

**Submission
No 27**

**INQUIRY INTO CURRENT AND FUTURE PUBLIC
TRANSPORT NEEDS IN WESTERN SYDNEY**

Organisation: Building Beautifully

Date Received: 18 September 2023



BUILDING BEAUTIFULLY

My name is Sharath Mahendran, and I run the YouTube channel Building Beautifully. I create videos that primarily focus upon the transport and planning needs of Sydney. This includes a video critiquing the Sydney Metro Southwest (which received 107,000 views), a 24-minute in-depth analysis of toll roads in Sydney (which received 194,000 views) and a video about the detrimental urban sprawl of suburbs such as Marsden Park (which received 108,000 views).

Over the course of just over 1.5 years, my channel has attained nearly 32,000 subscribers, and received a total of 2.9 million total views across all of my videos. I have been featured multiple times in the media, most notably with a profile piece in the Sydney Morning Herald (04/08/2023) entitled "[Meet the 21-year-old YouTuber taking on Sydney's bad planning](#)".

I have just laid out these statistics solely to emphasise just how much Sydneysiders care about the transport and planning in their city. The sheer number of views my videos attain do nothing but indicate a sizeable interest from residents in creating a better, more accessible and well-planned Sydney. My channel has become a medium through which residents can watch their frustrations over this city aired through videos. In other words, Sydneysiders are sick and tired of their city being left behind, and they would like to see our leaders take action.

In this submission, I will seek to demonstrate why I believe Western Sydney's public transport needs have been left behind the rest of Sydney for decades, and why I genuinely feel that your panel has the unique and powerful opportunity to positively impact our city in the years to come. As a western Sydneysider myself, I have seen how the public transport of our region is severely lacking compared to the rest of this city, and I know what needs to be desperately done to repair this.

In this submission, I will set out the following recommendations to your inquiry:

- 1) Prioritise business cases for a series of extensions to the Sydney Metro:
 - a) Extension from Tallawong to St Marys via Schofields
 - b) Extension from Aerotropolis to Macarthur
 - c) Extension from Westmead to Aerotropolis via Wetherill Park
 - d) Extension from Bankstown to Aerotropolis via Liverpool
 - e) Construct a metro link between Norwest and Kogarah via Parramatta
- 2) Conduct a study to identify further key transit corridors in Western Sydney that the government must prioritise reserving
 - a) Potentially use the Castlereagh Corridor to build a heavy rail line instead of a motorway
 - b) Potentially use the Outer Sydney Orbital corridor as a passenger railway
- 3) Work to increase the quality of bus services, which includes
 - a) Increasing bus frequencies to and from railway stations
 - b) Optimising routes, making them shorter and more direct
 - c) Adding more routes to serve more residents

- d) Increasing bus reliability and decreasing bus cancellations
- e) Identifying, reserving and constructing bus rapid transit (BRT) corridors
- 4) Prioritise densifying around current and future railway stations, in order to accommodate the residents who will be moving to Western Sydney in the years to come
- 5) Commence planning for liveable TOD developments in Blacktown, Penrith, Liverpool, Aerotropolis and more, to create Chatswood-like CBDs that help to decentralise businesses outside of Sydney CBD and encourage public transport usage

I sincerely thank you for making an effort to engage with the community by accepting submissions on this inquiry, and I hope that my suggestions can help inform the panel in helping Western Sydney become the region it so desperately deserves to be.

1. Construct more rail in Western Sydney

The terms of reference outline that your inquiry seeks to identify “the availability and accessibility of public transport services across Western Sydney”. There is no better way to convey this than by demonstrating how few heavy rail stations exist west of Parramatta. There are only 57 train and metro stations that exist west of Parramatta.

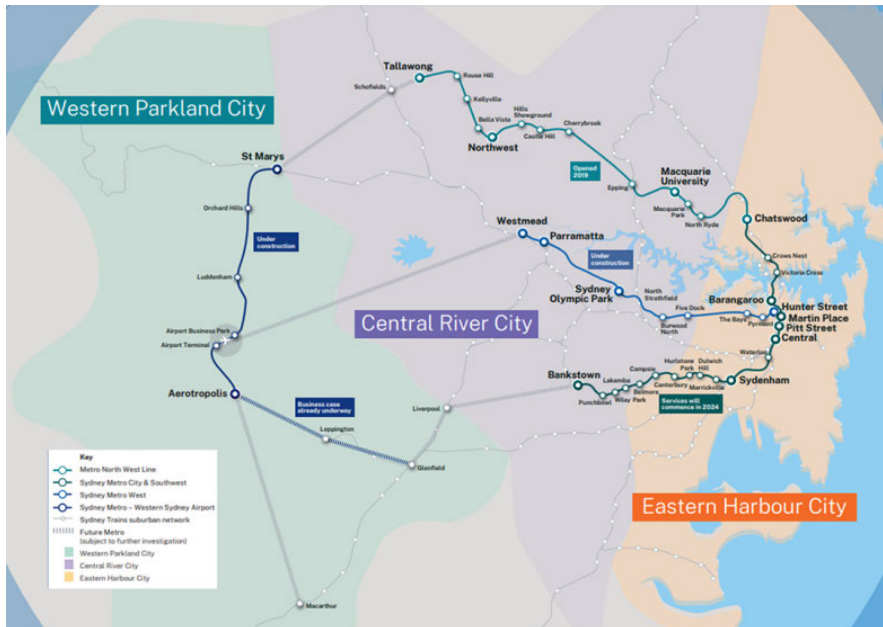


This may sound substantial, but considering that Sydney has 170 stations, this amounts to only 33% of Sydney’s stations existing in what I would personally define to be western Sydney, that is, west of Parramatta. This is despite Parramatta being the geographic centre of Sydney; one would expect 50% of stations to be located west of Parramatta. Once you consider that most of the land around stations on the Richmond Line cannot be developed as they lie on floodplains, the number shrinks even further.

Granted, most of Sydney lives east of Parramatta, but western Sydney’s population is already over 2.5 million (that is, more than 40% of Sydney’s population), and the burden of accommodating Sydney’s growing population primarily rests upon western Sydney’s shoulders.

All this is to say that western Sydney needs more heavy rail and metro stations, to counterbalance just how few stations there are in the growing region. This is being remedied with the under-construction Sydney Metro Western Sydney Airport line, but this will add a measly 5 new stations to Western Sydney. There are currently no concrete plans to build any new stations beyond these 5 stations.

In the lead-up to the NSW State Election of 2023, the Liberal Government indicated their intentions to fund business cases for 4 new metro lines:



- Extension from Tallawong to St Marys via Schofields
- Extension from Aerotropolis to Macarthur
- Extension from Westmead to Airport Terminal
- Extension from Bankstown to Aerotropolis via Liverpool

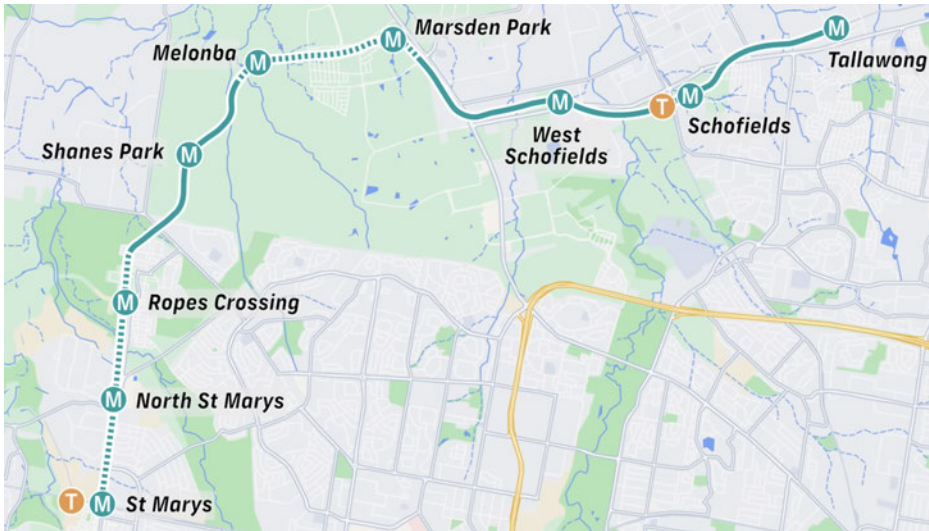
However, the Labor Government indicated that they would only fund business case studies for two of these four lines; Tallawong to St Marys, and Aerotropolis to Macarthur. As of writing this submission it is unknown whether they will fulfil this promise. I am cautiously hoping money is set aside to fund these business cases in the upcoming October state budget.

Without these four new metro lines, western Sydney risks continuing to be further left behind in comparison to its eastern counterparts. I strongly implore this inquiry to heavily recommend to the state Labor government that they fund these case studies, as each of these lines fulfils their own unique purposes that will address the transportation needs of western Sydney.

Below, I have included my own proposals for routes for these metro lines. These are from my video entitled "[Sydney's Metro Future: A Comprehensive Proposal](#)".

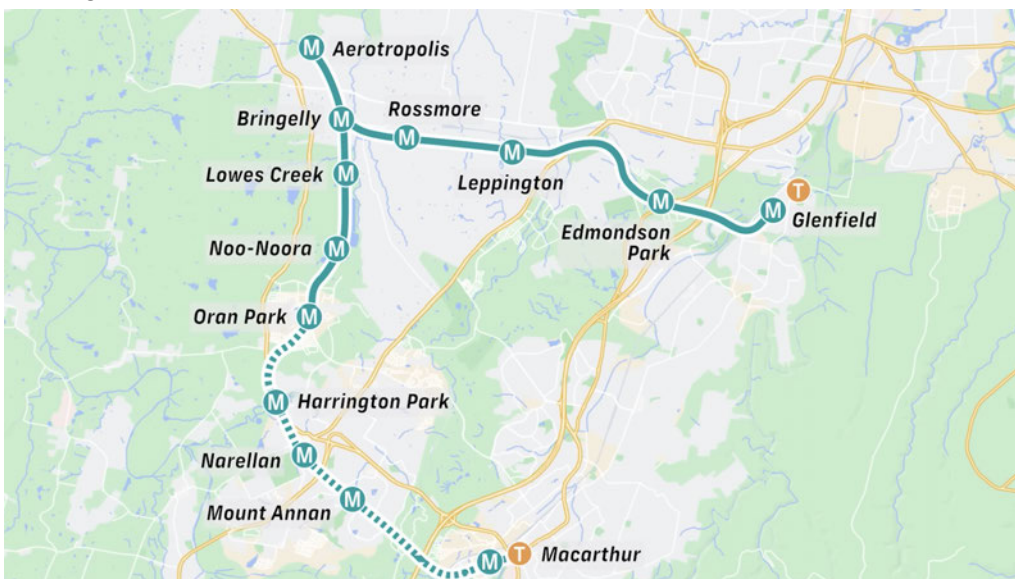
Tallawong to St Marys:

This line will finally close a gap in the metro system that exists between Tallawong and Schofields, which has kept commuters along the Richmond Line from truly benefiting from the metro. Depending on the route chosen, it could also allow for urban revitalisation in the areas around St Marys, including Ropes Crossing, Wilmot, Tregear and St Marys itself. Finally, it will allow Marsden Park, one of the fastest growing urban sprawl suburbs in Sydney, to have a heavy rail station.



Aerotropolis to Macarthur:

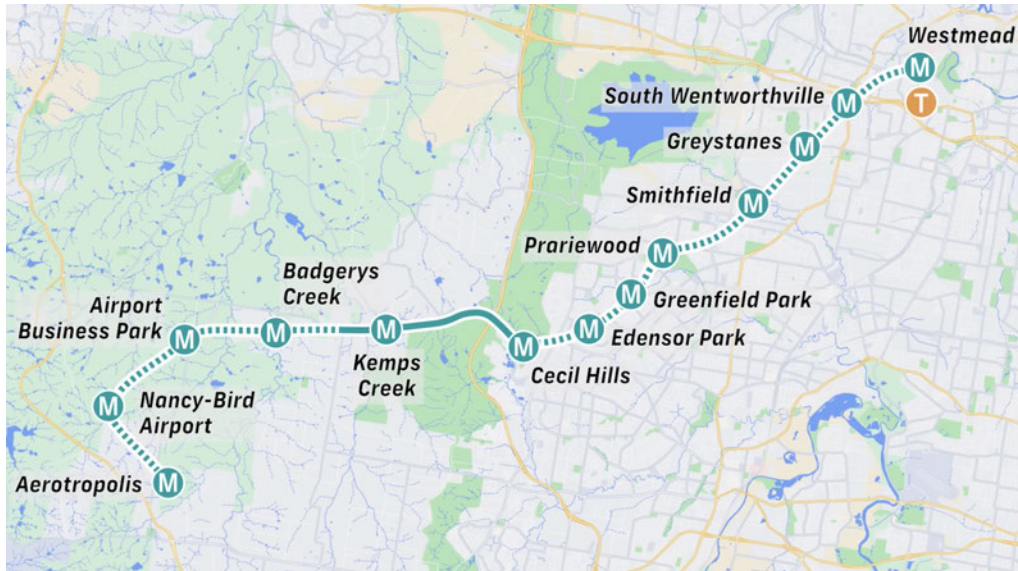
With Campbelltown being one of the closest town centres to the new airport, it desperately needs a direct connection to it. A metro station will also allow Campbelltown's urban renewal and put it closer to jobs in western Sydney, as opposed to jobs located over an hour away via the T8 in Sydney CBD. Most importantly, a metro station will finally give heavy rail access to the growth areas around Oran Park, which is once again an urban sprawl suburb. Below, an extension from Aerotropolis to Glenfield is included; the business case for this is already underway. However, on that note, this inquiry should strongly recommend that the Labor government pursue its construction once the business case is complete.



Westmead to Aerotropolis:

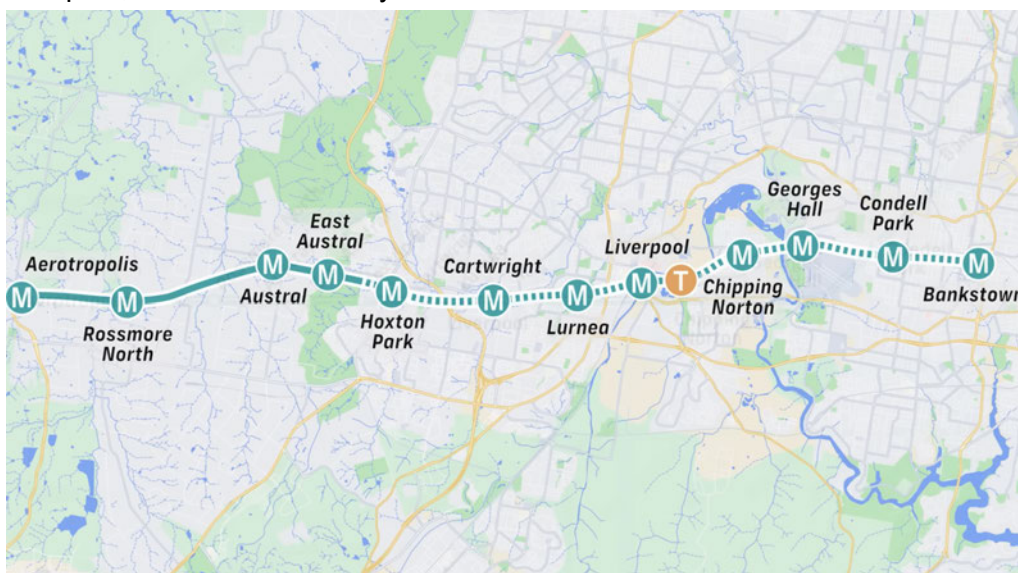
It will take a commuter from the new Nancy Bird-Walton Airport 15 minutes to get to St Marys via the WSA Metro, before transferring onto a T1 service and taking an additional 40 minutes to get to Sydney CBD. If the Sydney Metro West is extended to Aerotropolis, this could be cut to just 40 minutes requiring no transfers. More importantly, this would provide a fast link between the new Bradfield CBD, Parramatta CBD and Sydney CBD. This would be an unprecedented rail link, allowing commuters to easily get between the three most important cities in the Greater Sydney Region via one railway.

But I feel that, crucially, this railway would allow stations to be built in the Fairfield LGA at locations such as Smithfield, Prairiewood and Edensor Park. Despite being home to 200,000 residents, the Fairfield LGA currently only has 6 railway stations. Building a metro to the airport via the council will massively improve its transport accessibility to key employment centres in Parramatta and the new Bradfield city.



Bankstown to Aerotropolis:

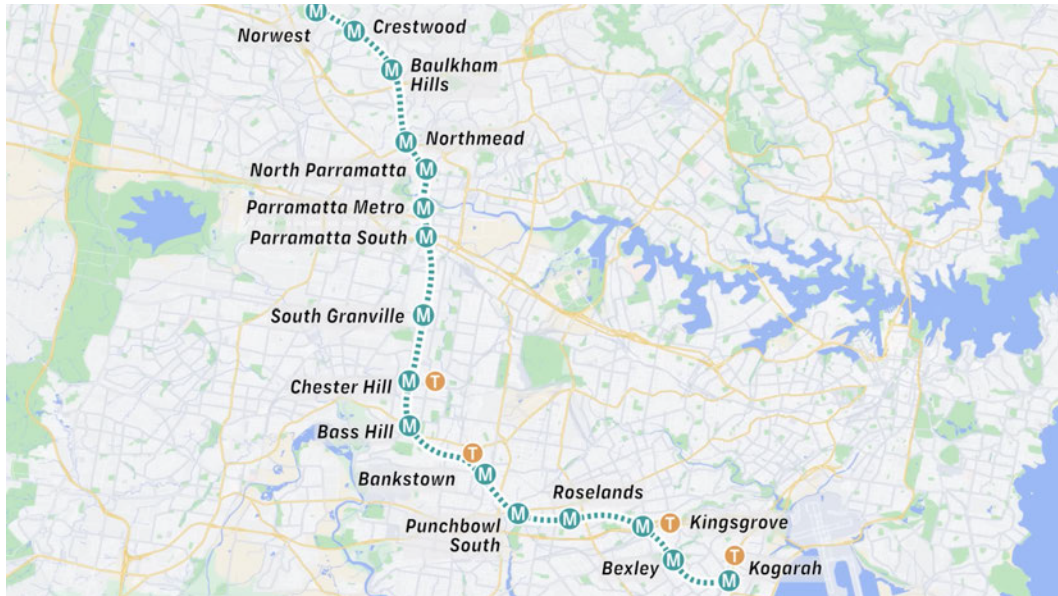
Currently, the Sydney Metro Southwest project is planned to end at Bankstown. This means that anyone west of Bankstown will not get to receive its benefits to the extent that the east of Sydney gets to. I believe the metro should be extended easterly to the new airport via Liverpool. This will not only make travel between Liverpool and Bankstown substantially faster, but it will also allow some of the poorly-serviced regions of the Liverpool LGA to benefit from public transport access, and improve accessibility to the new airport from Liverpool, Bankstown and beyond.



Norwest to Kogarah:

This is simply a metro line that I believe is not discussed enough, but I believe desperately needs to be built. This line will link almost all train lines in Sydney - the Sydney Metro at Norwest, the T1, T2 and T5 at Parramatta, the T3 at Chester Hill, the Sydney Metro again at

Bankstown, the T8 at Kingsgrove and the T4 at Kogarah. This will dramatically make it easier to get around Sydney. One might wonder how this line would help Western Sydney, but it's actually quite obvious; it will make it much easier for Sydneysiders to get to Parramatta and hence to the rest of Western Sydney. Circumferential intersuburban journeys around Sydney are difficult currently, forcing commuters to go all the way into Sydney CBD and back out again to make suburban trips. This proposal will fix that, allowing a commuter from Kogarah to get to Parramatta more directly, rather than travelling all the way into the city and then all the way out again.

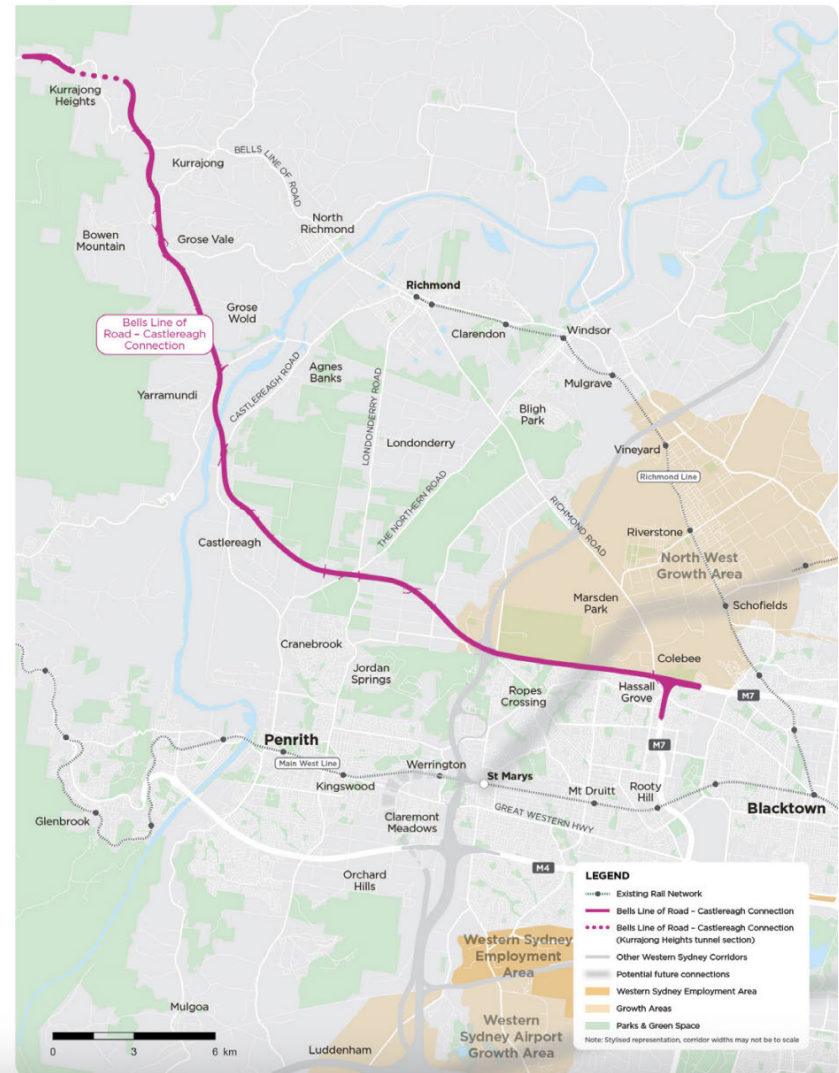


2. Conduct investigations to identify more rail corridors

What I have suggested above are merely proposals that the government has already made, although the Norwest to Kogarah line has been much more silently proposed than the others. However, I believe that investigations need to be made urgently to identify more rail corridors that should be preserved and considered. Western Sydney is a very big region, after all, and I have no doubt that there would be many other regions that could benefit from rail.

One example of this is the [Castlereagh Corridor](#), which is a reserved corridor for a future motorway. Below is a rough outline of its recommended route as seen in the linked document:

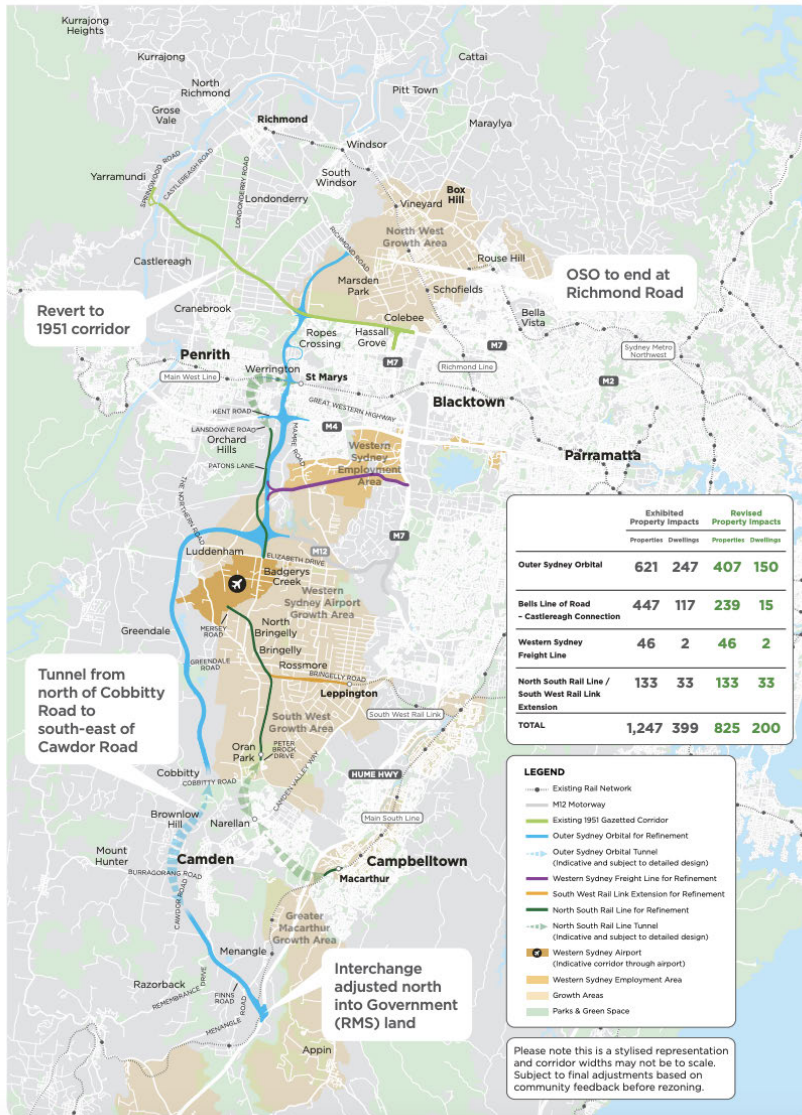
Map of the recommended corridor



I believe that instead of building a motorway along this corridor, a railway should be built instead. Granted, the Hawkesbury-Nepean plain that this corridor traverses is a renowned flood plain, so this idea may not actually be feasible, but it should certainly be investigated regardless.

Consideration should also be given to the [Outer Sydney Orbital](#), highlighted in blue in the below TfNSW map.

Future Western Sydney Corridors



Currently, this corridor is preserved for a motorway and freight railway. I believe it should also be reserved for a passenger railway, allowing it to service areas such as Camden, Cobbitty, Greendale and Luddenham.

Again, I would emphasise that this may not prove feasible after investigations, especially as substantial segments overlap with the imminent Western Sydney Airport Metro. However, I believe those investigations should at least take place. Rail is such an important part of Sydney's future, and we must invest in its investigations and construction now in order to benefit future generations.

3. Improve the quality of bus services

Buses must not be neglected. I believe that bus frequencies in Sydney, even in Western Sydney, are slowly improving, however they must be improved further. As an example, the [748 from Marsden Park to Rouse Hill Station via Schofields Station](#) runs every 15 minutes in peak hour, which is good to see. Yet it only runs every half an hour during the day, which I personally do not believe is good enough.

748

Marsden Park to Rouse Hill Station via Schofields



Monday to Friday	6	6	6	6	6	6	6	6	6	6
Elara Bvd before Ribbonwood Cr, Melonba	04:58	05:25	05:40	05:55	06:10	06:22	06:34	06:49	07:04	
Richmond Rd after Excelsior Ave, Marsden Park	05:04	05:31	05:46	06:01	06:16	06:30	06:42	06:57	07:12	
Schofields Station	05:14	05:41	05:58	06:13	06:28	06:42	06:54	07:09	07:24	
Tallawong Station	05:23	05:50	06:07	06:22	06:37	06:50	07:02	07:17	07:32	
Rouse Hill Station	05:30	05:57	06:14	06:29	06:44	06:58	07:10	07:25	07:40	

Monday to Friday	6	6	6	6	6	6	6	6	6	6
Elara Bvd before Ribbonwood Cr, Melonba	07:19	07:34	07:54	08:10	08:40	09:10	09:40	10:10	10:42	
Richmond Rd after Excelsior Ave, Marsden Park	07:27	07:42	08:02	08:18	08:48	09:18	09:48	10:18	10:48	
Schofields Station	07:39	07:54	08:14	08:30	09:00	09:30	10:00	10:30	11:00	
Tallawong Station	-	08:04	-	08:40	09:10	09:40	10:09	10:39	11:08	
Rouse Hill Station	-	08:13	-	08:49	09:19	09:49	10:17	10:47	11:16	

Monday to Friday	6	6	6	6	6	6	6	6	6	6
Elara Bvd before Ribbonwood Cr, Melonba	11:12	11:42	12:12	12:42	13:12	13:42	14:12	14:42	15:12	
Richmond Rd after Excelsior Ave, Marsden Park	11:18	11:48	12:18	12:48	13:18	13:48	14:18	14:49	15:19	
Schofields Station	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:02	15:32	
Tallawong Station	11:38	12:08	12:38	13:08	13:38	14:08	14:38	15:10	15:41	
Rouse Hill Station	11:46	12:16	12:46	13:16	13:46	14:16	14:46	15:18	15:50	

Monday to Friday	6	6	6	6	6	6	6	6	6	6
Elara Bvd before Ribbonwood Cr, Melonba	15:43	16:02	16:17	16:32	16:47	17:02	17:17	17:32	17:47	
Richmond Rd after Excelsior Ave, Marsden Park	15:50	16:09	16:24	16:39	16:54	17:09	17:24	17:39	17:54	
Schofields Station	16:03	16:22	16:37	16:52	17:07	17:22	17:37	17:52	18:07	
Tallawong Station	16:12	16:31	16:46	17:01	17:16	17:31	17:46	18:01	18:16	
Rouse Hill Station	16:21	16:40	16:55	17:10	17:25	17:40	17:55	18:10	18:25	

Monday to Friday	6	6	6	6	6	6	6	6	6	6
Elara Bvd before Ribbonwood Cr, Melonba	18:02	18:17	18:34	18:49	19:04	19:19	19:35	19:50	20:05	
Richmond Rd after Excelsior Ave, Marsden Park	18:09	18:24	18:40	18:55	19:10	19:25	19:41	19:56	20:11	
Schofields Station	18:22	18:37	18:52	19:07	19:22	19:37	19:53	20:08	20:23	
Tallawong Station	18:31	18:46	19:00	19:15	19:30	19:45	20:00	20:15	20:30	
Rouse Hill Station	18:40	18:55	19:09	19:24	19:39	19:54	20:09	20:24	20:39	

Monday to Friday	6	6	6	6
Elara Bvd before Ribbonwood Cr, Melonba	20:35	21:10	21:40	22:10
Richmond Rd after Excelsior Ave, Marsden Park	20:41	21:16	21:46	22:16
Schofields Station	20:53	21:28	21:58	22:28
Tallawong Station	21:00	21:35	22:05	22:35
Rouse Hill Station	21:08	21:43	22:13	22:43

Only running once every half an hour means that commuters will worry they will miss the bus and have to wait an extra half an hour. No one wants to do this, so they will drive instead. However, commuters are likely to be okay with waiting an extra 15 minutes if they miss a bus that arrives every 15 minutes. I know this because the 611 from Macquarie Park to Blacktown, a bus I use frequently, runs every 15 minutes throughout the entire day and even more frequently in the peak, and I am always happy to wait because of its frequencies. If you examine its schedule on Saturdays and public holidays, it's quite a dire state of affairs, as it only runs every half an hour all day.

Saturday										
Elara Bvd before Ribbonwood Cr, Melonba	06:06	06:36	07:06	07:36	08:06	08:36	09:06	09:36	10:06	
Richmond Rd after Excelsior Ave, Marsden Park	06:12	06:42	07:12	07:42	08:12	08:42	09:12	09:42	10:12	
Schofields Station	06:24	06:54	07:24	07:54	08:24	08:54	09:24	09:54	10:24	
Tallawong Station	06:33	07:03	07:33	08:03	08:33	09:03	09:33	10:03	10:33	
Rouse Hill Station	06:42	07:12	07:42	08:12	08:42	09:12	09:42	10:12	10:42	
Saturday										
Elara Bvd before Ribbonwood Cr, Melonba	10:36	11:06	11:36	12:06	12:36	13:06	13:36	14:06	14:36	
Richmond Rd after Excelsior Ave, Marsden Park	10:42	11:12	11:42	12:12	12:42	13:12	13:42	14:12	14:42	
Schofields Station	10:54	11:24	11:54	12:24	12:54	13:24	13:54	14:24	14:54	
Tallawong Station	11:03	11:33	12:03	12:33	13:03	13:33	14:03	14:33	15:03	
Rouse Hill Station	11:12	11:42	12:12	12:42	13:12	13:42	14:12	14:42	15:12	
Saturday										
Elara Bvd before Ribbonwood Cr, Melonba	15:06	15:36	16:06	16:36	17:06	17:36	18:06	18:36	19:06	
Richmond Rd after Excelsior Ave, Marsden Park	15:12	15:42	16:12	16:42	17:12	17:42	18:12	18:42	19:12	
Schofields Station	15:24	15:54	16:24	16:54	17:24	17:54	18:24	18:54	19:24	
Tallawong Station	15:33	16:03	16:33	17:03	17:33	18:03	18:33	19:03	19:33	
Rouse Hill Station	15:42	16:12	16:42	17:12	17:42	18:12	18:42	19:12	19:42	
Saturday										
Elara Bvd before Ribbonwood Cr, Melonba	19:36	20:06	20:36	21:06	21:36	22:06	22:36			
Richmond Rd after Excelsior Ave, Marsden Park	19:42	20:12	20:42	21:12	21:42	22:12	22:42			
Schofields Station	19:54	20:24	20:54	21:24	21:54	22:24	22:54			
Tallawong Station	20:03	20:33	21:03	21:33	22:03	22:33	23:03			
Rouse Hill Station	20:12	20:42	21:12	21:42	22:12	22:42	23:12			
Sunday & Public Holidays										
Elara Bvd before Ribbonwood Cr, Melonba	07:36	08:36	09:06	09:36	10:06	10:36	11:06	11:36	12:06	
Richmond Rd after Excelsior Ave, Marsden Park	07:42	08:42	09:12	09:42	10:12	10:42	11:12	11:42	12:12	
Schofields Station	07:54	08:54	09:24	09:54	10:24	10:54	11:24	11:54	12:24	
Tallawong Station	08:03	09:03	09:33	10:03	10:33	11:03	11:33	12:03	12:33	
Rouse Hill Station	08:12	09:12	09:42	10:12	10:42	11:12	11:42	12:12	12:42	
Sunday & Public Holidays										
Elara Bvd before Ribbonwood Cr, Melonba	12:36	13:06	13:36	14:06	14:36	15:06	15:36	16:06	16:36	
Richmond Rd after Excelsior Ave, Marsden Park	12:42	13:12	13:42	14:12	14:42	15:12	15:42	16:12	16:42	
Schofields Station	12:54	13:24	13:54	14:24	14:54	15:24	15:54	16:24	16:54	
Tallawong Station	13:03	13:33	14:03	14:33	15:03	15:33	16:03	16:33	17:03	
Rouse Hill Station	13:12	13:42	14:12	14:42	15:12	15:42	16:12	16:42	17:12	
Sunday & Public Holidays										
Elara Bvd before Ribbonwood Cr, Melonba	17:06	17:36	18:06	18:36	19:36					
Richmond Rd after Excelsior Ave, Marsden Park	17:12	17:42	18:12	18:42	19:42					
Schofields Station	17:24	17:54	18:24	18:54	19:54					
Tallawong Station	17:33	18:03	18:33	19:03	20:03					
Rouse Hill Station	17:42	18:12	18:42	19:12	20:12					

The truth is, people want to travel any time of the day, any day of the week. These frequencies imply that people only need to travel to work in peak hour, and that they should wait otherwise. I believe these frequencies need to be pushed up in order to encourage more people to not use their car and to instead consider public transport. This needs to be encouraged all over western Sydney.

I believe the remainder of the points that I have recommended are mostly self-sufficient, so I shall just repeat them below with brief explanation:

- Optimising routes, making them shorter and more direct: A shorter and faster route is more likely to be used than an indirect and longer route for obvious reasons.
- Adding more routes to serve more residents
- Increasing bus reliability and decreasing bus cancellations: Bus cancellations have become more and more prevalent in Western Sydney. A recent [Sydney Morning Herald article](#) found that services in Western Sydney only run on time around 95% of the time. Funnily enough this is higher than most of Sydney, which I believe is because insufficient services are running in Western Sydney so it's easier for what few services are running to run on time. So, services should be increased, and the

rate of on-time running should be closer to 100%.

What is the state of bus services in your area?

Region	Company	On-time running as at July 2023	Vacancies as at April 2023
Camden	Busabout	97.0%	-
Liverpool, Fairfield, Cumberland, Bankstown	Transit Systems	96.6%	-
Campbelltown, Liverpool	Interline Bus Services	96.5%	-
Northern beaches	Keolis Downer Northern Beaches	96.1%	68
Inner west	Transit Systems	96.0%	114
Upper north shore	CDC NSW	95.2%	25
Blacktown, Penrith	Busways	95.0%	23
Eastern suburbs	Transdev John Holland	94.8%	33
North shore	Busways	94.7%	90
Hills District	CDC NSW	94.4%	-
Sutherland, Georges River, Punchbowl	U-Go Mobility	88.0%	-

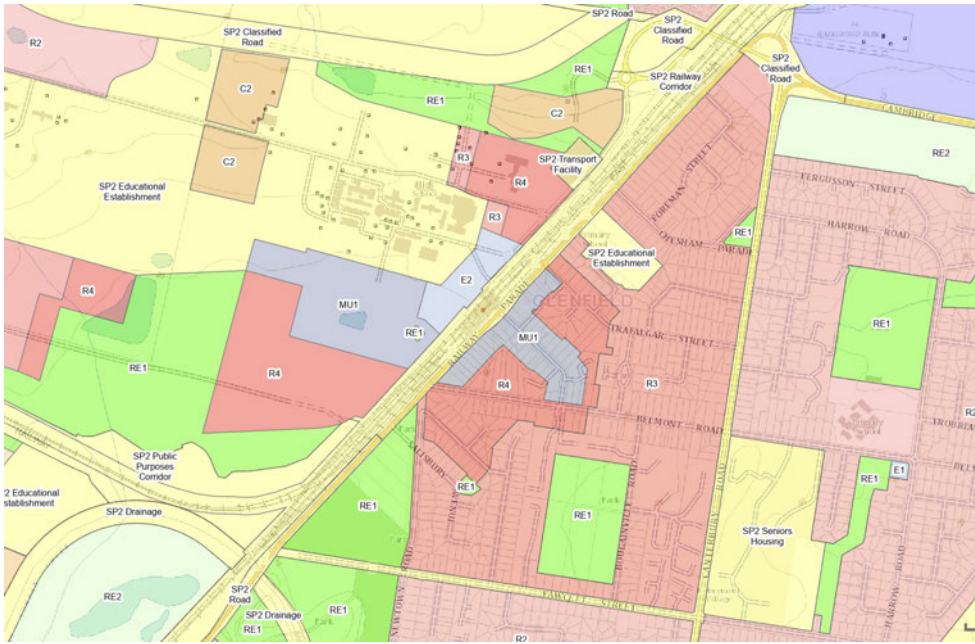
- Identifying, reserving and constructing bus rapid transit (BRT) corridors: No new bus rapid transit has been built in Western Sydney since the Northwest and Liverpool-Parramatta T-Ways. This needs to change. This must start with the long-promised bus links to the Western Sydney Airport from Liverpool, Campbelltown and Penrith. Any more bus rapid transit corridors on top of this should be identified and reserved.

4 AND 5: Densify around train stations and construct more TOD

Fortunately, many train stations around Western Sydney have already been upzoned beyond R2. Hence, the priority should be to construct medium and high-density living around these stations. Otherwise, if these stations continue to be surrounded by detached housing, fewer people can be housed where they want to live, stretching out commutes unnecessarily and degrading people’s quality of life.

Glenfield is a major interchange between the T2, T5 and T8, and a future station to the new airport. Fortunately, the area around the station has been upzoned to allow for R3 and R4

housing, but mostly detached houses still exist here.

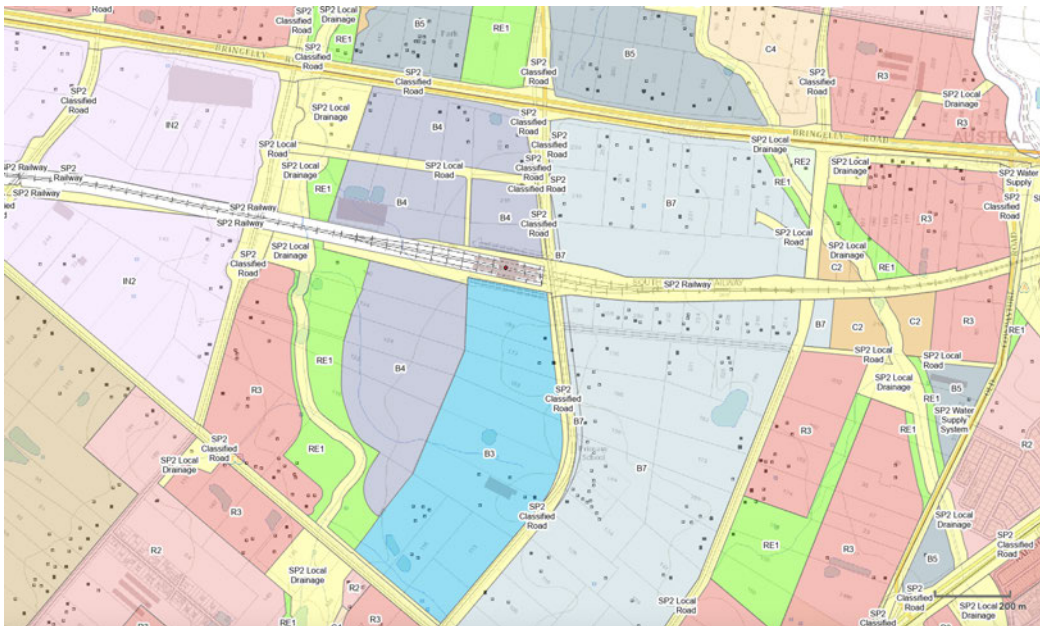


Development should start as soon as possible on increasing the supply of housing here, in order to house more people where they want to live.

TOD needs to also be a priority in Western Sydney. Chatswood is a successful example of TOD in Sydney; it has massively densified around its station core creating a liveable, vibrant area where businesses and residents can thrive. As such, Chatswood reduces the burden on Sydney's CBD core by drawing people out of the CBD and into Chatswood. This needs to be done in Western Sydney as well, in places such as Liverpool, Penrith (pictured below in the year 2040 from [the Daily Telegraph](#)), Blacktown, Campbelltown and the new Aerotropolis. This is essential as otherwise, congestion directed towards Sydney's CBD will only grow exponentially as all businesses will want to work here and residents will want to live here, dragging out commute times. A good city decentralises itself, spreading itself out.



TOD can even be prioritised in less likely areas, such as at Leppington station. This station is already upzoned for commercial (B3) and mixed use (B4) development.



Yet the station is still surrounded by practically nothing.



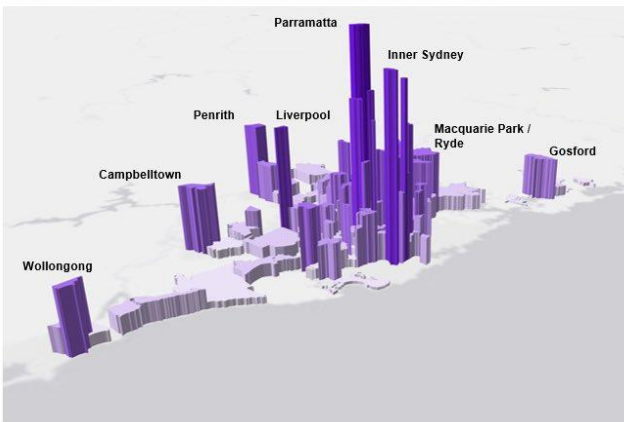
A situation like this is mirrored at other new stations, such as Kellyville Metro Station. We must prioritise building good mixed-use development around stations such as these, encouraging businesses and residents from all over Sydney to move here. More importantly, densifying around stations is efficient land use which will dramatically increase the supply of housing in Sydney, driving down house prices.

For the most part, Sydney has succeeded in decentralising out of the CBD and attracting businesses and residents to other parts of Sydney. This can be seen below by comparing [Melbourne and Sydney's density](#). Melbourne has hardly built around its train stations since 2006, while Sydney most certainly has.

Additional dwellings within 1km of a train station, SA2, 2006 – 2021



Additional dwellings within 1km of a train station, SA2, 2006 – 2021



I believe that Sydney is on the right track, and I would like this inquiry to strongly recommend the continued identification of ideal areas for upzoning, densification and TOD.

Concluding Statement

I would like to humbly thank you for taking the time to read my submission. It is abundantly clear to me the ways in which Western Sydney has been left behind for far too long. Far too few stations have been built in Western Sydney compared to Eastern Sydney, and this imbalance needs to be urgently corrected. Bus services must also be improved significantly, and more densification and TOD needs to happen in order to house more people in Western Sydney where they want to live.

I trust this inquiry to make the recommendations that are so desperately needed in order to prepare Western Sydney for future population growth, and bring it more closely in line with the transport accessibility that is granted to Eastern Sydney. I wish you well in your inquiry, and in shaping the future of Western Sydney.

Sharath Mahendran
Building Beautifully Creator