areas and suburbs including along T1 east and T2 south of Parramatta. This is not one of the rail planning 'fear' cases in my opinion.

It's one of positive future rail to areas that have sparse mass rail transit in a world class city. With SW population increases and extensions to the airport rail link southward presumably, it's time to think that way.

Planning should not only be just about the SMW and the WSA but the significant other demand for this direct link with Parramatta and the centres of the South West.

Providing direct link stubs Parramatta to WSA should not have been forgone based on assumed SW NW rail patronages. These other rail projects can qualify for the fear category much more than the Noname /Parramatta link. In any case, provisions should have been made for both.

It seems to me, that the Noname/ Parramatta direct link will never be built.

2. Five dock station - Brief Comment only

New Rail patronage with CBD here competes with the bus network to an extent.

3. Pyrmont and Bays – Brief Comments only

I had wondered if Pyrmont was close enough for the Bays rail trip catchment. Also, Bays itself will take some time to develop its own significant rail patronage based on suggested development rates.

My paper demand/capacity analysis considered that Bays would be a good choice of a skip stop in the short term at least for the Parramatta to CBD express services of the new metro service.

If I was to leave out 1 station it would have been Bays. Fivedock might be the second skip stop choice. My analysis about demand and capacity for a faster Sydney Metro West trip times and trip growth indicated about 4 intermediate stations twixt Parramatta and the CBD for best long term trip demand/system capacity and minimum times. I agree from other criteria 4 would not be enough. In practical terms, I may have recommended 5 or 1 less than now with Bays left out and a faster metro train of 160 kph nominally. We will have 6 of these intermediate stations and my now dormant analysis also addressed that number of intermediate stops majorly using rail transport criteria. These criteria included train types and speeds, rail demand and train/system capacity = number of trains per hour, minimum headways for express trains and skip stop services combinations amongst others.

Thank you for your attention.