Sydney Metro City & Southwest Chatswood to Sydenham Environmental Impact Statement Objection

Contents

Sydney Metro City & Southwest Chatswood to Sydenham Environmental Impact Statement Objection and proposal for the consideration of added inner-city stations.

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest Chatswood to Sydenham).

I object to this proposal on the grounds of inadequate provisioning of stations on the Central to Sydenham corridor. The current provision of one station (Waterloo) reflects an inadequate, incomplete and out of date modelling of population growth, urban development, transport and traffic in the inner-city.

In particular, the Metro project makes no reference to the impact of Westconnex on inner-city traffic and transport. The Metro EIS and station location selection process does not reference the potential for additional Metro stations to increase inner-city public transport use and reduce car use. There is no comprehensive model of the potential of additional stations to off-set the multiple challenges to the inner-city traffic and transport network resulting from population growth and local major projects.

In addition, the modelling for the Waterloo line alignment did not identify the viability of a station located in Alexandria on Euston road. A supporting rationale for this additional station location is presented below as Option 1 in Section 2: Proposal for additional station options.

Furthermore, a number of recent major, inner-city infrastructure announcements have been made since the modelling to decide Metro station locations. In themselves they are significant enough to require a reconsideration of station locations and transport servicing for the inner-city.

These are described in the sub-section 'Recently announced projects'.

Finally, the Community Consultation Process should be extended to allow more time for substantive community engagement around integrated transport provisioning for the inner-city.

Details follow below to support my objection. In response I hope for and expect

- a nuanced and detailed response
- an announcement that the provision of additional Metro stations on the Waterloo to Sydenham corridor is being urgently undertaken
- an extended and meaningful community consultation will be undertaken with the residents of Alexandria, Erskineville and St Peters.

Please give my detailed objection your close, meaningful and unbiased scrutiny.

Yours sincerely,

[redacted]

Background to this objection

Recently announced projects

The current Metro station selection process was undertaken before several major infrastructure decisions were announced. These decisions significantly bear on the transport requirements of the inner-city and therefore should be factored into any decisions on rail services. They decisions include:

- ATP Commonwealth Bank decision (11,000 staff and 1,600 cars). SMH Nov 12, 2015
- Waterloo Housing Estate redevelopment (20, 000 + residents and associated increased car use). Announced Dec 17, 2015
- Alexandria Park Super School (2,200 students and associated increased car use). Announced May 14, 2016
- Green Square population increase forecast (60,000 + and associated increased car use (1)) SMH Oct 17, 2015
- Westconnex Euston / McEvoy Road (60,000 + cars daily). Announced Sep 2, 2015, SMH

The ATP, Alexandria Park School and Westconnex projects all add significant traffic to roads that service Alexandria, Erskineville, Waterloo and St Peters. (See Westconnex and traffic modelling)

The Waterloo Estate redevelopment (20,000 + residents) AND the upward revision of the Green Square future population projection (60,000 + residents), means that the impact of a beneficial 'transport / traffic offset' has not been adequately modelled.

A central argument of this objection is that providing more Metro stations will reduce inner-city car-ownership and car use. As the station provision decisions were based on out of date information and for the reasons provided above, the Metro station and transport service provision for the Waterloo – Sydenham section requires immediate revision.

Population growth and transport modelling

The Metro station location process has not correctly modelled future population growth in inner-ring suburbs. By extension, the transport capacity requirements for an expanded population and the resulting positive contribution of providing multiple Metro stations to mitigate traffic grid-lock and transport system breakdown has also not been adequately modelled.

The district populations are growing at a much faster pace that previous census data and recent planning predictions. The inner-city is becoming a 'hyper-dense' population area, while being under-serviced for future oriented, high-capacity mass-transit systems.

- Numerous new 'boutique' apartment developments in area
- City to Eveleigh (20,000 + residents proposed)
- Waterloo Housing Estate redevelopment (20, 000 + residents)
- Green Square population increase forecast (60,000 + and associated increased car use)

It is very likely that the population and patronage forecasts in earlier modelling are now inaccurate and need to be updated. **For this reason alone, the Metro station location provisions should be re-evaluated.**

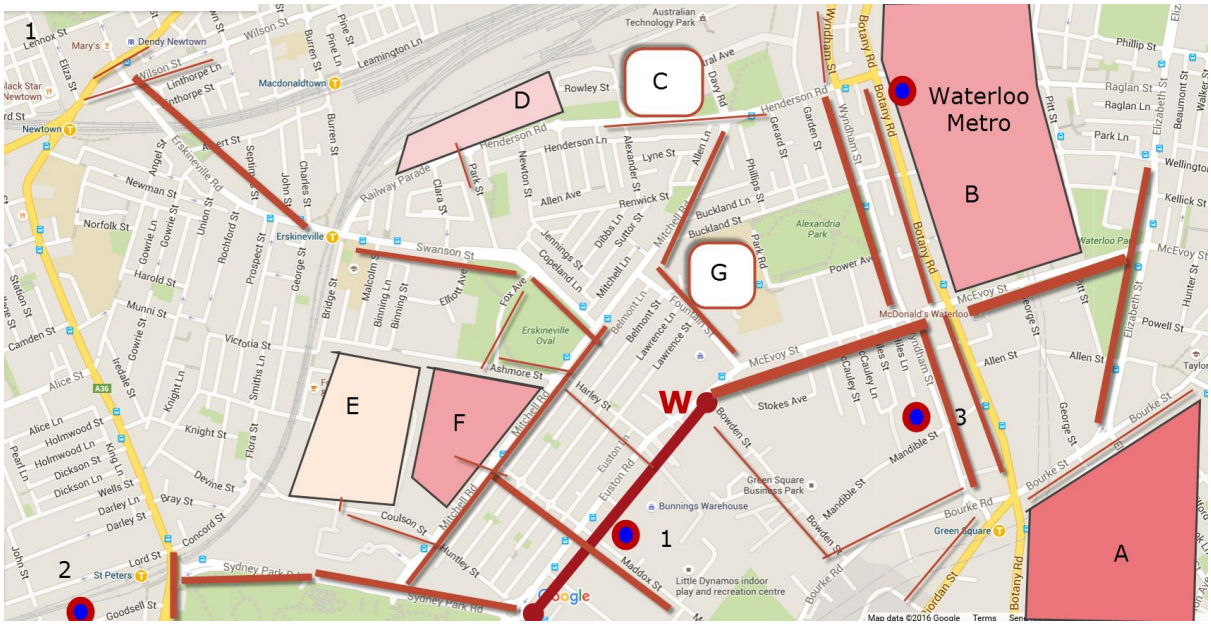

Figure 1: Planned urban development, traffic visualisation and station location options

Note: the thickness of the red lines above represents the likely spill patterns of the Westconnex traffic 'dispersal' through the inner-city road network.

Major projects:

A Green Square (60,000 + residents)

B Waterloo redevelopment (20,000 residents)

C ATP Commonwealth bank (11,000 employees, 1,600 cars)

D City to Eveleigh - South West, (2,000 residents approx.)

E Ashmore Estate – Eve, Casa, Erko etc (2,000 residents)

F Ashmore Estate - Golden Horn (main development, 6,000 residents)

G Alexandria High Super School (2,200 students, many out of area, selective stream)

W Westconnex (60,000 cars daily on Euston Road, Alexandria)

Station Options

1 Alexandria station

2 St Peters station

3 McEvoy station

Westconnex and traffic modelling

The Metro EIS does not model any relationship between the Metro (Waterloo to Sydenham) and Westconnex, despite the Metro Project intersecting with Westconnex near McEvoy / Euston Road, Alexandria. That Australia's two largest transport infrastructure projects make no reference to cross impacts indicates a failure to adequately connect transport planning.

Further, the Metro EIS provides no modelling of additional Metro stations (Alexandria and St Peters) ability to reduce cross-town car use (through intra-city connectivity to the growth corridor) OR offset the local impact of Westconnex traffic by reducing local car use through improved mass transport capacity.

Value Creation and preservation of health and amenity.

The Metro station location process has provided an inadequate model for future value creation and preservation of health and amenity of inner city neighbourhoods and residents. An integrated public transport network will provide the most cost-effective, appropriate and efficient services for urban growth.

Failure to integrate comprehensive, well-integrated, large-scale transport solutions will destroy the inherent value proposition of the inner-city. Without a significant expansion of public transport, major detrimental impacts from spiralling traffic congestion and car-use can be expected to negatively impact mobility(for locals and 'through district' users), local health and general amenity.

Inadequate public consultation

Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville.

The finalised Metro route (passing under Alexandria and St Peters), announced in February 2016, is still poorly understood by the communities being bypassed. Now that the route is finalised a further meaningful and substantial community consultation process should be undertaken to truly gauge the transport needs of these communities.

Revision of station locations (Additional Metro stations)

The Phase 1 station location phase failed to identify a viable Alexandria station at the approximate 'mid-point' of the Waterloo alignment (see Figure 1). This submission proposes and evidences why the provision of an additional station (Alexandria) is a minimal response to better provisioned and better integrated transport systems in the inner-city.

Figure 4.1 Preliminary station location options

Figure 2: Phase 1 did not identify viable station located on the 'mid-point' of the Waterloo - Sydenham alignment

Conclusion

In light of the inadequate traffic and transport capacity modelling I request an immediate review and reconsideration of the provision of additional Metro stations on the Waterloo – Sydenham alignment.

I petition that adding these Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport). They would provide a mass-transit system for the areas' rapidly increasing population, reduce chronic over-crowding on Erskineville station and reduce inner-city car congestion. A holistic analysis of future growth and long-term integrated transport will justify the addition of these stations.

Station cost and the preservation of fast-commute times for outer-suburban residents cannot be simply advanced as reasons to not thoroughly consider more inner-city Metro stations. The stations outlined below will not only provide mass-transit for growing inner-city populations, they will also service outer suburban resident's access to high job growth and service corridors. As such, each station location is likely to provide high-volume bi-directional use patterns, especially in weekly peak periods.

Further detail supporting this objection and the demand for immediate reconsideration for the provision of additional Metro stations for Alexandria, McEvoy and St Peters follows.

Section 2: Proposal for additional station options

In this objection I specifically propose that immediate modelling should be re-conducted on providing additional Metro stations on the waterloo to Sydenham section of the City Metro.

I propose that three options should be considered and immediately re-evaluated. They are:

- Option 1. Alexandria Metro Station
- Option 2. Alexandria station and McEvoy OR St Peters
- Option 3. Alexandria station, McEvoy and St Peters

Supporting evidence for each option follows.

Option 1. Alexandria Metro Station

Location: Euston and Maddox street, Alexandria

This option provides 1 additional Metro station at an approximate mid-point between Waterloo and Sydenham. Performance of this new station location against Metro project Objectives is provided in this section.

Note: This station location is NOT the same as the determinations made on an Ashmore station location, which was situated closer to Erskineville station. It therefore cannot be judged on the outcomes of the Ashmore station performance. In addition, this station location was NOT evaluated on the Metro Alignment Options (See Figures 2 and 3).

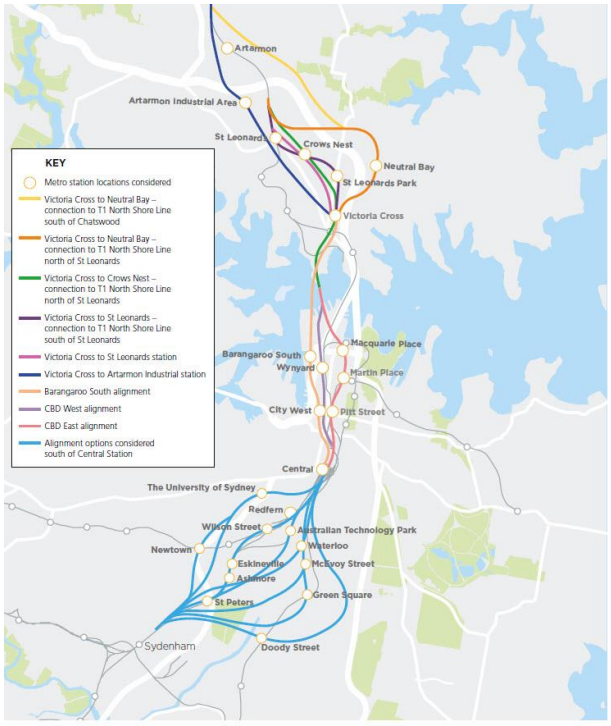

Figure 4.7 More recent indicative alignment options considered based on possible station location combinations

Figure 3: Metro Alignment Options

The Alexandria Metro Station location **a**ctivates a new 'footprint' , growing transport patronage and

network resilience as described below. It is situated at an approximate mid-point on the 4 kilometre 'station gap' between Waterloo and St Peters. Figure 5 shows the proposed Alexandria station location and catchment area.

Figure 4: Alexandria Metro Station location and catchment area, (Numbers indicate known near-term population and student growth)

This station option would provide immediate high capacity patronage from the Ashmore Estate / Alexandria growth area. It would improve other train line experiences by drawing peak hour over-crowding off Erskineville station, and positively impact on overall transport network resilience (through traffic reduction). It would provide city wide interconnectivity via current bus route connections and a 10 minute walk to the Green Square / Airport rail corridor.

This station location could support a bus interchange servicing new network routes (e.g. via Maddox street) to circumvent increasing grid-lock incidence. For example, the 370 bus route can currently take between 7 to 10 minutes (3 to 4 red light cycles) to progress from Fountain street to turn right onto Botany road in the morning peak.

This location is well-sited to develop an integrated district plan for walking, cycling and bus routes, providing a public transport oriented network for the City - Green Square – Airport job / population growth corridor.

Alexandria station performance against the Metro Project Objectives

The proposed Alexandria station location is within a few hundred meters of the positively evaluated McEvoy street station location and therefore shares many of the same positive attributes already identified through the Metro projects own initial planning process (See Figure 6).

The location offers the same urban activation profile as was modelled previously for the McEvoy station location. Figures below represent the current and the proposed (revised) Project Objectives matrix for Alexandria Metro station and brief notes follow on each criteria.

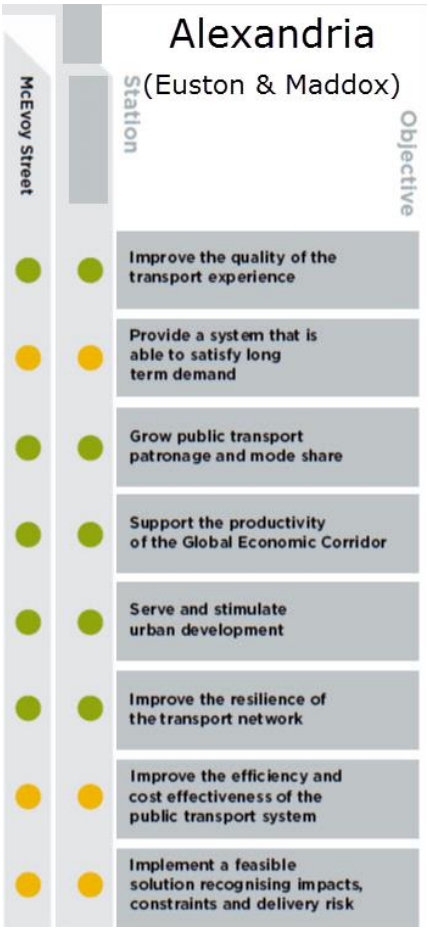

Figure 5: Metro station location Alexandria and McEvoy Metro Project Objectives matrix (proposed)

Improve transport experience quality

A station at Alexandria will considerably reduce the peak-hour overcrowding at Erskineville station which is already at 147% over-capacity. Future population growth associated with Ashmore Estate (6,000 residents from 2021) and City- Eveleigh South (2,000 residents +) will overwhelm Erskineville train services and local bus route capacity.

Provide a system to satisfy long-term demand

On this criteria the Alexandria station option should be judged at minimum as 'somewhat or neutrally' aligned as per the previous evaluation of the nearby McEvoy street station option. However, when considered in light of growing population and transport infrastructure pressure (outlined in sub-section 'Transport network resilience' below), this criteria could be considered to 'positively align'.

Grow public transport patronage and mode share

Providing Alexandria and additional Metro stations will mitigate increases in local's car-use and provide train to bus interconnectivity for out of area commuters to growth corridors.

Due to already approved major apartment developments (Ashmore Estate), an Alexandria station would have an immediate and substantial patronage capacity from commencement. The proximity

of high-density development can be seen in Figure 1.

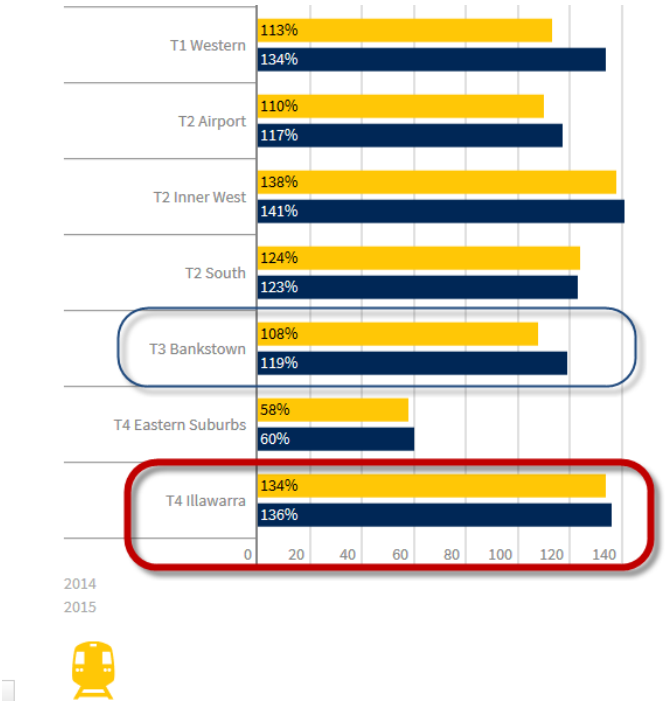

Figure 6: Sydney rail line over-capacity chart, 2014-2015
Source: Sydney Morning Herald (date)

A Metro stop at Alexandria will grow public transport patronage and not cannibalise other stations usage. Erskineville station is already over-capacity. With cessation of Erskineville's service via the T3 Bankstown line, this station will likely move onto the T4 Illawarra line. However, recently published documents (Figure 7) shows that this moves the already over-capacity Erskineville rail patronage onto an even more –crowded line than present. Additional bus services are unlikely to provide timely mass transit options (see sub-section on 'Transport network resilience' below)

This is before the arrival of 6,000 more Erskineville / Alexandria residents. The new residents are predominantly young urban professionals, who choose the inner-city for its proximity to the city and short, public transport oriented commutes. The location of this additional residential concentration is perfectly situated to be a 'new population' feed to a high-capacity station (Alexandria) capable of servicing this increased patronage volume.

Figure 8 below records a minimum of 25% of Erskineville Alexandria residents in 2006 worked in the city. This can be treated as a conservative estimate of likely patronage at Alexandria. In fact, as recent newspaper articles have recounted the acceleration of inner-city resident public transport usage, actual usage by Alexandria Metro station catchment residents to the city would likely exceed 30%. .

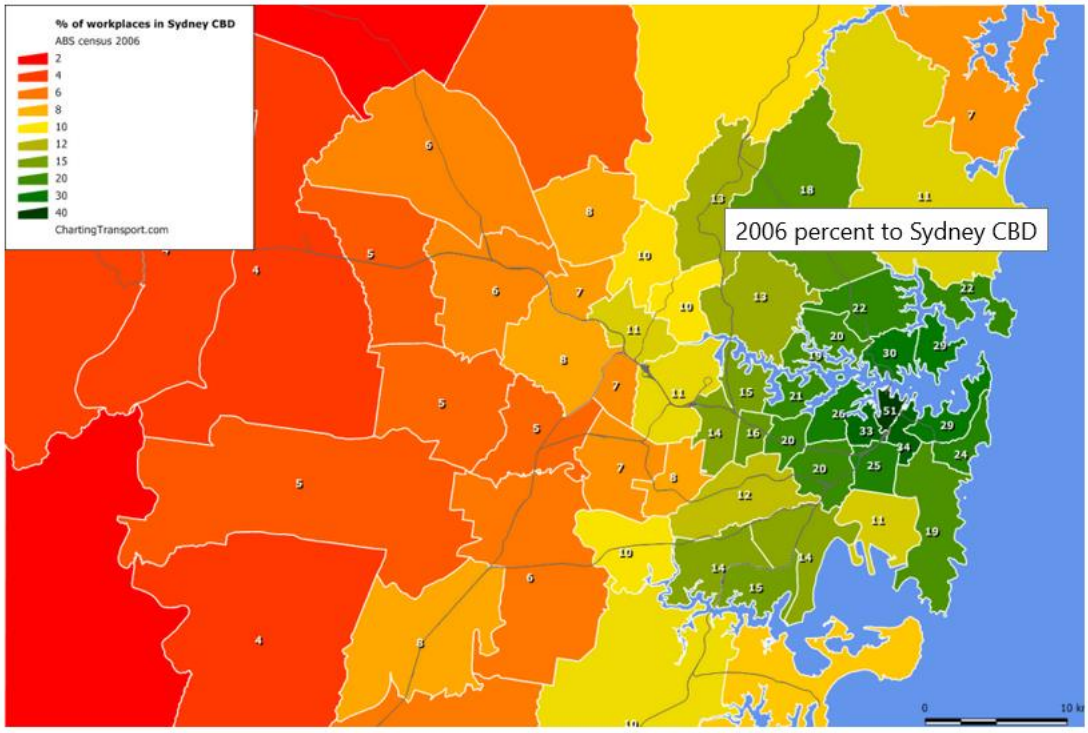

Figure 7: Proportion (percentage) of residents working in city (2006). Source https://chartingtransport.com/category/sydney/

Applying the conservative 25% figure (above) to the 6,000 Golden Horn development population (arriving 2021) to the existing Alexandria population of the Alexandria Station catchment would indicate a minimum 2,000 plus station patronage on each daily peak from commencement of service in 2024.

On this criteria therefore, the Alexandria station option should be judged 'positively aligned' as per the evaluation of the nearby McEvoy street station option.

Support the productivity of the Global Economic Corridor

A station at Alexandria would connect the northern and Bankstown rail lines to the Green Square and Airport via walking and bus access. On this criteria therefore, the Alexandria station option should be judged 'positively aligned' as per the previous evaluation of the nearby McEvoy street station option.

Stimulate urban development

On this criteria the Alexandria station option should be judged 'positively aligned' as per the nearby McEvoy street station option as it shares the same characteristics of brown-field mixed light industrial land use.

Transport network resilience

Provision of more Metro stations diversifies the transport infrastructure of the whole city transport network. Providing one (and preferably more) stations recognises the threats and opportunities of the 'whole of system' interactions of rail, bus, passive and car transportation.

Extensive provisioning of public transport through the inner-city will take cars off the road. This has tremendous benefits for local amenity, car and bus trip times, pollution and greenhouse reduction and the preservation of health and amenity. It benefits the wider city as Alexandria has been chosen as the 'through point' to connect the western suburbs with the east and airport corridor as part of Westconnex (Figure 8).

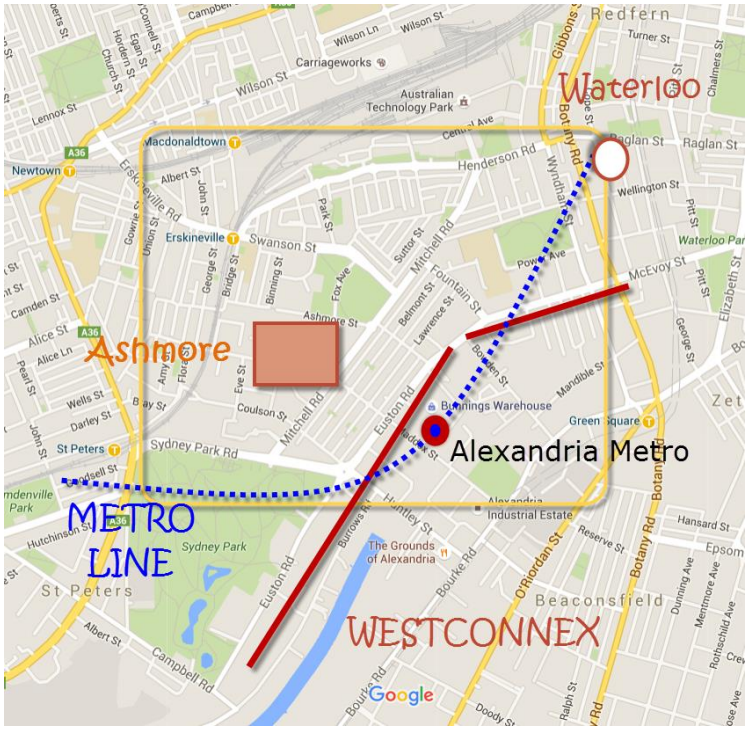

Figure 8: Proximity of Westconnex to approved Metro alignment and proposed Alexandria station

The Metro and Westconnex Projects intersect near Euston Road, Alexandria. The Westconnex Project EIS states that the daily load of Euston Road is predicted to increase from 7,000 cars daily to 60,000 + cars daily. As this increased traffic proceeds north-east it is expected to 'disperse' onto local roads.

The combination of Westconnex traffic to other district traffic generators has the potential to gridlock the road networks. Major (recently announced) district projects include the State Significant Projects

- Westconnex: 60,000 cars
- ATP: 1,600 cars
- Alexandria High School: 2,200 students

In addition significant increase in car ownership and use can be anticipated with projected populations of up to 100,000 future inner-city residents (on top of the current resident population). This includes:

- City – Eveleigh, 20,000
- Waterloo, 20,000 plus
- Ashmore Estate, 6,000 plus (from 2021)
- Green Square 60,000 plus

The combination of Westconnex with current and future population may break down the surface transport system which is currently already near saturation. For this reason increased bus services will not provide the load or speed capacity required for mass-transit of increased future populations and trip numbers. High-capacity transport systems are the solution in areas that have either or both high population and high in / through transport flows.

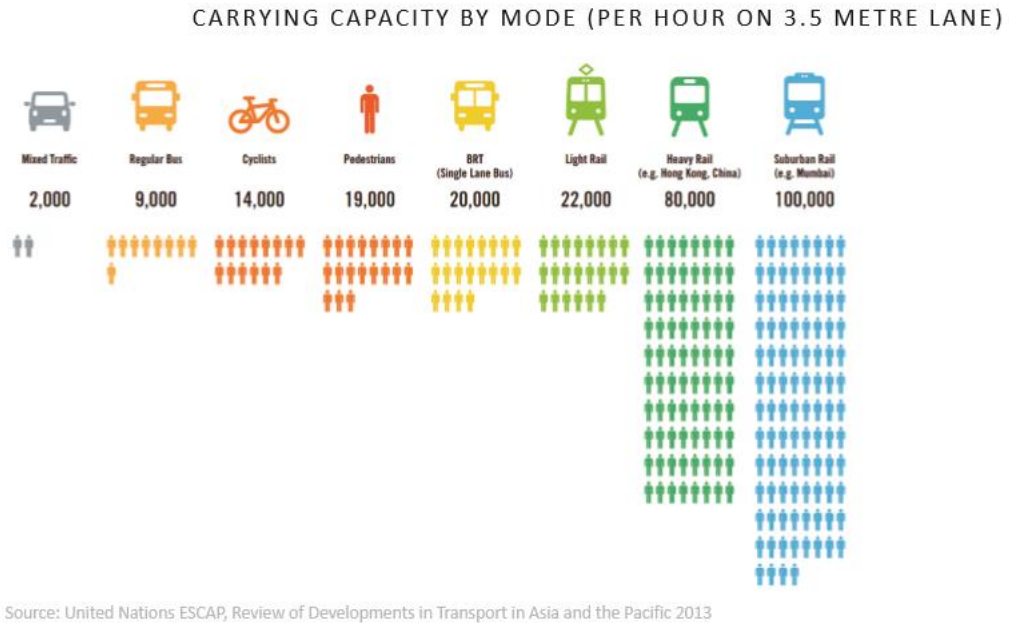

Figure 9: Carrying capacity by Mode (Source United Nations ESCAP, 2013)

The economic cost of traffic congestion is already well documented (Figure 10). The likely destruction of mobility in the population and job growth corridor will have a substantial, ongoing and compounding negative economic impacts for the city and the whole state.

The staggering economic costs of gridlock documented overseas and in Australia clearly outweigh the short-term cost of generous provision of public transport (additional Metro stations) planned to network mobility of whole of city population to and from high population and high job-growth corridors.

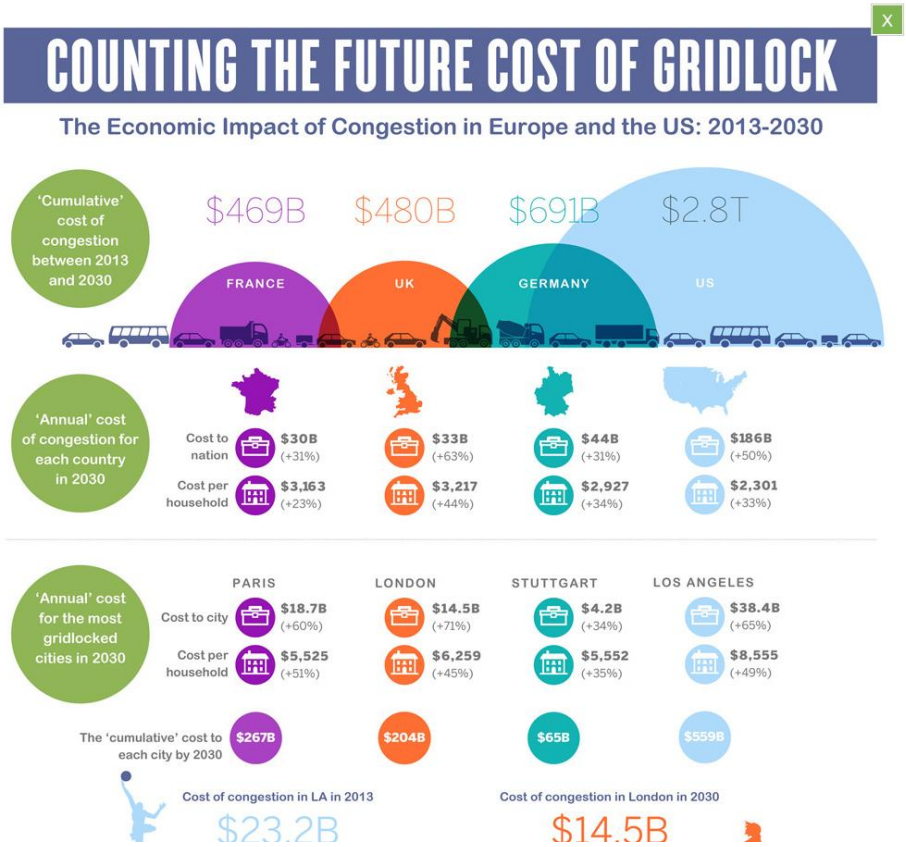

Figure 10: Cost of Gridlock

Therefore, on the 'Network Resilience' criteria the Alexandria station option should be judged 'positively aligned' as per the nearby McEvoy street station option.

Improve the efficiency and cost effectiveness of public transport

On this criteria the Alexandria station option should be at least judged 'somewhat or neutrally' aligned as per the nearby McEvoy street station option.

However, referencing the arguments in the 'Resilience' sub-section above, a thorough and holistic cost-benefit analysis of 'over-providing' public transport infrastructure would likely demonstrate not only the safeguarding of transport network resilience, but also the cost efficiency of additional Metro stations when tied into a comprehensive, long-term inner-city transport plan.

Implement feasible solutions:

On this criteria the Alexandria station option should be judged 'somewhat or neutrally' aligned as per the nearby McEvoy street station option.

Summary:

The Alexandria Metro station option has not been previously evaluated.

The proposed station is located near to new and potential population growth centres. It will diversify and strengthen the rail network and grow the use of public transport. In addition it will reduce area car-use and offset expected traffic transport increases. It will have numerous positive environmental outcomes through reduction of pollution and preservation of local amenity.

For these reasons an additional Metro station sited at Alexandria (Euston and Maddox) should be immediately and impartially evaluated for addition to the Waterloo to Sydenham Metro section.

Option 2. Alexandria station and McEvoy OR St Peters

Option 2 proposes 2 additional Metro stations between Waterloo and Sydenham. This option provides greater network integration and increased mass-transit passenger capacity for the public transport system. Details justifying each station location follow below.

In this option, if St Peters is chosen as a second station, Alexandria Metro Station should be moved EAST (to the Euston Road / Harley street intersection). This provides reduced walking time to Green Square station and integrates Alexandria station better with Green Square.

If McEvoy station is chosen as a second station, Alexandria Metro Station should be moved SOUTH - WEST (to near the Sydney park Road / Euston Road intersection). This provides reduced walking time to St Peters and to employment areas around Burrows road and Huntley street.

McEvoy station option

Location: Approximately at McEvoy and Wyndham OR Wyndham and Mandible streets, Alexandria

This option would provide high train network interconnectivity (via a 3 minute walk) to the Green Square station. It would link the Northern and Bankstown lines directly into the Green Square / Airport Economic growth corridor.

It would improve other transport experiences by drawing peak hour patronage off connecting bus routes (e.g. Waterloo passengers transferring to buses to 'hop' to green Square). Thus it would positively impact on passenger transport experience via direct access to Green Square and rail line interchange onto the Airport line (for Bankstown line users). Overall transport network resilience is improved through traffic reduction resulting from better service provision

A McEvoy street location would directly service outer suburban workers access to job opportunities at both Green Square and the Global Economic Corridor. Green Square alone is projected to generate 21,000 permanent jobs on completion. The majority of these would be in the town centre area, an easy walk from a McEvoy street location. See reference to predicted job numbers Green Square at: http://www.cityofsydney.nsw.gov.au/vision/major-developments/green-square

In addition, the station intersects with existing bus networks which could be expanded in future as part of an integrated district plan for walking, cycling and bus routes, providing a public transport oriented network for the City - Green Square – Airport job / population growth corridor.

The McEvoy street location has already been judged as positively aligned on five of eight criteria in the Metros' own modelling is presented below as Figure 12.

McEvoy Station Plate:

At minimum, serious consideration should be given to boring out station plates to provide for future station fit-outs. This provides for transport planning agility and an 'insurance policy' type approach to expand network interconnectivity rapidly if the road network reaches saturation and mass transit systems require activation.

St Peters station option

Location: Approximately at Goodsell street, St Peters

This option provides high train network and train to bus network interconnectivity to high-use public transport routes. It links Northern, Western and Southern suburbs to the King street corridor (hospitals, universities and entertainment), bus routes to Green Square, University of New South Wales, Arncliffe and the Airport / job-growth corridor.

The St Peters option preserves the current transport experience of public transport users on the T3 Bankstown line who work in the Burrows street industrial area or interchange at St Peters to north-south bus services. The removal of St Peters from the Bankstown line forces commuters to interchange at Sydenham to travel one stop further to St Peters to complete trips to

- The King street corridor (North and South)
- Burrows road industrial estate
- 370 to UNSW & eastern suburbs
- 348 to Zetland
- 308 to Redfern

St Peters provides a superior train to bus interchange point over Sydneham. This because St peters station intersects with a larger number of bus routes (4 versus 3) AND they are much higher capacity routes (they service busy King street, principally the hospital an university) and the popular 370 link to UNSW via green Square. The 3 Sydenham station bus connecting services carry lower passenger loads and don't connect to employment growth areas.

Image here

A careful consideration of the number of current and potential future commuters being dislocated by excising St Peters from the Bankstown line should be undertaken In addition, the opportunity for a St Peters Metro station location to grow total network capacity by integrating train to a bus interchange providing new bus routes as part of a district transport plan should be considered. While St Peters was considered to be negatively aligned for urban development, low-medium density development could be possible on this site and a holistic appraisal should be re-undertaken.

St Peters Station Plate:

At minimum, serious consideration should be given to boring out a station plate at St Peters to provide for a future station fit-out. This provides transport planning agility and an 'insurance policy' type approach to expand network interconnectivity on this strategic north- south / east – west transport corridor. This provides a 'safety-net' to rapidly increase the transport network capacity if the road network reaches saturation and mass transit systems require fast activation.

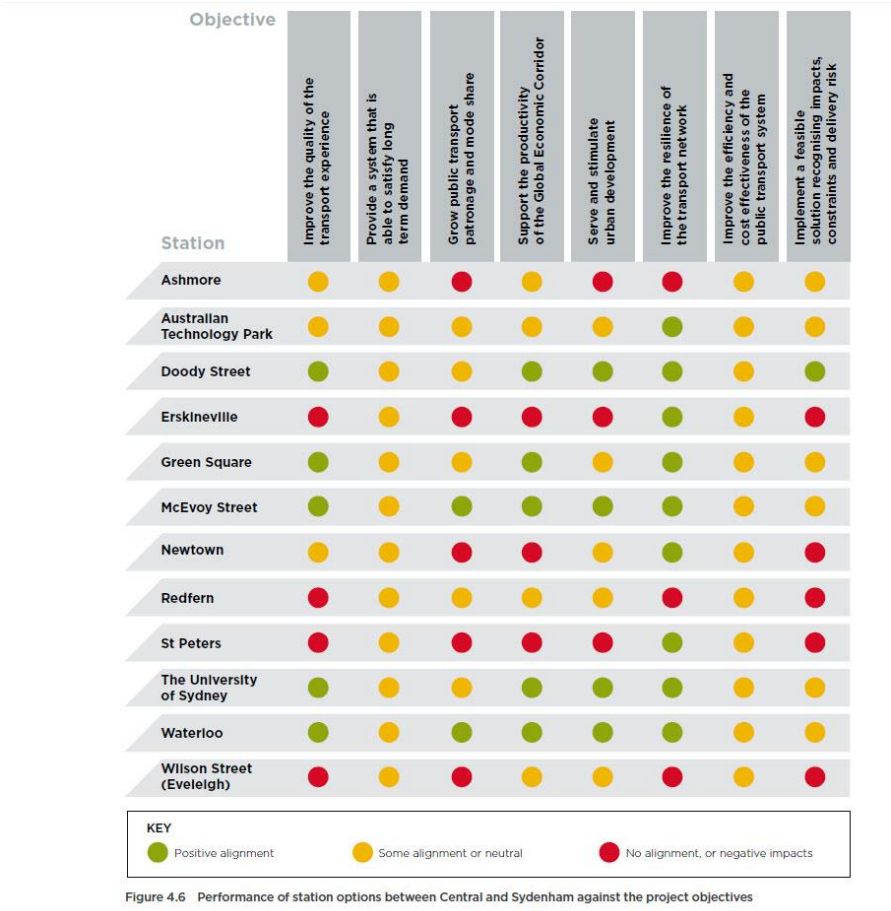

Figure 4.6 Performance of station options between Central and Sydenham against the project objectives

Figure 11: Station option performance (Metro documentation)

Option 3. Alexandria station and McEvoy and St Peters stations

Option 3 (3 additional Metro stations between Waterloo and Sydenham) provides the highest degree of transport network integration. Essentially it future –proofs the inner-city public transport network for this quadrant of the city by integrating high capacity rail with radiating bus / foot and cycling options.

Details justifying each station location have been provided above. The advantage of Option 3 is in the positive long-term transport network integration outcomes. Creating a well-provisioned inner-city Metro provides a high capacity 'spine' for integrating several rail lines, rail to bus all facilitating appropriate, radiating local passive (waling and cycling) transportation.

When considered as foundational infrastructure, providing hyper-dense mass transport systems in the inner-city is required for districts supporting medium to hyper-dense populations. Hyper-dense population will almost certainly be accompanied by record (in Australian contexts) daily 'in-and through movements' to job opportunities, shopping and entertainment, and 'through' movements, to transport (airport), jobs (the Global Economic Corridor) and existing high use corridors (King street, eastern and southern suburbs, universities etc).

The provision of a 'suite' of stations should be considered holistically, for the value that the 'over-provisioning' of transport infrastructure provides to the current and future city over the life of the project. As outlined above, with the adequate provision of efficient and comprehensive public transport, there is a chance that the surface road network may not be totally overwhelmed in the future, which would be a disastrous and economically counter-productive outcome.

Given the long-term nature of rail infrastructure, the stated desire of the State Government to create value through a medium to hyper dense inner-city and the documented role of this district and corridor as a wealth generator for the State and nation, the short-term expense of three additional Metro stations on the Waterloo to Sydenham section of City metro can be supported for the long-term gain.

Summary

For the detailed reasons advanced above, I object to the current Metro proposal and urge that immediate, detailed and impartial consideration be given to the addition of extra stations on the waterloo to Sydenham section.

In response I hope for and expect

- a nuanced and detailed response
- an early announcement that the provision of additional Metro stations on the Waterloo to Sydenham corridor is being urgently undertaken
- an extended and meaningful community consultation be undertaken with the residents of Alexandria, Erskineville and St Peters.

Please give my detailed objection and evidenced proposals for additional stations your serious consideration.

Yours sincerely,

[redacted]

Declaration:

I have made no reportable political donations made in the previous two years.
Yours Faithfully,

[redacted]

References:

1. “an increase of 50,000 vehicles per average weekday on Euston road” Source page 53 Westconnex technical paper 1 Traffic report, accessed online at
   *www.**westconnex**.com.au/.../Tech%20Paper%201%20-%20**Traffic**%20report%20Final*

Traffic congestion costs in Sydney, current and projected

http://www.news.com.au/finance/economy/australian-economy/clogged-roads-are-expensive-and-one-reason-we-spend-an-average-85-minutes-a-day-commuting/news-story/934ad0c2fca8f15dca346fe6934401c7