Are we there yet?

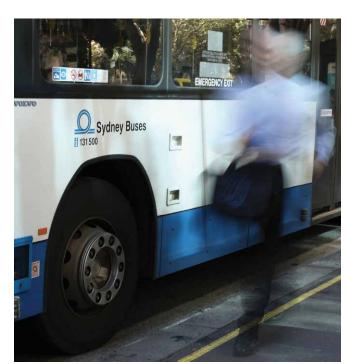
Value capture and the future of public transport in Sydney



COMMITTEE FOR SYDNEY ISSUES PAPER 11DECEMBER 2015











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INTRODUCTION

The Committee's research and advocacy work has had at its heart the aim of identifying the key success factors in making Sydney a more liveable, productive and equitable city. Our focus on one key to success - governance - has contributed to the emergence of the first metropolitan coordination structure Sydney has seen in the form of the Greater Sydney Commission. This paper seeks to be as influential in another key part of the cities' agenda: funding the transport Sydney needs.

Australian cities are regularly listed as some of the most liveable urban environments in the world and in most cases our urban infrastructure is world class. Our utilities - water, sewerage and electricity - are highly reliable. Our universities are rated among the world's best and our schools provide an excellent standard of universal education for our citizens. Our hospitals and medical facilities are excellent. Our beaches and waterways are clean and the air quality is good and getting better.

However there are a few areas where Australian Cities, and Sydney in particular, fail to meet our community's expectations. Traffic congestion in Sydney is challenging and getting worse, with Infrastructure Australia noting Sydney has 7 of the 8 most congested corridors in

Australia.¹ The length of time spent commuting to work is the highest in Australia and compares unfavourably with similar cities internationally. And our public transport network, while improving after decades of under investment, is a long way behind the global competition and far from being able to serve the economic and social needs of the city as it is.

At the same time, Sydney will double in size between now and 2056. The NSW Government is to be commended on the current infrastructure investment going into public transport at the moment, not least the Sydney Metro going through Waterloo and the Parramatta Light Rail lines, and for embracing forms of value capture as part of the approach. However, beyond these projects, we must recognise the massively upgraded and extended public transport network required to not just meet current demand but to plan for that 'next Sydney', the Sydney of 8 million not 4. Essentially, there needs to be more ambition about – and resources for – the modal shift required to make a liveable and productive city in the 21st century with heavy and light rail usage targeted to take more and more patronage from road use.

Infrastructure Australia, Australian Infrastructure Audit 2015, http://infrastructureaustralia.gov.au/policy-publications/publications/Australian-Infrastructure-Audit.aspx

That modal shift is required partly because of the changing nature of the economy and society. The irreversible shift from manufacturing to the knowledge economy in global cities is a shift away from making and transporting physical goods to exchanging knowledge and ideas. This shift has also been a spatial one – from employment in a myriad of dispersed factory locations to the agglomeration of economic activity we see in the contemporary knowledge economy. This is resulting in more and more jobs clustering in fewer and fewer locations with the high densities of human capital required to enable the knowledge spill-overs which are so valuable today.

This process has been called the 're-urbanisation of the economy' and has seen a radical gap open up in Sydney between where people live and where they work. Two thirds of recent residential development has been in Western Sydney. However, between 2006 and 2011 just 3 local government areas in Sydney saw more than 50% of all jobs growth in the city - all east of Parramatta where knowledge jobs have been concentrating.² We know that within 10 kilometres of the Sydney CBD - the 'compact Sydney' with the best public transport network - for every 10 inhabitants there are 8 jobs. Beyond 20 kilometres - the 'sprawl Sydney' with poor public transport - there are only 3 jobs for every 10.3 People are increasingly making long commutes - particularly to and from Western Sydney that are over an hour each way, to get from low density residential areas to where they work, in mixed -use, higher density, knowledge-job rich centres.

With poor public transport options the exodus from Western Sydney eastward each morning is by car. The result is increasing congestion and adverse consequences for the economy and the health of commuters. Another consequence is that more and more time-hungry people are seeking to reduce their car commutes by moving closer to where the jobs are, boosting density around employment centres. So we have a 'perfect storm' favouring a modal shift towards public transport in Sydney – fast, heavy rail to link between centres, and light rail to connect across centres.

The global evidence is in⁴. The increasing flow of knowledge workers driving from suburbia towards the favoured city-centric locations simply cannot be managed by roads alone- and their cars simply cannot be parked in those locations on arrival. We have to have modal shift - as part of an integrated package - if Sydney is to work properly.



Three things are required to proactively shape the city we want:

- Better land use and transport integration to bring homes and jobs closer together;
- A focus on demand management initiatives such as road pricing or congestion charging; and,
- An enhanced and extensive public transport network worthy of a city of 8 million.

This means, for example, heavy rail links which reduces the travel time between Parramatta and Sydney CBD from more than 30 minutes to under 15 or between Liverpool and Central Sydney from almost an hour to less than 30 minutes. Only through this can we extend the benefits of 'compact Sydney' to more Sydneysiders and reduce the problems of 'sprawl Sydney'.

² Department of Infrastructure and Regional Development, Cities: Population growth, jobs growth and communiting flows, 2013, https://bitre.gov.au/publications/2013/files/report_142.pdf

³ Kelly, J-F, Donegan, P, City Limits, Grattan Institute, Melbourne University Publishing 2015

⁴ The Rand Corporation report 'Moving Los Angeles' notes that "congestion pricing is the only approach that can reduce congestion without inducing additional automotive travel demand" - http://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG748.pdf, pg. 29



It's time for innovative thinking to fund transport

To achieve this impact, we must, given constrained public finances, be innovative in how we fund public transport. While one off sales or leases of government assets will achieve significant up-front capital, you cannot do this repeatedly to pay for ongoing operating costs. This is partly why politicians are sometimes attracted by road projects when public transport may in terms of overall community benefit, seem the better option: because with roads a tolling mechanism can produce a long-term income stream beyond the initial construction period. Conversely, public transport in Sydney is a long term operational burden with no adequate funding stream in place - the fare box only supplies about 25% of total operating costs. Every new public transport link is a perpetual cost to the NSW Government's budget. This has the potential to distort funding decisions - from the project that's right to the project that has a business case.

We need to do two things about this. One is to have a mature conversation in our cities about the true costs and benefits of transport and how the gap needs to be filled between what we as a community currently pay for public transport and what we need to pay to get the best outcomes. The second is we need to be innovative to find new solutions if we are to fill the funding gap and have the public transport network we need. If the community – and business – wants a liveable, productive and equitable

city, we are going to have to pay for it. That means having a mature dialogue about funding the future between politicians and the community. Value capture - essentially sharing the uplift in value brought about by government funded infrastructure more equitably between the community and the beneficiaries of that investment so that private interests who gain from the financial upside created by such infrastructure should help pay for it - will be an increasingly important item in the funding toolbox along with other 'beneficiaries pay' approaches. We simply have no choice.

Value capture can take many forms and there have been several recent reports in Australia setting out some possible alternatives.⁵ In this paper, as in all Committee research we examine those forms of value capture with most relevance and applicability to the NSW context. We also seek to understand what has been blocking reform in this state around value capture with a view to reducing or removing the barriers to implementation. While being informed by global best practice and precedent this is not an academic work. It is an informed call to action to change how we fund – and select – key urban infrastructure projects: so that we can improve results on the ground in Sydney.

Although this paper focusses on the Sydney context, it also provides governments across Australia, including the Federal Government, with a potential new way forward towards funding public transport in our cities. Given the Federal Government is looking at its role in cities policy, public transport and the appraisal process for infrastructure, we would like it to consider the possible implications of this paper from a Commonwealth perspective. It may be appropriate for the Federal Government to decide that it will only contribute funding to strategically important city transport projects in jurisdictions that have appropriate value capture funding mechanisms in place. Indeed, the Federal Government could incentivise good practice in terms of value capture mechanisms - and the overall appraisal process by which key infrastructure projects receive federal funding - by linking their investment with the policy or institutional reform they wish to see within states. After all, 'he who pays the piper calls the tune'.

While the focus of the paper is on value capture – essentially how the residential or commercial value created by publicly funded infrastructure can and should be shared more equitably – it also touches on a another crucial issue. That is how significant urban infrastructure projects are appraised and prioritised – something which has concerned the Committee for some time and about which the Committee is preparing a separate and fuller report. Specifically, this paper indicates that often infrastructure projects are prioritised less because they have compelling

Including: Consult Australia & AECOM, Value Capture Roadmap, http://www.consultaustralia.com.au/docs/default-source/cities-urban-development/value-capture-roadmap/value-capture-roadmap-as-web.pdf?sfvrsn=2

strategic rationales than because they can be funded, perhaps by tolling or Federal Government grant. On the other hand, projects which could bring significant economic benefits to Sydney may not get funded because they require not just investment in one-off capital costs but in recurring operational costs.

This Paper builds on earlier papers prepared by the Committee for Sydney in response to the NSW Government's Rebuilding NSW Discussion paper. It seeks to outline the structural problems undermining the efficiency and productivity of our greatest city and provide a roadmap for politicians and civic leaders on how to overcome these problems. But mostly it seeks to stimulate and inform a much needed public debate on the future of Sydney and how we are going to finance, build and improve the urban life of millions of Australians.

The end of the line: Where did funding for public transport go?

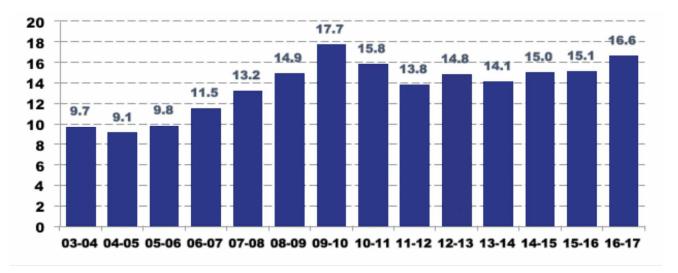
The lost decade?

There is a perception in Sydney that there has been a 'lost decade' in infrastructure investment by government. That government has been too obsessed with balancing the books to spend money on providing the services a growing city needs. Yet an analysis of successive state budgets since the Sydney Olympics show that this perception is not supported by the numbers. Although in some years the figures fluctuate, because infrastructure expenditure is 'lumpy', on a trend basis government expenditure on capital works has been growing at compound rate of 3.8% per annum.6

It has made sense for Government to increase its capital works expenditure in recent years because the cost of borrowing has never been cheaper. As one of a small number of AAA rated economies left in the world, the NSW Government can raise funds now more cheaply than it has for over a century. 7 Indeed NSW Government Bonds have been near the level of inflation for several years now, sometimes they're even lower. In real terms that is effectively free. Of course being historically cheap does not mean it is unlimited. Government needs to be mindful of the amount it can borrow. Borrowing too much could threaten the NSW Government's AAA credit rating which in turn could see the cost of debt increased. (We should also remember you cannot borrow to pay for recurrent costs, or not for long anyway). Yet not only has the cost of raising new debt fallen dramatically, the NSW Government have recently found new sources of even cheaper capital through the privatisation of public assets. The sale of major ports and electricity assets have provided a significant fillip to government capital. Nonetheless, government (and the community) must make careful decisions on where to spend resources. Cheap and available does not mean we still don't have difficult choices to make.

Yet if capital expenditure has been growing why is there a perception our infrastructure is not keeping up with community need? Why have commute times grown in Sydney? Why are our trains crowded and our roads congested? Because the types of infrastructure we are spending our (now cheap) money has changed over the past decade. Our governments have made choices on where to allocate our capital and increasingly they've chosen to allocate more money to the types of infrastructure which make both a profit for government and a return on the cost of capital.

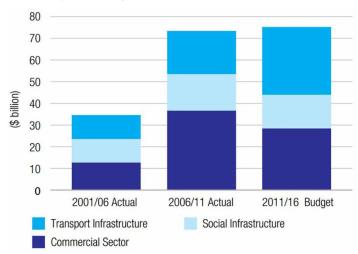
NSW Government Real Infrastructure Expenditure 2003-2017



The McKell Institute, 'Getting Us There: Funding the Transport Infrastructure of Tomorrow', Nov 2014, mckellinstitute.org.au/wp-content/uploads/pdf/McKell_Transport_A4_WEB.pdf

⁷ Infrastructure NSW, 'First Things First: The State Infrastructure Strategy 2012-2032', http://www.infrastructure.nsw.gov.au/pdfs/SIS_Report_Complete_Print.

NSW Capital Program 2001-168



Capital spending for Government Trading Enterprises (GTE) like the electricity networks and Sydney Water has more than doubled in recent years. At first this seems odd, population has only been increasing at a consistent 1-2 %, why the doubling in expenditure? But this actually makes some economic sense. These utilities are commercial monopolies that make a profit and pay dividends to government. Not only can they repay any capital investment, expanding their networks increases their long term profitability and the subsequent dividends they pay back to government.

Unfortunately for infrastructure like public transport the converse is true. Public transport is not a monopoly, does not make a profit and does not pay a dividend to Treasury. Indeed it has to go begging each year to government for a subsidy to keep the trains running and the ferries afloat. It is because of this need for an additional subsidy, above and beyond the capital cost, that public transport has been increasingly missing out. Public transport cannot cover the cost of its own day to day operations, let alone repay the cost of capital. As the Commission of Audit into public transport noted, only 22% of the urban rail network's costs are recovered through fares. Across all types of public transport in NSW, fares and other charges cover just 27% of operational costs.9 Therefore, any expansion of the public transport network requires this subsidy to be increased even further - comparative cities globally achieve around 60% cost recovery. Remember again that you can't borrow to cover the recurrent costs, as this is a road to a Greek style insolvency. Given the choice between funding a loss making business and a profitable one, it's easy to see who'll win.

There are many problems with this, not least the question of "are we funding what our community really needs?" With finance and capital determining our infrastructure decisions, our choices are being distorted. It is also a problem for urban productivity. It is questionable whether Australia really needed to build six large desalination plants over the past few years, most of which are not in use. They may have made a healthy return to government but they are not without an economic cost. Our utilities are more profitable and reliable but we are paying for it though increased customer charges. We've invested so much capital into electricity networks they are regularly referred to as "gold plated" but we are still all paying for it. This is undermining urban productivity and becoming a drag on economic growth. With funding and financing determining our infrastructure choices we have to ask, have we been doing the right things, and are we doing things right?

...if capital expenditure has been growing why is there a perception our infrastructure is not keeping up with community need?

⁸ Infrastructure NSW, First Things First: The State Infrastructure Strategy 2012-2032', http://www.infrastructure.nsw.gov.au/pdfs/SIS_Report_Complete_Print.

⁹ NSW Government, NSW Commission of Audit Final Report: Government Expenditure, http://www.treasury.nsw.gov.au/_data/assets/pdf_file/0020/22583/ Commission_of_Audit_Final_Report.pdf pg. 161

What type of infrastructure are we building in Sydney?

Even when money is allocated to urban transport infrastructure, too often the capacity to make a return on capital determines which mode of transport gets most of the funding. In the afterglow of the Sydney Olympics, the NSW Government released Action for Transport 2010. It outlined a ten year program of new transport infrastructure to take Sydney forward as global city. It outlined ten major new road projects, eight new rail projects and six new bus transit ways.

All the road projects were completed or being finalised. Of the rail projects only two were fully completed and one is now under construction. Two of the T-Ways were completed and one half built. In the choice between funding a major freeway and new rail line, the freeway will always win. This is because you can impose a toll on users which will repay the cost of capital and operations. Once again the funding model is driving our infrastructure choices.

NSW Government Action for Transport program, released 2000

Project	Description	Status
Eastern Distributor	A 6 km link between Sydney CBD, Port Botany and Sydney Airport.	Completed.
M5 East	An Eastward extension of the M5.	Completed
M2 to Gore Hill Motorway	Extending the M2 to link up with the Gore Hill Motorway.	Completed
City West Link	An alternate route for traffic going in and out of the CBD from the western suburbs.	Completed.
M7 (aka Western Sydney Orbital)	A 39 kilometre north-south road linking the MS and Hume Highway near Liverpool to the M2 at West Baulkham Hills.	Completed.
Cross City Tunnel	1.2 km tunnel Linking the Western and Eastern Distributors.	Completed.
Parramatta Road	Upgrade Major intersection improvements and the final stage of the City West Link.	Superseded by the Westconnex project.
Princes Highway Tidal Flow Scheme	New Canal Road tidal flow system.	Completed.
Victoria Road Upgrade	Numerous small upgrades for Victoria Road.	Completed.
New Transport Management Centre	New technologies to better manage the State's road network and enable quick response to traffic conditions.	Completed.
Sydney Airport Link	PPP Rail Project	Completed, but with patronage levels continuing at well below original forecasts.
Bondi Beach Rail Link	Extension of the Eastern Suburb Railway.	Cancelled.
Parramatta-Chatswood Rail Link.	A link between the Western, Northern and North Shore Line.	Half built.
Epping-Castle Hill Line	A new line servicing the North West metropolitan area.	Superseded by the North West Rail Link.
Strathfield-Hurstville Line	First incarnation was the Hurstville-Bankstown line proposed. Later modified to link Hurstville with Strathfield, connecting the Eastern Line with the Southern Line, the Western Line, and the North Shore Line.	Cancelled.
Liverpool Y Link	'Y' shaped link near Granville station, linking South Western Sydney with Western Sydney using existing tracks.	Completed.
High Speed Rail to Newcastle	An \$800 million high speed rail link from Hornsby to Newcastle.	Cancelled.
High Speed Rail to Wollongong	A \$287 million high speed rail link from Sutherland to Wollongong.	Cancelled.
Parramatta-Liverpool T-way		Completed
Blacktown-Wetherill Park T-way		Not built.
Parramatta-Blacktown T-way		Not built.
Blacktown-Castle Hill T-way		Partially built from Blacktown to Parklea.
Parramatta-Rouse Hill T-way		Completed. Renamed as the 'North-West T-way'.
Penrith-St Marys T-way		Not built.
Parramatta-Strathfield T-way		Not built.

Source: The McKell Institute, 'Getting Us There: Funding the Transport Infrastructure of Tomorrow', Nov 2014, mckellinstitute.org.au/wp-content/uploads/pdf/McKell_Transport_A4_WEB.pdf

The struggle of recurrent funding for public transport

This difficulty for public transport is further compounded by other changes in government finances. While raising debt is much cheaper now, securing recurrent funding is getting harder. Many of the day to day taxes available to government have been abolished or reduced over recent decades. Moreover, what recurrent income government has available is increasingly directed to Australia's national focus: Health and Education. Australians have for many years insisted on universal access to education and universal health coverage. This is not a bad thing, but it is an expensive demand, especially when it comes to health. An ever growing proportion of our government's recurrent expenditure is being directed towards health services, and this is likely to continue. Buses and trains not only have to compete with the profitable utilities and toll roads for capital; they also have to compete with hospitals for subsidies. In recent decades they've lost out. In NSW it could be argued that the funding model is determining what gets built, not societal need.

If Sydney's public transport is going to win the battle for both capital and subsidy, we need to take it out of competition with hospitals and schools. We need to find new funding sources so we can get it closer to covering its own costs without the need for subsidies – as utilities and toll roads do. If we can level the playing field, we'll then be able to make clearer choices over what to prioritise and what our city really needs. We can then start to plan properly and make sensible choices based on what will improve our overall urban productivity.

There is a growing acceptance in government that new funding mechanisms and sources of finance are going to be needed if we are going to expand our public transport network to meet our city's needs.

Sharing the costs (and benefits): Capturing value from public transport investment

There is a growing acceptance in government that new funding mechanisms and sources of finance are going to be needed if we are going to expand our public transport network to meet our city's needs. An acceptance that if we are going to deliver the type of transport choices our community wants, we need to develop new financial models which help pay for public transport and reduce its recurrent draw on consolidated revenue. Some options include;

- Increasing the fare box, by raising ticket pricing and/or increasing ridership.
- Efficiency measures to reduce operation costs.
- Employ new, more efficient, technology and transport modes.
- Congestion charges and levees.
- Increasing development charges
- Capturing some of the value created though intensification of land-use around transport nodes.
- Capturing some of the increased property values created by new transport services and routes.

It is the contention of this paper that some or all of these options will be needed if we are to provide transport choice for our citizens. Yet none of them are politically easy or without economic and social cost:

- Increasing fares too much may discourage users
 of public transport. For example we know that the
 surcharge for using the Sydney Airport stations has
 reduced patronage on the Airport Line. There is a limit to
 what we can charge.
- Ridership numbers cannot be significantly increased without additional investment - citizens are already making informed choices about their transport decisions.
 This means that they are unlikely to shift their travel patterns to public transport without better amenity or convenience.
- Efficiency measures should of course be continuously examined and we need to ask some hard questions as to why our public transport network is so expensive to run.

- New technologies and systems are continuously emerging and we should adopt the best they have to offer, yet their application is not without some costs.
 Driverless trains and smart signalling technology are expensive.
- Congestion charging is an option, yet Sydney already
 has an extensive toll road network and much of our toll
 revenue is already contractually hypothecated to the
 road operators.
- There are already significant levees and charges on new property development to fund other infrastructure like open space, water and sewerage. Moreover most development levies are passed on in the form of higher property prices.

While none of these are without difficulties they should all be considered as part of a new funding arrangement for delivering public transport. Yet it is the final two mechanisms, capturing property value uplift and value from intensification around transport links, which offer the best hope for closing the gap on meeting the costs of subsidising new public transport. Both are used extensively around the world yet have rarely been used in Australia. One of the key questions this paper is seeking to answer is why?

Why do we use value capture so rarely and sparingly?

Socialising the cost and privatising benefits

When it comes to land use in cities, there are two main ways government can create "value". One is through the land zoning system, which can increase the density, productivity and "yield" of certain parcels of land, making them more "valuable". This is often done at the stroke a Planning Minister's pen but can also then require some enabling infrastructure to accommodate the higher land use. For example, expanding the sewerage network can allow farmland on the urban periphery to become suitable for a higher and better land use, like housing. Similarly new public transport can make low density residential areas suitable for a higher density zoning. In each of these, the value of the raw land, and individual properties, can be increased dramatically.

The other is to improve the connectivity and amenity of certain parcels of land, making them more liveable or desirable places, and improving their value. A new rail service can significantly increase the value of land along its route, reducing commute times to a job, or increasing the catchment area for your business. Prices of residential land along the new Sydney Metro North-East line have increased significantly faster than the Sydney average on anticipation of the line opening. When it does open, hundreds of thousands of people will suddenly have access to transport choice, and land prices will rise again. Yet while the public is outlaying billions of dollars building the line (and millions of dollars in annual subsidies), local residents are seeing their private wealth skyrocket.



"Hedonic Spatial Value" and public transport

There is no society more attuned to the value of property than Sydneysiders. For two decades every dinner party conversation has eventually turned to the price of local real estate. We've revelled in our own sky rocketing houses prices and anguished over how our children will be able to afford a roof over their head. More than in any other city in the world our newspapers are full of bulging real estate sections and expert commentaries on what the latest housing figures mean.

But for all our expertise and obsessions we often don't really know what drives the value of a single piece of property. What is it that makes one property more valuable than another? There are two main determinants of value. One is the **intrinsic value** of the property, this is the combination of the value of the land and the quality and size of the buildings minus the costs, like land tax, council rates and maintenance. But the other determinant is what economists refer to as the **hedonic value** of the property. That is the value we give a property, other than its intrinsic value. For example, two identical houses, on identical piece of land, sitting side by side on the same street might have vastly different prices paid for them, if one of them has a harbour view and the other one doesn't. Similarly, property which is located close to or in easy access to jobs and services, has a higher **hedonic** value than properties far from jobs and services. As people we value connectivity instinctively, if sometimes unconsciously. We are essentially very social animals, we want to be near the buzz of urban life, to see people and be seen. And we are prepared to pay a premium to live, work and play in such places.

Government policy and infrastructure can improve or reduce the hedonic value of land. The announcement of a new municipal waste dump, a new freeway or a coal mine can significantly reduce local amenity, reducing the hedonic value of a place or property. When this happens, the government (or coal miner) is often forced to compensate local property owners for the loss of this value.

Similarly, governments can improve the hedonic value of land. While they can't build us any more Sydney harbours, they can improve the connectivity and liveability of certain places through improving public transport. While many of us don't like standing on a crowded train or waiting for tram or ferry, we place a high (hedonic) value on living near public transport corridors, even if you don't use public

transport personally. Simply having a choice of transport modes is seen as valuable. Countless studies have shown that even the announcement of a possible new public transport corridor by government can increase the value of land around the route. For example, it is estimated that the building of the Mandurah Rail Line in Perth increased the value of existing properties within 400 metres of the main stations by 40%. The hedonic value of living near a light rail service is often even greater.

Just as the public is often required to compensate for the loss of hedonic property value they should also be able to claim back some of the uplift when new infrastructure increase property values. They can do this through a land tax or a special council rate on properties closest to the transport node. That is value capture.

The need for value capture

There are many different ways of capturing these windfall gains and some are already in use in NSW. Some are in the form of direct levies on new development such as, Section 94 and State Infrastructure Charges (SIC) or through Voluntary Planning Agreements. In NSW we also have a limited tax on the unappreciated value of land, excluding the private home or farm. However we have never really embraced value capture in a systemic or substantial way.

There are several reasons for this. Firstly, we never needed to in the past. As Sydney grew and expanded the existing 19th century transport network could simply and cheaply be expanded to accommodate new growth. The post war period saw the rapid adoption of the private car and urban sprawl became cheap. Government could just lay the road network down and the private car could take care of the rest. Indeed public transport was actively dismantled to get it out of the way of cars. The tram tracks were ripped up and the ferry services reduced. Moreover, as mentioned earlier, we didn't have the huge commitment for health spending squeezing public coffers that we do now.

Yet the dynamics of Sydney has now changed. We are reaching the limits of how far we can sprawl. Our road network is at capacity and it is doubtful we can build our way out of the traffic. Our 19th century trains can't be extended much further. We can sweat the existing system more, but in terms of extending it, we've reached the end of the line.

¹⁰ James McIntosh et al 'Framework for Land Value Capture From Investments in Transit in Car-Dependent Cities', The Journal of Transport and Land Use, vol.10 no.1 2015 p1-31



As global Sydney expands to a city of 8 million people by 2050¹¹, maintaining and leveraging our position as a global city means dramatically improving our public transport network. This means:

- Fast Metro links between the cities of Sydney not just to and from the Sydney CBD, but across the network, with high volume transport delivering travel times of 15 minutes Parramatta to Sydney, 30 minutes Liverpool to Sydney and links north-south across the city;
- Light rail networks through key strategic centres –
 extending the light rail network around Sydney through
 to growth areas like Green Square and expanding the
 recently announced Parramatta light rail network.
- Fast train links to the Western Sydney Airport.

These are going to be expensive and it is doubtful we are going to be able to afford to build it without both new financial models and a community acceptance that we are all going to have to pay. Building this community acceptance is the first barrier we need to overcome, but it is by no means the only one.

Our government institutions will also need to change their thinking and change the way they operate. Each level of government will have a role to play in planning and financing our public transport. The current disjointed and siloed approach will need to be challenged and overthrown.

For example, it is currently only within the control of local government to introduce a special rate levy to capture the "hedonic" uplift of a new light rail service. Local councils will have to accept that public transport funding is not something that can be left solely for the State to fund. Some councils like City of Sydney and Parramatta City Council have taken up this challenge but they are often the exceptions. All urban councils will have to become active participants.

Within the State Government the different agencies will also need to coordinate their actions and policies, and not just the portfolios of Transport and Planning. The property and land holdings of each agency should be assessed not just with the needs of the single agency but also the future needs and opportunities for the city.

Government agencies will also need to challenge their own thinking. For example, Treasury will need to accept that it cannot be it alone that holds the purse strings. Monies raised through value capture will have to be hypothecated to public transport if we are going to get the community to accept paying more. Treasury will also need to challenge their own intellectual and ideological prejudices. Driving

A task for all

¹¹ Australian Bureau of Statistics "Regional Population Growth, Australia 3218.0", Population Projections, 2015

urban consolidation around new and existing transport nodes does more than just displace economic activity from other parts of the economy. It drives agglomeration of economic activity, improved urban productivity and is cheaper to service. International research tells us of the vital economic importance of these public transport projects.¹² It also improves the hedonic value of the land. Capturing some of this will prove it.

The Federal Government will also need to play a role. Cities are the powerhouse of our national economy and they cannot leave such important drivers of our economy to grind to an unproductive halt. But most importantly of all, we as citizens need to be prepared to give our governments a mandate for reform. They are right to be scared of new taxes and charges because they think we won't accept them.

Great cities don't happen by chance. They happen when every tier of government partners with their citizens to build a productive and sustainable place.

Overcoming the barriers

We need to have a chat

We need to start a candid conversation with the public about the changing nature of our public finances and the difficult choices we face, because government can't "just build it" any more. We are going to have to pay, and it's not a one-off payment either. We need to be honest and explain the dimensions of the problem. For example, few people understand that Transport NSW is appropriating over \$11 billion per annum¹³. We should tell them that, every day, every time they pay for a ticket. Every time someone gets on a Sydney Train and spends one dollar on their Opal card, taxpayers contribute \$3.54.14 When they understand the scope of the problem they might be more amenable to some of the changes we need to embrace like increasing the fare box.

Do the right thing.... and the thing, right

We need a plan for the role out of new infrastructure. A plan that sets clear priorities for what should be done first. As mentioned earlier, much of the government's capital works have been directed towards infrastructure which can pay its own way. Yet we need to consider if simply being able to pay is a good enough assessment criteria and is it now distorting our choices and leaving us with

12 Volterra Partners, Investing in City Regions: the case for long-term investment in transport, November 2014, http://volterra.co.uk/wp-content/uploads/2014/11/ Volterra-Investing-in-City-Regions-A4-report-PDF.pdf stranded or underperforming assets which are a drag on urban productivity. Australian cities commissioned six large desalination plants in the last decade at a cost of over \$11 billion. Only one of them is now in use and some may never be used. Yet every urban household is now saddled with an annual fee on their water rates for decades. That is a drag on our productivity. If not for the recent consumer backlash, and IPART calling us to account, we would still be gold plating our electricity network with infrastructure we probably don't really need. During the mania for toll roads in the 2000's, private companies were paying government for the right to build a road (the Cross City Tunnel) which no one really wanted and which wasn't part of any long term plan. We need to be able to properly prioritise our infrastructure needs based on more than just the capacity to make a financial return.

Hypothecation, nexus and consent

Experience shows that citizens are prepared to pay more when they know the money will go to a service they will use and value. None of us like paying taxes, but if it is going to a service or infrastructure we all need, we are more inclined to support paying it. The key to building Australia's national health scheme was a one percent Medicare levy on every taxpayer. Three decades later and the levy is a bipartisan commitment - with overwhelming public support. Similarly, Australians recently voted for the largest expansion of our social safety net in decades with another levy to fund the National Disability Insurance Scheme. This was supported by every major political party because it was supported by the overwhelming majority of voters. People see a clear nexus between themselves and these universal services and are prepared to support them. They might not be sick now but they know they will be one day. They might not have a disability, but they probably know someone who has.

Yet NSW has a terrible track record of promising to hypothecate certain charges only to direct them into consolidated revenue. For example in 1989, following a series of severe traffic fatalities, the State Government introduced a three cent per litre tax on petrol sold in NSW. This tax was meant to last only three years and be hypothecated to fixing up "black spots" on the states road. It was at first strongly supported by the public, however it raised far more money than the Government could spend and Government started diverting the extra money raised to other priorities. When the three years was up, the Government decided to keep the levy going. Were it not for a constitutional challenge the Government would probably still be levying it. These breaches of faith have undermined the community's confidence in hypothecation. If we are to

¹³ NSW Government 'Budget Estimates: Budget Paper No.3; 10-12', Budget Papers, 2015-16

¹⁴ NSW Government, NSW Commission of Audit Final Report: Government Expenditure, http://www.treasury.nsw.gov.au/_data/assets/pdf_file/0020/22583/Commission_of_Audit_Final_Report.pdf pg. 161

⁵ NSW Government 'New South Wales Government Submission to the Commonwealth Government's Inquiry into Fuel Taxation', Nov 2001

introduce new value capture measures we must ensure that all the monies raised are dedicated toward public transport. We probably need to legislate it.

The community will doubt any new tax/levy will be spent on the specific project it was meant too. Treasury have always argued against hypothecation because they believe government should have flexibility on where to spend the money. We need to get over this. People won't like paying a specific tax into a discretionary fund, and if people don't like it, governments will experience a backlash that could threaten the project. We can get ourselves in a vicious circle here. If we as a community don't encourage government to be bold, we shouldn't be surprised when they're timid. We need to be prepared to give government a mandate; and government shouldn't be scared of asking for one.

One way to overcome this issue is allow our citizens to decide for themselves. Every year, in cities and towns across the United States, residents are asked to vote in referendums to impose taxes on themselves to fund public transport. These taxes are used to cover the cost of a special Bond issue which provides the upfront capital needed to build a new rail or light rail service. If they vote yes, the result is a binding contract between citizen, Government and the purchasers of the Bond that the public transport will be built and the Bond obligations covered. If any of these obligations aren't met then the city or town is in default. There are now hundreds of these contracts financing the largest expansion of American public transport in a century. There is no practical reason why a similar referenda model couldn't be used in Sydney only the resistance that we haven't done it before.

Options for Sydney: An unpalatable menu

We should be under no illusions about the difficulties confronting Transport NSW. It is already heavily subsidised to the tune of billions of dollars per annum, and if we are to expand the network, this subsidy will rise. No one single tax or levy will cover this task and it will most likely need several different measures, including both value capture mechanisms and taxes to make public transport a viable financial investment. It must also be remembered that each funding mechanism is not without hidden costs and distortions and without careful design may have perverse outcomes. None of the options are politically easy and may well prove unpalatable to our citizens, but doing nothing is not an option. We should also remember that it is not essential that public transport become profitable or that every service must cover it costs. We just need it to be a better investment than it is right now. It is currently too expensive to expand it to service our city's existing needs let alone those of the future; but it is also too important to neglect. Public transport is going to be critical to improving urban amenity, making our neighbourhoods more environmentally sustainable and ensuring our cities remain the productive economic powerhouses of our national economy.



The menu of options available to capture value

The options for value capture are numerous - we have chosen to focus on those that we believe have the greatest opportunity in the Sydney context. However, it is worth noting the diversity of options to address the capturing of value¹⁶:

Retail sales taxes (GST)

Levied locally in other countries, retail sales taxes can be increased to capture value. This is problematic to achieve in Australia as the GST is levied at a national level.

Transfer (stamp) duties

Stamp Duty collects a significant amount of revenue for the NSW Government, but levying larger amounts on particular locations would be problematic and require legislation.

Payroll taxes

Payroll taxes could be levied in areas attractive for employment growth in order to fund infrastructure.

Property taxes

Property taxes are used regularly in other jurisdictions for value capture, and changes to the land taxes on the value of unimproved land in NSW could be used through a broad based land tax to achieve a similar value capture mechanism.

Council rates and special rates

Council rates could be varied by location within an LGA in order to capture value around new infrastructure. However they would require minor legislative changes to achieve value capture through the use of special rates.

Section 94 development contributions

Section 94 contributions are regularly used to fund infrastructure in NSW, with the costs borne by developers and potentially passed on through sales price increases.

Voluntary Planning Agreements

VPAs are often used to fund infrastructure in NSW - with an agreement struck between developers and councils during a re-zoning application.

Sale of bonus gross floor area (GFA)

Selling additional floors to fund infrastructure under Council VPAs has been used in certain circumstances in NSW.

Sale and / or lease of air rights

Air rights above transport can be effective at raising revenue, while also encouraging density through transitoriented development.

Sale or lease of surplus development sites

Selling surplus government sites in order to raise revenue can be used in NSW.

Parking levies

The NSW Government imposed an annual parking levy on all car parks in the City of Sydney and North Sydney Council area in order to raise revenue to fund improve access to metropolitan rail stations. This could be expanded to new areas of high density.

Hotel taxes

Hotel Taxes are used in the USA to fund infrastructure. This is not used in NSW, and would be problematic in targeting areas with low hotel density.

Capital Gains Tax (CGT)

Currently in Australia, owner-occupiers do not pay CGT on the sale of their property, but changing legislation to capture 'super profits' achieved through proximity to new infrastructure could work as a value capture mechanism.

Property development

Transport deliverers could develop properties on land surrounding transport hubs themselves, in order to raise revenue from sale or lease. This model is used successfully by MTR in Hong Kong.

None of the options available are without economic and social costs. Some can lead to distortions in behaviour and markets and each will need careful design to minimise and negative consequences. For example relying only on charges for on new developments may cause problems with housing prices or restrict supply. However if we are going to build a public transport system worthy of a city of 8 million we are all going to have share the burden. All of us, property developers, land owners and citizens.

Developers will make their contributions to our city - but they must be proportionate and they must be clearly signposted. The private sector will play a key role in creating and delivering effective value capture - but value capture is broader than just developer levies. Government must heed the private sector's need for certainty, and ensure that they work in genuine partnership with developers to create a framework underpinned by stability. Any expectations on the private sector to contribute to the funding of public transport must be identified prior to the commencement of projects - any change of circumstance after work has started will unreasonably impact on the capacity of developers to deliver projects. This will allow developers to take value capture requirements into account from the start when planning projects, and incorporate it into their calculations of project feasibility.

The Committee for Sydney recognises that while there are many options, it is worth examining some with a view to assessing their relevance for Sydney's circumstances.

¹⁶ Consult Australia & AECOM, Value Capture Roadmap, http://www.consultaus-tralia.com.au/docs/default-source/cities-urban-development/value-capture-roadmap/value-capture-roadmap-as-web.pdf?sfvrsn=2, pg. 9

Tax Increment Financing – a great model that won't work in Sydney

One value capture mechanism often spruiked as a solution for Sydney is Tax Incremental Finance or TIF. TIF is used widely around the world, especially in the United States. This involves hypothecating increased future property taxes resulting from improved value of the property arising towards new public transport. The problem with this model for Sydney is, unlike the Americans, we don't tax property we only tax land. Unless we were to radically change this situation the TIF isn't really an option for Sydney.

Residential Area Levies

Local Council often apply to IPART and the NSW Government for permission to impose "special" rates on certain precincts and parcels of land. These are often for certain specific purposes or local infrastructure needs and are usually time limited, lasting only for a few years. For example, in the 1990's South Sydney Council asked businesses along King Street, Newtown to agree to a "special" increased rate to improve the struggling shopping precinct. The street had been struggling for a number of years and was in need of some significant improvements which the Council could ill afford. The business owners agreed and a three year 'special' rate was imposed. The money raised was hypothecated to improving the street scape, removing ugly overhead power lines, widening footpaths, and improved seating and lighting. Money was also dedicated to supporting the local arts community and promoting the precinct as a creative hub. The levy lasted only three years but had a dramatic impact. By the early 2000's, King Street had become the best performing, non CBD, shopping precinct in Australia, employing thousands of people and became a major tourist attraction and shopping and dining precinct.

Yet "special" rates have rarely been used for major public transport, but they can be. Evidence both domestically and internationally has shown that property prices are higher within 400 metres of a transport node. Why is 400 metres the magic number? Because at this distance, it takes an average person less than five minutes to walk to the railway or light rail stop. When the Mandurah Railway was opened existing house prices within 400 metres of the main stations improved by nearly 40%. But the benefits don't stop at 400 metres. Even at 800 metres (or 10 minutes' walk) property prices are demonstrably higher. Much beyond this distance people start considering driving, and once they're in the car, they are more likely to stay there and drive the whole way their destination.

This increased land value around transport nodes can be captured if the Local Council agree to impose a special rate. Higher for those properties within 400 metres of the transport node, and a second, lesser rate, for those 800 metres. This rate could be hypothecated to help meet the recurrent costs of the transport service or to repay the capital. The State Government could also impose special rates on land around transport nodes, though they would probably need new legislation to take this power off local government.

The Committee has always taken a "de-regulatory" view of local government believing that local councils should be encouraged to be as entrepreneurial as possible. Especially now that amalgamations will result in larger, more empowered councils, we think it timely to review the powers of councils to enable them to have more discretion to levy special rates for infrastructure, subject to certain agreed limitations. At the same time, where infrastructure opportunities sit across more than a single local government area - as they usually do with significant public transport initiatives - or are of city-wide significance, the State Government should either form a partnership with the councils concerned to forward fund the infrastructure and be effectively paid back from the special area levy mechanism in each council or be statutorily enabled itself to levy a special area rate across the multi-council area. Legislation giving more discretion to councils and enabling the state to itself institute a special area levy should be considered.

Perhaps the easiest way to capture the value uplift from public transport is for the government to become an active participant in land ownership.

Land taxes

Land tax has had a chequered history in NSW, being imposed and repealed several times. NSW currently only levies a land tax on investment properties over a certain value threshold, with the family home or farm exempted. Most taxes distort economic decisions and can suppress beneficial economic activity. But in spite of its history, land taxes are loved by economists as one of the least distorting options for raising revenue. Yet land tax is unavoidable, relatively cheap to levy and is payable regardless of how well or poorly land is actually used.

They are also a good mechanism for capturing the value uplift of public investment in Transport. As mentioned earlier, being near a light rail line or within walking distance of a train station is highly valued and land prices around these nodes reflects this. A broad based land tax would capture the improvements in land value driven by new public transport. They also help resolve some of the spatial inequality which affects NSW. Our existing public transport network is not comprehensive and many neighbourhoods have little or no access to it. A land tax would mean that those neighbourhoods with good access to public transport would pay more for public transport, because their land is more valuable than those with no public transport access.

In spite of its perceived economic and social benefits it is a very difficult political task to sell. Land taxes are often seen as a tax on wealth, and every major political party in NSW has promised to never tax the family home. Yet these political barriers can be overcome. If it was hypothecated to a service the community supported, they might just vote for it. The Australian Capital Territory recently introduced a new land tax, phasing it in gradually over the next decade. Similarly the South Australian Government has started a conversation with their citizens about introducing a state wide land tax and has flagged their intentions of introducing it next year. Hard doesn't mean impossible. Unpalatable doesn't mean indigestible.

A Metropolitan Transport Levy

An alternative to a broad based land tax could be a metropolitan transport levy. A flat \$100 levy on every Council rate notice in the Greater Sydney Area would raise approximately \$180 million per annum. This could also be varied and increased for those properties and neighbourhoods which are better serviced by public transport.

Alternatively it could be expressed as percentage surcharge on each existing rate notice. Council rates in Sydney are generally much lower than other Australian cities because they have been "capped" since 1976. A ten or twenty percent surcharge on each rate, and hypothecated to public transport, would still leave our Council rates below the national average. Again this is politically difficult but the community might be prepared to pay if they know for sure it would be hypothecated to a service they want and need. We could at least ask them in a metropolitan wide referendum. Remember, if we are going to be able to make clearer choices between which infrastructure typology we are going to fund, we need to level the playing field. We have to make public transport a viable investment option.

Buy first, ask questions later

Perhaps the easiest way to capture the value uplift from public transport is for the Government to become an active participant in land ownership. A government announcement of a new urban consolidation precinct or new transport corridor can have an immediate impact on the price of land. Even just a hint in a press release can send the property speculators scurrying. However, Government can get in early and purchase key parcels of land before any announcement is made. It can then commence the rezoning and building the transport corridor, increasing the value of the now public land, which can be then sold for a greater value. Government does have some discretion over the timing and nature of rezoning land and identifying future transport corridors.

Capture first, announce later

Similarly, with other value capture measures it is important that governments have a regime in place before new transport routes are announced or new high density precincts are planned. As mentioned earlier, even a hint of a potential land use change in press release can increase the value of land in an area. If there is no value capture mechanism already in place much of this value creation can be lost. It can be politically hard to impose new levies retrospectively. It can also be economically distorting. All too often it becomes the "development" that gets levied, not the land. This is then passed on in the form of more expensive housing or if the levy is too onerous it can stop the development, and everyone losses. However, if a value capture mechanism is announced at the same time, or before, transport projects are identified, this sets the initial parameters for all - making the cost less distorting.

¹⁷ The McKell Institute, 'Getting Us There: Funding the Transport Infrastructure of Tomorrow', Nov 2014, mckellinstitute.org.au/wp-content/uploads/pdf/McKell_Transport_A4_WEB.pdf, pg. 49

¹⁸ Dollery, B & Wikeweera, A, 'An assessment of rate-pegging in New South Wales local government', Commonwealth Journal of Local Governance, Issue 6 July 2010, page 57

Hong Kong Mass Transit Railway

Hong Kong has been able to build and finance the most comprehensive public transport system in the world. Since the first line opened in 1979, the network has grown to service every corner of the island city. A staggering 90% of all trips in the city are by public transport. It is also operating at a profit, raising money to fund improvements and extensions of the network. It has achieved this because its transport operator is also a property developer. Hong Kong's Mass Transit Railway started buying up land along proposed transport corridors long before they were announced. The land holding is then improved through building the transport route, significantly increasing its value. Furthermore, because the land is now more productive it can support higher density development, increasing its value even further. Once completed the land can either be sold to provide new capital for further extensions or rented out to help supplement the fare box. In a single generation the citizens of Hong Kong have built the world's best public transport system. There is no reason Sydney can't do the same.

Non value capture mechanisms

Congestion charges and levies

Sydneysiders are now accepting having to pay tolls for major roads and there is now a general understanding that most new freeways will be financed, at least partially, with a user charge. This is great news for road builders. With the exception of the few years following the Global Financial Crisis, Sydney has had a steady stream of new freeways constructed, sometimes with government assuming construction risk and sometimes the private sector. Yet while toll roads have a secure financial future we do need to think about whether more roads are going to be the transport answer for a Sydney of 8 million people. The billions of dollars spent on Sydney roads over the past two decades has not resulted in any reduction in traffic or a reduction in overall commute times. In fact both have worsened considerably.19 Perhaps the toll road funding model is funding the wrong the infrastructure.

Charges on private vehicles entering the Sydney CBD aren't new. There is already a levy on parking spaces with the money raised hypothecated to improving access to public transport and building "park and ride" carparks around suburban train stations. It may be difficult, but shouldn't Sydney at least have a discussion about a congestion charge?

19 Australian Bureau of Statistics, Car Nation, http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features40July+2013

London introduced a congestion charge on all vehicles entering the city centre, with the money raised being hypothecated (by law) to funding improvements in the public transport network. While controversial at the time, hypothecating the money to public transport made it politically acceptable and it now receives enduring and bi-partisan political support. Every year over £120 million is raised through this charge and dedicated to expanding the Underground and buying new and better buses. This might not seem like much but it was enough to change the economics of public transport in London. With these and other charges supplementing the fare box, Transport for London could now cover the cost of its day to day operations. This has made it a viable place to invest both government and private capital. Furthermore, they have also started charging special land charges and levy's on properties whose "value" has been improved by new rail lines. The London Underground is now experiencing the fastest expansion of its network in nearly a century. The new Crossrail project in London is costing £14.8 billion, with 27% of that being funded through a Business Rate Supplement, a form of land value capture finance²⁰. Perhaps Sydney could think about employing a similar method?

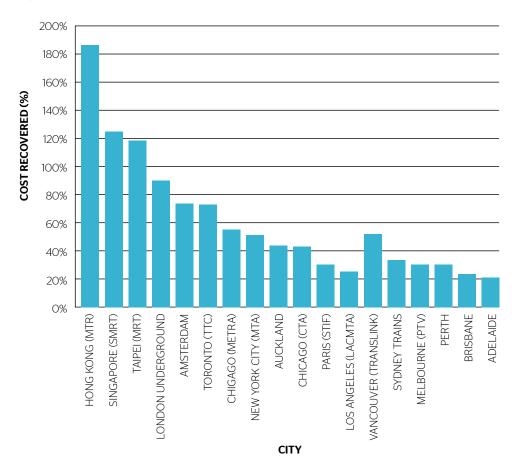
More than a ticket to ride, a ticket to the future

Sydney's Public Transport network raises very little of its funds through ticket sales, recovering only 30% of its operations through the fare box, rent and selling advertising.²¹ There are several reasons for this. Sydney does have some significant geographical problems - most notably a dispersed and sprawling settlement pattern. More than anything, urban sprawl undermines the economics of public transport. Yet geography can't explain everything. We need to have a hard look at why our existing transport network is so expensive to operate, and work harder to drive efficiencies and "sweat" our assets better. Yet we also need to consider our ticket pricing. Pegging fare increases to the inflation rate has meant we have not kept up with the growing cost of operating our transport services. There is a Catch 22 here. Both government and community have said they won't pay more in fares until services improve; however without new funding sources it's difficult to see how we are going to improve services. If we are going to see any meaningful expansion in our transport network, the fare box will have to work harder.

²⁰ Roukouni A and Medda, F, 'Evaluation of Value Capture Mechanisms as a Funding Source for Urban Transport: The Case of London Crossrail', Transport Research Arena 2012 48, pg. 2393-2404

NSW Government, NSW Commission of Audit Final Report: Government Expenditure, http://www.treasury.nsw.gov.au/_data/assets/pdf_file/0020/22583/Commission_of_Audit_Final_Report.pdf pg. 161

Percentage of public transport costs recovered by cities²²





²² SGS Economics, Innovative Funding Models for Public Transport in Australia Draft Report, 2015, Pg 11

Mind the Gap: Green Square Light Rail

Green Square was once an industrial precinct just 4 km's south of the Sydney CBD and just north of Kingsford Smith Airport. Following the announcement of the Airport rail line in 1994, the Local Council began the work of rezoning the precinct to allow for residential and commercial development, capitalising on the potential uplift created by the proximity of the Green Square train station. Twenty years later, Green Square is emerging as a vibrant new neighbourhood, providing employment to over 20,000 people and over 30,000 new homes. It will soon have the highest population density of any area in Australia at 23,000 people per square kilometre.²³

Yet even with a heavy rail network linking Green Square to the city, traffic and congestion is becoming a major headache for residents and city planners alike. The new metro station at nearby Waterloo might provide some relief, but there is a growing realisation that we are going to need to augment public transport in and around Green Square with a light rail service, connecting the precinct to the new city network, linking the inner south with the inner west and inner east.

The problem is how do we fund this and who should pay? The rest of Sydney might, perhaps rightly, feel that Green Square already has some transport options and that there are other parts of the city that have none and should therefore be given priority. The NSW Government is also already expanding the light rail in the inner city with the \$2 billion line to the Eastern Suburbs and linking the new Metro line through Waterloo, it is unlikely they will have any money left over to link this line to Green Square any time soon. So, if Green Square is to be linked it will need a new funding model.

Linking two high density precincts, (the CBD and Green Square) will provide the new light rail line with a ready catchment of customers and it is likely such a line would be able to meet much of its operating costs through its fare box. It would come close to being able to cover its day to day operations. Close, but not completely. There will still be a gap which has to be found somewhere.

Light rail will do more than just help resolve the traffic and congestion constraints which are threatening to strangle amenity in Green Square. It will connect a very high density community with the jobs and services of the city, just a few kilometres away. It will also improve access to the precinct from across Sydney, providing local businesses with new customers and a ready workforce. It will be a nicer place to live, to work and to play. In short it will dramatically increase the hedonic value of all properties in the area; and some of this increase can be "captured"

and used to close the gap between fare box and total cost. Internationally, light rail has been shown to increase the value of the surrounding properties by up to 40%.²⁴ Even if it only increased the value of a nearby apartment by 10%, that's worth approximately \$80,000 in windfall gain to each lucky owner - based on an average price of \$800,000 per dwelling. People might be prepared to make a small contribution to achieve such a gain.

Green Square is projected to have a population of 61,000 people spread across 30,500 new dwellings by 2030, and all would be in walking distance of any new light rail. If Council could levy a "special rate" on top of the existing Council rates of \$400 per annum it would raise over \$12 million in revenue per annum. If the "special rate" also applied to commercial properties (who would also be major beneficiaries) it would raise considerably more. The money raised would not only supplement the fare box, making sure the line covers it's recurrent costs, it would go a long way to repaying the cost of capital. The NSW Government could then consider using its considerable AAA credit rating to back a 30 year bond issue to raise the initial construction costs. Much (if not all) of which could be slowly repaid by any surplus left after operational costs are met. Once repaid, the special levy could be reduced or, if the subsidy is no longer needed, removed.

The City of Sydney has already committed over \$40 million towards securing the route and has spent a further \$500 million on the other civic infrastructure the precinct needed to be liveable, including open space, child care and the like. Yet even the wealthiest of councils can't fund such an expensive piece of infrastructure out of existing resources. Yet local government does still have a role to play because only local government can levy rates, even "special" ones. The community might argue that they are being asked to pay twice (through rates and tickets) and that's not fair! But they are also receiving twice the benefit a value uplift in their dwelling and increased amenity. If they want the private windfall gain in property values generated by the expenditure of public funds they should make a contribution to it. We can have our cake (for a small price) and eat it too, but we need to change our thinking.

Of course if governments are hesitant to just levy the rate, the local Green Square rate payers could be given a chance to have their say through a referendum. If they vote no, then they can make do with the existing heavy rail line, bus or the private car. They can wait in traffic. If they vote yes, they can enter a contract with their local council, the State Government and the bond market and have a light rail now.

²³ City of Sydney, 'Green Square', http://www.cityofsydney.nsw.gov.au/vision/major-developments/green-square

James McIntosh et al, 'Framework for Land Value Capture From Investments in Transit in Car-Dependent Cities', The Journal of Transport and Land Use, vol.10 no.1 2015 p1-31

A big job needs many different tools

Sydneysiders should be under no illusion about the enormity of the task it is facing. In a little over a generation, Sydney will become a city of 8 million people. Our public transport system can't service our existing population let alone the millions more who are coming. Most of all, there is no way we can accommodate such a large metropolis with over 70% of us using the car as our first choice in transport. For much of the past two decades we have responded to this growth by building more and more toll roads and freeways. When your citizens are sitting in a traffic jam this seems to make sense to government. When you only have a hammer, every problem looks like a nail. Yet even with the biggest freeway system our tolls can build, we will still be experiencing ever growing commutes, traffic and congestion. Our urban productivity will decline, but most importantly, a Sydney of 8 million people with insufficient public transport would be a pretty miserable place to live. Luckily we have more than just a hammer in our toolkit.

Building a world class public transport system for Sydney will require different funding models for different areas and for different transport modes. In many cases you will need to use several mechanisms if a particular project is to be successful. In Green Square the best (and possibly only) option is a special rate. There is no scope to increase density or levy development because the precinct is already very dense, and already developed. For the Western Sydney Light Rail there are more options available. Consideration could be given to a mix of measures, including imposing SIC levies on newly rezoned land, a special rate, as well as government buying and developing land itself. Building a Metro network across the City is an even bigger task. Perhaps a metropolitan wide land tax with all monies going into a Sydney transport improvement fund. None of these options are easy, but without new funding measures, public transport will continue to lose out.

In looking forward to the task ahead, it is worthwhile looking back at some of the more recent transport infrastructure we have built and asking the question, could we have done things a bit better? Could we have used different funding mechanisms to achieve a more economically and socially sustainable city.

The most recently completed section of Sydney's heavy rail network was the Epping to Chatswood which opened in 2009. We know that property prices along this line rose on announcement of the project and then jumped again when the line opened.²⁵ Yet a rail line through this area had been planned since the 1920's. There was an opportunity for the NSW Government to buy up some of the main parcels of land along this route to ensure the improved land

value is "captured" for the public, which did not happen. Unfortunately, some government agencies sold land just a few years prior to the line being built. The CSIRO was the largest landholder around the new station at North Ryde but sold the land to different property trusts in the early 1990's. The new owners have had a windfall gain out of the building of the line and have recently been able to seek even great residential and commercial densities around the station, which has missed the opportunity for the public to gain from this growth. Nonetheless, the public subsidy to maintain this line remains.

The NSW Government and the City of Sydney have recently embarked on the biggest expansion to Sydney's Light Rail network in over 75 years with construction of the Circular Quay to Randwick service. Costing over \$2 Billion, this line will transform the CBD and the inner eastern suburbs. George Street will go from a traffic snarled mess to a pedestrian friendly, tree lined boulevard in just a few years' time. This is a windfall gain for the property owners along the Street as the improved amenity and connectivity will make George Street one of the world's great shopping and commercial destinations. But the cost is falling on taxpayers and ratepayers. Wasn't there an opportunity to capture some of this windfall gain through a special Council rate?

The last twenty five years has seen significant growth in roads as successive governments have rolled out ever more ambitious toll roads. Major highways now snake across and under Sydney and more are in the pipeline. Our citizens' tolerance of user charges has provided a perfect financial model for an ever expanding road network. Yet a generation later, traffic and congestion has gotten worse. If we knew in 1990 what we know now, would we have developed such a toll road network? Perhaps we would have done what London did and introduce a general congestion charge with the monies raised being hypothecated to improving all transport options - not just roads. We could then make sensible decisions about what transport mode we should prioritise.

But hindsight is easy. What we need now is the foresight to plan ahead. To make the difficult choices we will need to make to ensure Sydney remains one of the most liveable cities in the world. We have lots of tools at hand, let's use some of them.

Ge, X et. al. Assessing the impact of rail investment on housing prices in North-West Sydney, http://www.prres.net/papers/Ge_Assessing_the_Impact.pdf, Pg 14

Appraisal methods

Capturing value is of no benefit unless you ensure it is delivering the right projects. New funding measures need to be partnered with a mode-neutral evaluation, appraisal of transport projects or investments. In some cases the best option may be to not build new transport routes but invest in 'sweating' existing lines by improving capacity, adopting technology improvements or implementing demand management initiatives. In many cases these may be less costly and more effective solutions to transportation problems than new capacity projects. However, our ways of funding projects and our appraisal methods often lead to a bias to new road capacity.

As mentioned earlier, our acceptance of user charges for new roads provides a good funding model for an ever expanding freeway system. But just because we can fund something doesn't mean it should be built. This funding bias towards roads is further reinforced by a structural bias in the governance arrangements for urban transport. Perhaps the biggest obstacle inhibiting a multi-modal approach is the existence of separate road agencies with their own Ministers at a State and Federal level. This siloed approach ignores the integrated nature of the transportation system in cities and exacerbates the highway and road focus in transportation funding. Such segregating of funds by mode does not encourage States to prioritise projects that best serve the system as a whole; rather, it creates budget biases and potentially false choices.

We believe all governments should adopt a more modeneutral investment approach in our cities. That we should allocate funds efficiently based on system-wide needs and priorities by pooling resources into a multimodal fund, and then distributing funds using mode-neutral appraisal criteria. This means that no option, such as road building, improving existing infrastructure, public transport or

demand management, would be ignored in the project selection process. State priorities informing such a process might be congestion management, land use and transport integration, housing supply and densities, economic development, job creation, health objectives or community safety. These are the broader success criteria for delivering A Plan for Growing Sydney rather than the current narrow mode-based criteria used in transport evaluation. Such an approach would include a system of strategic transport modelling, able to identify essential city shaping transport projects.²⁶ The identification and selection of city shaping projects would prioritise the most efficient and effective forms of transport. In addition, cost-benefit analysis would be improved by measures of accessibility, rather than mobility. Measures of accessibility would include degrees of access to resources, services and activities for commuters and all other travellers, including pedestrians

²⁶ National Transport Modelling Working Group. Critical Review of Transport Modelling Tools. Malvern, Sinclair Knight Merz, 2009.



and cyclists.^{27, 28} Projects would not be evaluated on levels of mobility, for example speed or time saving, as these have proven to be of no meaningful consequence.^{29,30} This issue of mode-neutral and strategic appraisal methods will be examined in more detail in a future Committee for Sydney Issues Paper.

27 Australian Transport Council. Improving urban congestion information for decision-making: Report to COAG from the Australian Transport Council. 2008.

Conclusion

Over the next few years Sydneysiders and their civic leaders have some tough choices to make. As a society we have already made certain choices on what our top priorities should be. That we should care for the sick and the aged and we should all bear the cost our collective health care. We have also agreed that everyone should have access to a quality education and that we must spend more so everyone has a decent shot in life. However this leaves little in discretionary spending for those other services that we, as urban dwellers value, such as public transport. We are at a cross roads and there are no easy options. Unless we are going to insist our politicians move resources away from health and education - something the Committee for Sydney is not supportive of - then we are going to have to find new ways of financing public transport. We are going to have to change our current thinking and our current funding mechanisms, because they, and we, have come to the end of the line.

²⁸ Litman, Todd. Smart congestion relief: Comprehensive evaluation of traffic congestion costs and congestion reduction strategies. s.l.: Victoria Transport Policy Institute, 2013.

²⁹ Litman, Todd. Smart congestion relief: Comprehensive evaluation of traffic congestion costs and congestion reduction strategies. s.l.: Victoria Transport Policy Institute, 2013.

³⁰ Infrastructure Australia, State of Australian Cities 2014-2015, 2015, https://infrastructure.gov.au/infrastructure/pab/soac/files/2015_SoAC_full_report.pdf, pg. 120



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The Hon. Mike Baird MP, NSW Premier