INQUIRY INTO SYDENHAM-BANKSTOWN LINE CONVERSION

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Ms Abigail Boyd, MLC Chair, Portfolio Committee No. 6 - Transport and Customer Service Legislative Council Parliament House Sydney NSW 2000

By email: portfoliocommittee6@parliament.nsw.gov.au

Dear Ms Boyd

Inquiry into the Sydenham-Bankstown Line conversion

Thank you for the opportunity to provide a submission to the Portfolio Committee No. 6 -Transport and Customer Service's *Inquiry into the Sydenham-Bankstown Line conversion*, from heavy rail to metro, being the southwest part of the Sydney Metro City and Southwest project.

The University of Sydney welcomes this Inquiry, as it provides an opportunity to highlight the negative impacts the proposed conversion will have on residents of south western Sydney including a significant number of our staff and students.

The Camperdown end of the Camperdown-Ultimo Health and Education Precinct is currently serviced by a single heavy rail station - Redfern - which is in an inconvenient location, is congested, over capacity at peak hour and unable to support any major increase in patronage even with the recently announced partial refurbishment program.

The reduction in direct services to Redfern and the resultant increase in travel times that will arise from the Sydenham-Bankstown Line conversion will further inconvenience commuters travelling to and from a precinct that currently provides more than 35,000 jobs and which is predicted to experience continuing strong growth in jobs and demand for efficient transport options due largely to the presence of Royal Prince Alfred Hospital and the University of Sydney as anchor institutions.

The proposed Sydney Metro City and Southwest alignment will remove direct train services to Redfern for commuters living west of Sydenham on the T3 Bankstown Line. Should this proposed alignment proceed, our students and staff living west of Sydenham will face approximately 15% extra travel times for their journeys to and from the University, while those currently travelling on the T3 limited stops service will face up to 26% longer travel times each way. We urge the Committee to consider impacts such as these in light of the significant transport constraints facing the Camperdown Precinct, which have been exacerbated by recent reductions in public transport services to the Precinct.

The number of commuters to the Camperdown Precinct who will be impacted by the Sydney Metro City and Southwest is significant. For example, residential postcode data shows that on 23 September 2019, there were 2,077 University of Sydney students living within 1km of a train station west of Sydenham on the T3 Bankstown Line. Of these students, 28% catch the

Office of the Vice-Chancellor and Principal F23 - Administration Building The University of Sydney NSW 2006 Australia T +61 2 9351 6980 E vice.chancellor@sydney.edu.au sydney.edu.au ABN 15 211 513 464 CRICOS 00026A train from stations west of Bankstown while the remaining 72% catch the train from stations between Sydenham and Bankstown.

The University has over the last four years made submissions to the NSW Government recommending that the Sydney Metro City and Southwest Route (as an extension of Sydney Metro Northwest) run through Camperdown with a stop servicing Royal Prince Alfred Hospital and the University's Camperdown campus.

We accept that this recommendation was not supported by the Government and that the Sydney Metro City and Southwest Route will instead run from the Sydney CBD to Sydenham via a new station at Waterloo.

Nevertheless, given current levels of congestion and projected future demand for transport to and from the Precinct, we remain strongly of the view that continuing with Redfern Station as the only heavy rail infrastructure supporting the Camperdown Precinct represents an unsustainable strategy.

Alternative solutions must be found and we have therefore turned our attention to the new proposed Sydney Metro West project; a separate line to connect the CBD with Parramatta. We have provided the NSW Government with extensive evidence of the transport challenges facing the Camperdown-Ultimo Health and Education Precinct and of the social and economic benefits that would flow if the Sydney Metro West Route could run from the CBD through Camperdown and out to Westmead.

This alternative Metro West option would improve existing and future congestion and capacity issues, address the significant projected growth in commuter numbers and link two of Australia's largest and growing health and education precincts - Camperdown-Ultimo and Parramatta/Westmead.

The Committee's inquiry into the business case of the Sydenham-Bankstown Line conversion provides an important and timely opportunity for the NSW Parliament to consider the impact this proposal will have on commuters to Redfern who reside west of Sydenham. The inquiry provides an opportunity to carefully consider this and other issues that appear to have been overlooked during the development of the business case.

For the reasons detailed in our attached submission, we urge the Committee to consider recommending that the NSW Government revisit the planning and design of the proposed Sydney Metro West Route, so that it runs from the CBD to Westmead via the Camperdown-Ultimo Health and Education Precinct.

We would welcome the opportunity to discuss these issues further with the Committee at its convenience. Please contact Greg Robinson, Director of Campus Infrastructure & Services – if you require anything further from the

University.

Yours sincerely,

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Sydenham-Bankstown T3 Line Conversion

Upper House Inquiry Submission

The University of Sydney, 4 October 2019

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Introduction

The University of Sydney welcomes the Portfolio Committee No. 6 - Transport and Customer Service Inquiry into aspects of the planned conversion of the Sydenham-Bankstown Line conversion from heavy rail to metro. By outlining our concerns about the negative impacts the conversion will have on our staff and student population who travel to and from South West Sydney, this submission addresses *Terms* of *Reference* (b) - the consideration of alternatives for improving capacity and reducing congestion. We discuss and recommend a solution to address these impacts.

The University of Sydney's Camperdown Campus

The University of Sydney's Camperdown Campus is placed at the heart of one of Australia's leading education, health and research precincts. So strong is this Precinct's standing, that the Greater Sydney Commission (GSC) has designated it the Camperdown-Ultimo Collaboration Area within the Eastern Harbour City's innovation corridor. This Collaboration Area stretches from Camperdown to Ultimo, and covers Darlington and Eveleigh; most of Haymarket, Ultimo and Camperdown; and parts of Glebe, Forest Lodge, Newtown, Redfern and Surry Hills.

Growth

Apart from the University's more than 70,000 students and 7,500 staff, and the neighbouring Royal Prince Alfred Hospital's (RPA) tens of thousands of annual visitors and staff, the area is home to the Australian Technology Park (ATP) and the North Eveleigh Precinct. Local residents and businesses are also part of our community, with more than 13,000 people living in Redfern alone. In addition, the Commonwealth Bank of Australia (CBA) is part way through a relocation of nearly 10,000 staff to the ATP in Eveleigh which will conclude next year.¹

Current transport constraints

Our Camperdown Campus is serviced by just one heavy rail station - Redfern. Its location is inconvenient for commuters to the University and RPA as the station is located 650m from the edge of the Campus, 1km from Campus destinations north of City Road and 2km from the RPA, meaning that staff, students, patients and other visitors to the area have long walks to and from public transport.

As one of Sydney's busiest stations, Redfern has reached capacity. Opal data from March 2016 shows that during the University's semesters when our students are attending classes, there are approximately 55,000 passenger movements at Redfern per day, including both tap ons and tap offs, with this number excluding data for the significant numbers of transferring passengers who use the station as a major interchange.² An estimated 9,900 pedestrians travelled between Redfern Station and the University in peak periods in 2013³ and University student numbers have grown by 18% since then.

A 2017 report prepared for the University by Aurecon projected future annual passenger demand at Redfern Station will continue to grow by 4.6% per year, based on average growth from 2004 to 2016. Of particular note, Aurecon found that the relocation of the CBA headquarters to the ATP and the University's ongoing commercial industry partnership will

¹ "Commonwealth Bank to move 10,000 people to state-of-the-art workplace at Australian Technology Park by 2020". CBA media release 12 November 2015.

² Richard Ellison, Crowding at Redfern Station associated with The University of Sydney, Institute of Transport and Logistic Studies, The University of Sydney Business School, 2017.

³ Parking & Traffic Consultants, Darlington Precinct Pedestrian and Bicycle Access Strategy, 2013.

result in an additional 20,000 people arriving at Redfern Station during the morning period from 6am-9am over the next 15 years, from those two institutions alone.⁴

The University acknowledges that the NSW Government has committed to an upgrade of Redfern Station to improve access and connections for passengers. However, this will not materially address the Station's current and projected capacity constraints.

The solution

With limited alternative transport options, our current operations and future expansion plans are heavily dependent on major improvements in heavy rail connections if the GSC's vision for transforming the Camperdown-Ultimo Health and Education Precinct into a world class innovation district is to be realised. The Precinct is already a major economic driver for NSW and has the potential to generate up to \$25 billion each year for the NSW economy.⁵

The GSC has highlighted that "heavily congested roads and limited transport modal options"⁶ pose a complex challenge for this designated Collaboration Area and has highlighted the need for a mass transit system, including a Sydney Metro West stop at Camperdown, as a priority.

The NSW Government's planning of the Sydney Metro City and Southwest Route and station locations has done nothing to address the congestion, capacity and inconvenience of Redfern Station. Nor do the plans build-in capacity for the known future growth in jobs, residents, students and visitors (including for healthcare) the Precinct will experience over the next 10-20 years.

The University believes that the solution lies in revisiting the proposed Sydney Metro West to provide a station at Camperdown.

We welcome this Inquiry in the hope that its recommendations encourage the Government to reinvestigate the proposed Sydney Metro West Route to ensure it can still deliver a new and modern mass transport system, which better serves the whole of Sydney and which can realise the greatest social and economic benefits for the people of Sydney and NSW.

⁴ Aurecon. Greater Sydney Innovation Precincts - Travel times between precincts, 2017.

⁵ Economic Benefits of Achieving a Camperdown-Ultimo Innovation District. Deloitte Access Economics, August 2018.

⁶ Our Greater Sydney 2056. Eastern City District Plan – connecting communities. Greater Sydney Commission, March 2018 page 8.

Terms of Reference (b): Consideration of alternatives for improving capacity and reducing congestion.

Key issues

The proposed route of the Sydney Metro City and Southwest from Bankstown through to Sydenham and on to Waterloo will have significant negative impacts on south western Sydney residents who rely on the current heavy rail line to get to the University of Sydney Campus, RPA and the neighbouring sites. Rail passengers from South West Sydney travelling to and from the Camperdown/Redfern and North Eveleigh area will be further disadvantaged by the removal of direct access to Redfern Station.

Student usage

Residential postcode data show that on 23 September 2019, there were 2,077 University of Sydney students living within 1km of a train station west of Sydenham on the T3 Bankstown Line. Of these students, 28% catch the train from stations west of Bankstown while the remaining 72% catch the train from stations between Sydenham and Bankstown. Figure 1 shows that majority of the University of Sydney students who use the T3 Bankstown Line for commuting to the Camperdown Campus live in the suburbs between Sydenham and Canterbury.

There are over 3,500 students who currently live within 2 kilometres of the stations along the heavy rail line that is to be replaced with Sydney Metro City and Southwest. Figure 1: Heat map of University of Sydney students using the T3 Bankstown Line for commuting to Camperdown Campus



For these students, a rail journey that is currently direct will, in the future, involve up to two transfers, thereby significantly increasing both travel time and the risk of missing connections and running late. As well as adding to their personal journey time, with no direct route from Sydney's South West, commuters to and from the University's Camperdown Campus and

surrounding areas will inevitably place more pressure on Central Station, Redfern Station and the surrounding bus routes and roads.

Other recent reductions to services

The Sydney Metro City and Southwest's proposed route from Sydenham to Waterloo will bypass the St Peters, Erskineville and Redfern rail stations. This move will further decrease the number of already reduced direct services to Redfern station, which include:

- The timetable changes made on 26 November 2017 as part of the Sydney Trains 'More Trains, More Services' created an inefficient journey for University of Sydney students and staff travelling on the Blue Mountains Line as it no longer stopped at Redfern and saved just 3 minutes in travel time to Central Station. These commuters now must either change trains at Strathfield Station to reach Redfern or transfer to a bus from Central Station.
- 2) The 2018 reductions to the number of direct services stopping at Redfern Station during peak hours on the Blue Mountains and the Newcastle lines have already heavily impacted the people who live, work, study and visit the Camperdown / Redfern / North Eveleigh area.⁷
- 3) The timetable changes on 30 September 2018 reduced commuter flexibility in travelling to and from Redfern Station and increased transport mode changes for Camperdown Campus commuters travelling on the Central Coast and Newcastle lines. This led to reduced direct services from four to two during the morning peak time to Redfern Station, and reduced direct services departing from Redfern Station from six to three in the evening peak. As a result, commuters travelling to the Camperdown Campus now have, on average, an increase in journey time by up to an additional 20 minutes including the changeover at Gosford Station or Strathfield Station to Redfern Station, where available in the morning and/or a mode-shift to Central Station arriving to Camperdown Campus either from another train at Redfern Station or a bus along City Road.

Impact on students and learning time

A 2019 Aurecon study, Sydney Metro City and Southwest - Impacts on Sydney University students,⁸ commissioned by the University found that the conversion will increase student travel time and reduce their learning time, as outlined below:

- Removal of direct train services to Redfern for students living west of Sydenham on the T3 Bankstown Line.
 - Currently, the T3 Bankstown Line runs direct heavy rail services for all 22 stations between Liverpool and Redfern through to the City Circle. Fast services also run between Liverpool and Redfern during peak hours which have limited stops (13 stops) and save 12% of travel time on average as compared to the all-stops service.
 - As part of the Sydney Metro City and Southwest alignment plan, 11 stations from Sydenham to Bankstown will be on the Metro Line and the remaining stations will continue to be on the Heavy Rail line.
 - Consequently, University of Sydney students living west of Sydenham will now have to make one transfer - at Sydenham from Metro to heavy rail and those living west of Bankstown will have to make two transfers - at Bankstown from heavy rail to Metro and at Sydenham from Metro to heavy rail, to reach Redfern Station.

⁷ "Sydney Metro City and Southwest Alignment – impacts on Sydney University students". Aurecon, Sept 2019

⁸ "Sydney Metro City and Southwest Alignment – impacts on Sydney University students". Aurecon, Sept 2019

- An alternate access to the University campus could be achieved by disembarking at Sydney Metro's new Waterloo station and then a 30-minute bus ride or a 30minute walk.
- Increase travel times and reduce learning time for students per semester
 - Due to the transfers now involved, these students will have to endure approximately 15% added travel time to their journeys each way as compared to the current All-stops service. This is equivalent to one-fifth of the total course contact hours per semester per student.
 - As compared to the limited-stops service, student travel times will increase by as much as 26% each way. This is equivalent to almost one-third of the total course contact hours per semester per student.
 - \circ Similar impacts will be suffered if students choose instead to use Metro's Waterloo station.
- There will be even bigger impacts during construction of the new Metro line

Current Redfern Station usage

A 2017 study conducted by the Institute of Transport and Logistics Studies (ITLS) for the University found that around 200 passengers per minute use Redfern Station during the peak weekday hours of 8.30am and 9am and that future planned increases in student numbers at the University may have a substantial effect on passenger numbers at Redfern.⁹ It also concluded that, based on previous modelling undertaken by the Institute on behalf of the University and Transport for NSW, the new Metro City and Southwest stop at Waterloo will provide little relief for passenger numbers at Redfern.

Since that study:

- CBA have confirmed they will move 10,000 staff to its new North Eveleigh location
- the NSW Government has announced a revitalisation, housing development and jobs growth promotion of Redfern and North Eveleigh
- the NSW Government has announced an upgrade to Redfern Station but with no increase to its capacity.¹⁰

The November 2018 Cardno Report, *University of Sydney Transport Status Report*, cited data which showed that Redfern Station was the sixth busiest rail station in Sydney in the AM peak period.¹¹ Without the provision of new transport options, Redfern Station does not have the capacity to absorb the additional pressure of an increased student, employee, resident and visitor travelling population.

Future projections snapshot

Listed below is a snapshot of the projected increase in people travelling to and from the Camperdown area related to study, employment and healthcare alone. It is important to note that this is just a snapshot and does not include projected population increases through private residential property development and the additional jobs that will be created by the Redfern and North Eveleigh project. Given the lifestyle stage of the majority of projected increases below (students and elderly people receiving or caring for someone receiving healthcare) and the significant lack of public parking in the area, public transport will be heavily relied on by these groups.

⁹ "Crowding at Redfern Station associated with The University of Sydney". Richard Ellison, Institute of Transport and Logistics Studies, University of Sydney, February 2017.

¹⁰ <u>https://www.transport.nsw.gov.au/projects/current-projects/redfern-station-upgrade-new-southern-concourse</u> 6 September 2019.

¹¹ University of Sydney Transport Status Report. Cardno. November 2018.

20,000 extra health and education jobs

In 2016, the University and the RPA employed over 17,500 people, and estimate a total of 7.238 net new jobs by 2036.¹² With a new private hospital planned under construction adjacent the RPA site, further health-related employment will be added to the precinct. Considering the broader Broadway/Camperdown/Darlington/Eveleigh precinct, the NSW Bureau of Transport Statistics identifies that the precinct currently provides a total of 35,485 jobs and is forecast to grow to 39,497 jobs by 2021, and 54,550 jobs by 2041.13 While the figures are significant we believe they do not reflect the actual expansion plans of the Precinct and are considerably below our own estimates.

The University's Camperdown campus expansion investment alone is anticipated to unlock an additional 3,360 new direct, high value-add jobs to the Precinct.¹⁴

9,000 additional student accommodation beds

The University has committed to developing affordable student accommodation to meet the arowing needs of its students, of which 1,600 of a total of 4,000 beds are now in operation and a further 350 are proceeding through the development approval process.

In addition to the education floor space and affordable student accommodation planned by the University, external private providers are also delivering a pipeline of student accommodation, such that 5,000 additional student accommodation beds will become operational within a 3km radius of the University within the next 6 years.¹⁵

40 per cent increase in demand for health services

The Sydney Local Health District's (SLHD) 2012-17 Strategic Plan provides for the projected demand for health care services of over 770,000 people by 2031, increasing due to ageing and population growth, plus an additional **70,000** people from the NSW Government's proposed urban transformation plans.

As a principal referral hospital of the district, RPA's key purpose is to provide timely, high guality and patient-centred health care. The RPA Hospital currently treats more public patients than any other hospital in NSW, admitting 84,000 patients and providing 630,000 outpatient services per year.

The demand for services at the hospital will increase as the surrounding catchment population ages, with the number of residents over 70 projected to increase by 29% by 2021 and 81% by 2031. To accommodate this significant growth, the hospital is forecast to require a 40% increase in beds and services. In addition to front line services, there is a need to ensure research capabilities grow to continue to support innovation and high quality care.

Patronage assessment of a Camperdown Metro station

Patronage assessment demonstrates that a Camperdown Metro station would be highly utilised during both peak and off-peak periods, with peak patronage at levels comparable to Redfern Station, one of the busiest stations in the existing rail network. As an attractive alternative to the existing transport options, the station would generate modal shift, inducing a significant move to rail that provides a more environmentally friendly and efficient transport outcome that benefits not only the corridor but transport across Sydney while unlocking significant network capacity, future jobs and economic growth.

¹² SGS Economics and Panning, Inputs into Draft Parramatta Road Urban Transformation Strategy response, University of Sydney and Sydney Local Health District, 2016.

¹³ Bureau of Transport Statistics, Employment Forecasts 2011-2041, Transport for NSW, 2014; Release v2.0.

¹⁴ PwC, Sydney's next Strategic Centre: An economic assessment of the

Broadway/Camperdown/Darlington/Eveleigh precinct, 2016. ¹⁵ Location IQ, Future Supply of Student Housing, March 2015.

Conclusion

Sydney Metro, in its City and Southwest Final Business Case Summary October 2016, states that "To be effective the transport system must meet customer needs. Transport for NSW is responsible for ensuring the needs of the customer are at the centre of planning and decision making for the transport system and that all projects are designed and operated accordingly."¹⁶

The University and its collaboration partners have previously sought to have a Metro station located at Camperdown. The University remains concerned that the process of designing the Sydney Metro and deciding station locations has failed to employ an overarching lens in order to:

- investigate Sydney's current and future transport pinch points
- develop real and immediate solutions that will improve system wide capacity
- reduce system wide congestion
- improve travel times and the experience for Sydney commuters.

The University is also concerned that this metro alignment will jeopardise key project objectives as set out in the 2016 Sydney Metro City & Southwest Business case, including to:

- improve the quality of transport experience for customers
- provide a transport system that is able to satisfy long-term demand
- serve and stimulate urban development
- improve the resilience of the transport network
- improve the efficiency and cost effectiveness of the public transport system.

The University maintains that the consideration of alternatives for improving capacity and reducing congestion failed to take into account the need to:

- reduce pressure on an overcrowded Redfern Station
- reduce pressure on congested vehicle travel in the Camperdown/ Redfern and North Eveleigh precinct
- take into account the significant projected increases to student, staff, resident, visitor numbers and people receiving health care to the area.

The University believes that the conversion of the Sydenham to Bankstown section of the T3 to Metro will inadvertently add to the already serious congestion, inconvenience and capacity issues at neighbouring Redfern and Central stations and the roads surrounding them.

The solution

The University believes that the resultant congestion and transport constraints in the Camperdown/Redfern and North Eveleigh areas can be alleviated now if the NSW Government reinvestigates the route of the next phase of Sydney Metro – the proposed Sydney Metro West - to include a Camperdown station.

An added, and equally important, benefit of a station at Camperdown is the invaluable link it would create between Sydney's two largest and expanding health and education precincts - Camperdown and Westmead.

The University and its partners at Camperdown and Westmead have identified the Sydney Metro West network as the transport solution that could support both the University and the

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https://www.sydneymetro.info/sites/default/files/Sydney%20Metro%20CSW%20Business%20Case%20Summ ary.pdf

GSC's aspirations for the rapidly expanding growth corridor from the CBD to Greater Parramatta to the Olympic Peninsula (GPOP).

The University's 2016-20 Strategic Plan highlights significant investment in two of Sydney's key health and education precincts, Camperdown-Ultimo and Westmead. With existing transport constraints in each precinct, the University believes that Sydney Metro West provides a unique opportunity to realign land use, growth and transport infrastructure to realise the full potential of both precincts.

A 2017 analysis by Aurecon showed that despite their economic importance and the need for proximity, both the Westmead and Camperdown-Ultimo Health and Education Precincts receive very little benefit from the NSW Government's record infrastructure investment, even with the significant existing transport constraints of both sites.¹⁷

A Sydney Metro West station at the University and adjacent to the RPA would substantially increase the number of sub-30 minute connections between Sydney's known innovation clusters and allow the Precinct to leverage its considerable attributes in support of Sydney's other innovation clusters and the GSC's smart city vision. Combined, these two centres have the ability to activate the growth corridor across greater Sydney and provide the rapidly expanding GPOP with employment opportunities and access to services.

Forecasts show that a Camperdown Station could accommodate 6,000 passengers an hour in 2036, comparable to Redfern Station which, as we have outlined, is currently one of the busiest stations in the train network.

Recommendations

To realise these benefits, the University recommends that this Inquiry consider the merits of a Camperdown Station of the Sydney Metro West as the final chance to deliver a transport solution that will release the Camperdown-Ultimo Health and Education Precinct's potential and alleviate the immediate and rapidly growing congestion and capacity issues surrounding it.

Establishing Sydney Metro West stations at Camperdown and Westmead would:

- 1. Alleviate the congestion, inconvenience and capacity issues not addressed and also compounded by the Sydney Metro City and Southwest.
- 2. Enable a significant increase in smart jobs.
- 3. Support the majority of the GSC's Region and District strategies across the Western and Eastern Cities.
- Alleviate existing transport constraints and support the long-term transport requirements of successful and rapidly expanding health and education innovation precincts.
- 5. Facilitate the transition of both the Camperdown-Ultimo and Westmead Health and Education Precincts into Innovation Districts of an international standard.
- 6. Enable the mature Camperdown-Ultimo Health and Education Precinct to act as a nexus and support to Sydney's other innovation clusters and expedite the smart specialisation of these clusters.
- 7. Accelerate the GSC's vision for a 30 minute smart city.
- 8. Unlock capacity on the wider transport network.

¹⁷ Aurecon, Greater Sydney Innovation Precincts, Oct 2017

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