

RIVER RAIL

KOGARAH TO PARRAMATTA RAIL LINK

MAY 2020





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A MESSAGE FROM **THE MAYOR**

At Georges River Council we are committed to leading for change, ensuring we are future focused, thinking beyond our current programs of work and business as usual, and making conscious decisions to achieve our bold aspirations as well as those of Greater Sydney. The River Rail connection between Kogarah and Parramatta is a critical city building project which will transform the future of Sydney and the only way that the NSW State Government's 30-minute city goal can be achieved.

This report highlights that benefits from River Rail are city-wide, and are a catalyst for further quality commercial opportunities at Kogarah, which will create high-value job opportunities for the South District. The connectivity we are advocating will transform the possibilities for Kogarah, enabling it to realise its role as a key centre in this region of Sydney, as defined by the Greater Sydney Commission and the NSW Government.

Council supports the recognition of the mass transit link in State planning and is committed to working with the State government to fast track this project as part of the economic recovery of Greater Sydney.



01 PREFACE

As Sydney grows on its journey to a city of 8 million by 2050, it becomes clearer that the transport mode required to sustain this growth without congestion is rail. This has been the lesson everywhere such growth has been experienced.

Equally, the cities internationally which have attempted to manage their growth without rail investment have seen their suburbs sprawl ever outwards whilst their roads fill up with vehicles no matter how much extra capacity they create. Rail enables that economic agglomeration which is at the heart of the modern knowledge economy. It also enables higher density development closer to jobs so that markets have easy access to talent and people have easy access to good jobs but also the amenities they look for from a city.

A liveable city of short journeys between employment, homes and amenities attracts talent, investment and indeed community loyalty. This is the '30 minute Sydney' we are all seeking to build. It can only be built on rail and the extending of the network Sydney currently has.

Yes, this means developing rail connectivity to and through the new Western Sydney airport, of which this council is a strong supporter. Equally, we are firm advocates of the new West Metro from the Sydney CBD through Parramatta to Westmead. The continued growth of Parramatta and that corridor is of significant benefit to our part of Sydney as indeed to the city as a whole. However, in our judgement, based on a review of the evidence, to enable Sydney's 'metropolis of cities' to achieve the fullest potential, public policy and investment needs also to be targeted at meeting the economic and social needs – and harnessing the momentum of the fast growing populations and businesses in that key quadrant of Sydney to the south of the CBD, of the 'eastern city' and the 'central city'. The main element of that renewed focus on this corridor we have identified as core to success is the north-south rail link connecting Kogarah to Parramatta via Bankstown (River Rail).

Such a rail link is of course already supported in key city planning and transport strategies produced

by the GSC and TfNSW and we welcome this emphasis. We note also that such a rail link also commands the support of all relevant local governments and indeed the communities they serve. The City of Parramatta in particular, is a confirmed partner in our advocacy for this initiative as is the Hills council to the north. This is gratifying and such partners will be vital in taking this campaign forward. The issue for us is to ensure that such aspirations and policy alignment results in speedy delivery of the proposed alignment. We believe a greater priority should be accorded this proposal by government agencies. The River Rail initiative needs to be 'fast-tracked'.

This is so for many reasons. This is a 'north-south' initiative in a city which thus far has prioritised mostly radial rail journeys from the middle or outer parts of Sydney into the Sydney CBD. Modern cities create rail networks which link all parts of the compass, resulting in greater economic impact at the nodes of intersection, better and more efficient access to more parts of the city for commuters and businesses and overall a better function of the city from the advantages of the 'network effect' over the mere radial structure. Just as crossroads historically enabled densities and mixes of uses and connected them to broader communities and markets, so too do nodes of intersection on the rail network.

Also and simply, our proposed north-south initiative will encourage development and densities at Kogarah and Parramatta as well as interim nodes and will have a benign 'relieving' impact on the current corridors running radially to the CBD of Sydney. That is to say, the initiative will help grow the economic cake of this part of Sydney and enhance opportunities for more communities, whilst having the potential to reduce pressure and congestion on existing infrastructure and routes.

We stress: we cannot see how Parramatta can achieve the strategic aim set for it, to be Sydney's second CBD and the capital of the Central City, without enhancing its connectivity north-south as well as east-west. We cannot see how the communities to its south can access opportunities and jobs there, without long journeys on congested roads, unless this alternative is speedily developed.

The 'speed' required to progress this initiative reminds us of the urgency of establishing this mass transit capacity precisely because to do so now will not just enable higher quality and well designed higher density development in the form of Transit Oriented Development along the route: it will make low quality, low density development unattractive for the market to pursue in this corridor as contrasted with a 'business as usual' suburban form – which on all evidence will lead both to lower housing numbers being delivered but also suppress the potential for economic activity. Unless public policy focuses on the potential of this corridor, the opportunity will be missed to achieve that land use and transport integration which is at the heart of the successful modern city.

For us, as we show in this report, the benefits from rail in this corridor are city-wide but they also catalyse further high-quality commercial opportunities at Kogarah. The connectivity we are advocating will transform the possibilities for Kogarah and enable it to play fully the role seen for it in the GSC's planning as a key centre in this region of Sydney – and as a focus of employment. We are of course aware that while such transport connectivity always galvanises and focuses opportunities at such nodes, the rail investment needs to be supplemented by co-investment from any and all possible sources, public and private. Councils planning powers and resources must also be applied in a complementary manner to infrastructure investment, to maximise potential. We stress that the rail initiative advocated sits within a broader land use and transport strategy to support the development of Kogarah so as to attract high quality private investment.

The council thus has 'skin in the game' and recognises that the fullest alignment between state government agencies and the council will be required to deliver the best results. We commit ourselves to this partnership. We have seen how

the governance innovations in the Western Parkland City Deal – involving horizontal agreements between councils and vertically between tiers of government – have worked to attract both public and private investment and believe that such collaborations will be crucial to emulate or learn from in developing and leveraging the initiative set out here.

We also recognise that in an era of constrained public finances and a wide range of competing priorities that all partners to this initiative will have to explore innovative ways of accessing funding and financing of such projects. Great public and private value will be created from this initiative – companies will be more efficient and successful, more higher quality jobs will be accessible, higher density residential development will be achieved and homes will see an uplift in the market – and no one doubts that new ways of fairly accessing and sharing such value with the infrastructure providers who have catalysed the transformation need to be established. We are willing to have the discussion about the most effective and equitable ways of progressing this approach.

This paper makes the case for urgent investment in River Rail, as a vital catalytic project for a crucial part of Sydney, at a key moment in its growth. It argues that together we can harness this momentum and transform this area – and with it the opportunities for its communities and businesses as well as those of Greater Sydney. In short it makes a call to fast-track River Rail.

In making this case, this report outlines:

- the strategic context of Georges River, Kogarah and Greater Sydney
- why rail is the form of connectivity required
- why the River Rail corridor is so important
- why we need to prioritise this corridor now
- how to make it happen

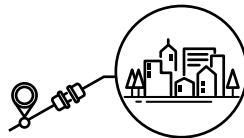
Figure 1 provides an overview of benefits anticipated to flow from investment in River Rail.

River Rail: Overview of benefits

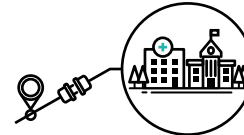
A CITY SHAPING INVESTMENT



long, connecting Parramatta to Kogarah via Bankstown



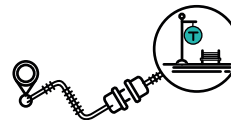
Connects with strategic centres



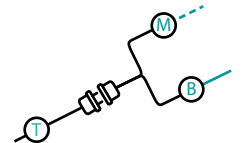
Connects to health and education precincts at Bankstown, Kogarah and Westmead



Estimated cost to build the new line



Connects to existing rail lines T3, T4 and T8



Connects to proposed Metro South West and existing bus services

CONTRIBUTING TO ECONOMIC GROWTH



additional GRP across Sydney from 2030 to 2045 (NPV)



of travel time for motorists saved each day in 2036, worth a potential \$0.7 billion over 30 years



additional trips by rail each day in 2036

IMPROVING SOCIAL OUTCOMES



additional people in walking distance to a station



Includes potential urban renewal sites



additional jobs accessible from stations along the line (within 45 minutes in 2046)

Figure 1 An overview of benefits anticipated to flow from investment in River Rail

02 THE STRATEGIC CONTEXT FOR INVESTMENT

A vision for Georges River: a leader for change in Sydney

Georges River Council is committed to being a positive leader for change to make Georges River, and Greater Sydney, the best place it can be. We are future focused and ambitious about our potential. We are proud of the Georges River area and will continue to promote our community and the opportunities our city offers. This includes thinking beyond our current programs of work and day to day activities to make conscious decisions to achieve our vision.

Our Vision for 2050 is for the Georges River area to be an accessible, green, diverse and innovative place, community and economy. In 2050, Georges River is Connected, Naturally.

Core to our vision, Georges River allows people and businesses to connect locally, regionally, nationally and globally, from easy walking and cycling links, to the use of innovative transport technologies across the LGA and new and upgraded transport links across Greater Sydney and to the Illawarra. Georges River is working to transform the connectivity of Greater Sydney.

This accessibility supports a strong economy across a connected network of centres and precincts as well as providing residents of all ages and talented workers with access to lifelong learning opportunities to build their knowledge, creativity and wellbeing, contributing to innovation and prosperity.

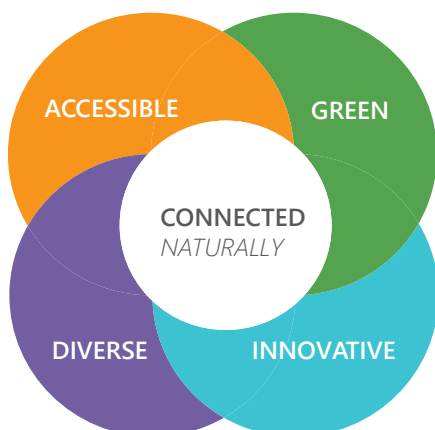


Figure 2 Georges River Council Vision for 2050

Georges River at a glance

Georges River is well positioned in Greater Sydney. Its location, environment, communities and economy make it a place with unmatched potential and opportunity. Georges River:

- connects across the metropolis of three cities, including to each of the metropolitan centres that act as anchors for the Eastern Harbour City, Central River City and Western Parkland City, and is the gateway to the South District, with connections to the Illawarra and Shoalhaven
- is within 20 minutes of Sydney CBD and less than 20 minutes to Sydney Airport from two rail lines, with 11 train stations, and major road connections
- features regional parks and sportsgrounds including Oatley Park, Gannons Park, Olds Park, Poulton Park, Hurstville Oval, Penshurst Park, Hurstville Aquatic Leisure Centre, Norm O’Neill Cricket Training Facility in Penshurst and Netstrata Jubilee Stadium
- includes 40+ local centres, villages and neighbourhoods that offer shops, local services, meeting places and community facilities and services
- offers jobs in health and education in Kogarah and retail, entertainment, commercial and civic in Hurstville; local centres providing retail and other services; and urban services in nine industrial precincts in Peakhurst, Carlton and Kingsgrove
- includes diverse and culturally rich communities with a young workforce, a high proportion of residents who speak languages other than English, and residents from places as diverse as China, Nepal, Greece, Philippines and India.

- is home to a skilled workforce with low unemployment (3.4 per cent) relative to Greater Sydney (4.5 per cent) and higher rates of education attainment
- sees a higher proportion of residents who use public transport for work (31 per cent compared to 23 per cent in Greater Sydney)
- welcomes 2.5 million international visitor nights per year

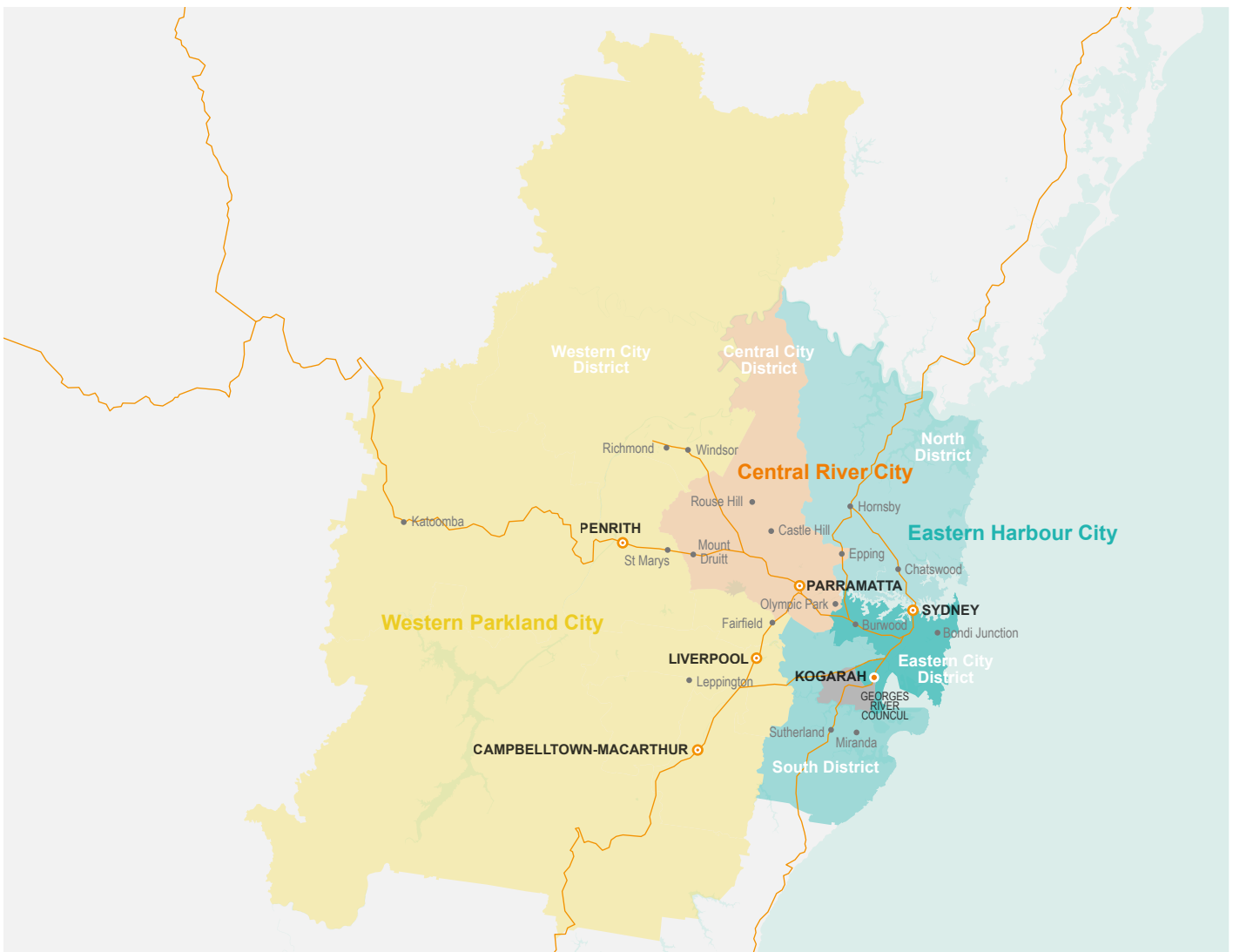


Figure 3 Georges River metropolitan context

POPULATION & HOUSING

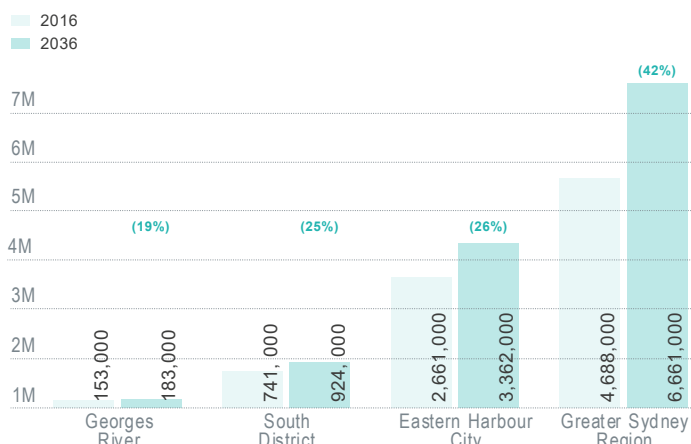


Figure 4 Historic and projected population for Greater Sydney, Eastern Sydney, the South District and Georges River

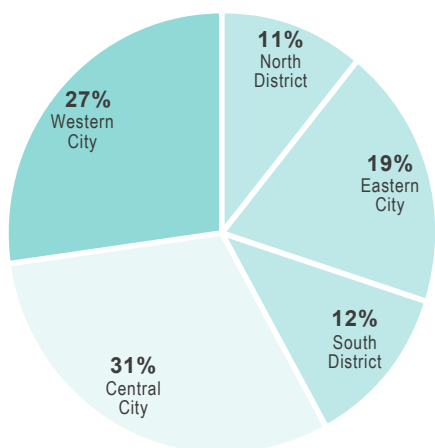


Figure 5 District level growth in the percentage of population 2016-2036

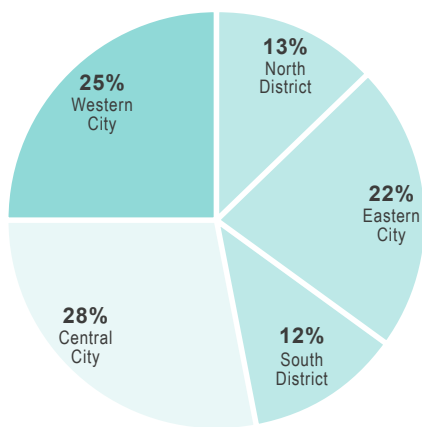


Figure 6 District level growth in the percentage of homes 2016-2036

EMPLOYMENT

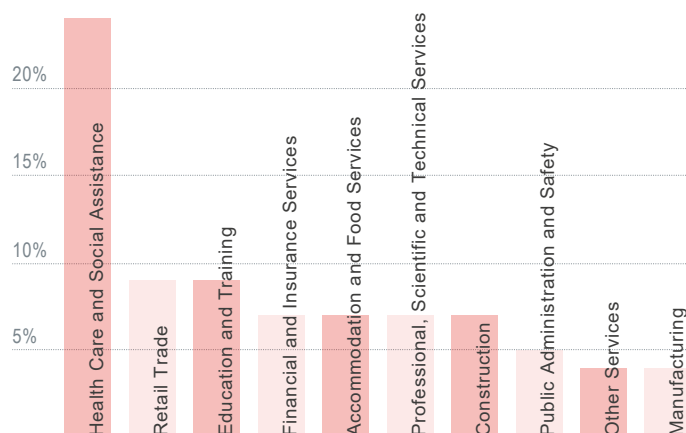


Figure 7 Georges River Council - Employment composition (top 10 industries) 2016

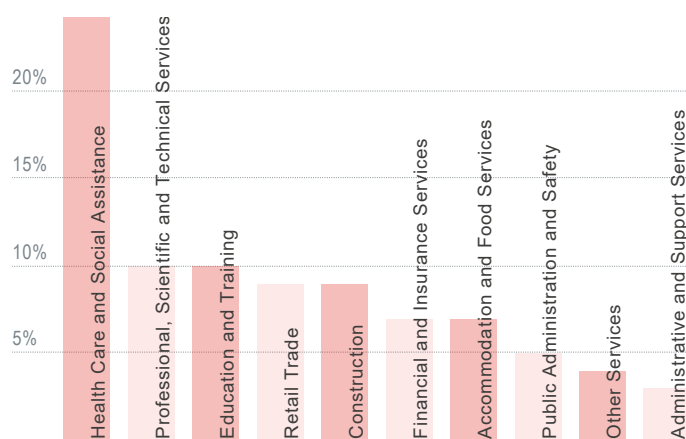


Figure 8 Georges River Council - Employment composition (top 10 industries) 2036

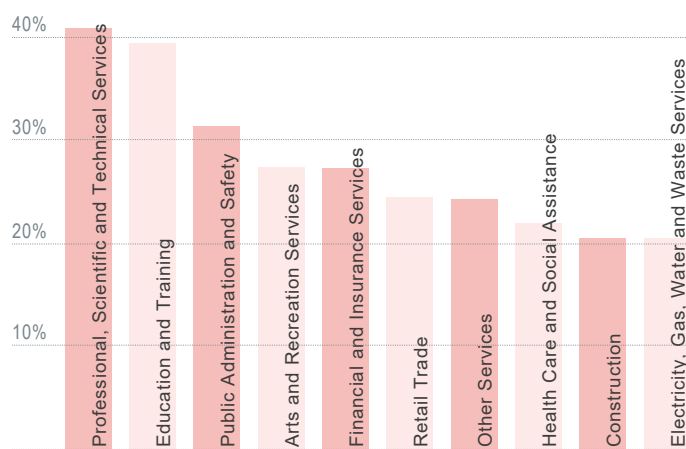


Figure 9 Georges River Council - Employment growth by industry (top 10 industries) 2016 - 2036

EDUCATION

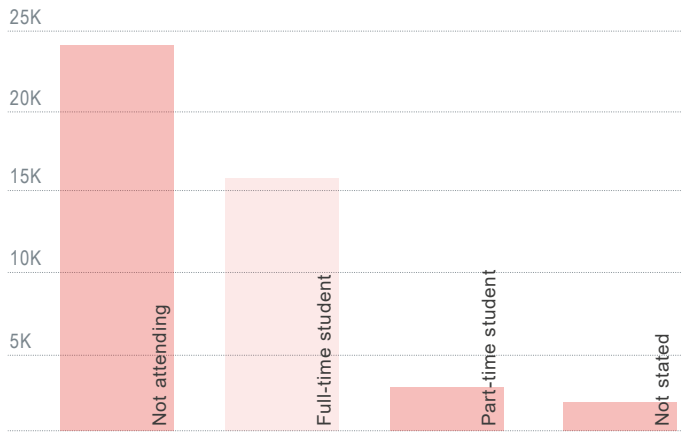


Figure 10 Aged 15-34 years old and studying in 2016

TRAVEL TO WORK

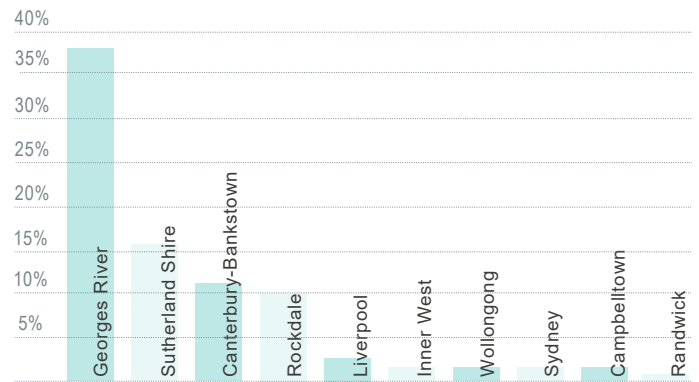


Figure 11 Where do workers in Georges River come from?

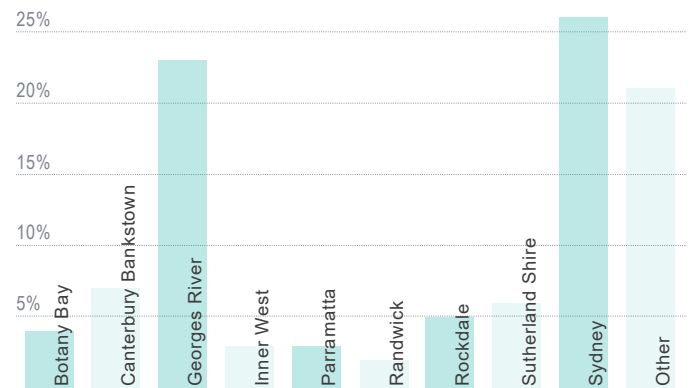


Figure 12 Where do residents go to work?

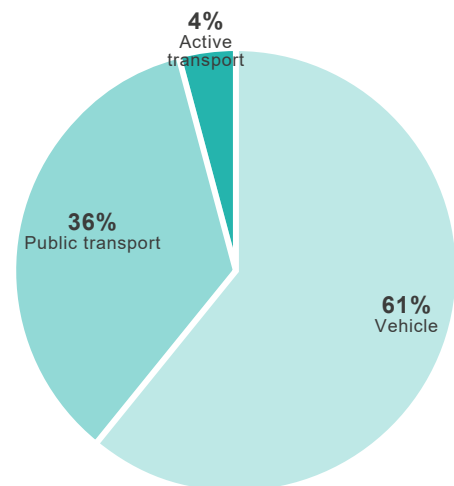


Figure 13 How do residents get to work?



Georges River and the Three Cities Plan

Sydney is growing rapidly with 725,000 additional homes and 817,000 additional jobs required by 2036 to meet the “needs of a changing economy and workforce and provide a balance of diverse communities”.

To accommodate this growth and support a sustainable, productive and liveable city, the Greater Sydney Commission’s (GSC’s) A Metropolis of Three Cities – the Greater Sydney Region Plan establishes a vision for Sydney where most residents live within 30 minutes of their jobs, education and health services as well as being within reach of great places.

To achieve this the NSW Government conceptualised the Sydney Region as a metropolis of three cities:

- the Eastern Harbour City
- the Central River City
- the Western Parkland City

Within the three cities the GSC identifies five Districts. Three of these Districts - the North District, Eastern City District and South District - make up the Eastern Harbour City, while the Central City District makes up the Central River City and the Western City District makes up the Western Parkland City.

Georges River Local Government Area sits at the heart of the South District, together with Sutherland and Canterbury-Bankstown Local Government Areas.

The Kogarah Strategic Centre and Health and Education Precinct lies at the intersection of Georges River Local Government Area, within the South District, and Bayside Local Government Area, within the Eastern City District. Its sister Strategic Centre, Hurstville sits more centrally within the Georges River Local Government Area.

The metropolitan policy plans for substantial growth in the Eastern Harbour City over the next 20 years. The Eastern Harbour City is projected to grow from 2.4 million people in 2016 to 3.3 million people by 2036, an increase of 900,000 people. Of this growth, 204,000 extra people will reside in the South District.

The Central River City is also set to grow significantly from 1.3 million people to 1.7 million people over the next 20 years, an increase of 400,000 people.

Figure 14 illustrates the distribution of additional homes across Sydney between 2016 and 2036, highlighting the significant growth projected for Sydney's Eastern Harbour City and Central River City.

While the Greater Sydney Region Plan identifies Georges River Council area within the Eastern Harbour City, Georges River Council also identifies strongly with the Central River City.

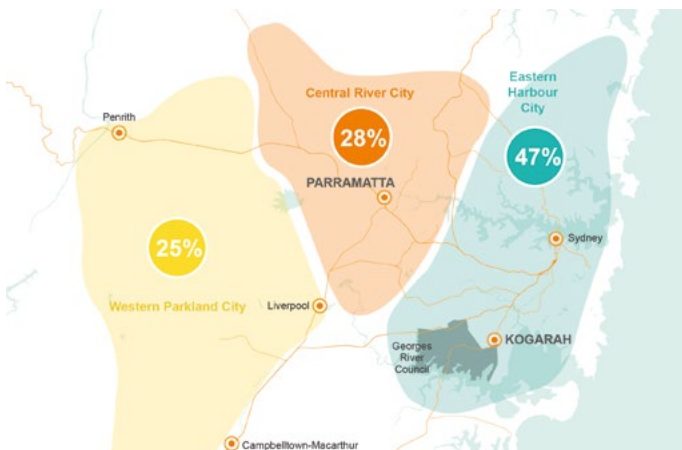


Figure 14 Additional homes across Sydney between 2016-2036 showing significant growth in Sydney's Eastern Harbour City and Central River City

Meeting the NSW Government's vision for Greater Sydney to be a 30-minute city, where most residents live within 30 minutes of their jobs, education and health facilities, services and great places, will require the Eastern Harbour City, the Central River City and the Western Parkland City to act as a network of connected and integrated economies.

Sydney's three cities must act as a network of connected and integrated economies.

A Metropolis of Three Cities, Future Transport and the NSW State Infrastructure Strategy recognise the importance of River Rail as one of a series of four city-shaping rail corridors, radiating from Greater Parramatta which, together with the Sydney Metro West rail link and other modes - including light rail, bus and ferry services - will provide a transport network which will support cross-city and cross-region journeys to meet the 30-minute vision.

The NSW Government recognises River Rail as one of a series of city-shaping rail corridors radiating from Greater Parramatta which provide a network which will support the 30minute vision.

River Rail, particularly when delivered as part of a wider Central City Rail Network, as described in Figure 15, will provide Sydney's metropolitan centres with access to a larger skilled labour force, connecting people from Georges River to Greater Parramatta and the Central River City as well as the Eastern Harbour City and the Western Parkland City.

Enhancing transport infrastructure to connect strategic centres in Georges River and the wider South District with Greater Parramatta, the broader Central River City and the wider transport network for Greater Sydney will increase productivity and access to jobs, enhance equality, and support the liveability, sustainability and resilience of Sydney as a whole.

Critically, River Rail will be a vital catalytic project for a crucial part of Sydney, at a key moment in its growth. We must seize the opportunity to maximise the potential of Kogarah, Georges River and the South District and avoid the problems that will arise should the existing pattern of residentially-dominated, low density development be perpetuated in Sydney's south, making future change increasingly difficult and costly to achieve.

Box 1 The Central City Rail Network

The Central City Rail Network, consisting of lines connecting Greater Parramatta and Epping, Kogarah (via Bankstown), Northwest and Western Sydney Airport, collectively complements existing and planned connections at Parramatta to create a Central River City transport hub.

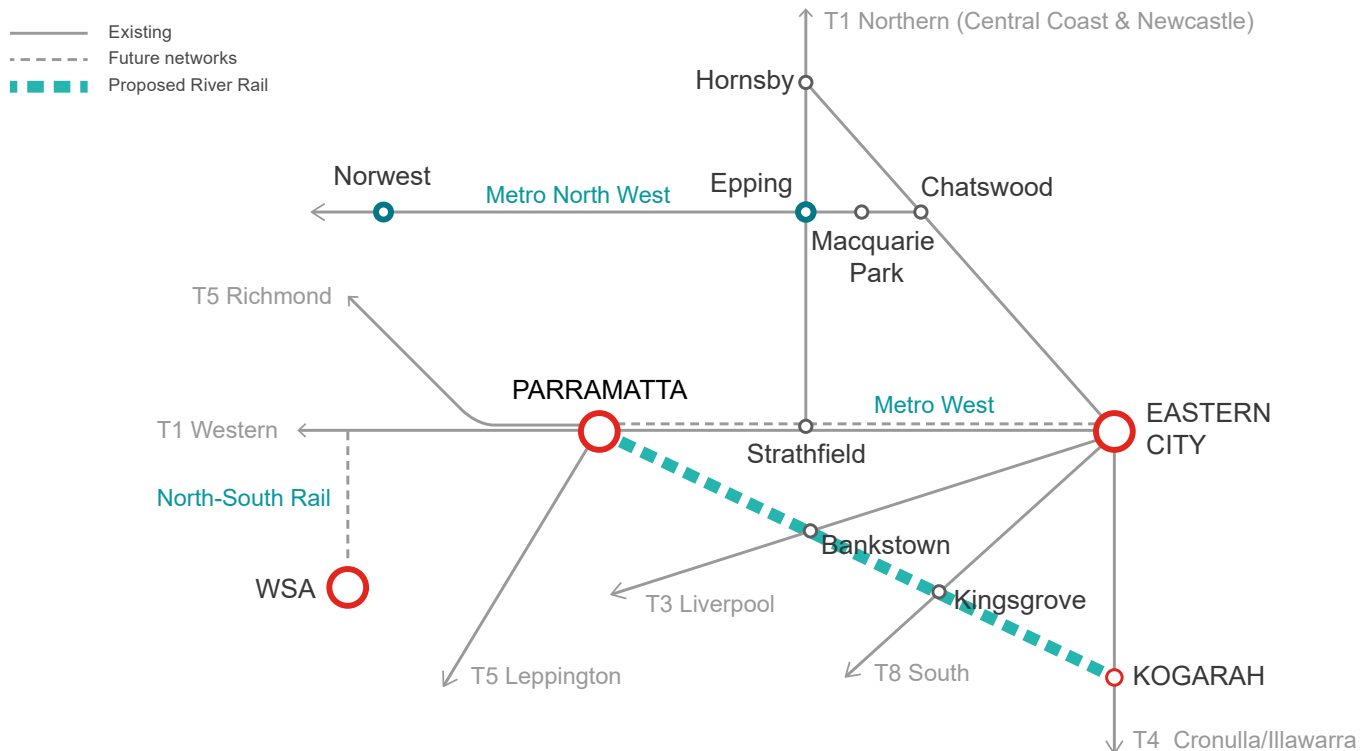
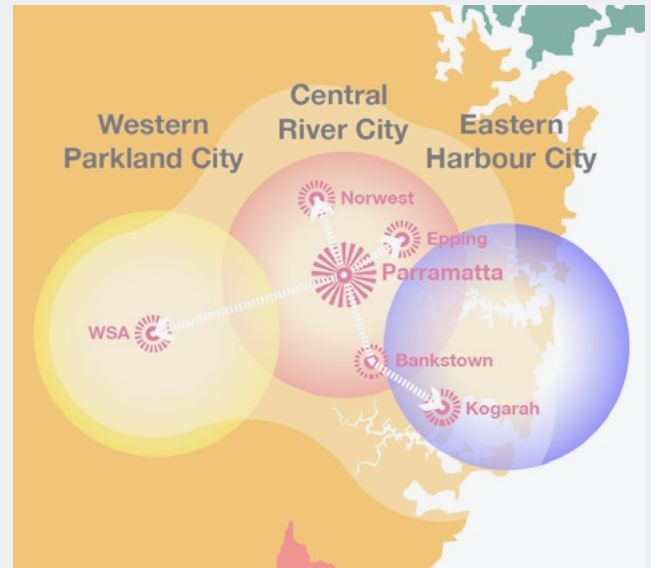


Figure 15 The proposed train networks

CONNECTIONS	DESCRIPTIONS
CURRENT CONNECTIONS	<p>Georges River is currently connected as follows:</p> <ul style="list-style-type: none"> - T8 Airport and South line connecting east to Kingsford Smith Airport and Sydney CBD and south - T4 Cronulla/Illawarra (South Coast) line connecting south to Cronulla and Wollongong and north to Sydney CBD
FUTURE CONNECTIONS	<p>Projects underway will further connect Parramatta CBD:</p> <ul style="list-style-type: none"> - Sydney Metro West will double rail capacity between the Parramatta CBD and Eastern CBD - Parramatta Light Rail will connect the Parramatta CBD with Westmead and Carlingford (Stage 1) and Sydney Olympic Park (Stage 2) <p>Projects underway will enhance connectivity to Kogarah</p> <ul style="list-style-type: none"> - T4 Illawarra Line (including South Coast Line) train improvements (2026)
ADDITIONAL CONNECTIONS UNDER INVESTIGATION WITH FUTURE TRANSPORT	<p>Projects under investigation for implementation in the next 10 years to enhance connectivity to and from Hurstville and Kogarah:</p> <ul style="list-style-type: none"> - Hurstville / Kogarah to Bankstown to Parramatta Rapid Bus Link (0-10 years investigation) <p>The following additional connections for Sydney's transport network, connecting to and from Kogarah (or Hurstville):</p> <ul style="list-style-type: none"> - Kogarah to Parramatta via Bankstown mass transit / train link (10-20 years investigation) - Extension of the Kogarah-Bankstown-Parramatta- link to Norwest (20+ years visionary) - Extension of the south east mass transit/train link from Randwick to Kogarah and Miranda to provide longer term capacity relief on the T4 Illawarra Line and support urban renewal. (20+ years visionary) - Potential Hurstville (or Kogarah) to Macquarie Park via Rhodes (through Burwood or Strathfield) mass transit/ train link will provide important cross city connectivity from Hurstville (or Kogarah) to the T1 connection at Rhodes and then continuing on to Macquarie Park on the Sydney Metro (20+years visionary)

03 WHY RAIL?

Rail has the potential to be the structuring principle for good growth in Sydney. Rail provides broad, city-shaping benefits to the community along with the ability to move large numbers of people to and between economic centres and supports the agglomeration of activity required to create increased productivity and jobs growth.

Enables density without congestion

Sydney is a great city with big transport challenges.

The Property Council of Australia (PCA) released “Creating Great Australian Cities”, in which the performance of Australian cities is compared to international benchmarks. The report found that Australian cities are lagging international best practice when it comes to transport and infrastructure.

Road investment has promoted dispersed development.

As illustrated in Figure 16, road-based transport tends to encourage more dispersed development patterns than rail and consequently less agglomeration of economic benefits. The consequences of a continuing to rely on a “business as usual” roads-based approach would be continued car dominance resulting in dispersed development, higher costs of infrastructure and services, health issues and increased congestion on roads. This is a low productivity model that fails to capitalise on the global trend of high value service economy cities where jobs agglomerate close to denser, mixed-use urban areas served by public transport, rather than in drivable suburban areas.

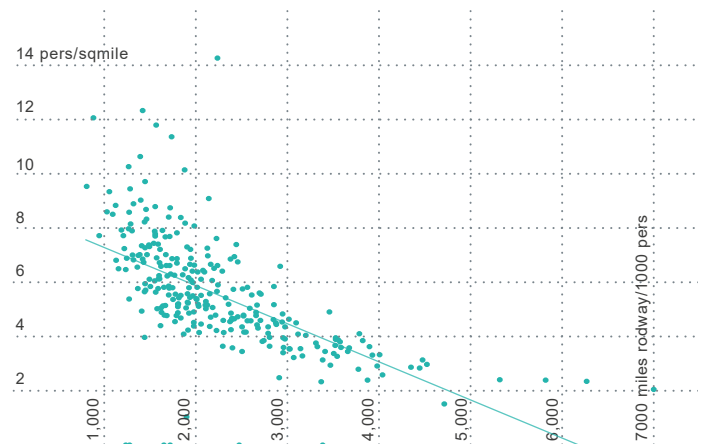


Figure 16 Lane miles of road per population density - road investment promotes dispersed development

Infrastructure Australia has demonstrated the benefits of a more compact and connected Sydney facilitated by rail investment.

The Future Cities Report shows that better outcomes are achieved when:

- Growth is managed with the aim of locating jobs closer to where people currently live, and more evenly distributing the impact of population growth.
- New housing is focused around existing transport hubs and employment centres, increasing the density of people and activity in these areas.
- Investment in public transport infrastructure will improve accessibility to jobs and relieve the cost of congestion for all growth scenarios for Sydney.

Box 2 gives further information about the findings of Infrastructure Australia’s Future Cities Report.

Box 2: An overview of the Australia's Future Cities Report

Infrastructure Australia's Future Cities Report compares the performance of three 30 year scenarios for Sydney by modelling their impact on transport and social infrastructure. The three scenarios include:

- Expanded Low Density scenario – tests a future in which the largest proportion of development is placed in outer greenfield areas.
- Centralised High Density scenario – tests a higher density, inner-city growth future which locates people closer to existing transport infrastructure and major employment centres
- Rebalanced Medium Density scenario – tests the outcomes of rebalancing a city's spatial structure by spreading the impact of new jobs and houses more evenly across the metropolitan area, around key centres.

The results of the analysis is organised under five indicator themes: the performance of the transport network, access to jobs, the environmental performance of the road network, access to and demand for social infrastructure and access to and demand for green space.

KEY STATISTICS	REFERENCE CASE (2016)	EXPANDED LOW DENSITY SCENARIO (2046)	CENTRALISED HIGH DENSITY SCENARIO (2046)	REBALANCED MEDIUM DENSITY SCENARIO (2046)
TRANSPORT PERFORMANCE				
ROAD CONGESTION (a)	15%	28%	30%	28%
PUBLIC TRANSPORT MODE SHARE (b)	26%	32%	35%	35%
ACCESS TO JOBS IN 30 MINUTES (c)				
CAR	13%	9%	9%	9%
PUBLIC TRANSPORT	2%	2%	2%	2%
ACCESS TO JOBS IN 60 MINUTES (d)				
CAR	43%	35%	36%	36%
PUBLIC TRANSPORT	13%	18%	23%	22%
ACCESS TO HOSPITALS (e)				
PERCENTAGE OF POPULATION WITH ACCESS	80%	71%	76%	74%
ACCESS TO SCHOOLS (f)				
PERCENTAGE OF POPULATION WITH ACCESS	97%	92%	95%	94%
ACCESS TO GREEN SPACE (g)				
PERCENTAGE OF POPULATION WITH ACCESS	62%	54%	58%	56%

Note: Indicators are rounded to the nearest whole percent. This means same scenario appear to show the same result even though there are differences in performance. Before detail is provided in the relevant sections of this section.

Note: Care should be taken when comparing the reference case to the scenario. This is particularly the case with green space, school and hospital access indicators, where no new infrastructure was added from the reference year.

(a) Measured as the percentage of vehicle KMs travelled where volume of traffic exceeds road capacity in the AM peak

(b) The percentage of trips by public transport in the AM peak

(c) The percentage of jobs accessible in 30 minutes during the AM peak

(d) The percentage of jobs accessible in 60 minutes during the AM peak

(e) Within a 20 minutes drive or 30 minutes by public transport of a major hospital in the AM peak

(f) Within a five-minute drive or 20 minutes by public transport or a 40 minute walk of a primary or a secondary school in the AM peak

(g) Within a five minute of any green space

Underpins the knowledge economy

Globally, more high value jobs are clustering in city centres as economies 're-urbanise'.

This is also happening in Sydney, whose knowledge economy benefits from the concentration of talent, information and insights. Density, mix of uses, co-location of industry, universities and government – along with enhanced mass transit connectivity are vital in such an economy. Cities which inhibit or cannot create the ecosystems for this modern economy will go backwards.

Only rail, as the most efficient form of mass transit as highlighted in Figure 17 can enable the inhabitants of a large city like Sydney to access labour markets and entrepreneurs and firms to attract more high value investments and talent, to serve the modern knowledge economy which puts a premium on job density and agglomeration in locations in which urban liveability and productivity are combined.

Box 3 illustrates how rail infrastructure investment was employed to boost economic development in the Randstad Region of the Netherlands.

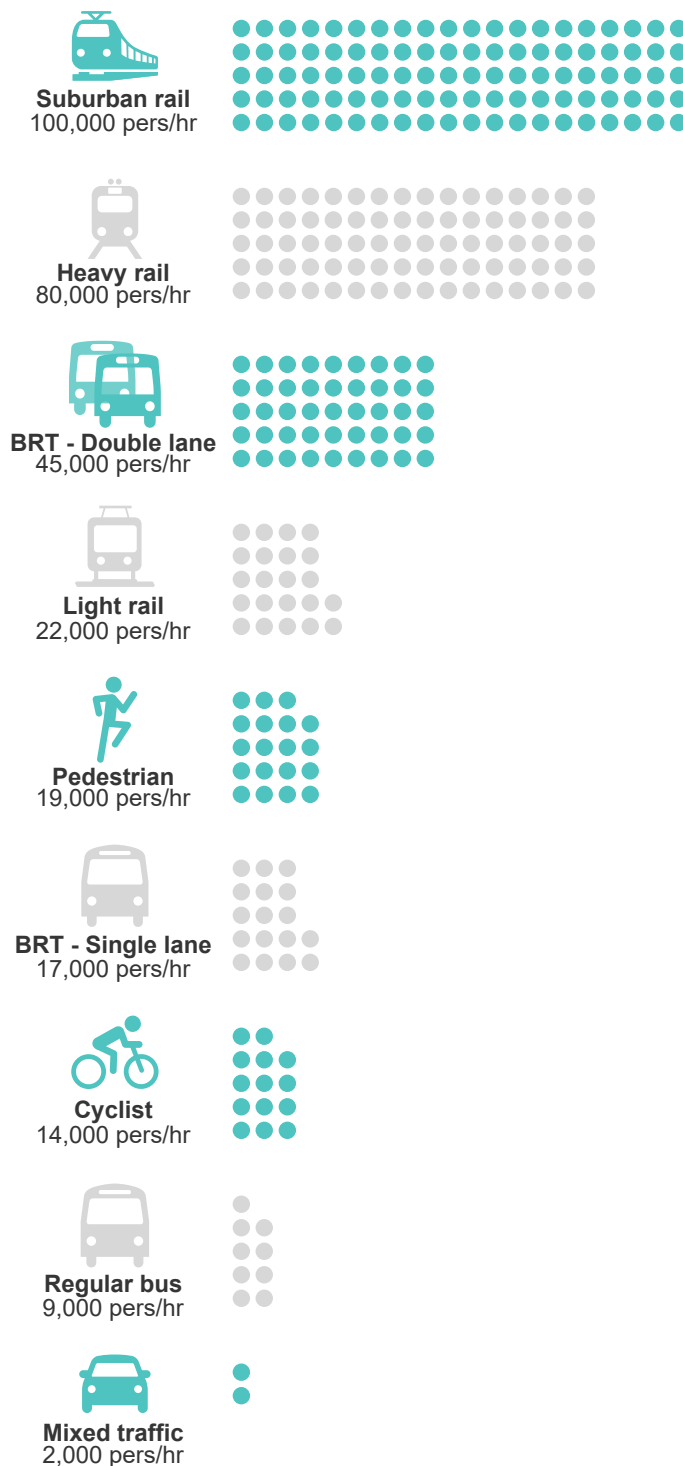


Figure 17 Corridor maximum capacity of urban transport modes, in persons per hour in both directions

Socially inclusive

Rail supports inclusive growth, ensuring that districts and neighbourhoods have equitable access to jobs and services and facilities, aided by good public transport access. Providing a quality transport system will support access to skilled jobs, schools, universities, hospitals and other facilities, fundamental to addressing social disadvantage.

Existing rail coverage in Sydney is relatively poor

Figure 18 provides a comparison of the Sydney rail network to other cities with higher intensity of activity than Sydney. The maps are to scale and show the relative sparsity of heavy rail in Sydney, particularly without the new rail lines identified in Future Transport.

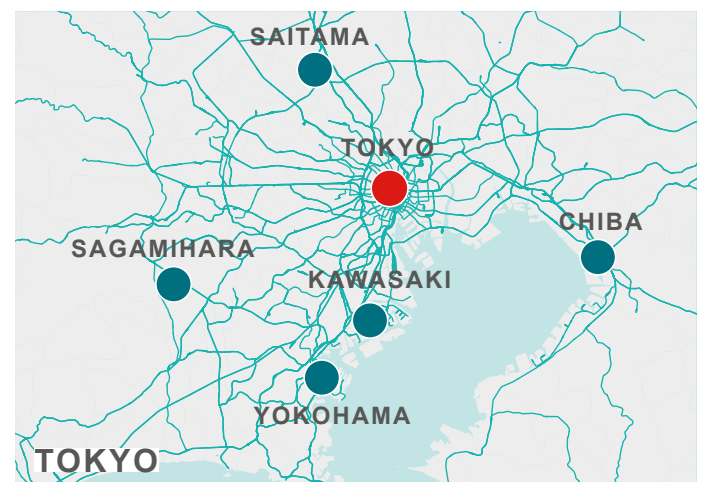


Figure 18 International comparison of rail coverage

The current Sydney network, is being largely reinforced by the Sydney Metro network, and supports the further growth of high value agglomerations in the centre of the Eastern Harbour City which therefore remains the overwhelming dominant economic cluster and the densest urban centre in the country.

While important concentrations of jobs occur outside of the core area in the Eastern Harbour City, the current rail network pattern makes it more difficult to access these other important employment nodes.

There has been a chronic under-investment in rail over the past 50 years which governments are now addressing with new rail being planned and implemented in Australia's five big cities. More is needed.

Box 3 Using rail to boost economic development – Randstad Pass

Just like in Australia, the Netherlands experienced rapid economic and population growth following World War II. The rapid growth increased the need for new housing and consequently city expansion. There was a shift from employment in industry to employment in the service sector. From the socioeconomic and spatial perspectives, almost everything in the Netherlands, much like in Sydney, pointed towards car ownership and use.

The prevalence of cars caused a much more decentralised pattern of commuting and suburbanisation. During the mid-20th century, the role of the rail network was replaced by the use of the car and the expanding road and motorway network.

Present

The Randstad – an agglomeration of 8.1m people largely in Amsterdam, Rotterdam, The Hague and Utrecht – is now the fourth largest economy in Europe. The 2017 Randstad monitor showed: 70% workforce participation, 60€/hr labour productivity, the lowest travel time lost due to congestion of anywhere in Europe and accessibility characterised by the largest time between cities (centre to centre), approximately 45mins by train.

This marked transformation was achieved through several measures. The policy shift was from prioritising connections between larger cities to linking the now numerous suburbs and growth centres to the railway network. The infrastructure improvements increased accessibility, making accessible land more valuable for further development and at the same time created travel demand inducing need for more infrastructure improvements – in particular active transport and urban design interventions around stations.

How outcomes can be achieved

Government adopted a multi-faceted approach to urban renewal and regeneration that included the following elements:

- The four main cities in the region all possess light rail systems to connect their key neighbourhoods and surrounding towns.
- This multi-nodal network ensures that the cities could easily access a talented labour pool at universities and other assets located outside the central city. Although successive national and sub regional plans evolved and adapted over time, there has been a 30-year commitment to densify around stations and existing settlements, and to create deliberate inter-dependencies between the 4 large cities.
- This approach should be applied in Sydney to ensure the success of the three cities strategy. There needs to be a commitment to linking the three cities so the region can function as a single economic and labour market.

04 WHY A NEW RAIL LINE FROM KOGARAH TO PARRAMATTA

Well-planned rail has the capacity to deliver the jobs and transformational change Georges River aspires to, including by supporting the importance of Kogarah in the South District as well as reinforcing the role of Parramatta for the Central and Western Cities.

Network benefits

Building a rail network to connect the Southern District to the Parramatta CBD and employment centres in between will encourage new economic agglomerations and provide more opportunities for residents to live, work and do business closer to home. It will increase choices for north-south and cross-city public transport and deliver medium and higher density in a larger number of locations across Sydney as the region's population continues to grow.

In short, a north-south connection from Kogarah to Parramatta will facilitate **a more networked transport system**, helping to transform Sydney's currently radial rail infrastructure. This will take pressure off existing congested radial connections and enable people to travel to more destinations quickly providing access to a broader range of jobs and opportunities within a 30 minute public transport journey from their home.

Rail needs to follow population growth. The Eastern Harbour City will continue to accommodate the majority of Sydney's population growth between 2016 to 2036 and is expected to accommodate growth equivalent to a city twice the size of Canberra by 2036. It is critical that this growth is supported by continued investment in rail as the mass transit backbone of Sydney transport system. Figure 19 highlights that River Rail will be critical in supporting population growth in Sydney over the next 20 years.

If the current journey to work mode share for public transport at just 23% in the South District is maintained, traffic congestion will get significantly worse as population grows. Infrastructure Australia's Future Cities report indicated that Sydney's forecast growth will result in the order of 40% more

vehicle kilometres travelled by 2046 if significant interventions aren't made to encourage more people to use public and active transport.

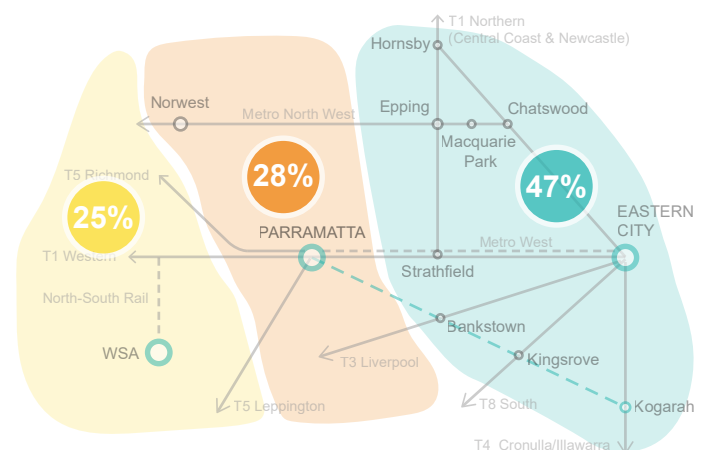


Figure 19 Rail needs to follow population and employment growth – in Sydney most of this growth over the next 20 years will be focused in the Eastern Harbour City

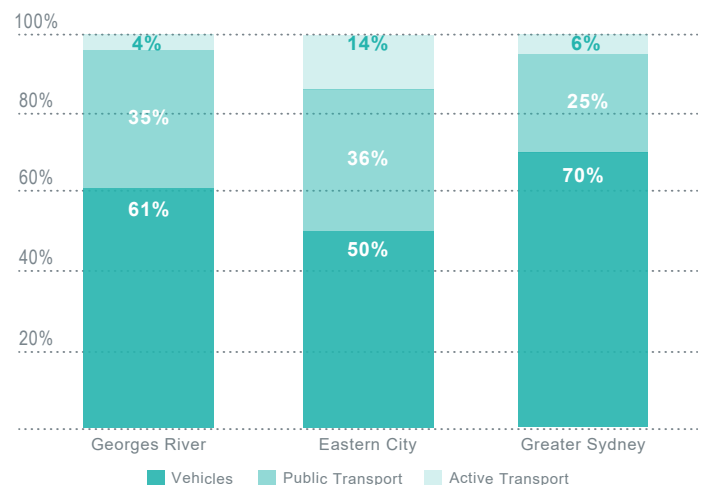


Figure 20 Increased investment in rail is required to reduce congestion due to reliance on car travel in the South District, including Georges River

There is a real risk of failing to deliver the Three Cities vision if public transport infrastructure, especially rail, is not provided alongside population growth – and it is already lagging. If Sydney continues to under-invest in rail, people will be using increasingly crowded infrastructure to travel further to access employment, consigning the south to be a dispersed dormitory city for a wider Eastern City.

Ultimately, if a rail network is not provided this could compromise the ability of Sydney to achieve its population and employment growth targets and live up to the vision of a productive, liveable and sustainable city. This emphasises the urgency to deliver River Rail.

Georges River is more than the heart of the South District, it also sits at the centre of an underutilised piece of the city with significant opportunities to accommodate additional population and jobs growth, in close proximity to existing homes, employment, services and facilities.

Georges River is at the heart of the South District and also sits at the centre of an underutilised piece of the city.

The Pulse of Greater Sydney Report highlights the importance of better public transport connections across the South District which currently exhibits Sydney’s lowest levels of accessibility to the city’s metropolitan centres and clusters, as highlighted in Figure 21. Across the South District only 24% of dwellings are located within 30 minutes of a metropolitan centre or cluster via public transport.

The South District currently exhibits Sydney’s lowest levels of accessibility to the city’s metropolitan centres and clusters.

For Georges River, achieving the 30 minute vision, requires direct public transport links like River Rail to connect people in Georges River to and from Sydney’s major centres for jobs, education and services across the region. Making Georges River an easier place to access will also influence the productivity and liveability of the South District and support more jobs and services locally.

River Rail will connect Georges River to some of Sydney’s major centres for jobs, education and services while also supporting productivity and jobs growth in the Southern Corridor where it is desperately needed.

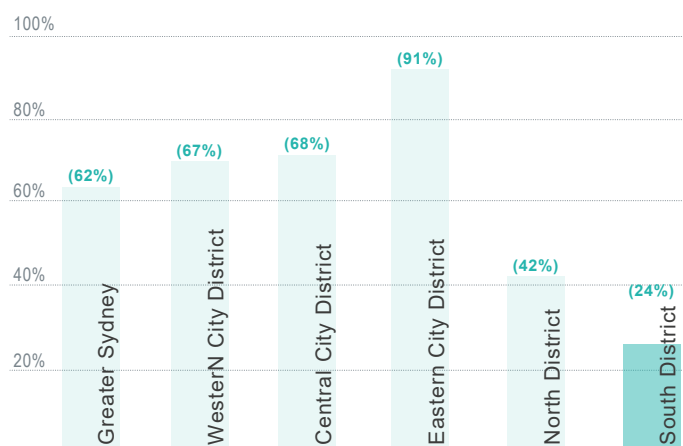


Figure 21 Percentage of dwellings located within 30 minutes of a metropolitan centre or cluster

Without improvements to the rail network like River Rail, increases in the numbers of housing and residents locally will continue to outstrip employment growth, placing increased pressure on transport networks.

River Rail not only provides the opportunity to establish a game changing rail connection from Georges River to the heart of Sydney but could also connect Georges River and Greater Sydney to a wider city-megaregion by 2050, with Wollongong inevitably drawn more and more into the orbit of Greater Sydney's momentum by mid-century, with all the benefits that such integration offers in what has been called the 'Sandstone mega-region'. Figure 22 illustrates the relationship between River Rail and the potential wider-city megaregion network.

It is hard to see how the full potential of the new Sydney advocated by the Greater Sydney Commission – including maximising the benefits of the Western Sydney 'aerotropolis' and leveraging the opportunities offered by Sydney's South District - could be achieved without delivery of River Rail.

It is hard to see how the full potential of the new Sydney advocated by the GSC can be achieved without delivery of River Rail.

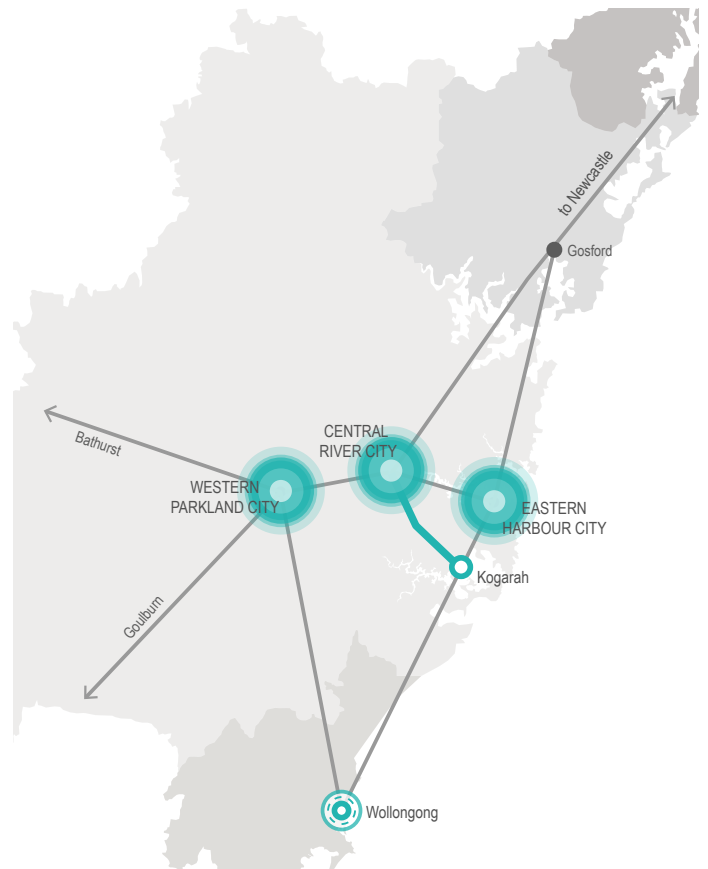


Figure 22 River Rail could form part of a network connecting Georges River and Greater Sydney to a wider-city megaregion



Economic and social benefits

CONNECTING INNOVATION ASSETS AND SUPPORTING ECONOMIC DEVELOPMENT

To grow capabilities in the service and knowledge economies, Georges River needs to focus on what makes it unique. In so doing it needs to provide transport that enhances these important economic development factors by managing them better as systems and ensuring they are well connected to assets driving Greater Sydney's service and knowledge sectors. River Rail can achieve this by better connecting networks of economic clusters and centres in the south, such as those identified in Table 1, with those in the Sydney's wider economic ecosystem. With delivery of River Rail, gross regional product (GRP) could be expected to grow by an additional \$7.5 billion (net present value) between 2030 to 2045.

River Rail will help to connect Sydney's economic assets and could support GRP growth by an additional \$7.5 billion by 2045

Of particular importance for Georges River, the Greater Sydney Commission identified Kogarah as a Strategic Centre and a Collaboration Area in the South District Plan due to the area's existing health and education precinct. With over 50% of jobs in Kogarah within the health care and social assistance sectors, there is great potential for Kogarah to become one of Sydney's fastest growing health and research precincts. This strategic vision for Kogarah requires maximising the potential on offer for a Health, Education and Innovation Precinct (HEIP) that drives a future of innovation. Connecting the Kogarah HEIP to the Bankstown and Westmead Health Precincts will provide opportunities for the growth of synergies and collaboration amongst public, institutional and private sector organisations across the two precincts.

With investment in River Rail, there is potential for Kogarah to become one of Sydney's fastest growing health and research precincts.

ASSETS	ASSETS THAT COULD BE LEVERAGED BY BETTER CONNECTIVITY
MAJOR HEALTH AND EDUCATION ASSETS	<p>Health assets such as Kogarah Health, Education and Innovation Precinct could be better connected to other key health precincts such as Westmead and Bankstown. These have been recognised by the GSC as major assets in the South and Central Districts and need to be better connected to help catalyse innovation and high value employment.</p> <p>Major education clusters including University of NSW and TAFEs which collectively need to be enhanced and made more accessible. These assets will be important to feed skills into the region. Better connecting these assets into a network of employment and education hubs such as Parramatta will improve graduate retention in the region.</p>
PRESENCE OF INDUSTRIAL CLUSTERS	<p>The Bankstown Airport Masterplan 2014 sets aside 130 hectares of land adjacent to Milperra for future development for non-aviation uses, with the aim of developing an industrial economic and employment hub. Connecting Kogarah to Chester Hill would enable a short interchange to this district.</p> <p>Connection through Kingsgrove would also offer the opportunity to transform significant industrial lands into higher job density land uses.</p>
SIGNIFICANT KNOWLEDGE ASSETS	<p>Parramatta CBD is emerging as a major employment and cultural hub and has an existing base of successful firms in knowledge sectors such as professional services and government and administration. Kogarah is set to grow as an important employment hub in the South District with strong health and education foundations, together with a mixture of retail and commercial activities and a finance and insurance tradition.</p> <p>Hurstville is also set to grow rapidly, providing the cultural heart of Sydney's south, as well as consolidating its role as a regionally important and unique retail and dining destination complemented with corporate, education and administrative anchor tenants.</p>

Connecting economic assets via River Rail

Case Study - Kogarah Strategic Centre and Collaboration Area



Opportunity for high value employment and R&D

The future outlook for Kogarah is an enhanced strategic centre, home to intense, mixed use economic and social activities, well-connected to other strategic centres and health and education precincts. Leveraging major public investments in health, education and sporting facilities, Council is positioning Kogarah as a ready and willing business location of the future. By capitalising on existing business, services, demographic factors and networks, an evolution towards Kogarah as a Health, Education and Innovation Precinct (HEIP) can take place. Developing and attracting talent, garnering new business investment and fostering lasting strategic partnerships will position Kogarah to thrive as a unique business location for health and medical research, education, collaboration and innovation.

Kogarah has strong health and education foundations, with leading public and private hospitals, a presence from the UNSW, as well as a major TAFE campus. Kogarah also hosts a mixture of retail and commercial activities and boasts a finance and insurance tradition.

Planning for Kogarah's HEIP represents a new opportunity for the invigoration and uplift of Kogarah. It casts a new vision, supported by a practical strategy to guide the expansion of investment and employment in the sectors of health, education and innovation. The vision aims to enhance Kogarah's standing as an innovative, smarter city and supports its potential to attract world-class research and multi-national investment opportunities.

Globally, districts and neighbourhoods that can deliver strong commercialisation of R&D outcomes are thriving and this is where long terms economic growth is determined to be strongest. Research commissioned by the City of Parramatta Council found that health care and education in areas with a hospital or university outstripped average growth in Sydney between 2001 and 2015.

Good access is critical to future economic development

Critical to the development of the Kogarah HEIP will be ready access to world leading talent and a deep pool of customers seeking health, education and innovation related goods and services. While high-density mixed-use land use patterns and appropriate road connectivity can contribute to accessibility, work by organisations like the Brookings Institute and the UK Innovation Districts Group highlights the central importance of transit connectivity to the success of innovation precincts. The impact of this lower level of accessibility will be suppressed demand and inefficiency, making it harder for firms to recruit and retain staff and to access markets.

SUPPORT IMPROVED URBAN FORM

Supporting improved urban form makes it possible to effectively manage population growth, bring jobs closer to people and share economic benefits across the city.

The north-south rail connection from Kogarah to Greater Parramatta via Bankstown has significant potential to support the urban intensification required to catalyse increased productivity and jobs growth.

New housing and jobs will be focused around existing and new transport hubs and employment centres, increasing the density of people and activity in these areas. This will enhance accessibility to jobs via transit, supporting jobs growth in Georges River and the South District as well as the Central Sydney, thereby helping to address the current jobs deficit, which sees 142,000 people invest their time in long and frustrating trips to work outside of the South District each weekday

More local jobs will help to address the current jobs deficit in the South District

The American Public Transport Association estimates that for every \$1 billion invested in public transport infrastructure, 36,000 jobs are created, in turn generating over \$3 billion in commercial transactions and approximately \$500 million in government tax revenues. This improved accessibility to jobs will also help relieve the cost of congestion.

Locations across Greater Sydney – not just the South District – will benefit from River Rail, providing access to over 100,000 additional jobs within 45 minutes in 2045. The new rail link could be expected to attract an estimated 30,000 additional trips by rail each day in 2036, relieving congestion for motorists and saving in the order of 5,000 hours of travel time, worth a potential \$0.7 billion over 30 years.



Figure 23 River Rail could support jobs growth in Georges River and reduce the number of people investing their time in long trips to work outside of the South District each weekday

STAY
HANDSOME
ESPRESSO

STAY
HANDSOME



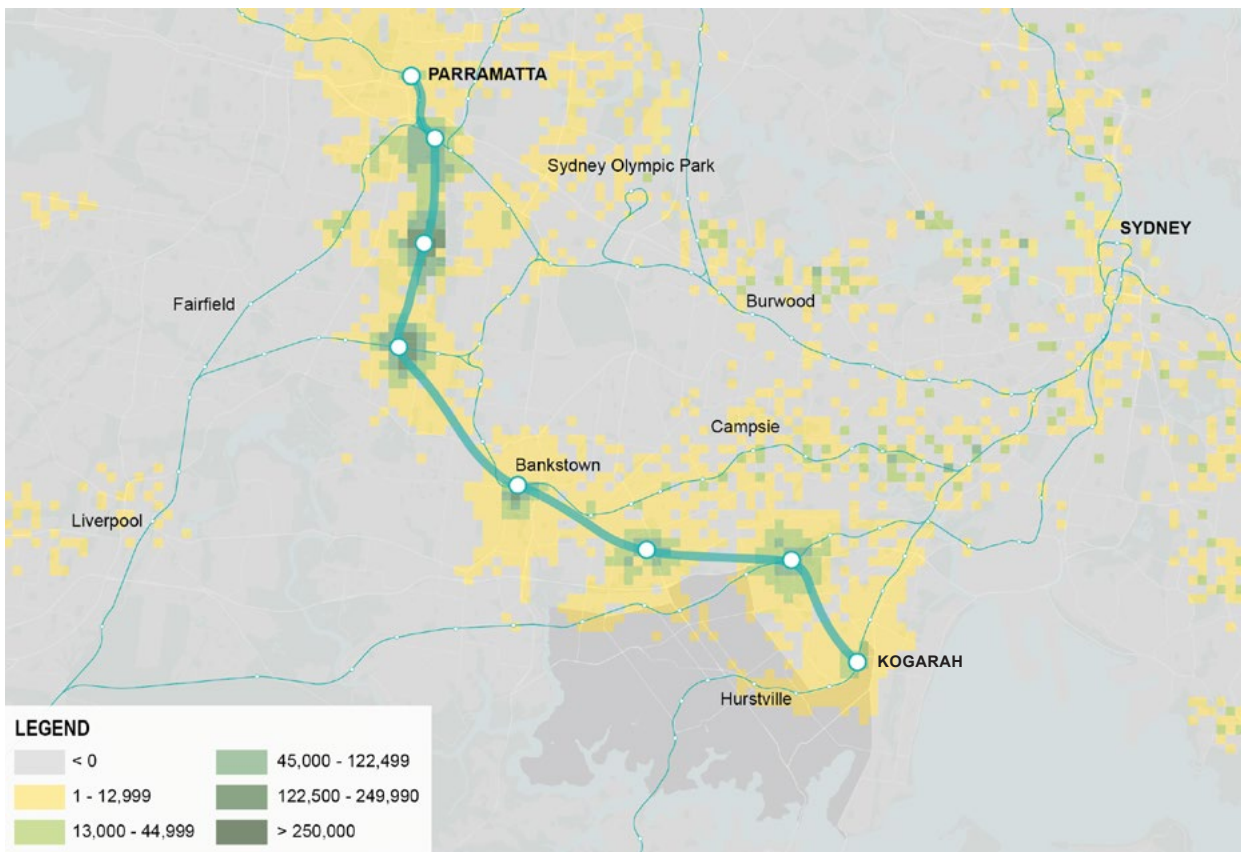


Figure 24 Total difference in access to jobs within 30 minutes on public transport, as a result of River Rail (in 2046)

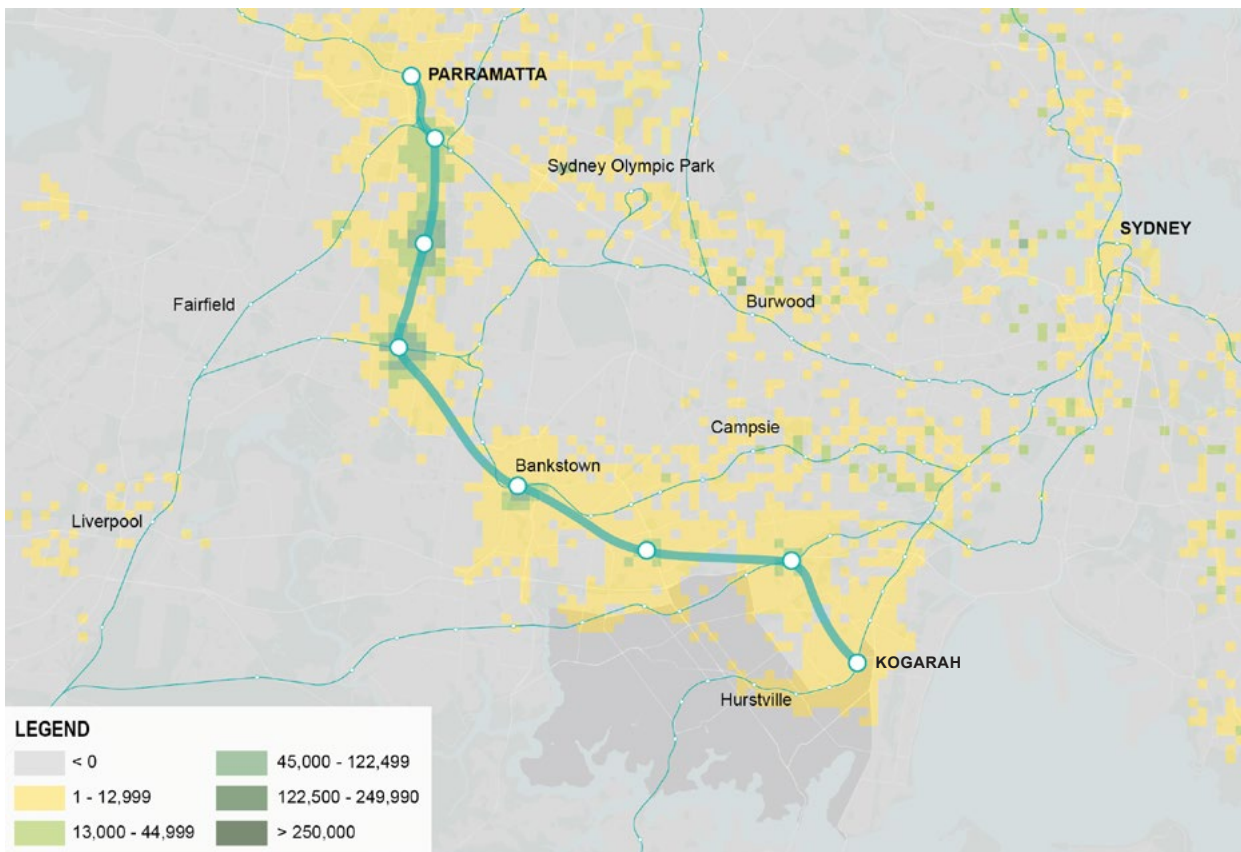


Figure 25 Total difference in access to knowledge industry jobs within 30 minutes on public transport, as a result of River Rail (in 2046)

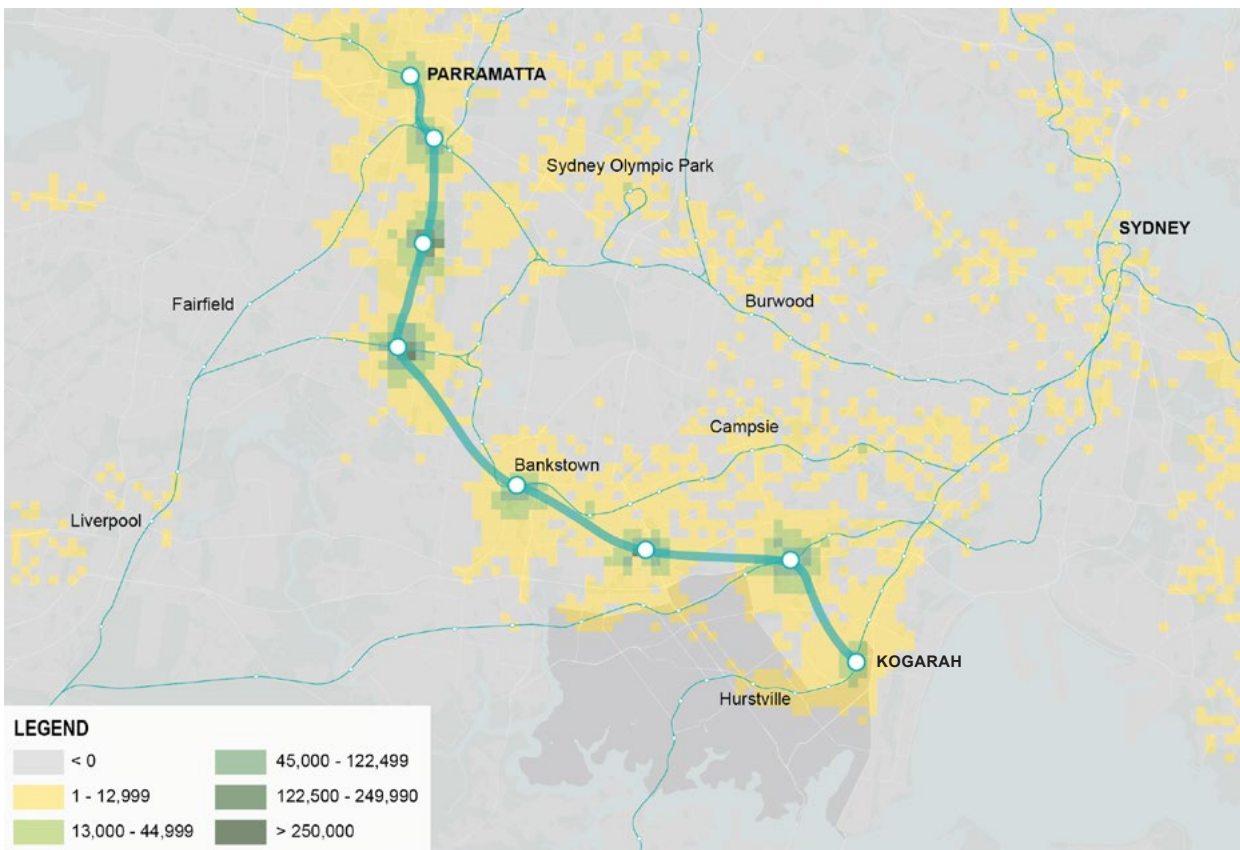


Figure 26 Total difference in the number of people in the labour force that can access Kogarah on public transport within 30 minutes, as a result of River Rail (in 2046)

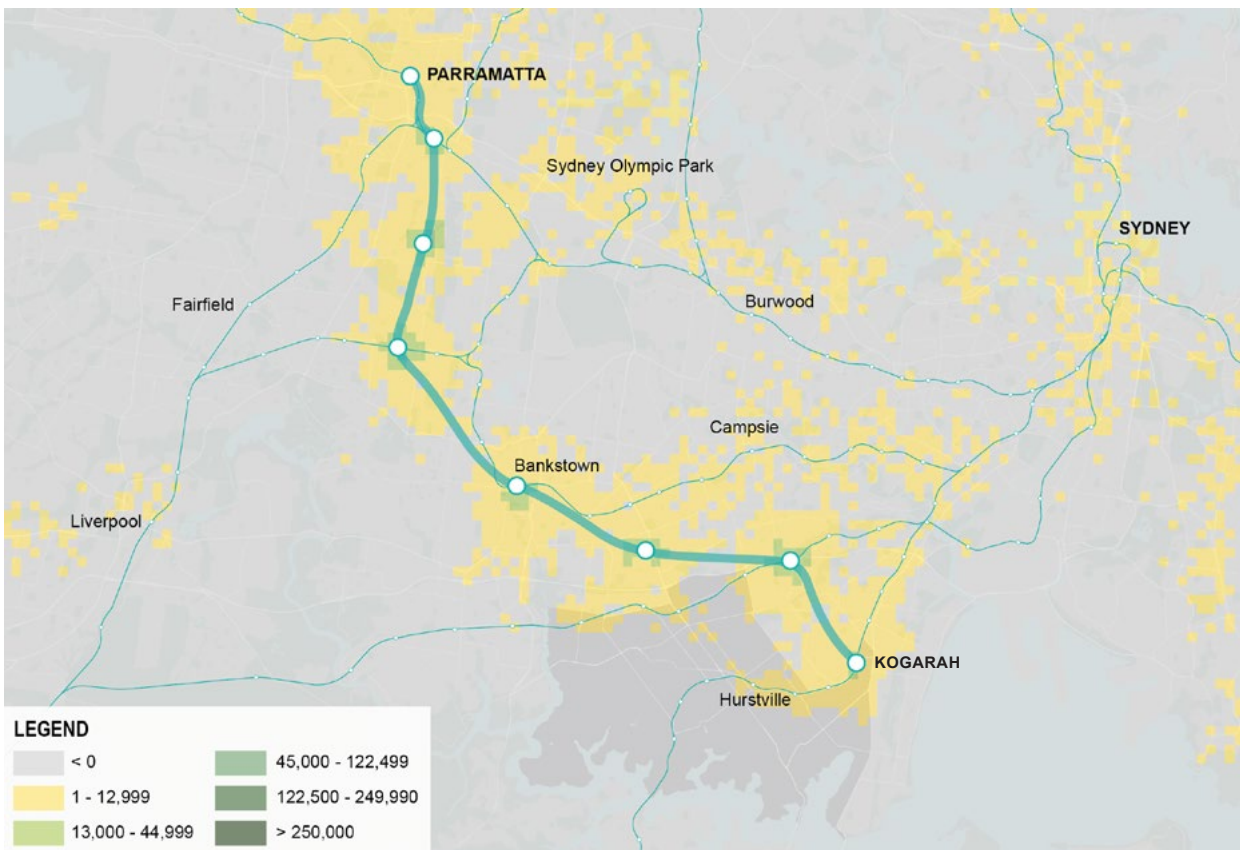


Figure 27 Total difference in the number of tertiary-educated people in the labour force that can access Kogarah on public transport within 30 minutes, as a result of River Rail (in 2046)

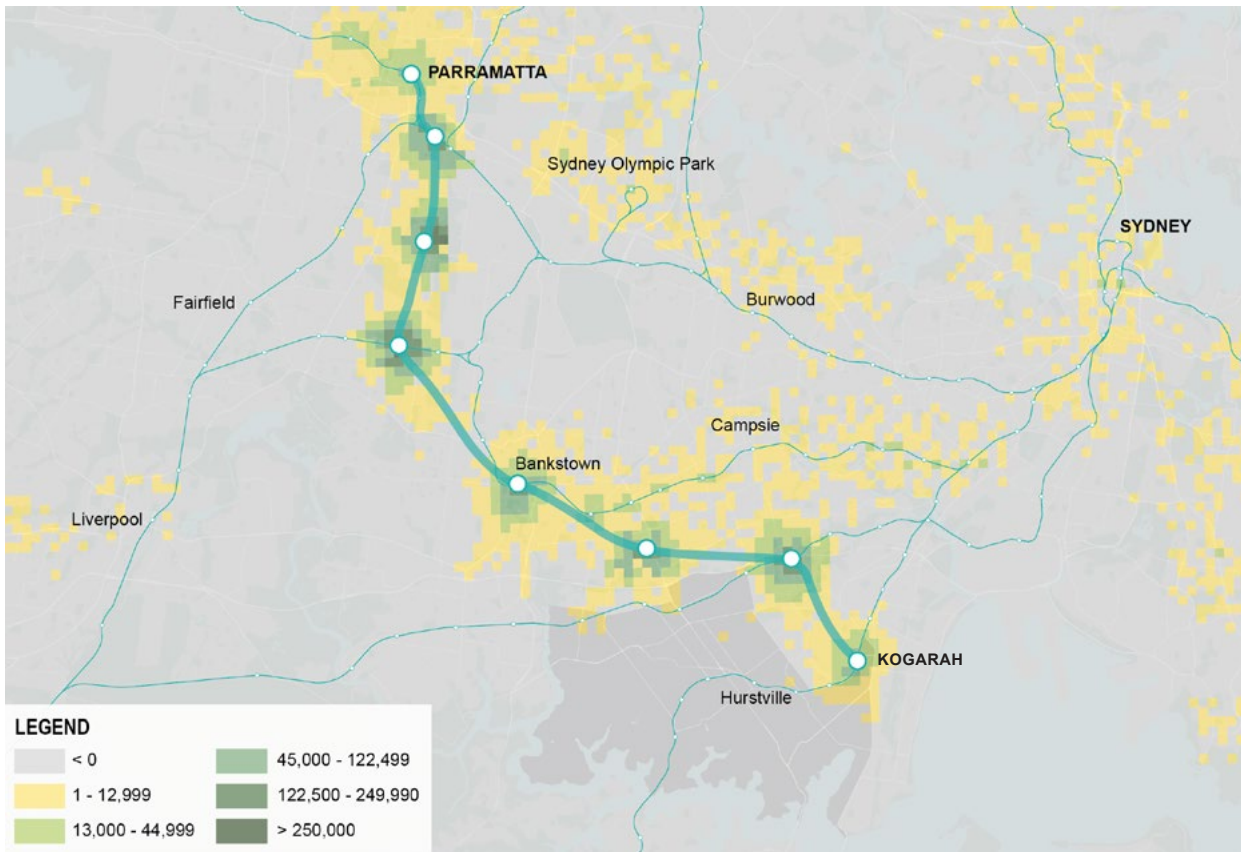


Figure 28 Total difference in the number of people that can access Kogarah on public transport within 30 minutes, as a result of River Rail (in 2046)

PROVIDING GREATER CONNECTIVITY TO ENHANCE SOCIAL INCLUSION

There are clear signs that disadvantage is moving towards lower density suburbia and exurban locations, including in Southern and Western Sydney, with poor public transport access and a less diverse land use mix. A more connected rail network that includes River Rail offers the opportunity to address this issue. As illustrated in Figure 29 River Rail would contribute to social inclusion by improving connectivity for people in areas currently facing social disadvantage.

Accessibility to employment in Sydney's southern corridor is much lower than in the balance of the Eastern City and parts of the Central City. Consequently, job opportunities for residents in the district are constrained. The concentration of knowledge jobs in the Eastern Harbour CBD is unsurprisingly associated with residents of other parts of the Eastern Sydney holding more knowledge jobs and earning more money than those in the South District.

Inadequate access to transportation poses significant barriers to those trying to enter the labour market.

These challenges are particularly acute for welfare dependent households in suburban areas who do not have access to private transport. Existing public transport systems often do little to bridge the gap between where the poor live and where jobs are located. This is because these existing systems were established on a monocentric, radial network, moving inner-city and suburban residents to CBD locations. However, most entry-level jobs that are best suited for those looking to move off welfare are located in adjacent suburban areas. Investment in River Rail would help grow local strategic centres and support broader accessibility, connecting the disadvantaged to employment opportunities, education and health services as well as recreational facilities.

Modelling indicates that a key impact of River Rail would be a projected increase in economic welfare, including increases in employment levels and real wages, due to the realisation of agglomeration benefits. Because the Kogarah to Parramatta corridor has higher than average levels of social disadvantage, investment in rail in this corridor will provide a particularly important opportunity to enhance social mobility through increasing real wages as well as providing greater access to more skilled jobs, schools, universities, hospitals and other facilities.

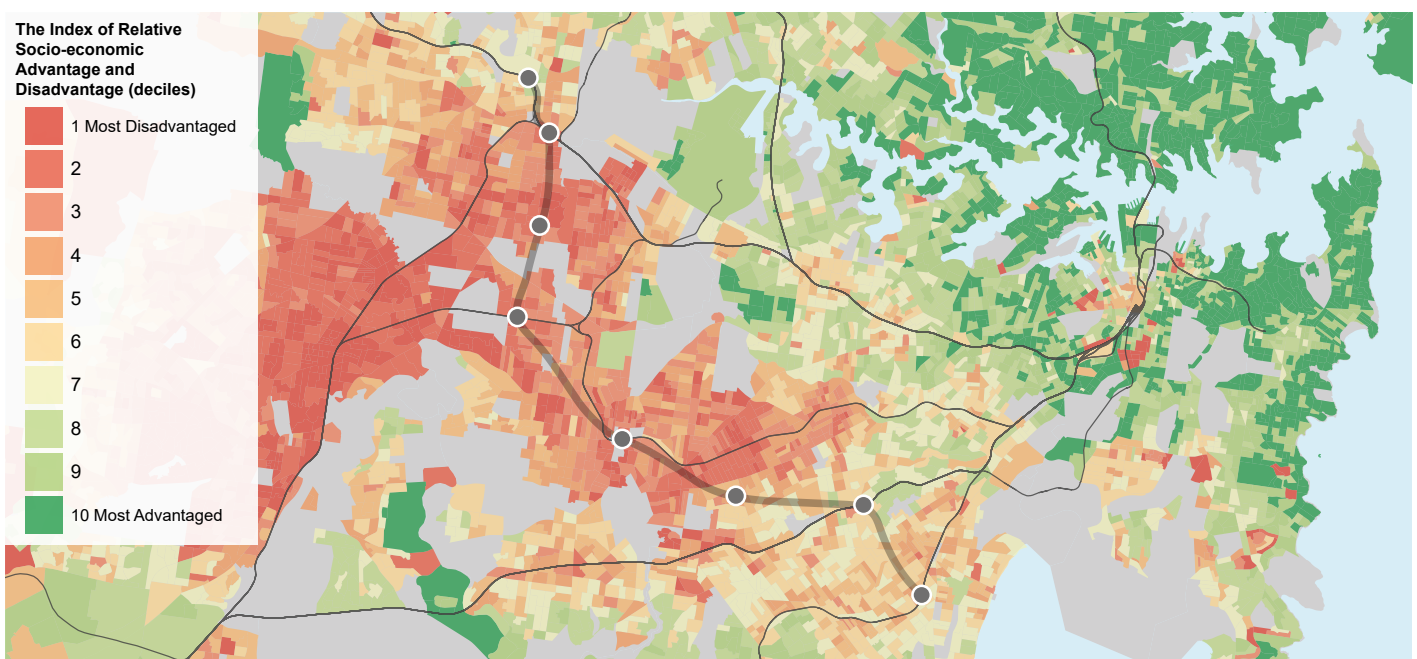


Figure 29 River Rail would contribute to social inclusion by improving connectivity for people in areas currently facing social disadvantage

ENHANCING WALKABILITY AND PROMOTING ACTIVE TRANSPORT

River Rail will promote mixed-use walkable environments which support community vibrancy as well as improved health.

Currently only 66,000 people in the corridor live within walking distance of a rail station meaning many people drive to work or to access services – this would increase to over an estimated 118,000 by 2046. Figure 30 shows walking catchments which could be served by River Rail.

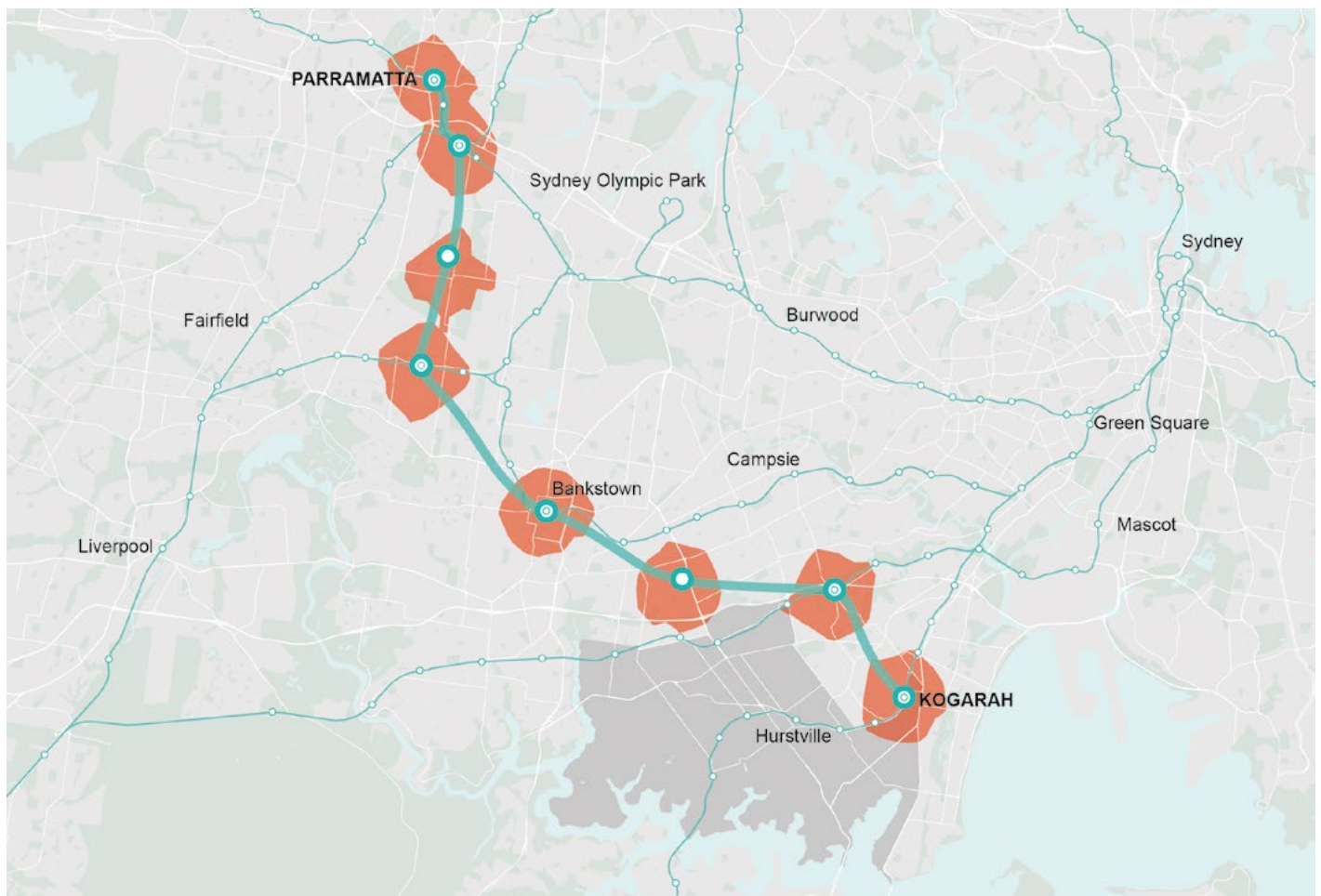


Figure 30 Walking catchments served by River Rail

LEVERAGE SYDNEY METRO SOUTH WEST AND WEST AND SPREADING THE BENEFITS

Delivering the rail link from Kogarah to Parramatta via Bankstown and other centres in the South District and Central River City will enable more people to interchange and transfer between a wider range of transport services and create opportunity for further development around each of the centres, including the new metro station in the Parramatta city centre. These connections will capitalise on the historic investment in Sydney's transport network as well as investment in Sydney Metro South West and Sydney Metro West, delivering more benefits to more communities because of them. Planning River Rail now will give Greater Sydney the best chance of realising the benefits of these synergies. Box 2 highlights the network connections that would be facilitated supported by River Rail which would support more compact urban form and spread the benefits of investment in rail infrastructure in Sydney.

Box 4: Creating a network which supports more compact urban form and spreads the benefits

The line will create new interchange opportunities with bus services as well as an estimated 8 new interchange opportunities with other rail lines including:

- Kingsgrove Station (T8 Airport & South Line)
- Chester Hill Station (T3 Bankstown line)
- Harris Park Station (T2 Inner West & Leppington line and T5 Cumberland line)
- Kogarah Station (T4 Eastern Suburbs & Illawarra line)
- Parramatta Station (T1 North Shore, Northern & Western line, T5 Cumberland line Blue Mountains line T2 Inner West & Leppington line)

Currently there are 0 interchange options



8 opportunities

A MORE SUSTAINABLE AND LIVEABLE (INCLUDING HEALTHIER) SYDNEY

Enabling better urban form and transit outcomes will help to minimise Sydney's carbon footprint as well as contributing to the city's overall liveability. By avoiding in the order of 100,000km of car travel each day, avoided congestion, with associated avoided environmental impacts, worth a potential \$0.37 billion over 30 years could be achieved, contributing to significant reductions in Sydney's transport carbon footprint.

By promoting walking and cycling trips, River Rail can also help to keep our community active and healthy, and stem the rise of obesity and lifestyle diseases like diabetes, heart disease and cancer.

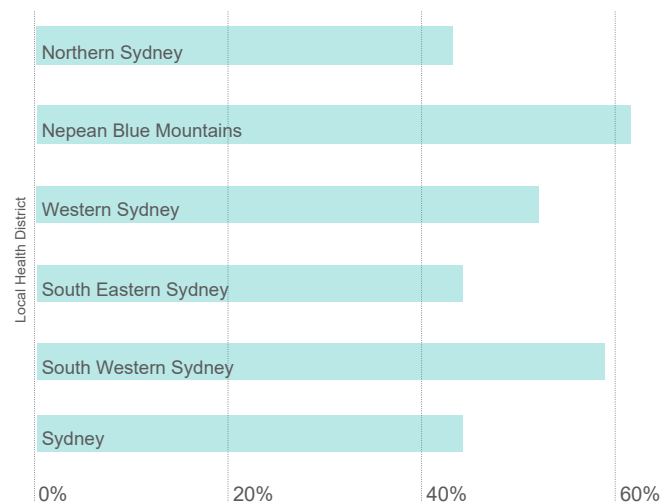


Figure 31 Percentage of overweight or obese adults by Local Health District

AN EFFICIENT RAIL NETWORK

By connecting Georges River with a range of other centres, River Rail will serve a growing community with diverse travel needs. The ranges of centres and reasons for travelling on rail in this corridor will lead to more balanced patronage levels in both directions than typically experienced in mono-centric cities as highlighted by the range of trips purposes identified in Table 2. Increases in employment in key centres also has the potential to generate more balanced commuter flows as well as supporting self-containment of employment.

	River Rail will bring rail to under-served communities and connect people throughout the South District, the Central River City and Greater Sydney to enable trips for a range of purposes:
COMMUTER TRIPS	<ul style="list-style-type: none"> – Journey to work trips – Access to employment would be underpinned by connecting Kogarah to Parramatta CBD via Bankstown Strategic Centre. With the range of existing and new housing along the rail corridor and good connections to the Sydney transport network this will create diverse flows across the corridor – rather than being tidal, more balanced flows will provide more efficient operations during the peak period. – Education trips – The rail network will provide direct access to the health and education facilities at Kogarah and Bankstown as well as connecting to Westmead.
BUSINESS TRIPS	<ul style="list-style-type: none"> – Business trips – River Rail will link the Kogarah Health, Education and Innovation Precinct to Bankstown Strategic Centre, Parramatta CBD and Westmead, one of Australia’s largest health and education precincts.
LEISURE TRIPS	<ul style="list-style-type: none"> – Recreation trips – River Rail will encourage access to a wide range of recreational activities in Georges River, the wider South District and Parramatta and the Central City, including enhanced access to the new Powerhouse Museum at Parramatta, Parramatta Stadium and Sydney Olympic Park. – Visitor trips – Georges River is seeking to create a city which is active throughout the day and in the evenings. Council’ Economic Development Strategy seeks to curate a bright night time economy for residents, workers, students and visitors through improvements in night time entertainment, dining and other and recreation opportunities. Rail will provide quick, reliable and safe access to major cultural, entertainment, retail and recreational destinations, in Georges River, the wider South District and the Central City.

Benefits for Georges River and the South District

A thriving Kogarah will help overcome a divided Sydney.

Kogarah is a logical place to evolve into a thriving Strategic Centre to support and share the agglomeration benefits of the Eastern Harbour CBD and a growing Parramatta and Central River City in Sydney's southern corridor. River Rail will provide a catalyst for jobs growth in Kogarah and Bankstown and will enable Kogarah to perform its role as a key strategic centre within the South District and as a nexus between the Eastern and Central Cities. Kogarah's growth brings increasingly high-quality jobs to the South District, helping to address the jobs gap and socio-economic divide between the south and central and eastern Sydney.

Investment in River Rail will help to catalyse existing economic assets by increasing the size of the labour force and market that can access them within the benchmark travel time of 30 minutes.

In a competitive global market for investment and innovation, linking these existing assets and clusters sooner than planned is crucial for Kogarah and the South District to fulfil their potential and role as a critical part of Sydney's Eastern City.

Without urgently providing new connectivity to and from Kogarah, there will be a growing jobs divide between southern Sydney and the balance of the Eastern City and Central City.

With the GSC's policy supporting significant population growth across the Eastern Harbour City, including in the South District, encouraging jobs growth in Kogarah and the broader South District requires urgent attention.





05 WHY NOW?

Urgent priority

The thirty-year delivery timetable in Future Transport and the State Infrastructure Strategy does not reflect the importance of a connected Kogarah and Parramatta to the realisation of the GSC Plan or, put another way, the serious risks to the significant continued growth across the Eastern Harbour City as well as the vision of Parramatta not growing to its full potential. There are compelling reasons to begin planning and delivering River Rail and deliver a more connected South District and Eastern and Central City:

- Sydney has a transport and urban development problem. Government bodies and thought leaders have emphasised the urgent need to improve Sydney's public transport offering and urban form to manage population growth, bring jobs closer to people and share economic benefits across the city. This will be demonstrated through robust economic analysis of the links between higher densities and higher productivity growth, compared to a lower density model
- Kogarah is a logical place to evolve into a thriving strategic centre and innovation precinct to support and share the agglomeration benefits of the Eastern Harbour CBD and a growing Parramatta and Central River City in Sydney's southern corridor. River Rail provides a catalyst for jobs growth in Kogarah and Bankstown and will enable Kogarah to perform its role as a key strategic centre within the South District and as a nexus between the Eastern and Central Cities.
- Sydney's Eastern Harbour City is divided. The key challenges for Sydney of addressing the jobs gap and socio-economic divide between the south and the balance of the Eastern City demand urgent attention as the population continues to be focused across the Eastern Harbour City out to 2036.

- Government is accelerating infrastructure investment. As part of their Covid-19 recovery plan to boost economic activity, the government has plans to bring forward billions in infrastructure spending into the next four years. This presents an opportune time to commit to a more sustainable infrastructure portfolio that responds to the prevalent challenge of climate change. Prioritising mass transit such as River Rail pushes Sydney ahead in building the infrastructure needed to secure a sustainable, productive and equitable future for the city.

The Three Cities Vision

Waiting decades to build River Rail risks missing this generational opportunity to establish the north-south connections that will make Georges River and the South District as well as Greater Parramatta and the Central City the productive, liveable and sustainable places they should be and failing to realise the GSC's Three Cities vision.

Council supports the Three Cities vision with its emphasis on the role of strategic centres in providing access to a wide range of jobs, goods and services close to people's homes and supporting the 30 minute city. However, without more immediate investment in transit, the ambitions for the Kogarah HEIP and Bankstown strategic centre won't be achieved, missing the opportunity to leverage the broader investment underway in these key precincts.

Unless an enhanced rail link is committed to with some urgency then crucial opportunities will be missed to achieve the best public policy outcomes. Indeed, if this rail scheme is not brought forward there is the real risk of locking in a sub-optimal low intensity development and jobs trajectory for southern Sydney and contributing to ongoing inequality.

While Council fully supports the investment needed to develop the Western Parkland City with the new Western Sydney Airport as its hub, there must remain a policy focus and public investment program to continue the progress and momentum of Sydney's existing urban areas, including the southern corridor in the Eastern City, Greater Parramatta and the Central City. It is not yet 'done' and without continued intervention it will indeed be underdone to the detriment of the wider metropolis.

The corridor from Kogarah to Parramatta via Bankstown is real today and rapidly maturing as an economic ecosystem, which means it should get short to medium term investment priority to fully realise the ambition and benefits of the three city metropolis.

06 MAKING IT HAPPEN

Funding: value capture

The State Infrastructure Strategy highlights the limits to the NSW Government’s ability to continue to invest in infrastructure while meeting fiscal targets. For new investments, this means better decision making to select the right projects to use available funding as productively as possible and exploring funding options including value capture as well as the potential to establish a Central City Deal, which brings in the South District, between all levels of government. The staggered priority of the four rail lines in Future Transport reflects this funding and prioritisation dilemma. The need and urgency of River Rail, particularly as part of the wider Central City Rail network, as a transformational addition to the wider Sydney transport network, needs prioritisation.

There are several mechanisms available to capture value on major development and infrastructure projects such as River Rail. The size and scale of the project and the methodology by which value is captured and can be attributed to a project can vary. The NSW planning system already includes several value capture mechanisms. However, these mechanisms do not apply to all infrastructure. Highly successful cases like Crossrail in the UK, have managed to fund a large share of project costs via value capture mechanisms. Over 60% of Crossrail’s funding has been provided by Londoners and London businesses.

Figure 32 sets out various value capture methods which could be investigated for use as a funding source for River Rail.

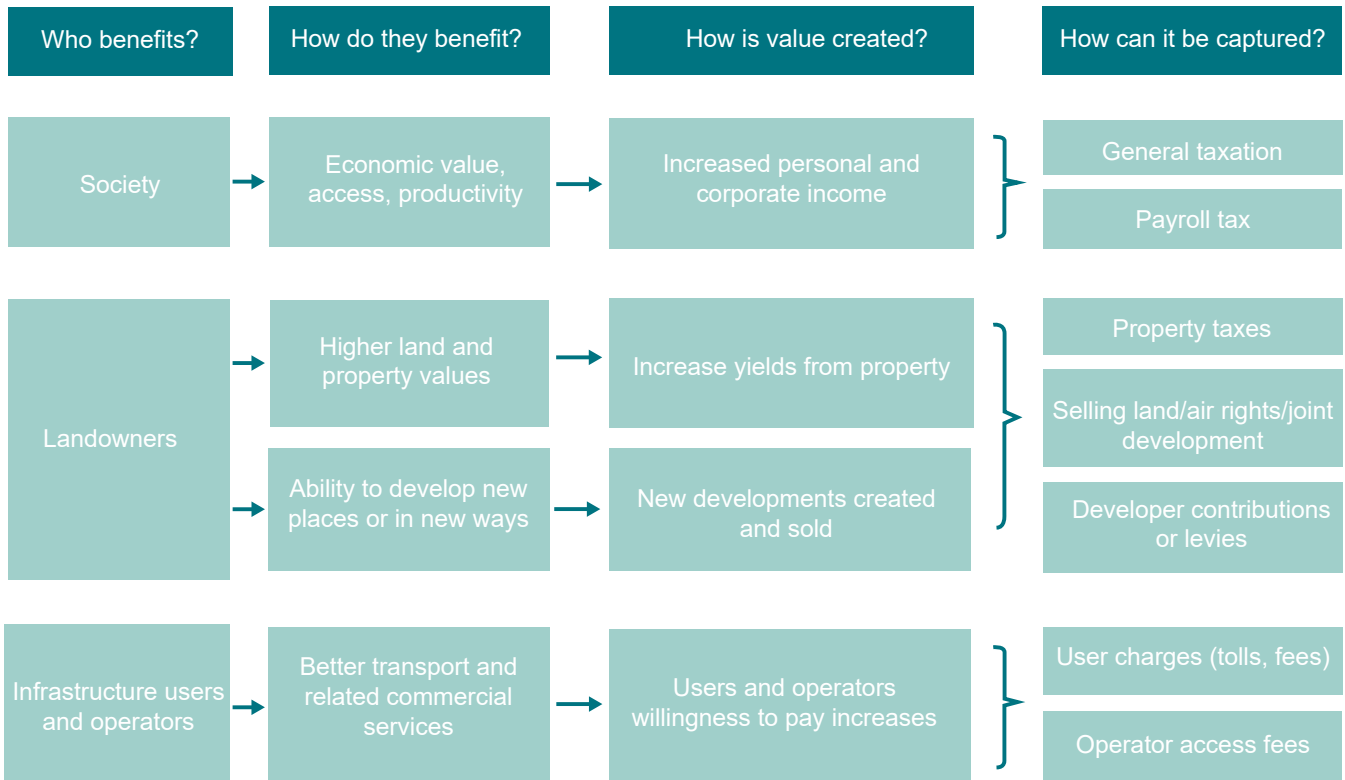


Figure 32 How River Rail will create value

The diagram describes a suite of known measures. A fully developed funding strategy in the future will need to be based on detailed modelling and consultation. The list provides a stepping off point for a discussion on the range of options that could start to address the funding issue for the rail link.

The different types of revenue streams have different geographical connections to the corridor. Figure 33 illustrates how value could potentially be captured from within and around the corridor.

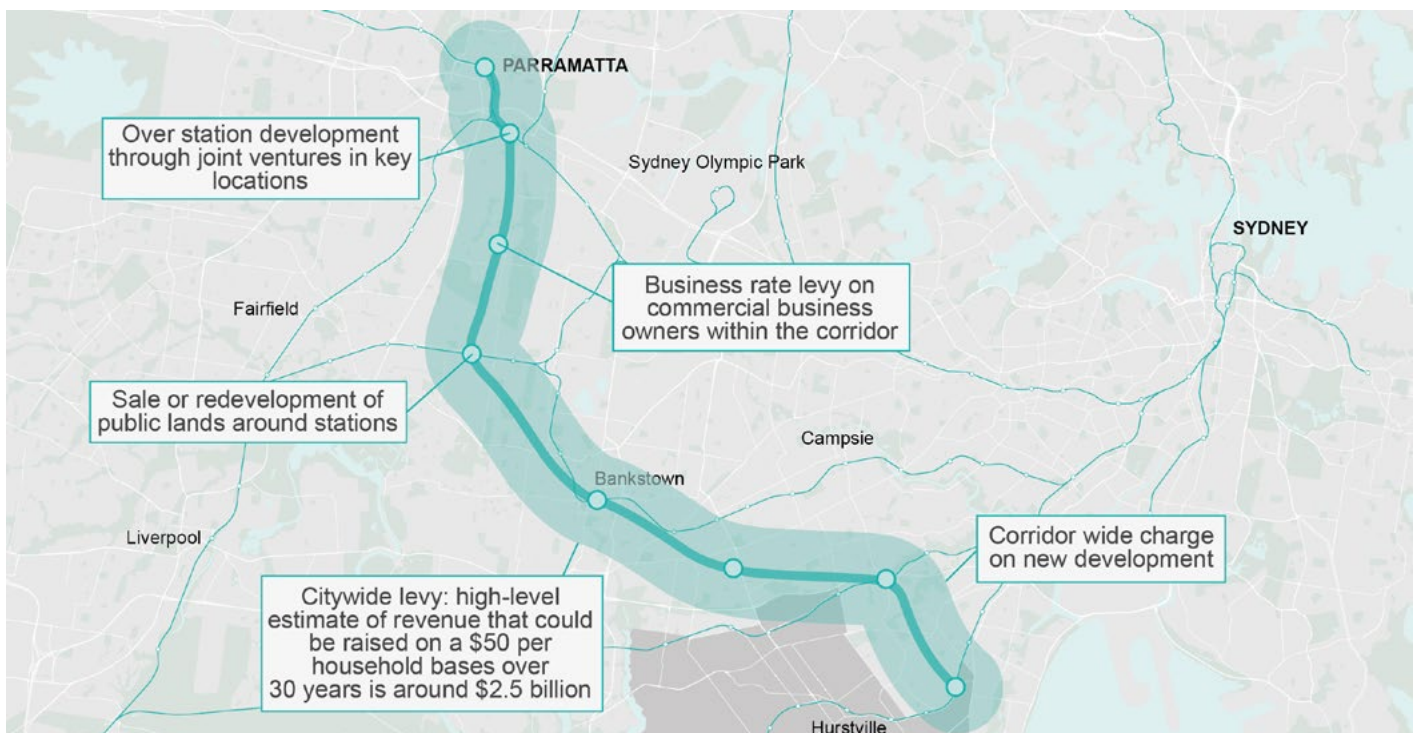


Figure 33 Capturing value from within and around the River Rail corridor

Transit oriented developments

An integrated approach to land use and transport planning is required to maximise the benefits of investment in River Rail, including delivery of transit-oriented developments (TODs).

Employing a place-based approach will enable a typology of TODs to be applied, based on the nature of the transit services and land uses in and around each station precinct and the broader integrated public transport network. Best outcomes will be achieved when the transit node, place and market value of each precinct is optimised.

Box 5 provides an international case study of integrated walkable transport hubs based on the Canadian Metrolinx Mobility Hub Guidelines.

Box 5: International case study of integrated walkable transport hubs: Metrolinx Mobility Hub Guidelines (Canada)

The Mobility Hub Guidelines for the Greater Toronto and Hamilton Area outline the needs for “a system of connected mobility hubs” that provides customers with “seamless access to the regional transit system supports higher density development, and demonstrates excellence in customer service” Mobility Hubs serve as mixed used places near transport interchanges. The hubs are systems of activity around transit (within an 800m radius). The economic case for hubs is stronger than stand alone rail stations investments - where land use and rail investments are integrated- thus enhancing the economic case for transport infrastructure investment (to include broader land use benefits as well as conventional transport benefits). The guidelines focus on optimising:

- Multimodal transit opportunities
- Residential and employment density
- Sense of place (comfortable, safe, and attractive streets and public spaces within the hub boundary)
- Pedestrian activity
- Economic vitality and competitiveness through development
- Hubs maximise transit use and active transport within the catchment by activating key paths with visually interesting design (thoughtful landscaping and art) as well as improving permeability of street networks leading to transit. Within the hubs circulation of pedestrians and cyclists are prioritised.
- Where possible bike lanes are provided in collector streets. Guidance also prescribes density thresholds for mobility hubs where rail is the main transit service

Applicability to the Central City Rail Network

- Consider the stations and surrounding precincts as a complete system rather than separately in terms of individual station components.
- Improve permeability to shorten active transport journeys through the precinct - this could increase the overall travel time savings for business case.
- Active transport mode share targets for the 800m precinct.
- Develop guidelines for developing each zone around the station for integrated, transit supportive outcomes
- Inclusion of green initiatives in the project corridors
- Proposed movement networks, development parcels, building heights and land use planning controls.

Coordination and collaboration

In the face of constrained budgets, what is needed is a city, state and Federal government partnership. This partnership must include an agreed investment framework, demonstrating the national economic contribution of such transformative projects as River Rail. A Central City - City Deal could provide a suitable vehicle for achieving the outcomes sort were the geography of the deal to extent to include the South District.

Best outcomes can be achieved through continued development and refinement of the place-based strategy for the Central City and South District, building on and refining the Three Cities vision as it is reflected in the Greater Sydney Regional Plan, District Plans, Future Transport and the State Infrastructure Strategy. This includes testing the growth and infrastructure scenarios for the Central City and South District, using emerging best practice approaches to options appraisal to capture the full transformative nature of the new network connections. The Growth Infrastructure Compact process provides an opportunity to sequence growth and infrastructure delivery.

