Submission No 8

INLAND RAIL PROJECT AND REGIONAL NSW

Organisation: Penrith City Council

Date Received: 2 February 2021

Our reference: Infostore
Contact: Nathan Burbridge
Telephone: [redacted]

1 February 2021

Mr Justin Clancy MP
Chair of the Inquiry into Inland Rail project and Regional NSW
Parliament House
6 Macquarie Street
SYDNEY NSW 2000

Dear Mr Clancy

Submission to Inquiry into the Inland Rail project and regional New South Wales

Thank you for the opportunity to make a submission to the Inquiry into the Inland Rail project and regional New South Wales.

Penrith City Council makes this submission as an important metropolitan centre and one located closest to the new Western Sydney International Airport. As such, it plays a pivotal role in the emerging Western Parkland City but also as a gateway to regional New South Wales; particularly the Central West.

Our submission to this Inquiry concentrates on two aspects:

a) economic development opportunities arising from the project
b) infrastructure required to ensure regional communities benefit from the project.

We wish to bring the Inquiry's attention to the economic opportunities that can be derived from constructing in stages the Castlereagh Connection road project. The Castlereagh Connection is a significant national infrastructure project that has been identified by Infrastructure Australia as a high priority.

The 1951 corridor preserved and predominantly in government ownership follows a route identified by Transport for NSW in its Western Sydney Corridors planning. It also includes a proposed extension as part of the Bells Line of Road that would facilitate connection over the Blue Mountains and into the Central West.

In recent times, Council has commissioned its own research to identify the potential benefits of accelerated Government investment in the Castlereagh Connection.

The finding of this research is the Castlereagh Connection as it relates to regional NSW will:

- Provide swifter, safer flood evacuation for the Hawkesbury-Nepean Valley
- Provide greater connectivity and access to employment for many disadvantaged communities

Penrith City Council
PO Box 60, Penrith
NSW 2751 Australia
T 4732 7777
F 4732 7958
penrithcity.nsw.gov.au

- Unlock economic opportunities in relation to freight, tourism and agribusiness including for regional NSW
- Reduce gaps in the national transport network, particularly to the Central West region, and reduce travel times
- Maximise investment by connecting it to other planned infrastructure including the Greater West Metro, Outer Sydney orbital and the M12 motorway.

The total estimated cost we have identified for construction of the Castlereagh Connection to Castlereagh Road is estimated at $1.8 billion. This project could be staged with an indicative costing of $1.2 billion for stage 1 (to The Northern Road) and further $600 million for stage 2 (to Castlereagh Road). Both stages show a positive Cost Benefit Ratio based on modelling prepared for Council in 2019. No costing for stage 3 across the Nepean River as per the 1951 Corridor has been investigated but would be subject of a future business case investigating the full length.

Attached is our discussion paper on Castlereagh Connection. The discussion paper has been prepared to outline the strategic benefits of the Castlereagh Connection and propose that the State Government prepare a strategic business case for this project.

We would welcome any opportunity to begin a discussion through this Inquiry to identify this road project and its contribution to maximising regional connectivity and complement the benefits derived from the Inland Rail project.

For further information please contact Council's City Economy and Marketing Manager, Mr Nathan Burbridge, on [redacted].

Yours sincerely

[redacted]

Warwick Winn
General Manager

Attach.

Penrith City Council
PO Box 60, Penrith
NSW 2751 Australia
T 4732 7777
F 4732 7958
penrithcity.nsw.gov.au

CASTLEREAGH CONNECTION

MAXIMISING THE AEROTROPOLIS & SUPPORTING THE PARKLAND CITY

Executive Summary

Penrith has long been recognised as a metropolitan centre with an essential current and future role in the emerging Western Parkland City. It is on track to be more liveable through balanced growth and improved amenity.

All levels of Government are committed to accommodating future growth in the right places. To support this, new infrastructure is needed to make sure transport and road networks are efficient, safe and our community is connected to more jobs closer to home.

As a river city, Penrith offers amenity to its communities and visitors, however being a river city brings a flooding risk. There is an immediate need for an evacuation solution for Penrith as part of the Hawkesbury-Nepean Valley that addresses the current flood and safety risks to communities living in the catchment and to facilitate responsible development.

Castlereagh Connection is a significant national infrastructure project that has been identified by Infrastructure Australia as a high priority.

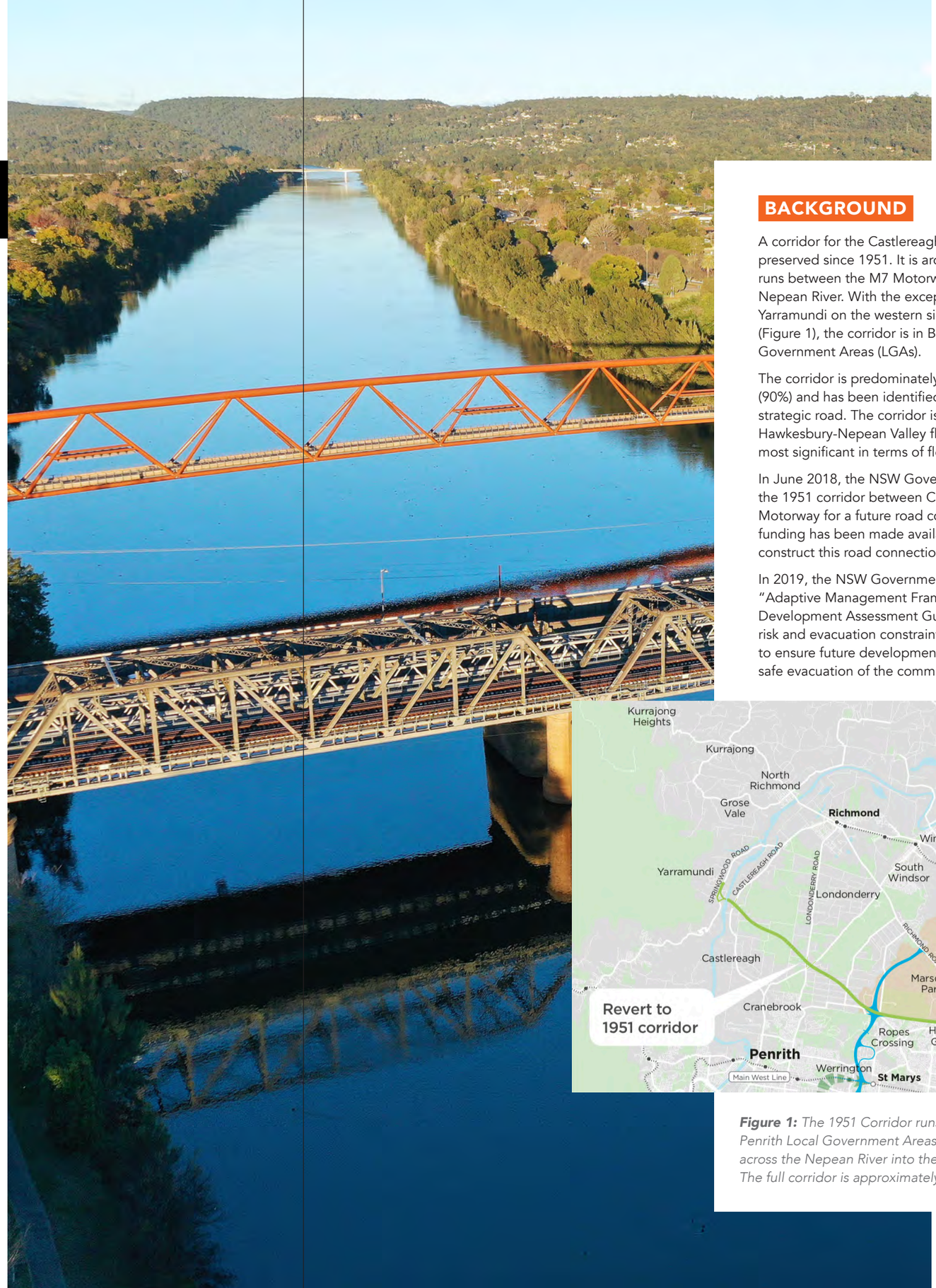
This road will:

- provide swifter, safer flood evacuation for the Hawkesbury-Nepean Valley
- facilitate development in the Penrith City Centre which is critical to the aerotropolis
- provide greater accessibility for disadvantaged communities to job and educational opportunities
- unlock economic opportunities in tourism, freight and agribusiness
- maximise investment by connecting to planned North South infrastructure - Sydney Metro Greater West and the Outer Sydney Orbital as well as the existing Motorway network, and
- reduce gaps in the national transport network, particularly to the Central West.

Castlereagh Connection is around 22kms in length, is almost 90% in government ownership and could be constructed in stages as funding allowed, delivering interim benefits for each stage and achieving maximum outcomes upon completion.

The total estimated cost for construction of the Castlereagh Connection to Castlereagh Road is estimated at $1.8 billion. This project could be staged with an indicative costing of $1.2bn for stage 1 (to The Northern Road) and further $600m for stage 2 (to Castlereagh Road). Both stages show a positive Cost Benefit Ratio based on modelling prepared for Council in 2019.

This Strategic Discussion Paper has been prepared by Council to outline the strategic benefits of the Castlereagh Connection and proposes that the Government prepare a Strategic Business Case.



BACKGROUND

A corridor for the Castlereagh Connection has been preserved since 1951. It is around 22kms in length and runs between the M7 Motorway and just west of the Nepean River. With the exception of the end point at Yarramundi on the western side of the Nepean River (Figure 1), the corridor is in Blacktown and Penrith Local Government Areas (LGAs).

The corridor is predominately in government ownership (90%) and has been identified since 1951 as a future strategic road. The corridor is located within the Hawkesbury-Nepean Valley flood catchment; one of the most significant in terms of flood risk in Australia

In June 2018, the NSW Government re-confirmed the 1951 corridor between Castlereagh and the M7 Motorway for a future road connection. However, no funding has been made available to investigate or construct this road connection.

In 2019, the NSW Government implemented an "Adaptive Management Framework" and accompanying Development Assessment Guideline to manage flood risk and evacuation constraints in the Penrith City Centre to ensure future development does not impact on the safe evacuation of the community in the event of a flood.

Figure 1: *The 1951 Corridor runs through Blacktown and Penrith Local Government Areas (TfNSW) and extends across the Nepean River into the Blue Mountains LGA. The full corridor is approximately 22km in length.*

COST BENEFITS AND POTENTIAL STAGING

In 2019 analysis on Castlereagh Connection was commissioned by Council.

This analysis, using the M12 project as a comparison, indicates the proposed road will cost an estimated $1.8bn for a four-lane grade separated road or about $20m per lane per km for a four-lane, grade separated road.

Castlereagh Connection could be delivered in stages, which would realise immediate, incremental benefits, particularly congestion and flood evacuation. It could also be built with a single lane in each direction initially, with capacity for widening in the future.

Suggested staging is outlined below with the initial benefits each stage can deliver:

- **Stage 1 M7 to The Northern Road approximate total 14kms – (estimated $1.2b)**
  Will support flood evacuation for around 13,000 vehicles and support east west movement from The Northern Road/ Londonderry Road intersection. Will improve regional connectivity and reduce load on the current local and arterial road network by providing an additional east west connection between Great Western Highway and Richmond Road.
- **Stage 2 The Northern Road to Castlereagh Road (approximately 7km estimated $600m)**
  Will realise a broader flood evacuation catchment (up to 24,000 total in a major flood event) and provide a higher order road than the existing Regional Evacuation Route. Will enhance connectivity to a broader regional catchment and remove traffic from local roads more efficiently.
- **M7 and across Nepean River as per 1951 corridor (approx 1km) –** not costed by Council at this time but would be subject to future business case investigating the full length route for traffic from the Blue Mountains and to facilitate freight movements from the Central West.

Each of the 6 issues identified in the Executive Summary is explored on the following pages, including how Castlereagh Connection relates and responds to the issue.

ITEM	COST/BENEFIT ($m) ** 21km	COST/BENEFIT ($m) *** 14km
Capital Cost	-1,839	-1,226
Congestion/VOC	7,7,429	6,055
Flood evacuation	70	57
Freight Savings (diverted freight)	54*	54*
Total NPV	5,660	4,886
BCR	4.07	4.98

* Freight Savings not included in the NPV/BCR as these require the entire connection across the Blue Mountains to be built, not only to the Nepean River and M7 as costed here.

** Costs/Disbenefits are shown as negative numbers.

*** Costs have been prorated based on the distance, benefits have been prorated based on the population shares across the area.

Figure 5: *Corview/RPS 2019.*

The NPV and BCR for the 21km version of the project are very strong, at $5,660 and 4.07, respectively. For the 14km version these come in at $4,880 and 4.98 respectively. This demonstrates that the benefits of the project are significantly higher than its costs.

ISSUE 1

SWIFTER, SAFER FLOOD EVACUATION FOR THE HAWKESBURY-NEPEAN VALLEY

The NSW Government's *Resilient Valley, Resilient Communities – Hawkesbury-Nepean Valley Flood Risk Management Strategy* identifies the Hawkesbury-Nepean Valley as one of the highest risk areas for flood in Australia.

There are 134,000 people currently living on the floodplain. It is estimated 64,000 people would need to evacuate this floodplain in a 1 in 100-year flood. In a 1 in 500 year flood, or an event similar to the largest flood on record in 1867, some 90,000 people will need to evacuate. In the next 20 years, Infrastructure NSW estimates as many as 171,000 people would need to evacuate in a 1 in 500 year event.

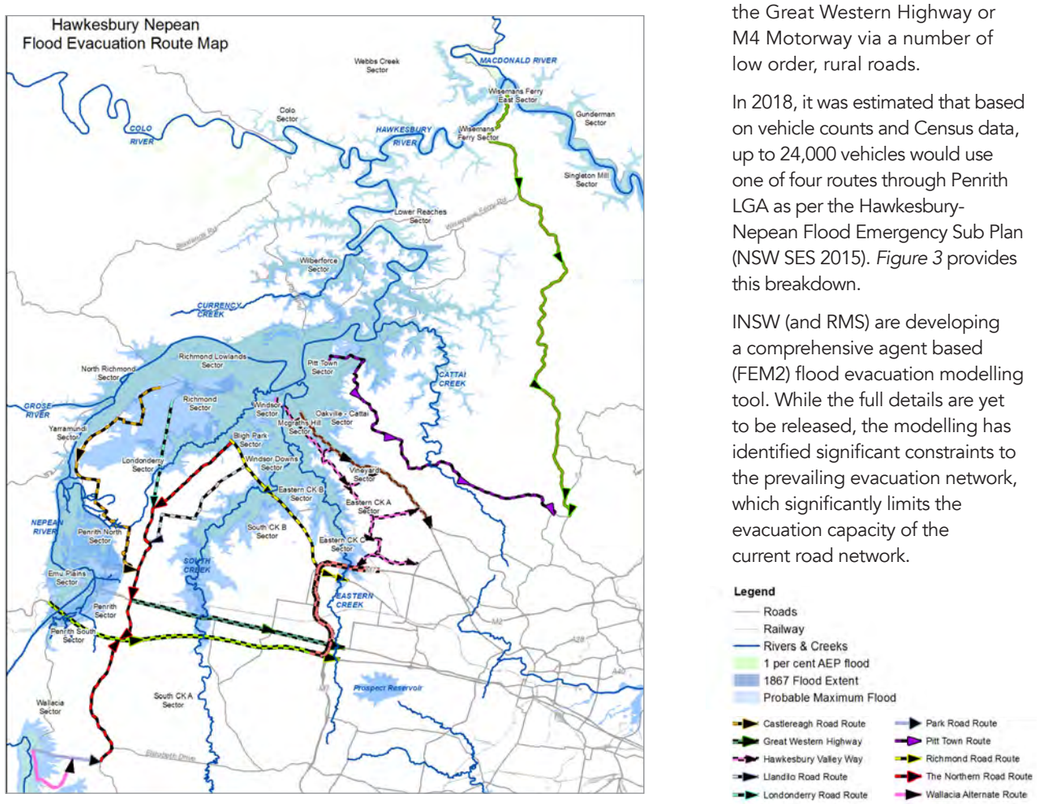


Figure 2: *Regional Flood Evacuation Routes within the Hawkesbury Nepean Valley.*

The Hawkesbury-Nepean Valley Flood Risk Management Strategy Taskforce Options Assessment Report (January 2019) indicates that currently *there is insufficient road capacity to safely evacuate the at-risk population within the limited flood forecast time available for evacuation*. Multiple communities rely on a regional network of common roads as their means of evacuation.

Figure 2 shows the flood evacuation routes directing the majority of evacuees to travel south towards Penrith to exit via the Great Western Highway or M4 Motorway via a number of low order, rural roads.

In 2018, it was estimated that based on vehicle counts and Census data, up to 24,000 vehicles would use one of four routes through Penrith LGA as per the Hawkesbury-Nepean Flood Emergency Sub Plan (NSW SES 2015). *Figure 3* provides this breakdown.

INSW (and RMS) are developing a comprehensive agent based (FEM2) flood evacuation modelling tool. While the full details are yet to be released, the modelling has identified significant constraints to the prevailing evacuation network, which significantly limits the evacuation capacity of the current road network.

ISSUE 1

ROUTE (number in brackets relates to route identified on map below)	VEHICLES
Castlereagh Road (Regional Evacuation Route) (4)	9,038
Londonderry Road (3)	2,292
The Northern Road (from Windsor and Bligh Park) (2)	6,953
Llandilo Road (1)	5,938
TOTAL	**24,221**

Figure 3: *Number of vehicles estimated to use one of four routes through Penrith LGA.*

Figure 4: *How the Castlereagh Connection supports swifter, safer evacuation for the majority of evacuees from North of Penrith and reduces traffic entering the M4 and Great Western Highway.*

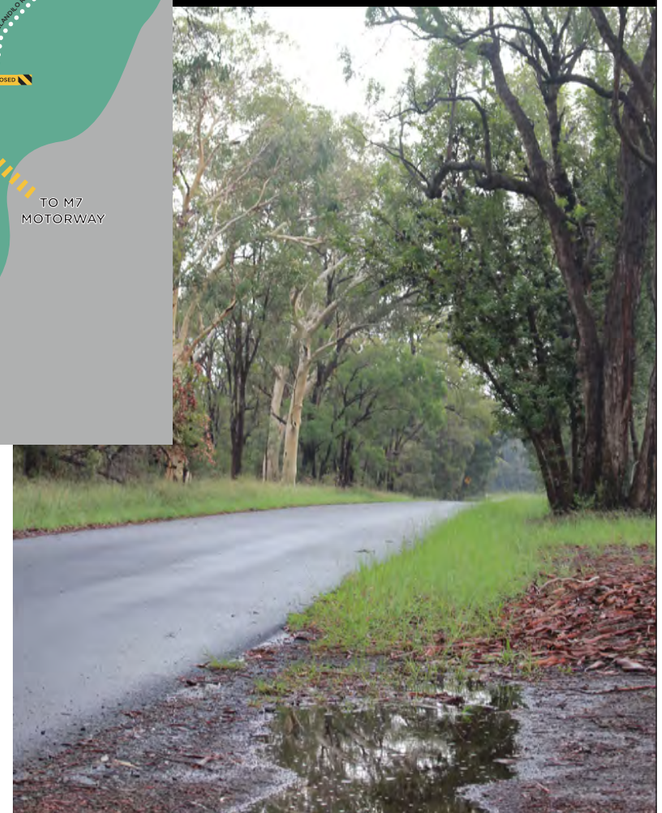
Image right: *Jockbet Street is part of the Regional Evacuation Route.*

HOW CASTLEREAGH CONNECTION WILL ADDRESS THIS ISSUE

Castlereagh Connection would intersect with four of the current evacuation routes and divert up to 24,000 vehicles (particularly many of the 37,000 residents of the highly flood prone Richmond-Windsor SA3) onto the M7. This would reduce congestion at several convergence points on The Northern Road.

Its delivery would also support safer, swifter evacuation and reduce the need for early evacuation due to capacity constraints. The improved evacuation outcomes are shown in *Figure 4*.

Castlereagh Connection would provide an evacuation grade route and allow for SES and other emergency workers to be more effectively deployed during any evacuation.



ISSUE 2

CONGESTION ON THE ARTERIAL ROAD NETWORK

The existing arterial road network across the Western Parkland City is congested. This congestion is particularly prevalent along the M4 and M7 Motorways which connect many residents to major employment centres.

Improving traffic movement along these corridors will become increasingly important as Western Sydney's population continues to grow.

Routes out of Penrith, Hawkesbury and parts of Blacktown impact the Great Western Highway and M4 entry points as well as Blacktown/ Richmond Road. Currently, motorists travel north or south to join major arterials before continuing their journeys east. This creates significant traffic volume on the local network.

Existing east west connections such as the Great Western Highway, M4 Motorway and Richmond/Blacktown Road are heavily congested with no east west regional connections between Richmond Road and the Great Western Highway. Currently motorists also use a series of back roads through rural areas to travel east. This is particularly evident through Llandilo, Shanes Park, Jordan Springs and Ropes Crossing.

HOW CASTLEREAGH CONNECTION RESPONDS TO THIS ISSUE

The Castlereagh Connection would improve access to the Motorway network for residents, particularly those in the North of Penrith, Hawkesbury and Blacktown LGAs including the North West growth centre where some 30,000 new homes are planned.

The Castlereagh Connection corridor is adjacent to the Marsden Park strategic centre with potential for 10,000 jobs. Future planned and proposed infrastructure also intersects with the corridor including the Outer Sydney Orbital and the North South Rail Link . Castlereagh Connection will further realise the benefits of other infrastructure projects through increased regional connectivity.

ISSUE 3

UNLOCK ECONOMIC OPPORTUNITIES

Penrith is uniquely positioned between the North West and South West growth centres of Sydney and is the gateway to the new Western Sydney Airport and Aerotropolis.

Penrith will be the hub for a nationally significant economic corridor with diverse industries and a range of job opportunities.

These include growth and expansion of new and emerging industries related to the Aerotropolis and associated supply chains, including freight and logistics, advanced manufacturing, health and education, and tourism, particularly domestic tourism in Penrith and the Blue Mountains.

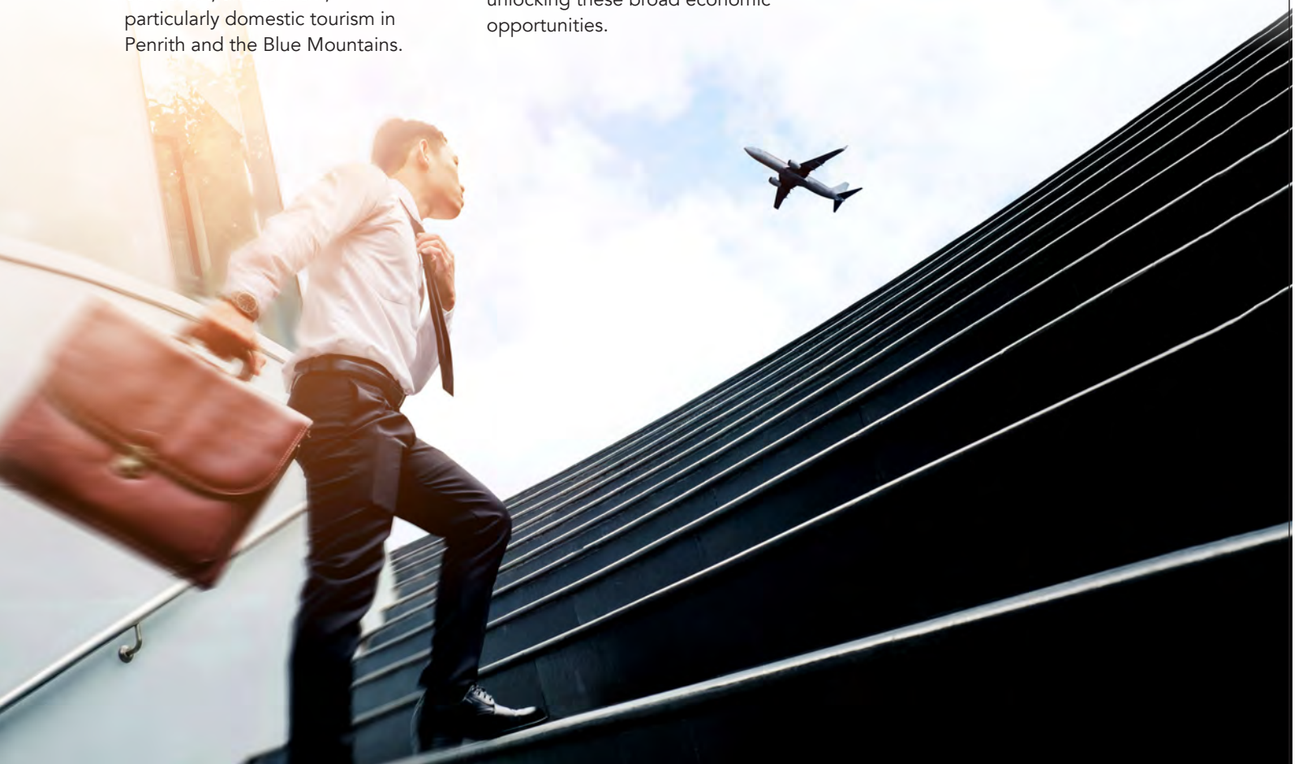
Existing and emerging precincts including those in St Marys and Erskine Park specialising in industry, manufacturing and logistics are also set to grow off the back of new market opportunities.

An economic opportunity exists for goods, particularly agribusiness and fresh food products from the Central West, to be processed and packaged in Western Sydney for world markets reached by an international airport.

Modelling for Western Sydney Airport indicates that its 24-hour operation and connection to international markets means agribusiness has the potential to significantly benefit the NSW and national economy. Greater road transport connectivity is key to unlocking these broad economic opportunities.

HOW CASTLEREAGH CONNECTION RESPONDS TO THIS ISSUE

To function effectively Penrith needs to be serviced by an optimum road network. Castlereagh Connection would allow a more seamless route to join with the existing BLoR and any future upgrades to this route, as well as providing enhanced connectivity from the Hawkesbury, Central West and Penrith LGA to the Sydney Metropolitan area.



ISSUE 4

CITY SHAPING INFRASTRUCTURE AND PENRITH'S REGIONAL ROLE

As the Western Parkland City continues to develop, key centres like Penrith must fulfil their strategic role of providing services, facilities, jobs and housing.

Penrith's role as the axis of the established East West corridor and the future North South arc of outer Western Sydney has long been recognised in planning for the Greater Sydney Region.

The strategic importance of centres like Penrith and St Marys are recognised in the Western City District Plan. The structure of these cities, including opportunities for housing growth, needs to optimise existing infrastructure and to maximise investment in new infrastructure.

Notwithstanding, the NSW Government's "Adaptive Management Framework" and accompanying Development Assessment Guideline for the Penrith City Centre set out the need to increase flood evacuation capacity commensurate with development. This constraint is impacting development in the Penrith City Centre, an impact that the construction of the Castlereagh Connection could partially address.

HOW CASTLEREAGH CONNECTION RESPONDS TO THIS ISSUE

Improved evacuation capacity in the Hawkesbury-Nepean will facilitate appropriate development in the Penrith City Centre currently affected by the Adaptive Management Framework. It will reduce the number of vehicles needing to evacuate via the Great Western Highway or M4 Motorway in a flood event as the Castlereagh Connection will become the evacuation route for many in the affected Hawkesbury-Nepean catchment area.

Castlereagh Connection will also improve Penrith's connections to other centres in the Western Parkland City and employment centres in Sydney's Northwest.

ISSUE 5

DISADVANTAGED COMMUNITIES WITH POOR ACCESS TO JOBS, EDUCATION AND OTHER SERVICES

Limited access to jobs and education has a high social impact on many Western Sydney suburbs.

This includes several suburbs in Penrith and Blacktown LGAs that have been identified as highly disadvantaged under the Socio-Economic Indexes for Areas (SEIFA) by the ABS (2016). Mt Druitt (2), Blacktown (2) and St Marys (1) are particularly notable, with St Marys in the lowest decile on both measures (SEIFA disadvantage and SEIFA Index of economic resources).

North St Marys has a particularly high unemployment rate of 12.3% compared to 6% for Greater Sydney. The unemployment rate for young people aged 15- 24 years was even higher, at 18.6% compared to 13.3% for Greater Sydney.

Penrith and Blacktown LGAs have low levels of job self-sufficiency meaning the majority of workers leave the area to go to work – in 2016 only 38% of Penrith workers were local residents and in Blacktown 44%. With limited public transport access, the majority of these residents travel via private vehicles or are unable to secure jobs without transport.

HOW CASTLEREAGH CONNECTION RESPONDS TO THIS ISSUE

Some of Sydney's most disadvantaged residents will benefit from delivery of the Castlereagh Connection through improved connectivity to jobs, education and services.

The associated jobs anticipated in the North West Growth Area would become more accessible via the Castlereagh Connection, linking to highly disadvantaged communities in Mt Druitt, St Marys and Blacktown.

This infrastructure would also support additional job creation and enhance supply chains, by integrating transport with Dunheved Business Park and businesses in the Western Sydney Aerotropolis.

ISSUE 6

A CRITICAL COMPONENT OF THE NATION'S TRANSPORT NETWORK IS MISSING

There are two direct routes from the Central West of NSW to Metropolitan Sydney; the Great Western Highway and Bells Line of Road (BLoR). Both have recognised shortcomings, particularly for freight movement.

Given the proximity of the future Western Sydney Airport and emergent national and international freight opportunities, there is an existing and critical need to provide supporting road networks and better east-west connectivity.

The Central West is home to a quarter of the State's agriculture. Its connections to the future Western Sydney Airport are limited because the BLoR and Great Western Highway prohibit travel by B-doubles longer than 19 metres and with a total mass greater than 50 tonnes.

The Central West is forecast by Infrastructure Australia to be among the seven most important regions in the country in terms of GRP (Gross Regional Product) by 2031. Improved connectivity to this region would be particularly beneficial, as the new airport will have a substantial focus on cargo opportunities planned in the early phases.

HOW CASTLEREAGH CONNECTION RESPONDS TO THIS ISSUE

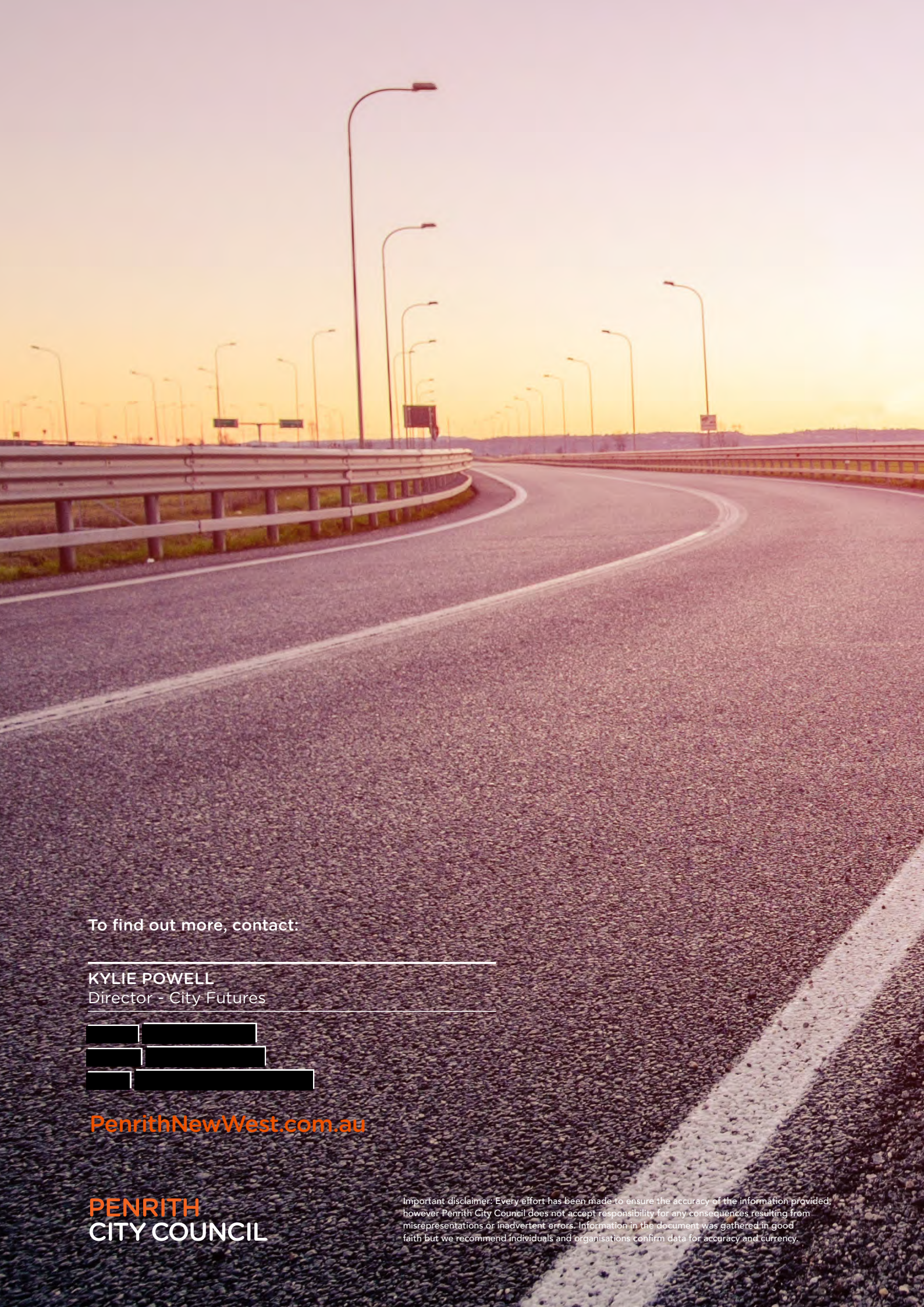
Castlereagh Connection, either with upgrades to the BLoR or an extension west, would connect significant populations and industry in Western Sydney more efficiently and effectively to the East. It would also support traffic from the west using Bells Line of Road (one of only two routes from the Central West across the Blue Mountains), in particular freight, as the current routes across the mountains are limited by volume. It would collect traffic from BLoR, Hawkesbury and Penrith and provide access to the Motorway network and, in the future, more directly via the Outer Sydney Orbital.

CONCLUSION

This Paper has outlined the broad ranging and critical issues that can be addressed or supported by Castlereagh Connection. It is clear that they warrant further investigation by Government through the commitment to a Strategic Business Case. A preliminary cost benefit analysis commissioned by Council and the long standing nature of the Corridor also provide further rationale for investigating its merits.

A Strategic Business Case would provide further clarity around staging and benefits. An independent investigation commissioned by Council estimated time savings and vehicle operating cost (VOC) savings of around $7.4bn (Corview Cadence 2017). The subsequent analysis in 2019 which covered a broader range of benefits, such as flood evacuation and freight opportunities, yielded a higher Cost Benefit Ratio of 4.07 (21km to Castlereagh Road) and 4.98 (14km to The Northern Road).

Castlereagh Connection will provide swifter, safer evacuation, improve east west connectivity and regional transport movement, deliver significant economic benefits in the region and beyond and support smart, planned growth in Greater Penrith and the Western Parkland City. It is now considered a business case be prepared, including potential staging of the 1951 corridor as confirmed by Transport NSW in 2018.



To find out more, contact:

KYLIE POWELL
Director - City Futures

[redacted]

PenrithNewWest.com.au

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