

Addressing Western Sydney's Jobs Slide

RELEASE FOR COMMENT

CONTENTS

3 Getting Western Sydney to Work

Getting to Work in Western Sydney

The Cost of Public Transport

Daunting Demand for CBD Transport

The Problem is Cost and Inefficiency, Not
Choice

7 The Population Issue

The Challenge

Distinctive Growth

Happening Fast and Here

10 The Jobs Intensity Issue

Straight to the Conclusion

What is Jobs Intensity?

Business as Usual

Jobs Intensity: The Current State

How We Got Here

If Things Remain the Same

15 The Future

Losing Intensity

Increasing Intensity

The Broomstick in the Road

17 Conclusions

Avoiding the Problem

Prosperity and Fairness

Which Way From Here?

WESTERN SYDNEY UNIVERSITY



The
Centre for
Western
Sydney

ADDRESSING WESTERN SYDNEY'S JOBS SLIDE

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The images and data on which the report relies are provided by .id The Population Experts, data partners of the Centre for Western Sydney. Rob Hall, Economic Analyst with .id, led the development of the data and co-created the underpinning narrative.

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GETTING WESTERN SYDNEY TO WORK

There are many reasons to be concerned about the growing and, now, long-term problem of jobs in Western Sydney. First there is the simple problem of insufficient jobs in Western Sydney for its resident workers. We address this issue in detail later in this document.

Then there is the problem of jobs location. Increasingly, Western Sydney's jobs are scattered¹ without public transport access, meaning resident workers have no choice except to travel to work by car. This lack of choice affects more than just Western Sydney workers: there are climate change implications; there are efficiency and productivity concerns. The Australian government's Bureau of Infrastructure, Transport and Regional Economics (BITRE) calculates that the avoidable cost of congestion for Australia's capital cities was around \$16.5 billion for 2015, with this cost rising to around \$30 billion by 2030 if nothing substantial changes.² Resolving Western Sydney's daily traffic snarls is the central task in this national project.

Overlaying both these concerns is the problem of long-term economic change and what this means for Western Sydney workers. The number of jobs in the manufacturing sector, the region's historical economic driver, has been declining for more than a decade and this will continue. At the same time, large concentrations of jobs in high value-adding professional services sectors are not emerging at sufficient pace to match the growing number of tertiary qualified Western Sydney residents.

We acknowledge that these are complex issues requiring more than headline summaries. That said, we can point to a cumulative effect of Western Sydney'

jobs and economic change issue: the growing costs of getting people to work. We turn to this effect immediately. Then we explain why this matters to the nation's largest and fastest growth urban region.

The following sections of this report provide detailed elaborations of Western Sydney's anticipated population growth and its intensifying jobs problems. We acknowledge in this exposition that we fail, at this stage, to propose solutions. The problems are too large for scant, off-hand pronouncements claiming a solution is near. There is a major research and policy development task to be confronted; and we make some comments as to how we should proceed on this task.

GETTING TO WORK IN WESTERN SYDNEY

There are many reasons why the jobs problems in Western Sydney need urgent attention and successful resolution. We select one of these in this introduction: the problem of getting to work. We choose this opener because it is in the Sydney news a lot.³ Roads are congested; user pricing schemes are proposed; a new motorway is questioned; fast, heavy and light rail schemes are lobbied for; cycling and walking paths are pushed for. And so it goes.

We think the overriding issue in Sydney's transport debate is the issue of jobs in Western Sydney. Jobs in Western Sydney is the narrative thread linking all the other transport stories. Our research partner id.com tells us that 74.2% of Western Sydney workers use a car as their main

way to get to work. The equivalent rates for trains and buses are 5.2% and 1.9% respectively. What we are about to reveal is that Western Sydney's car dependence presently relieves the NSW government of a gigantic transportation bill.

1. Centre for Western Sydney, 2015, *Work, Places and People in Western Sydney*.

2. Bureau of Infrastructure, Transport and Regional Economics, 2015, *Traffic and Congestion Cost Trends for Australian Capital Cities*.

3. For example: Crikey online Friday, April 1, 2016 (Alan Davies) <http://blogs.crikey.com.au/theurbanist/2015/04/20/is-rail-giving-its-peak-performance-in-australian-cities/>; The Daily Telegraph August 27, 2015 (Jim O'Rourke) Sydney trains at Third World load factors as passengers crammed in to carriages.

GETTING WESTERN SYDNEY TO WORK

THE COST OF PUBLIC TRANSPORT

Our figures come from the NSW public trading enterprises (PTE) regulator, iPart. The regulator tells us that, for the current NSW financial year, operating expenses for public transport (trains, buses, light rail and ferries) in the Greater Metropolitan Area (GMA) exceed fare revenues by \$4396.3 million. When maintenance and depreciation costs are added, the public transport deficit climbs to 5014.7 million, or more than \$5 billion.⁴

Note that the capital costs of new projects, like the Metro Northwest and the South West Rail Link, are not included in this calculation, and note that the estimated cost to the year 2019 of the Metro Northwest project totals \$8.3 billion.⁵ In other words, with or without adding the enormous costs of building new public transport infrastructure,

the cost of public transport provision in NSW has become daunting. Yet, as we explain in detail in sections below, the demand for public transport will grow considerably in coming decades. Central to this new demand will be demand for long distance public transport services from professional workers resident in Western Sydney. The rising demand, however, cannot be met from efficiencies in existing capacity. Unless the jobs demand from Western Sydney's new types of workers is satisfied by a different approach to economic planning in Western Sydney, substantial new capital investment in public transport infrastructure will be required.

The reality, though, is that procuring capital to raise capacity to meet extra public transport demand will be very difficult. In 2011-12, NSW state debt exceeded \$14 billion.⁶ Asset sales have cut this to around \$7 billion. Yet even with handsome proceeds from projected

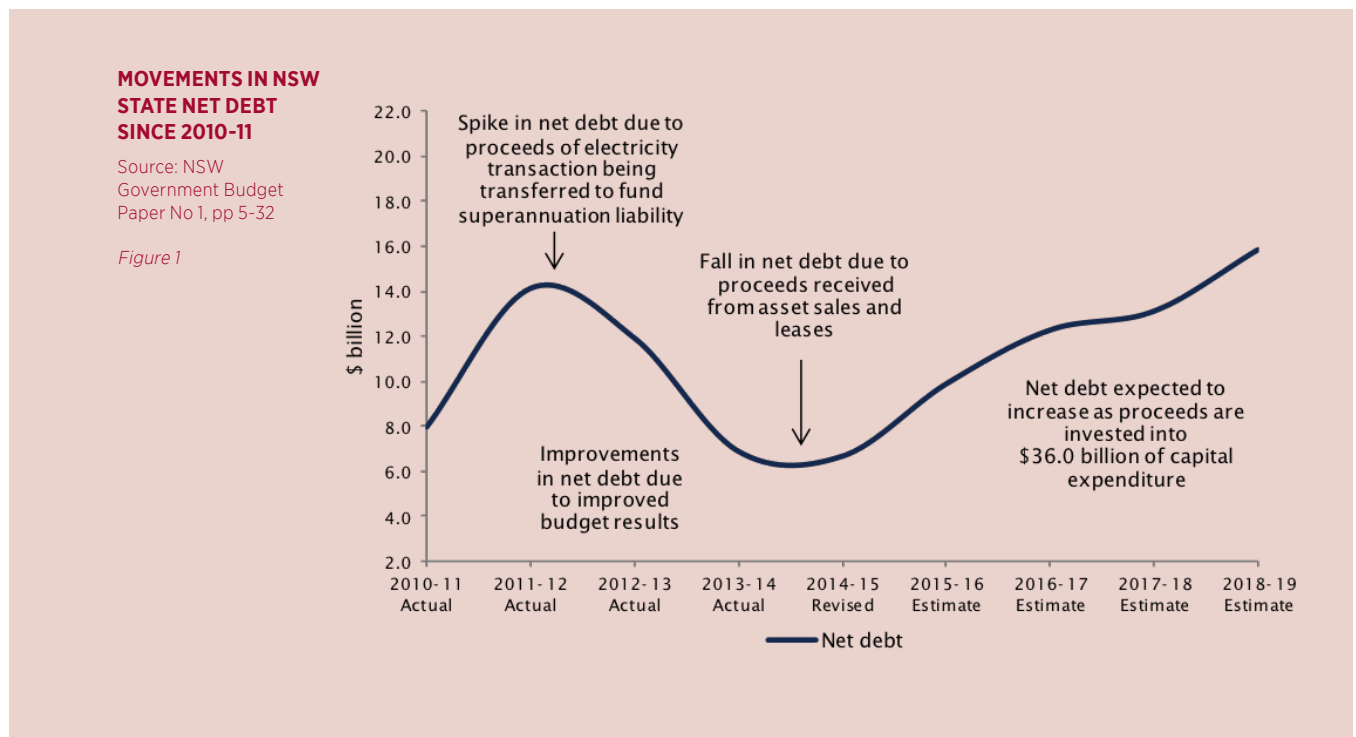
asset sales, NSW debt is projected to accumulate to over \$16 billion in just three more years.

The cost of public transport is already a major contributor to rising debt: because operating costs aren't matched by fare revenues, and because of the vast costs of maintenance and of new capital spending. A new PTE called the Transport Asset Holding Entity (TAHE) has been established by treasury to isolate and monitor the growing cost of public transport. A reasonable guess is that treasury isn't happy at what the public transport portfolio is doing to the state's coffers.

4. iPart 2015 Information Paper No 12 Cost Recovery p.4; iPart 2015 Information Paper No 7 Medium run marginal financial costs (MFC)

5. NSW Government Budget Paper No 2 page 4-3

6. NSW Government Budget Paper No. 1, page 5-32



GETTING WESTERN SYDNEY TO WORK

DAUNTING DEMAND FOR CBD TRANSPORT

With rising numbers of people and workers, demand for public transport in Sydney will grow and grow. If nothing much changes, the major portion of this growth in demand will be demand in journey-to-work access to the Sydney CBD. The NSW Bureau of Statistics predicts that between 2011 and 2046 Sydney will grow its AM peak rail capacity by only 27.2%, assuming all known capital projects are successfully completed.⁷ Yet for the same period, the Bureau predicts total public transport demand for the AM peak will rise by 91.1% – three times the rise in capacity – with rising demand for rail the major contributor.⁸

Sydney CBD travellers seem to be facing two crushes: directly in the carriages

and buses as they try to get to work; and in the pocket as they are hit inevitably by rising fares to reduce the transport budget deficit and then by rising taxes to service growing state debt.

THE PROBLEM IS COST AND INEFFICIENCY, NOT CHOICE

We need to dispel a myth: the idea that Western Sydney workers somehow prefer car use over public transport in their journeys-to-work. Our calculations (Table 1) show that outer Sydney workers are the most likely of any group in Sydney to use the train to get to work in the CBD. And outer Sydney workers with CBD jobs are the least likely group to use their motor vehicles to travel to work. Sydney's LGAs with highest rate of

rail use for journeys-to-work to the CBD are Campbelltown (92%), Penrith (87%), and Camden and Fairfield (each 86%). Moreover, these same LGAs have the lowest private motor vehicle use rate for CBD work journeys.

7. Measured by total rail kms travelled by a typical train configuration

8. NSW Bureau of Transport Statistics figures March 2014; based on BTS employment and population projections.

JOURNEY TO WORK MODE SHARE TO SYDNEY CBD BY ORIGIN LGA, 2011

Source: BTS figures compiled by Centre for Western Sydney

Table 1

REGION	TRAIN	BUS	FERRY/ TRAM	PRIVATE VEHICLE	WALKED ONLY	OTHER
INNER RING ¹	25	34	3	17	15	5
MIDDLE RING ²	63	14	4	17	1	1
OUTER RING ³	65	18	1	15	0	1
TOTAL	49	23	3	17	6	2

1 Ashfield (A) Botany Bay (C) Lane Cove (A) Leichhardt (A) Marrickville (A) Mosman (A) North Sydney (A) Randwick (C) Sydney (C) Waverley (A) Woollahra (A)

2 Auburn (C) Bankstown (C) Burwood (A) Canada Bay (A) Canterbury (C) Hunters Hill (A) Hurstville Kogarah (C) Ku-ring-gai (A) Manly (A) Parramatta (C) Rockdale (C) Ryde (C) Strathfield (A) Willoughby (C)

3 Blacktown (C) Blue Mountains (C) Camden (A) Campbelltown (C) Fairfield (C) Gosford (C) Hawkesbury (C) Holroyd (C) Hornsby (A) Liverpool (C) Penrith (C) Pittwater (A) Sutherland Shire (A) The Hills Shire (A) Warringah (A) Wollondilly (A) Wyong (A)

Note: C denotes City status, A denotes Municipality status

GETTING WESTERN SYDNEY TO WORK

Overwhelmingly, Western Sydney workers are forced to travel to work by car. This means they pay a far higher journey-to-work bill than workers elsewhere in Sydney. The reason that Sydney's inner and middle ring workers use public transport in higher numbers is that their jobs are more likely to be located in Sydney's CBD, which gives them access to excellent public transport services. Sydney's public transport system was designed explicitly for this type of travel and this type of traveller.

For inner and middle ring workers, having access to public transport to get to work also means having access to the generous subsidies within Sydney's fare pricing structures. Consider that the highest weekly payment for a public transport user in Sydney (via Opal Card) is \$60, or \$3120 per year. Most travellers pay less than this. In contrast, the typical Western Sydney worker, compelled to travel to work by car and travelling, say, 200 kilometres per week, spends \$10,000 per year on running costs and depreciation.⁹ In total, we estimate the Western Sydney workforce spends \$5 billion per annum getting to and from work in their cars.¹⁰ Remarkably, \$5 billion is also the net annual cost to the taxpayer of running the Sydney public transport system. The two aggregates sit awkwardly on the same perch by any efficiency or equity criteria.

Western Sydney workers would love to enjoy the subsidies available to public transport users in Sydney's inner and middle regions. But this re-distributive flow is denied them. Our report *Work, Places and People in Western Sydney* shows that for more than four decades jobs growth in Western Sydney has been

increasingly dispersed. Government policies to build large concentrations of jobs in Western Sydney have not been pursued with the required aggression. Car dependency and rising urban congestion are the direct consequences of planning failure. Moreover, a public transport solution, without reconfiguration of the shape and composition of Western Sydney, has become too expensive – and probably impossible to design even if funds were available.

So this is the starting point for this paper: Sydney is lurching towards an urban structure where its transportation problems are impossible to solve. Next we explain the population pressures involved in this equation.

9. Some common references for this calculation:
<http://www.theguardian.com/world/2013/dec/12/driving-to-work-costs-11000-a-year-for-the-average-capital-city-driver>
<http://www.sydneytrains.info/news/2006/060705-calculator>
<http://blogs.crikey.com.au/theurbanist/2013/12/17/how-much-extra-does-it-cost-to-commute-by-car/>

10. Estimates of car use: Assuming that 1 million workers currently in Western Sydney, assume this generates 500,000 cars used daily for commuting, @\$10,000 per annum for the typical traveller, equals an annual total Western Sydney cost of \$5 billion.

THE POPULATION ISSUE

THE CHALLENGE

There is no greater challenge confronting Sydney – one of the world's great global cities – than the task of shaping Western Sydney to accommodate its population growth. Western Sydney is the most populous and fastest growing region in all of Sydney. The broad outline of Western Sydney's¹ growth in the coming decades is understood: a million more in the next twenty years or so. Here we dissect this growth pathway. Understanding what is happening in our region in detail is a crucial step in devising actions to ensure the prosperity of the region's residents, and the sustainability and liveability of this vast Sydney region.

DISTINCTIVE GROWTH

Figure 2 shows growth rates for Australia, Sydney's Greater Metropolitan Region (GMR)² and Western Sydney. Together they show a nation that is growing consistently above the rates of other advanced nations due to the combined demographic impacts of sustained fertility rates, healthy ageing and a positive approach to immigration.

The peculiarly high rate of population growth in Western Sydney is evident from the graph. Western Sydney is Australia's standout growth region. While the growth rate for metropolitan Sydney tracks the growth rate for Australia as a whole – not surprisingly, since Sydney, with Melbourne, contributes most to Australia's overall growth – population growth rates for Greater Western Sydney are significantly higher than

both Sydney's and Australia's rates. The difference in growth has even widened in recent years.

1. We use 'Greater Western Sydney' and 'Western Sydney' interchangeably. The region comprises 14 local government areas: Auburn, Bankstown, Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Holroyd, Liverpool, Parramatta, Penrith, The Hills and Wollondilly.

2. In this report, we consistently refer to the Greater Metropolitan Region (GMR), or its shorthand, Metro Sydney. The GMR excludes the Gosford and Wyong LGAs. Where we use 'Greater Sydney' we include these LGAs.



THE POPULATION ISSUE

Western Sydney's resident population will grow from 2.17 million in 2016 to 2.92 million in 2036 (see Figure 3). To understand the extent of this growth consider that in 2036 the population of Western Sydney alone will be the equivalent of what Greater Sydney was in 1970. History tells us what it took to build that 1970 Sydney, its roads and public transport systems, its thriving central business district, its suburban nodes, its education and health resources, and its full complement of sporting, recreational and cultural facilities. Building Western Sydney requires more than adding increments to a city whose shape and structure are pretty much settled.

HAPPENING FAST AND HERE

Another way of understanding the dimensions of Western Sydney's growth is to look not only at projections of absolute size and numbers, but also at rates of change. By 2036 the population of the GMR is projected to grow to 5,759,423. 65% of this growth will take place in Western Sydney, despite the region comprising only 47% of Metro Sydney's population in 2011, the year of the last census. In other words, two out of every three new Sydneysiders in the next twenty years – and for the foreseeable future beyond – will live in Western Sydney.



THE POPULATION ISSUE

There is an important micro-geography in Western Sydney's growth. By and large growth will be steered to specific localities according to the NSW government's overall planning strategies, local councils' implementation of these plans, and the capacity of developers to bring new dwellings to market.

TWO OUT OF EVERY THREE NEW SYDNEYSIDERS IN THE NEXT TWENTY YEARS WILL LIVE IN WESTERN SYDNEY

Our research partner, id.com, uses a sophisticated data analysis tool called SAFi to identify the most likely locations for future population growth.

Figure 4 shows details of Western Sydney's growth over the next twenty years based on output from the SAFi model. Sydney's major growth fronts are in Western Sydney's northwest sector (especially Blacktown and The Hills) and in its southwest sector (especially Camden and Liverpool), as well as to the north of Penrith and the Olympic Park area. Significant growth is also anticipated in southern parts of Sydney's inner city and along portions of the west harbour foreshore, although the magnitude of growth in these inner areas is dwarfed by Western Sydney's growth.



THE JOBS INTENSITY ISSUE

STRAIGHT TO THE CONCLUSION

Western Sydney's population growth has major implications for jobs and workers in the region. The jobs issue is complex, requiring detailed statistical examination. When the stakes are high detail matters.

But let's go straight to the conclusion: If jobs generation in Western Sydney remains at recent historical levels, by 2036 Sydney's economy will be strangled by the daily congestion and expense involved in moving people to their places of work.

WHAT IS JOBS INTENSITY?

We need first to explain the concept of jobs intensity. This refers to the number of jobs located in a region expressed as a ratio of workers living in that region. In 2011 the jobs intensity ratio for Western Sydney was 84 jobs for every 100 resident workers (or 0.84). There are different ways of compiling this ratio. A common method is to use census data. Answers to questions that ask workers their place of residence and the job address allow us to calculate jobs intensity. In a recently published analysis of Western Sydney's labour market entitled *Work, Places and People in Western Sydney*¹ the Centre for Western Sydney uses unadjusted census data to calculate a jobs intensity ratio for Western Sydney in 2011 of 70 jobs per hundred workers (or 0.70), a figure significantly lower than the 0.84 ratio referred to above. Why the difference? Because many people fail to answer either labour force status or work location questions in the census. In effect, then, the ratio of 0.84 represents a correction of the census 'under count'.

With the census-based jobs intensity ratio of 0.70 in common use, our calculation here of a jobs intensity ratio of 0.84 for Western Sydney might be perceived by some as evidence that jobs availability in Western Sydney is better than has been portrayed. This is not the case. The difference between the 0.70 ratio we use elsewhere and the 0.84 used here is due to the assumptions made about the validity of census data relating to workers and places of work. At 0.84, Western Sydney's jobs intensity is poor for an urban region of this size in an advanced global city, and our analysis of the prospects ahead gives little cause for joy if a business-as-usual approach to jobs planning persists.

BUSINESS-AS-USUAL

What do we mean by a business-as-usual approach? For us, business as usual means planning for jobs continues to take a backseat to planning for dwellings. Western Sydney needs both. It is a sad reflection on the state of economic planning for global Sydney that the substance of the analysis we present here is not readily available from government planning agencies.

BY 2036, SYDNEY'S ECONOMY WILL BE STRANGLED BY THE DAILY CONGESTION AND EXPENSE INVOLVED IN MOVING PEOPLE TO THEIR PLACES OF WORK

Consistently, politicians and heads of government agencies posture at Western Sydney podiums with the claim that jobs are their number one priority. Yet both an analysis of jobs provision and clear policies for jobs generation are absent from government planning and policy

documents. One significant objective of this report is to convince government of the need for robust analysis and monitoring of jobs generation in Western Sydney as the basis for effective policy formation and action.

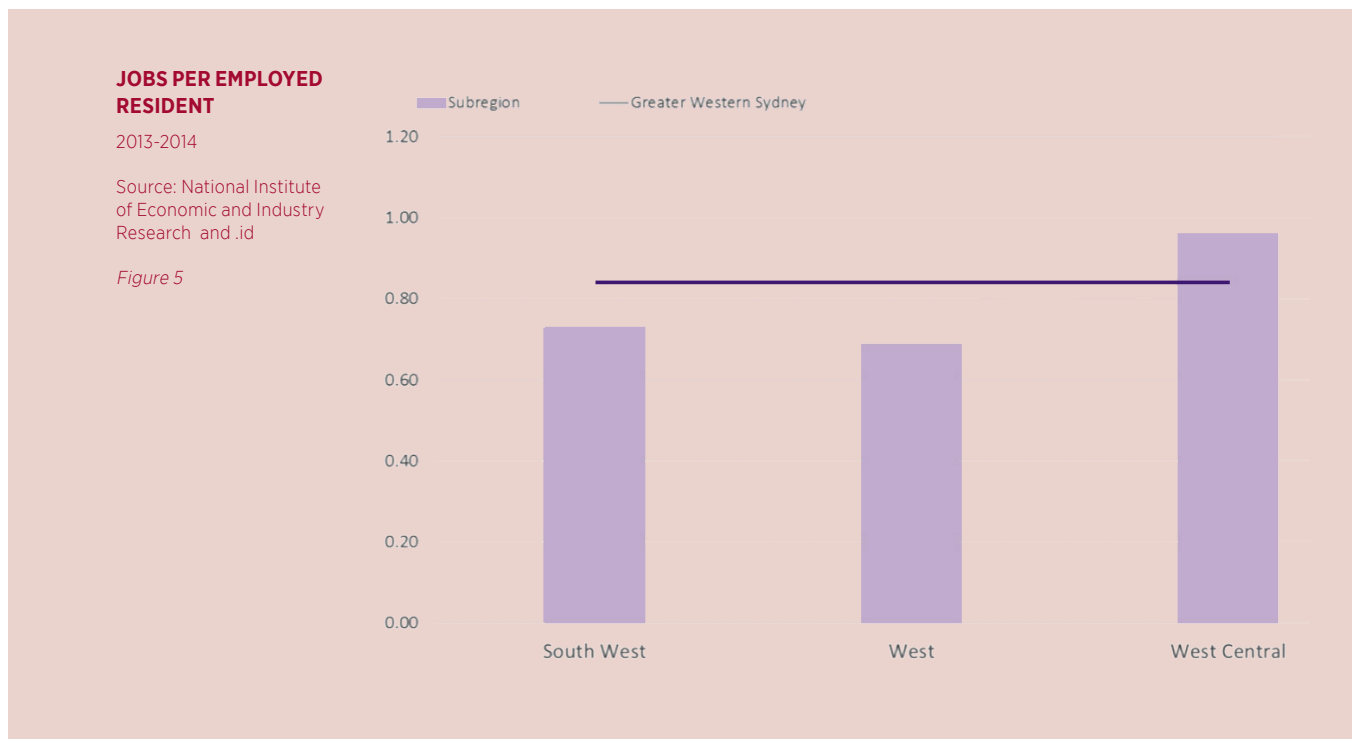
1. Downloadable from <http://www.uws.edu.au/cws/policy>

THE JOBS INTENSITY ISSUE

JOBS INTENSITY | THE CURRENT STATE

Figure 5 summarises where we are in terms of jobs intensity in Western Sydney. As we note above, in 2011 there were only 84 jobs in Greater Western Sydney for every 100 GWS resident workers. We think this is very low for an urban region of 2.17 million people. Of course, Western Sydney is a broad region. Reducing its jobs performance to a single number is rather crude. Figure 5 shows estimated jobs intensity in 2013-14 for each of Sydney's planning sub-regions (or 'districts'). These districts are devised by the NSW government's Department of Planning and Environment, and correspond to the districts assigned to commissioners in the new Commission for Greater Sydney.

The jobs ratios in Sydney's outer districts – the predicted site of much of the population growth – are significantly below the region's 2011 0.84 average, while West Central performs above the regional average. This higher jobs intensity figure is boosted by two stand-out West Central local government areas, Parramatta and Auburn, which host concentrations of jobs in Parramatta CBD and Sydney Olympic Park respectively. Unfortunately jobs surpluses in these locales are grossly insufficient to compensate for jobs deficits elsewhere in the region.



THE JOBS INTENSITY ISSUE

HOW WE GOT HERE

The significance of jobs change can be better understood by examining the rate of change in jobs availability – much like we did when we analysed population growth. Taking 2001 as a base year, the year following the Olympics with the Sydney economy experiencing half a decade or more of growth following the early 1990s recession, we can observe in Figure 6 that the number of employed residents in Western Sydney grew by 21% by 2014. Yet jobs in Western Sydney grew by only 13% during the same period. This means that in a typical year in this period jobs in Western Sydney grew by 8,158 jobs while the number of resident workers grew by 13,975. This is the jobs deficit.

We can see from the graph that a jobs gap is opening in an alarming fashion.

This is a disappointing trend, although it should not come as a surprise. Elsewhere, our historical analysis of jobs growth in Western Sydney (from *Work, Places and People in Western Sydney*) shows that restructuring of Australian manufacturing from the mid-1970s to the mid-1990s brought dramatic job-shedding in Western Sydney's manufacturing sector, the region's leading employer since the Second World War. Jobs growth in services sectors in the region has been insufficient to match the growth of the region's workforce, let alone compensate for the decline in manufacturing jobs.



THE JOBS INTENSITY ISSUE

We can see from Figure 7 the jobs intensity ratio has been allowed to fall from 0.90 in 2001. In that year the jobs deficit was 80,000. In 2014 the deficit reached 160,000. The problem has doubled in size, and is continuing to grow.

Let's examine this deficit further.

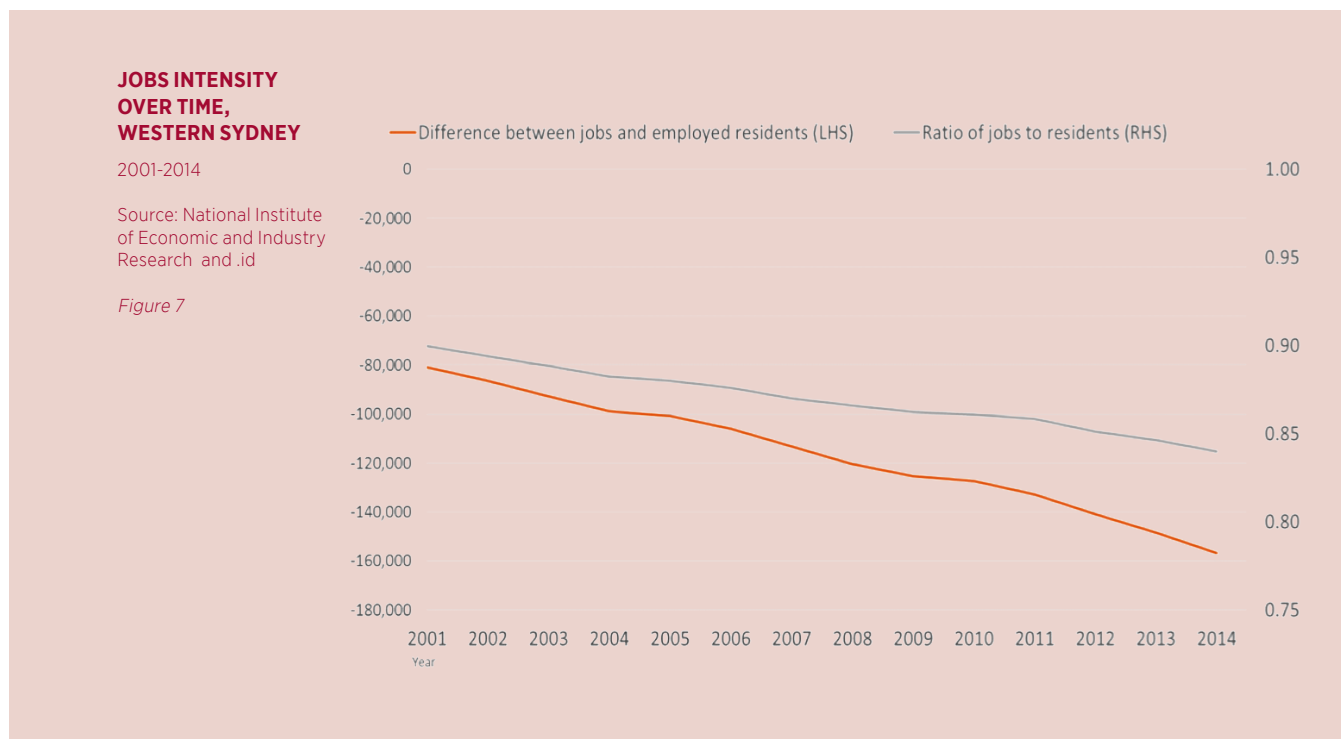
Remember that the jobs intensity ratio is a crude assessment of jobs availability; it fails to take account of skills levels of jobs and workers and simplistically assumes that local workers take all the local jobs. In reality, workers outside Western Sydney travel to the region for work while Western Sydney workers take jobs elsewhere, and not necessarily because of a lack of local jobs. When we make these adjustments to our modelling we calculate that around 318,086 Western Sydney workers leave the region for work on a typical working day. Some of these

travel short distances to an adjoining local government area (say from Bankstown to Canterbury) and thereby show up as workers exiting the region. Yet for over 50% of exiting GWS workers the daily journey is to Sydney's inner city labour market including the CBD and its adjoining employment precincts, and to the logistics facilities surrounding Port Botany and Sydney Airport. And, as we have seen, this group – especially its CBD component – commits to public transport for their work journeys more than any other of Sydney's commuting cohorts.

Something else to keep in mind: Our analysis reveals that it is Western Sydney's university educated and skilled residents who are more likely to undertake daily travel to Sydney's CBD and inner employment precincts. Analysis of the 2011 census shows around 1 in 2 Western Sydney residents who work

in professional, scientific and technical services jobs travel eastward beyond the Western Sydney region every day.

Our work also reveals that Western Sydney's uptake of post secondary qualifications is accelerating. We observe that the number of Western Sydney workers with bachelor or higher degrees rose by 50,000 between 2006 and 2011, an average of nearly 10,000 additional degree holders per year. This growth vastly exceeded the growth of local jobs appropriate for these workers. Note that we will release detailed analysis of the jobs composition of the changing Western Sydney labour market in a forthcoming report.



THE JOBS INTENSITY ISSUE

IF THINGS REMAIN THE SAME

Let's summarise what we know is likely to happen if we continue a business-as-usual approach to planning and economic development in the region.

First, based on id.com's SAFi modelling, the number of resident workers in Western Sydney will grow by 309,695 in the next twenty years. This is a 30.9% increase.

Second, if the jobs intensity ratio holds at the adjusted 2011 census snapshot rate of 0.84 for this period, then jobs growth will lag worker growth. Projecting a 0.84 ratio to 2036 sees the number of jobs in Greater Western Sydney growing by 256,737, or 22%.

The result? By 2036, there will be 210,000 fewer jobs than resident workers in the region.

Third, if journey-to-work patterns continue to mimic 2011 behaviours and jobs intensity holds at 0.84 then the number of people who live in Greater Western Sydney but work outside the region will grow from 318,086 in 2016 to 416,264 by 2036. This will increase congestion in every mode of transport, put enormous pressure on economic productivity across the GMR, and generate unsustainable fiscal stress on state and local government balance sheets in the struggle to provide, maintain and fund adequate transport infrastructure and services. Moreover, there will be highly significant negative impacts on family life, and on residents' health and living conditions across the metropolitan area.

Our ranking as a global city will plummet.

THE FUTURE

LOSING INTENSITY

What if we don't maintain the 0.84 census snapshot ratio over the next two decades? Figure 8 compares an ongoing jobs intensity ratio of 0.84 with what has actually taken place over the past ten years. In other words, it shows what is already happening to Western Sydney's stock of local jobs.

We have already seen that even if the jobs intensity ratio holds at 0.84 then there will be 210,000 fewer Western Sydney jobs than there are resident workers by 2036. But since around 2004, Western Sydney's rate of jobs generation has failed to meet the 0.84 ratio. To replicate 0.84 year-on-year we should have been generating more than 13,000 net additional jobs annually, and started doing so ten years ago. The actual net increase, however, has averaged just 8,000 per year. This represents an average jobs intensity ratio of only 0.77.

If Western Sydney's jobs performance over the last ten years is reproduced for the next twenty years, then the difference between jobs and resident workers in Western Sydney jumps from the 210,000 mark (calculated on a 0.84 ratio) to 306,063. Based on this scenario, the daily worker outflow from GWS will be 492,521, which is a little short of half a million journeys in the AM peak, and another half a million in the PM peak.

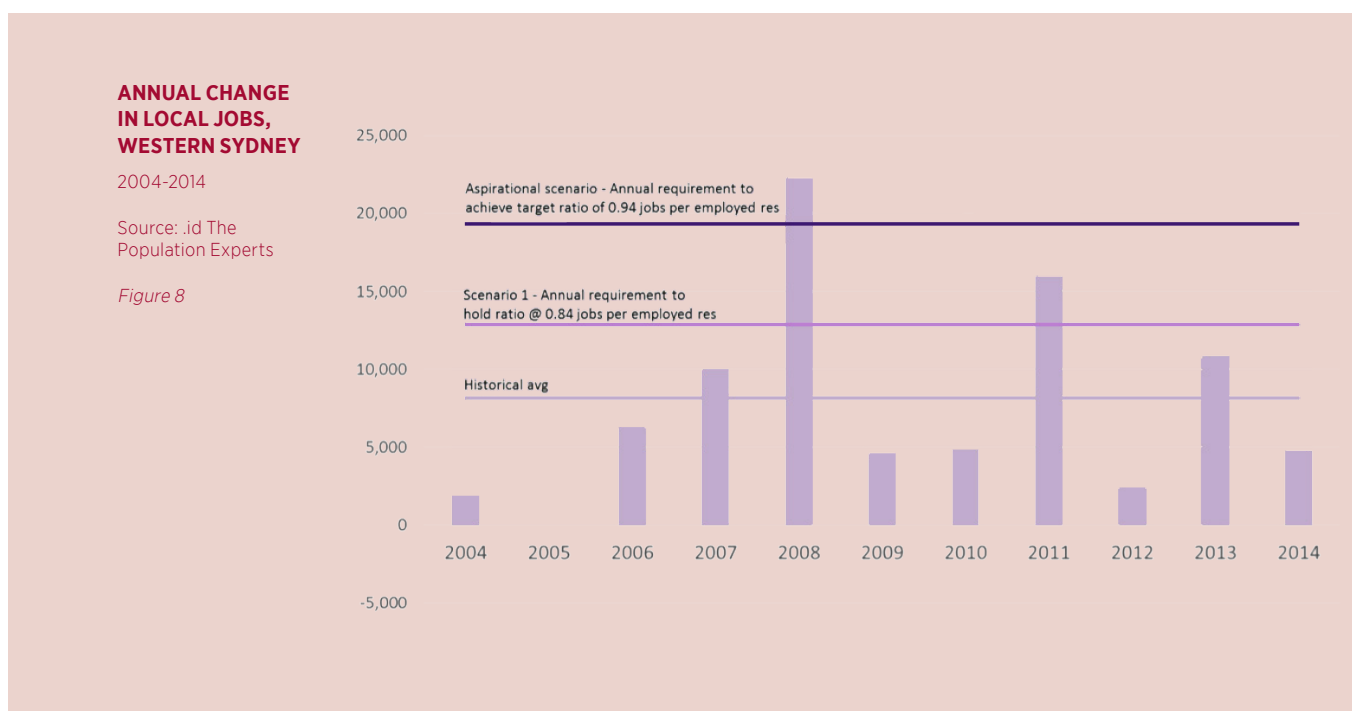
INCREASING INTENSITY

What if, despite the past performance of jobs generation in Western Sydney, we managed to improve jobs intensity from 2011 levels? This is the scenario that we find embedded in the employment projections generated by the Bureau of Transport Statistics. A 0.94 jobs intensity ratio by 2036 would, we think, better contribute to the sustainable, prosperous

GMR economy that Sydneysiders expect. Presumably, the government's Bureau of Transport Statistics must think so too. But we can find no justification for the selection of this ratio beyond its desirability: The 0.94 ratio sits inside the Bureau's work as if it were a self-evident economic truth.

But is 0.94 possible as well as desirable?

One concern is that the 0.94 aspiration anticipates an annual net jobs generation rate for Western Sydney 137% higher than the rate achieved over the last ten years. This is a startling difference. Only in 2008, the heady year before the global financial crisis, did employment generation in Western Sydney exceed a ratio of 94 jobs per 100 resident workers. Note too there were only two years in the last ten – 2008 and 2011, the latter on the back of record federal government stimulus spending – when net jobs growth even reached the 0.84



THE FUTURE

THE BROOMSTICK IN THE ROAD

Lagging growth rates make it harder to reach future targets. A lagging jobs generation rate digs into past jobs gains, meaning future growth rates need to be even higher to simply maintain present rates.

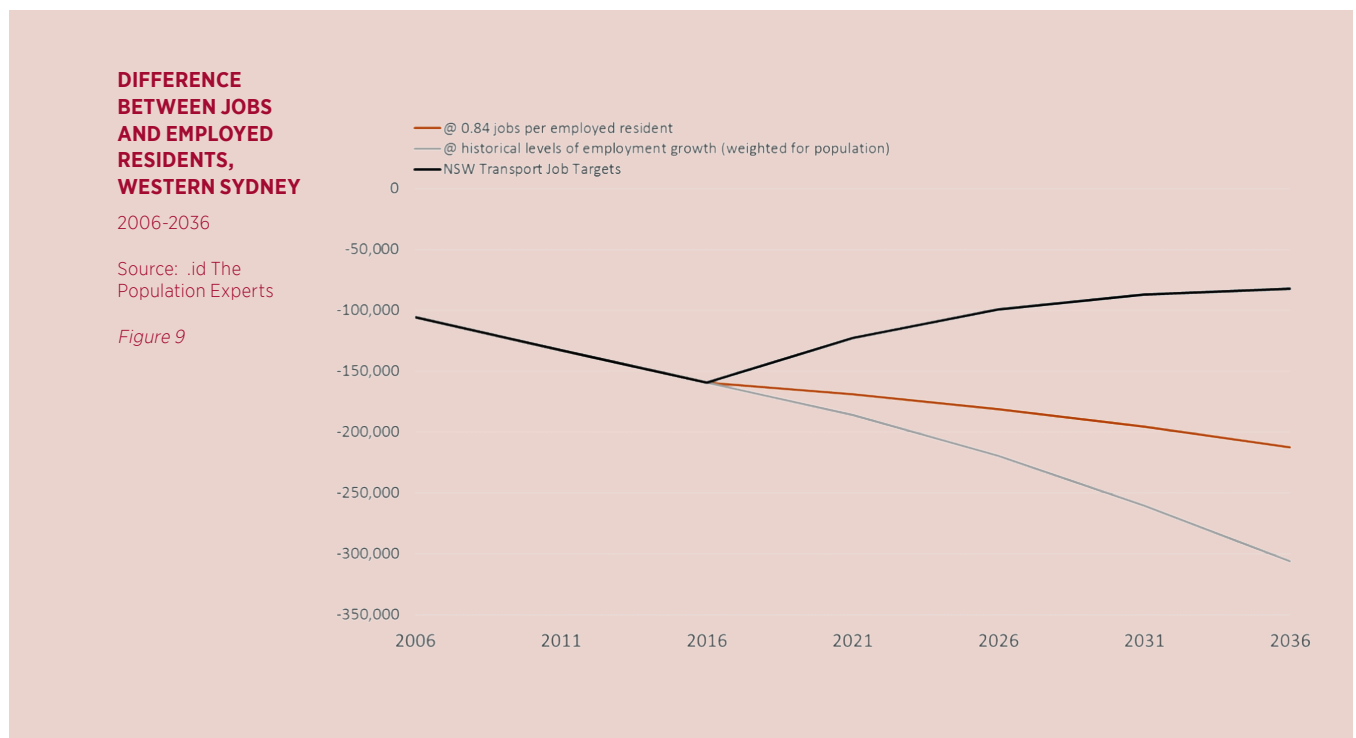
This is the problem shown in Figure 9. The graph summarises our jobs intensity analysis. We call it the witch's broom.

There are three branches on the witch's broom. The bottom one tracks Western Sydney's jobs deficit - the difference between the number of local jobs and the number of resident workers - using the ratio 0.77, the actual ratio of jobs intensity experienced by Western Sydney over the last decade. This is the business-as-usual scenario. The middle branch tracks the jobs deficit using the 0.84

census snapshot: the adjusted 2011 stock of Western Sydney jobs divided by the number of Western Sydney workers. The upper branch is based on the aspirational ratio of 0.94 apparently used by the Bureau of Transport Statistics. This is the only branch on the broomstick where new jobs growth is high enough to claw back the region's jobs deficit, even though it does this only modestly.

The witch's broomstick tells us this: If business-as-usual continues for the next twenty years, as shown by the bottom branch, Western Sydney ends up with a jobs deficit of 306,063 and a daily worker outflow of 492,521. In contrast, if the Bureau's aspirational ratio is met year-on-year for the next twenty years then the jobs deficit will fall to around 82,507 and a daily worker outflow of 310,359. This is a vastly better outcome than the business-as-usual scenario, but it

requires a dramatic turnaround from the branch of the witch's broomstick Western Sydney is sliding down.



CONCLUSIONS

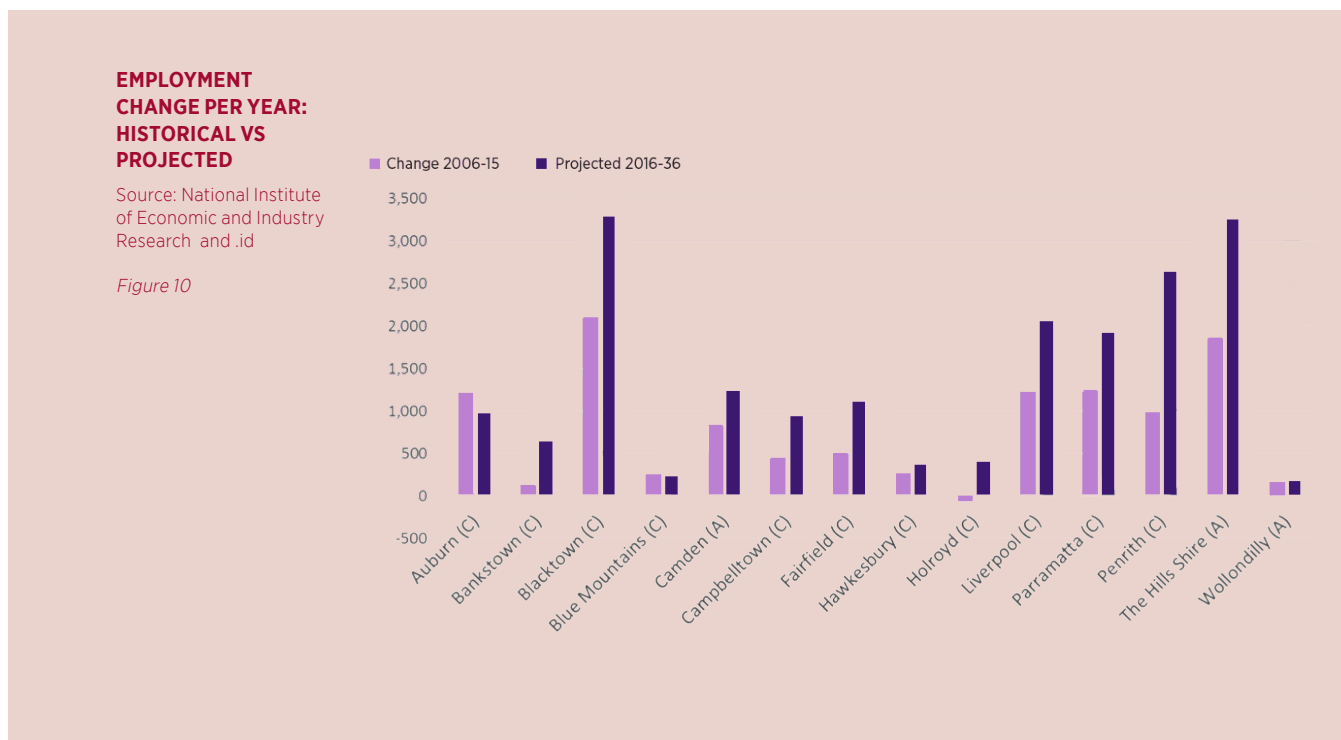
AVOIDING THE PROBLEM

Our paper is an introduction to a deeper and wider project on how we resolve Western Sydney's job gap and its journey-to-work problems so that a Sydney-wide asphyxia – of transport systems and the wider metropolitan economy – is avoided. Our work so far exposes only the aggregate nature of the problem we confront. We need to know more: about the problem, and then about policy solutions. As we have seen, business-as-usual sends us sliding down the witch's broomstick.

We present a final graph to reiterate our findings. Figure 10 applies our modelling to Western Sydney's local government areas. There are two columns for each of the 14 LGAs. The light purple columns show annual average jobs growth in the LGAs between 2006 and 2015. We can

see the modest employment growth that business-as-usual has generated. For Bankstown growth was minimal, for Holroyd net jobs went backwards. In the Blue Mountains, Campbelltown, Fairfield, Hawkesbury and Wollondilly, net jobs growth failed to top a meagre average of 500 per year for the ten-year period.

The dark purple columns show annualised jobs growth projections 2016-2036 using the aspirational 0.94 jobs intensity ratio used by the BTS in its projections. The graph shows the giant jobs hurdles ahead. In particular, in the region's most heavily populated LGAs – Blacktown, Liverpool, Parramatta, Penrith and The Hills Shire – the graph shows that reasonable aspirations for the future cannot be realised if the immediate past is a guide. A major shift in direction has to occur.



CONCLUSIONS

PROSPERITY AND FAIRNESS

There is an inter-generational fairness issue here. Right now we are building the future of Sydney's entire metropolitan region. As we have said, two out of every three new Sydneysiders is a westie, and this will remain true well into the future. In two or three decades' time we will have built a substantially new metropolis whose shape and structure is locked-in. The location of our new residents and the location of the jobs they perform will have become fixed. Options for getting to work will have been chosen, largely by us. But other people, largely our children, will be living with the consequences of these choices. If workers in 2040 do not have reasonable jobs choices within manageable travel distances from their homes then we will have failed our next generations miserably. Prosperity cannot be guaranteed under circumstances where people have poor jobs access: economic efficiency and productivity depend heavily on mobility, on having access to resources and workers, and being able to get products to market.

and less drug and alcohol dependence. Children in homes where parents have quality jobs achieve better at school. More jobs in Western Sydney lessens the pressure on inner city housing markets. And is there a better response to human-induced climate change than by engineering a city where distances travelled are substantially reduced?

GRIND TO A HALT CONGESTION ON ROADS, TRAINS AND BUSES, AND DEBILITATED STATE GOVERNMENT FISCAL HEALTH, WILL FOLLOW.

Social equity and inclusiveness outcomes also depend on reasonable access to jobs. There is no more effective policy measure for the successful integration of new migrants, for example, than ensuring they have access to good local jobs. High levels of workforce participation mean less crime, fewer mental health issues,

CONCLUSIONS

WHICH WAY FROM HERE?

We think this is a time in Sydney's history when two inter-connected policy objectives need to have exceptional status:

- Raise Western Sydney's jobs intensity so that distances travelled are dramatically reduced.
- Engineer a city where the location of dwellings and jobs produces a transport problem that can be solved.

The Centre for Western Sydney has prioritised the jobs intensity issue with an aggressive platform of research and policy development. This report is the platform's first output. Three further expositions will follow:

1. A detailed breakdown of Western Sydney's population growth and what this means for a future Western Sydney workforce.
2. A similarly detailed account of economic change in Western Sydney exposing the region's lagging and growing sectors, with implications for where jobs growth potential lies.
3. A critical analysis of the issue of CBD growth and jobs concentrations, and an exploration of giant jobs options for Western Sydney.

This work will establish the research base for the pursuit of effective policies.

Then the Platform will drive more work over a three-year time frame. Four projects are being assembled.

1. A detailed examination of demographic and economic changes in Western Sydney with a view to better understanding the locational opportunities that are being created by the region's extraordinary growth.
2. An exposition of the possibilities for economic and jobs generation from the successful construction and operation of a Western Sydney Airport at Badgerys Creek.
3. The identification of transport infrastructure corridors most appropriate for sustainable, prosperous growth in Western Sydney, and ideas about how these corridors might be exploited.
4. An appraisal of financing and funding options, including more adventurous user pricing models, to ensure optimal social and environmental outcomes in the city that we are building.

We commenced this report with speculation about the burgeoning costs of transport provision in Sydney. We then showed the massive increases in long distance commuting from Western Sydney that are likely to be generated should a business-as-usual approach to jobs location continue. Grind-to-a-halt congestion on roads, trains and buses, and debilitated state government fiscal health will follow. The scary thing is that this scenario is likely.

The good thing is that we have time to create something better.

Contact information

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