HillPDA CONSULTING

Community costs and benefits of urban consolidation

A comparative model of transport costs and benefits across five Sydney areas

September 2018

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1.0 INTRODUCTION

HillPDA has investigated the community benefits arising from reduced transport costs of delivering housing in middle ring suburbs compared to outer Sydney suburbs.

Building knowledge on the cost impacts of development is crucial to providing responsive land use policy and governance. The underlying premise put forth is that urban consolidation is a very effective way of fostering a high quality of life for an increasing population. This report considers the relative merits, in terms of transport costs, of locating housing in different locations in Greater Sydney.

1.1 Existing research

The broad-scale economic benefits of increased transport infrastructure and agglomeration have been identified by the European Conference of Ministers of Transport held by the OECD in 2001. These include:

- **Jobs and labour markets:** Transport accessibility may broaden the access of employers to a pool of qualified labour.
- **Product markets:** Transport accessibility may facilitate the expansion of the market for goods and services.
- **Image and confidence:** Transport accessibility may be a lever to bolster the image of a region which requires regeneration, e.g. by reducing travel times below a critical threshold. [1]

Accessibility to transport can also affect social inclusion and exclusion. Transport-related barriers to social inclusion are – the availability and physical accessibility of transport; the cost of transport; services located in inaccessible places; safety and security or fear of crime; and travel horizons, where people on low incomes are sometimes less willing to travel to access work than those on higher incomes[2].

Other social impacts arise as a result of long daily commutes - when jobs are located further away from housing, and housing from jobs. While an area may have good access to transport infrastructure, there may still be long average daily commute times. Negative social impacts of an increased daily commute have been identified by Lyons and Chatterjee:

- **Stress and Fatigue** – Longer car commutes have been found to be positively correlated with high blood pressure, self-reported tension, reduced task performance, negative mood in the evening hours after work, and the following symptoms: a stiff neck, tiredness, lower back pain, a difficulty in focusing attention, and anger. There are also impacts on the employer in terms of absenteeism, tardiness, turnover of staff and job satisfaction.
- **Health Impacts** - Such impacts are widely reported and include increased risk of involvement in traffic accidents, increased risk of respiratory and cardiovascular disease due to air pollution, reduced time available for visiting doctor, for leisure and social activities, and for sleep, physical exercise and healthy eating.[3]

These benefits of public transport accessibility have been appreciated and included as part of NSW State Government planning policy.

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[1] European Conference of Ministers of Transport, (2001). *Assessing the Benefits of Transport*, p. 13
[2] Stopher, P. & Stanley, J., (2014). *Introduction to Transport Policy: A Public Policy View*, p. 118
[3] Lyons, G. & Chatterjee, K., (2008). 'A Human Perspective on the Daily Commute: Costs, Benefits and Trade-offs', *Transport Reviews*, p. 185-6

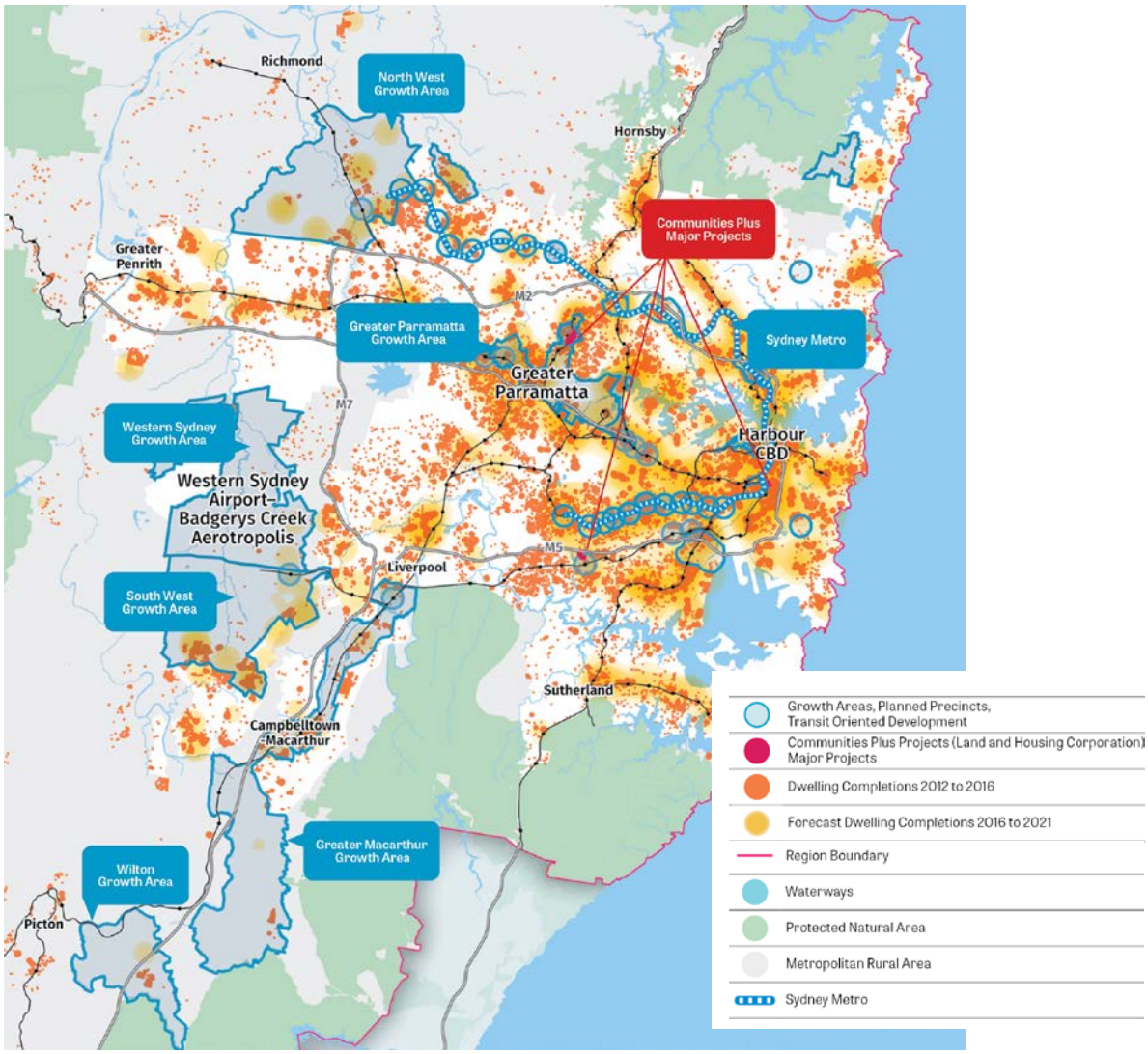
1.2 Policy Context

The Greater Sydney Regional Plan, 'A Metropolis of Three Cities' aims at managing the growth of Sydney by integrating land use, transport and infrastructure planning across the three tiers of government and across state agencies. A primary aspiration is to increase quality of life through reducing the amount of time people spend travelling to jobs and services to around 30 minutes or less.

> 'The 30-minute city aspiration will guide decision-making on locations for new jobs and housing and the prioritisation of transport, health, schools and social infrastructure investments. This will facilitate the co-location of infrastructure in metropolitan and strategic centres with direct public transport, so that people can access services and jobs.'
>
> - A Metropolis of Three Cities

This growth in residential and commercial development is targeted to certain mixed use areas around the city otherwise known as activity centres, as seen in Figure 1.

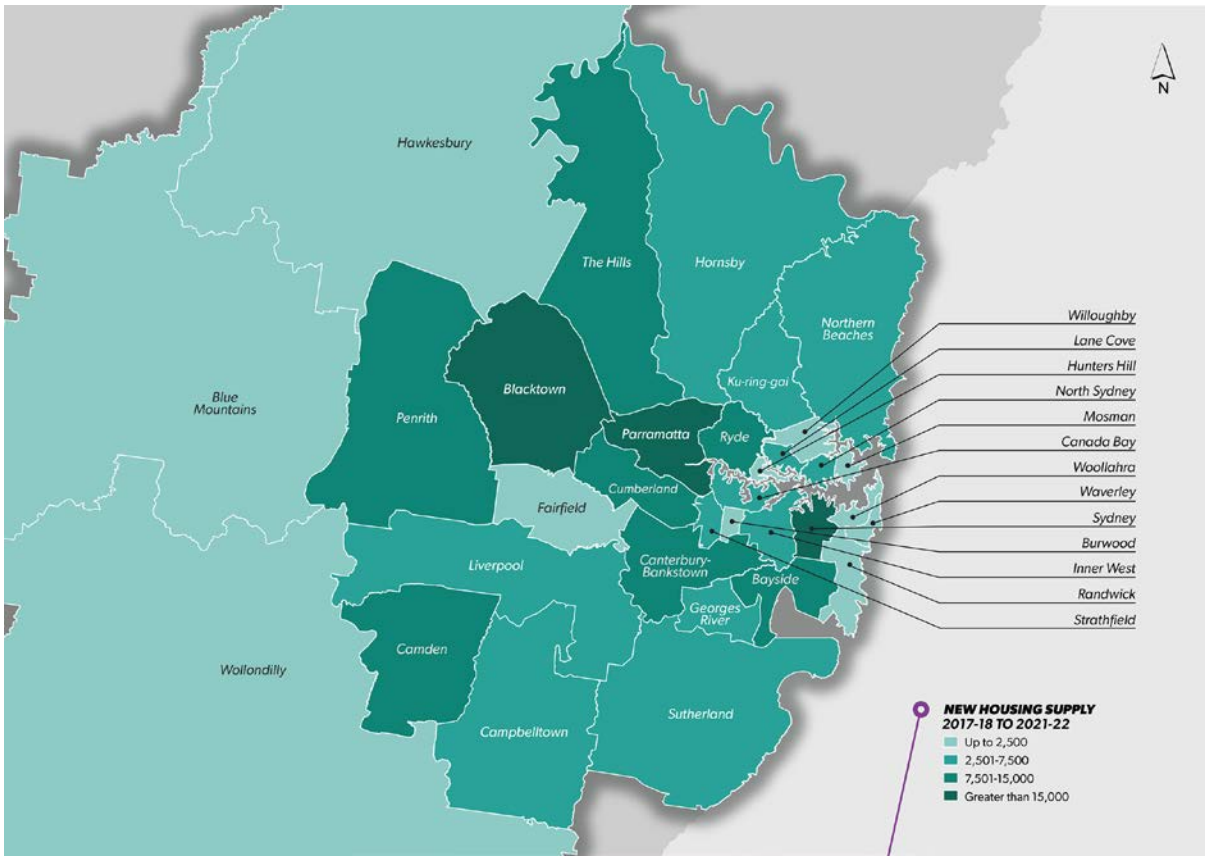
Figure 1: Greater Sydney growth areas



Source: Greater Sydney Plan, A Metropolis of Three Cities

Currently, the short term housing supply is clustered to the west of Sydney and the Harbour CBD, as seen in Figure 2.

Figure 2: Sydney housing supply forecast by LGA



Source: NSW Department of Planning and Environment, *Sydney Housing Supply Forecast*, December 2017

As seen below, this housing supply is coming to areas in the west that rely on larger LGA catchments for employment.

Table 1: Top five Places of Work by Place of Residence

	Blacktown		North Sydney		Inner West		Liverpool		Parramatta	
	Location of employment	%	Location of employment	%	Location of employment	%	Location of employment	%	Location of employment	%
	Blacktown	30.7	Sydney	40.0	Sydney	42.9	Liverpool	30.7	Parramatta	27.3
	Parramatta	12.2	North Sydney	25.1	Inner west	19.7	Sydney	9.9	Sydney	17.8
	Sydney	10.1	Willoughby	7.2	North Sydney	3.8	Fairfield	9.1	Ryde	9.1
	The Hills Shire	8.1	Ryde	4.5	Parramatta	3.3	Canterbury-Bankstown	8.2	Cumberland	5.3
	Cumberland	5.6	Northern Beaches	3.4	Ryde	2.8	Parramatta	5.7	Blacktown	4.4
	Other	33.3	Other	19.8	Other	27.5	Other	36.4	Other	36.1

Source: ABS Census 2016

In the longer term it is likely that there will be an increase in employment in the western and south western suburbs, resulting from an increase in housing provision and land zoned for employment. However, notwithstanding the development of the Three Cities concept, the eastern Sydney Harbour CBD, which is currently the primary job centre of Greater Sydney, will continue to attract employees from Greater Sydney and beyond.

2.0 METHODOLOGY

One approach to measuring the social impact of transport accessibility is to estimate the cost of operating a transport service. A lower operating cost as a proportion of income means the service is accessible to more people. Another measure is by the flow-on effects on the rest of the community as a result of using a certain transport service – these are externalities, or external costs. HillPDA has model the benefits of proximity to public transport through these two cost measures:

Operational costs	External costs
The cost paid by consumers and subsidisers for providing the service.	These are costs (or benefits) paid by the community as a whole that are caused by a certain mode of transport.

Lower operational costs represent a lesser impact upon the consumer and provider. A lower external cost represents a lesser impact upon the wider community.

HillPDA herein acknowledges the limitations of modelling quality of life through a monetary value. The dollar values that this method yields are representations of wider social costs, as outlined below.

What are operational costs?

The Australian Automobile Association releases a quarterly report of transport affordability in Australian cities. This includes an index of household transport costs, which are gathered from the following metrics:

- Car loan payments
- Registration & licensing
- Insurance
- Fuel
- Public transport
- Tolls
- Roadside Assist

The average annual household cost of running a car in Sydney is $19,427.[4] HillPDA has deducted public transport from this index because our model uses a distance-oriented measure for public-transport costs. The cost of running public transport in this report is gathered from the ticket price and government subsidy for the average daily work journey.

What are external costs?

In 2014, the Independent Pricing and Regulatory Tribunal (IPART) of New South Wales began research into the external costs and benefits of public transport use in Sydney in order to better index ticket prices for rail, bus and ferry. The external costs and benefits included in their report are:

- **Congestion cost.** This is the external benefit associated with avoided road congestion when people use public transport. For future fare reviews, we intend to measure this benefit in three ways:
  - **Time:** the value of time saved by existing drivers when people use public transport instead of adding to road congestion.

[4] Australian Automobile Association, *Transport Affordability Index*, June 2018

  - **Vehicle operating cost:** the value of vehicle operating costs, such as fuel, avoided by existing drivers when people use public transport instead of adding to road congestion.
  - **Reliability:** the benefit of more predictable travel times for existing drivers when people use public transport instead of adding to road congestion.

- **Environmental externalities**. This includes the external benefits of avoided air pollution and greenhouse gas pollution when people use public transport instead of driving. In estimating a total benefit from the public transport network we have netted off the external costs associated with the pollution created by the public transport services themselves.
- **Accidents.** This is the external benefit associated with avoided road accidents when people use public transport instead of driving.
- **Active transport.** This is the external health benefits that arise because public transport encourages greater levels of physical activity – primarily when people walk or cycle to and from public transport.
- **Deadweight loss of taxation.** This is the external costs associated with the taxes used to subsidise public transport – that is, the costs taxes have in terms of economic efficiency, which are over and above the amount of the tax.
- **Road user charges.** This adjustment is made to recognise the fact that road user charges – such as tolls, the fuel excise and parking levy – offset some of the external costs that driving imposes on the community. Because they also form part of the cost people consider when deciding whether to drive or use public transport, not including these would overstate the external benefits of public transport.
- **Scale and crowding.** These are the external benefit for existing passengers if service frequency increases in response to increased patronage, and the external cost to those passengers if the level of services doesn't increase, leading to crowding.

The report did not include an estimate of the social inclusion, agglomeration or wider economic benefits, because these are difficult to accurately measure. The external costs and benefits of each transport mode are identified as follows:

Cost	Car	Bus	Rail	Light Rail
External cost to travel ($/kilometre)	0.51	0.05	0.02	-0.07
External cost of journey ($/journey)	3.09	-0.49	-0.22	-1.34

The external cost of travel relates to the wider costs of a certain mode of transport existing, whereas the external cost of the journey relates to the impact of taking one mode rather than another. This is why the use of cars can have a cost impact while the use of rail and light rail alleviates cost on the system.

These figures are used in Section 3.0 to juxtapose the socio-economic impacts of a development across a number of areas in Sydney.

What is time cost?

Time cost is the value of time spent in transit. Time is valued differently based on the reason for travel. For example, business travel may result in lost productivity, while travelling for recreation may not have any lost productivity because the journey would always have been taken. This cost is beared by both the individual (where they may have been working for a wage, exercising or other activities of benefit to themselves), and the wider community (where they may have been working to contribute to the economy or been participating in

civic activities). This measurement highlights that time spent in transit could be time spent doing other, more socially or economically productive activities.

International studies vary from taking 35% to 120% of the hourly wage as a value of the time spent. The 2014 IPART report takes 50% of the median hourly wage as an indication of time cost. The ABS's most recent figure for median hourly earnings from May 2018 is 41.70 for a full time adult in New South Wales. Therefore, following IPART's calculation, the value of time would be $20.85.

3.0 COMPARATIVE MODELLING

This report models the cost paid by the consumer, provider and the wider community for different types of daily transport modes.

The model compares the total cost of providing habitual transport to a 250 dwelling residential building across five areas in Sydney. The five locations have been selected to provide an indication of costs relative to distance from the Sydney CBD.

For the purpose of this analysis, the study areas have been defined using Statistical Area 2 (SA2) boundaries, as defined by the 2016 Australia Census of Housing and Population. These can be seen in

Figure 3.

The study areas are:

- Liverpool
- Leichhardt - Annandale
- St Leonards - Naremburn
- Mount Druitt - Whalan
- Parramatta - Rosehill

Figure 3: Study Area Boundaries

3.1 Modelling

Table 2: Yearly Household Operating Costs

Location	Mode	Fare Cost (per trip)	Fare Subsidy (per trip)	Yearly operating costs (per resident)	Yearly operating costs (per household)
Liverpool	Car				$19,426.92
	Bus	$4.71	$3.45	$4,259.52	$7,326.37
	Rail	$ 4.94	$ 7.97	$ 6,737.84	$11,589.09
Leichhardt - Annandale	Car				$19,426.92
	Bus	$3.66	$ 3.45	$3,711.42	$ 6,383.64
	Light Rail	$3.58	$5.77	$ 4,882.89	$8,398.57
Mount Druitt - Whalan	Car				$19,426.92
	Bus	$4.71	$3.45	$ 4,259.52	$7,326.37
	Rail	$4.94	$ 7.97	$ 6,737.84	$11,589.09
St Leonards - Naremburn	Car				$ 19,426.92
	Bus	$3.66	$3.45	$ 3,711.42	$6,383.64
	Rail	$ 4.94	$7.97	$6,737.84	$11,589.09
Parramatta - Rosehill	Car				$19,426.92
	Bus	$3.66	$3.45	$ 3,711.42	$6,383.64
	Rail	$4.94	$7.97	$6,737.84	$ 11,589.09

Sources:

Fare cost – Opal adult trip based on average daily distance travelled (Department of Infrastructure and Regional Development, *Australia's commuting distance: cities and regions, 2011*, p. 20)

Fare Subsidy – 62% for rail (Transport for NSW, *Sydney Trains 2016–17 Annual Report*), and $3.45 per bus trip (value of subsidies divided by number of trips in 2015-16)

Car yearly operating costs – Australian Automobile Association, *Transport Affordability Index: June 2018*

Assumes two journeys per day, 261 days per year.

Table 3: Yearly Household External Costs

		External cost to travel ($/kilometre)	Average daily distance (kilometres)	External cost of journey ($ per journey)	Yearly External Costs (per resident)	Yearly External Costs (per household)
Liverpool	Car	0.51	16.1	$ 3.09	$ 3,756.05	$ 6,460.41
	Bus	0.05	16.1	-$ 0.49	-$ 45.68	-$ 78.56
	Rail	0.02	16.1	-$ 0.22	-$ 30.80	-$ 52.97
Leichhardt - Annandale	Car	0.51	7.1	$ 3.09	$ 2,558.06	$ 4,399.86
	Bus	0.05	7.1	-$ 0.49	-$ 163.13	-$ 280.58
	Light Rail	-0.07	7.1	-$ 1.34	-$ 829.20	-$ 1,426.22
Mount Druitt - Whalan	Car	0.51	17.7	$ 3.09	$ 3,969.03	$ 6,826.73
	Bus	0.05	17.7	-$ 0.49	-$ 24.80	-$ 42.65
	Rail	0.02	17.7	-$ 0.22	-$ 22.45	-$ 38.61
St Leonards - Naremburn	Car	0.51	12.5	$ 3.09	$ 3,276.86	$ 5,636.19
	Bus	0.05	12.5	-$ 0.49	-$ 92.66	-$ 159.37
	Rail	0.02	12.5	-$ 0.22	-$ 49.59	-$ 85.29
Parramatta - Rosehill	Car	0.51	13.1	$ 3.09	$ 3,356.72	$ 5,773.56
	Bus	0.05	13.1	-$ 0.49	-$ 84.83	-$ 145.90
	Rail	0.02	13.1	-$ 0.22	-$ 46.46	-$ 79.91

Note: Bus and rail externals costs are a negative, indicating their net benefit to the wider community (when chosen rather than private car). Assumes two journeys per day, 261 days per year.

Sources:

External cost to travel – IPART, Draft Report, *Review of External Benefits of Public Transport*, December 2014

Average daily distance – Department of Infrastructure and Regional Development, *Australia's commuting distance: cities and regions*, 2011, p. 20

External cost of journey – IPART, Draft Report, *Review of External Benefits of Public Transport*, December 2014

Number of employed persons per dwelling – Census 2016

Table 4: Time Cost

	Time Spent Travelling (minutes)	Time cost of daily travel	Yearly household cost	Yearly time cost lost across 250 dwellings
Liverpool	40	$ 27.80	$ 12,479.98	$ 3,119,994.00
Leichhardt - Annandale	17	$ 11.82	$ 5,303.99	$ 1,325,997.45
Mount Druitt - Whalan	44	$ 30.58	$ 13,727.97	$ 3,431,993.40
St Leonards - Naremburn	31	$ 21.55	$ 9,671.98	$ 2,417,995.35
Parramatta - Rosehill	32	$ 22.24	$ 9,983.98	$ 2,495,995.20

Time spent travelling – adapted from Department of Infrastructure and Regional Development, *Australia's commuting distance: cities and regions*, 2011, p. 20

Time cost of daily travel – half the New South Wales median hourly income ($41.70) (Census 2016)

Assumes two journeys per day, 261 days per year.

Table 5: Total Transport Costs and Benefits

Location	Mode	Percent who use mode	Number of users in 250 dwellings	Yearly Operating Costs per 250 dwellings	Yearly External Costs per 250 dwellings	Total yearly Operating and External Costs across development
Liverpool	Car	64.9%	162	$ 3,152,017.77	$ 1,048,201.15	$ 4,200,218.92
	Bus	2.3%	6	$ 42,126.65	-$ 451.73	$ 41,674.93
	Rail	11.6%	29	$ 336,083.52	-$ 1,536.20	$ 334,547.32
	Time Cost					**$ 3,119,994.00**
	Total			**$ 3,530,227.95**	**$ 1,046,213.22**	**$ 7,696,435.17**
Leichhardt - Annandale	Car	44.3%	111	$ 2,151,531.39	$ 487,285.04	$ 2,638,816.43
	Bus	16.6%	42	$ 264,921.16	-$ 11,643.86	$ 253,277.30
	Light Rail	3.8%	10	$ 79,786.41	-$ 13,549.08	$ 66,237.33
	Time Cost					**$ 1,325,997.45**
	Total			**$ 2,496,238.96**	**$ 462,092.10**	**$ 4,284,328.50**
Mount Druitt - Whalan	Car	66.4%	166	$ 3,224,868.72	$ 1,133,236.59	$ 4,358,105.31
	Bus	3.8%	10	$ 69,600.56	-$ 405.15	$ 69,195.41
	Rail	13.5%	34	$ 391,131.69	-$ 1,302.99	$ 389,828.70
	Time Cost					**$ 3,431,993.40**
	Total			**$ 3,685,600.96**	**$ 1,131,528.45**	**$ 8,249,122.81**

Location	Mode	Percent who use mode	Number of users in 250 dwellings	Yearly Operating Costs per 250 dwellings	Yearly External Costs per 250 dwellings	Total yearly Operating and External Costs across development
St Leonards - Naremburn	Car	31.6%	79	$ 1,534,726.68	$ 445,259.06	$ 1,979,985.74
	Bus	10.3%	26	$ 164,378.79	-$ 4,103.69	$ 160,275.10
	Rail	28.0%	70	$ 811,236.09	-$ 5,970.64	$ 805,265.46
	Time Cost					**$ 2,417,995.35**
	Total			**$ 2,510,341.56**	**$ 435,184.73**	**$ 5,363,521.64**
Parramatta - Rosehill	Car	39.5%	99	$ 1,918,408.35	$ 570,139.06	$ 2,488,547.41
	Bus	6.1%	15	$ 97,350.55	-$ 2,224.96	$ 95,125.59
	Rail	30.8%	77	$ 892,359.70	-$ 6,152.90	$ 886,206.80
	Time Cost					**$ 2,495,995.20**
	Total			**$ 2,908,118.60**	**$ 561,761.20**	**$ 5,965,875.00**

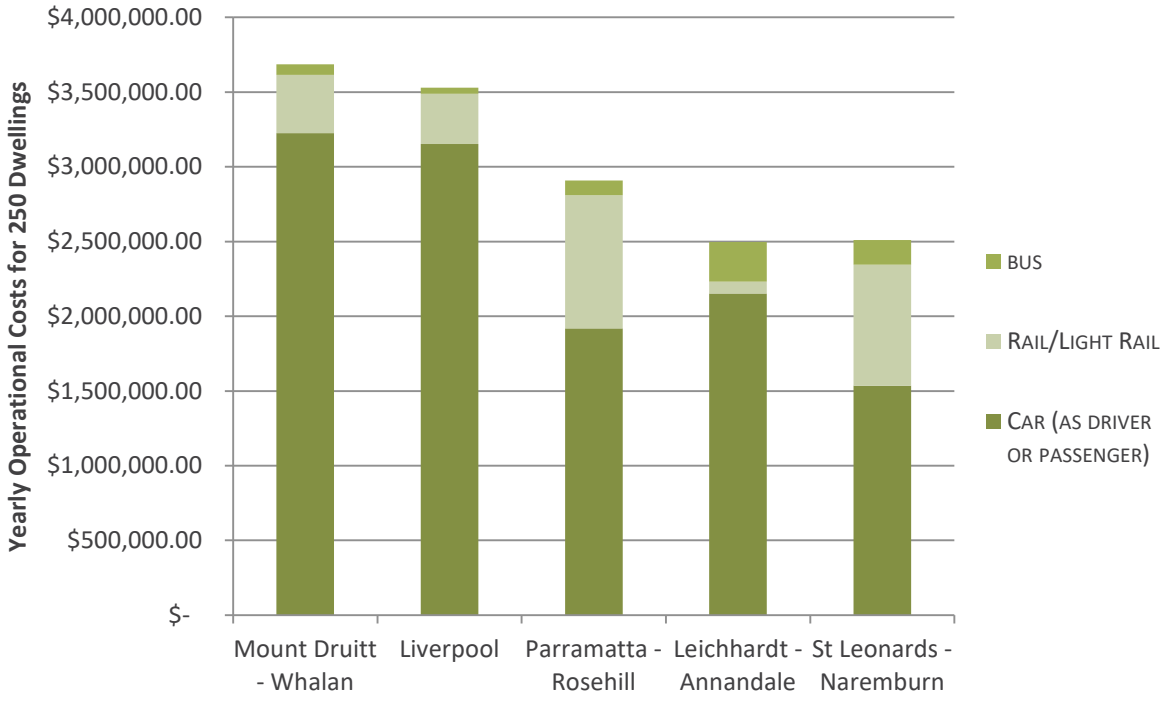
Note: Percentages may not add up to 100%, as other residents may have walked or cycled, which were not included in this model.

Sources:

Percent who use mode – Census 2016, SA2 Quickstats

3.2 Operational Costs

Figure 4: Yearly Operational Transport Costs for 250 Dwellings



Source: HillPDA adapted from IPART Review of External Benefits of Public Transport.

Note: Leichhardt – Annandale refers to light rail only; all others refer to rail only.

Figure 4 compares the cost of operating different modes of transport for 250 dwellings across five Sydney Areas.

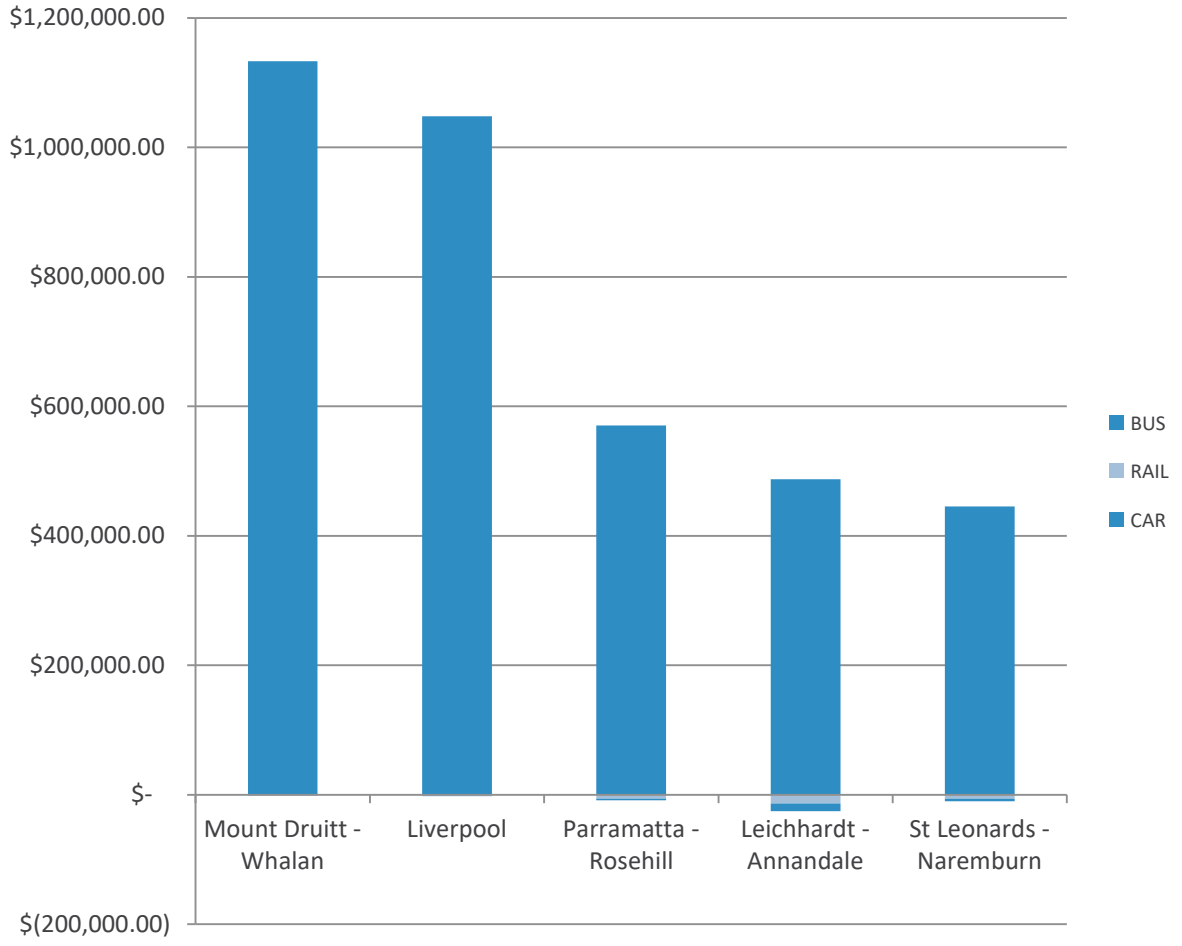
Outer areas such as Mount Druitt and Liverpool have a higher immediate operational cost because of the high proportion of people who drive, the longer distances they travel and the high cost of running a car. Inner areas have a lower cost of transport provision. In St Leonards – Naremburn, around the same number of people drive as take the train to work, however, the cost of providing this is significantly less (seen in the far right column).

This model does not include walking or cycling, which are in all cases more cost-effective and provide more community benefit than each of the above modes of transport.

Providing bus, rail, and light rail places less overall cost on the consumer and the provider compared to cars. Inner suburbs have better access to these services and lower daily travel distances, which further reduces the cost burden of providing transport to new residents.

3.3 External Costs

Figure 5: Yearly External Transport Costs for 250 Dwellings



Source: HillPDA adapted from IPART Review of External Benefits of Public Transport

Figure 5 shows the external, indirect costs associated with transporting employed residents from 250 dwellings in areas across Sydney. These costs are sourced from the IPART's Review of External Benefits of Public Transport.

The external transport costs in outer suburbs (Mount Druitt – Whalan and Liverpool) are almost double those of the inner and middle suburbs. This is due to a higher proportion of the household travelling to work by car, and travelling longer distances to work.

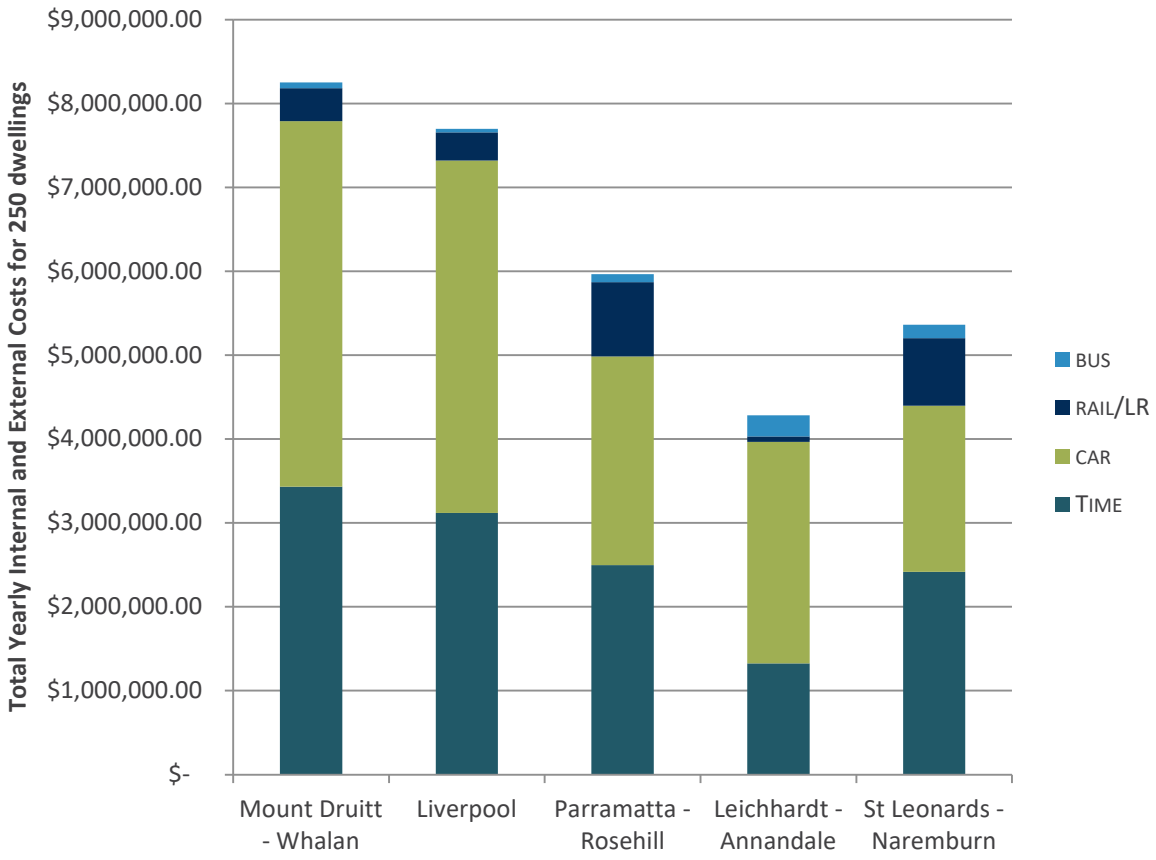
Negative costs represent the cost saved by the community when people choose to take public transport as opposed to private vehicle. These negative costs are so small because of how many people drive, and how great the level of impact of car use is on the wider community.

It is noted that the **margins between external costs in different areas are larger than those of the operational costs.** This indicates that areas in outer suburbs generate increasingly more external costs as compared to inner suburbs, meaning that when transport times are longer, proportionally more cost is placed on the wider community than on the consumer.

4.0 CONCLUSIONS

The modelling undertaken in Section 3.0 of this report has quantified the impacts of extended transport times that result from developing residential land use further away from jobs, and with low public transport accessibility and patronage. The costs to the wider community as a result of time-otherwise-spent, congestion, pollution and road charges in suburbs further away from jobs and services are in the order of millions of dollars over the life of a building. The total yearly operational and external transport costs for 250 dwellings can be seen in Figure 6.

Figure 6: Total yearly operational, external and time costs for 250 dwellings



Source: HillPDA

At current figures, a development in an outer suburb creates greater social and economic impacts compared to a development in the inner suburbs. These social and economic impacts that IPART describes eventuate in increased demand on road infrastructure, health services, and productivity, all of which reflect a detriment to the state economy, and individual and community wellbeing.

The provision of a higher quality of life at a lower cost than any other should be main assessment criteria for any current case submitted for consideration of State interests. It is concluded that deontologically there is a greater community cost of development in the outer suburbs. This is supported by data in Section 3.0 which shows that the current costs of transport to the community as a result of residential development in outer Sydney far surpass those costs of the same number of dwellings in an inner suburb.

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NEUTRAL BAY NSW 2089

21 September 2018

Commercial in confidence

Dear George

Subject: 67-75 Lords Road, Leichhardt

We refer to our recent discussions regarding your planning proposal for the above site and your request for advice on the community benefits of urban consolidation.

In September 2018 HillPDA undertook a study on the costs of providing transport to residential developments across five areas in Sydney titled 'Community costs and benefits of urban consolidation: A comparative model of transport costs and benefits across five Sydney areas'. For the purpose of the report, the term 'cost' is used to indicate impacts to the wider community. A comparative model compared the operational costs of providing transport as well as the external costs to the wider community as a result of making certain transport choices. The cost of the time lost in transit was also included. A copy of the study is attached for your reference.

The report found the following:

- The Eastern Harbour CBD is the current primary jobs centre of Greater Sydney and will continue to attract employees from Greater Sydney and beyond.
- People in outer suburbs have a higher average daily distance travelled to work (around 17km) compared to those in inner suburbs (around 9km).
- A larger portion of people in outer suburbs drive cars to work compared to inner suburbs
- Driving a car to work has a much greater impact on the wider community than catching public transport; cars have an external **cost** of $3.09 per journey while bus and rail have external **benefits** of $0.49 and $0.22 per journey respectively.
- The cost of **providing/operating** transport in inner suburbs is much lower than providing transport to outer suburbs. This is true for the cost paid by the consumer as well as the government through public infrastructure.
- The **wider community costs** (i.e. external costs such as congestion, environmental externalities, health, tax loss, scaling and road user charges) of using transport are higher in outer suburbs compared to inner suburbs.

The costs of transport were modelled for a hypothetical 250 dwelling development across five different statistical areas in Sydney to provide a comprehensive assessment of cost to the wider community. This model showed the total yearly operating, external and time cost of 250 dwellings to be $7.7 million in Liverpool, $4.3 million in Leichhardt – Annandale, $8.2 million in Mount Druitt – Whalan, $5.4 million in St Leonards – Naremburn and $6.0 million in Parramatta – Rosehill. These figures can be seen per household in the table below:

Community cost† outcome for expenditure, external costs and travel time

Statistical Area 2	Yearly operational (dollars per household)	Yearly external (dollars per household)	Yearly time cost (dollars per household)	Total yearly (dollars per household)
Liverpool	14,121	4,185	12,480	30,786
Leichhardt - Annandale	9,985	1,848	5,304	17,137
Mount Druitt - Whalan	14,742	4,526	13,728	32,996
St Leonards - Naremburn	10,041	1,741	9,672	21,454
Parramatta - Rosehill	11,632	2,247	9,984	23,864

Source: HillPDA, 2018. †Costs are used indicatively

The model demonstrated that the costs were significantly greater in locations further from the Sydney CBD. Leichhardt – Annandale was found to have high accessibility to public transport and is closer to the major job centre of the Harbour CBD, which is reflected in the low time spent in transit each day. For example, expenditure on transportation, (including public, private and time costs) per household in Leichhardt is $13,600 to $15,600 less than that expended by Liverpool or Mount Druitt households.

Existing literature in planning highlights that accessibility to public transport correlates with higher living standards. Creating capacity for new housing at a higher quality of life for a lower cost than any other is a key interest of the Greater Sydney Commission as outlined in Objective 10 of the *Greater Sydney Regional Plan: A Metropolis of Three Cities*:

> '*Providing ongoing housing supply and a range of housing types in the right locations will create more liveable neighbourhoods and support Greater Sydney's growing population*.'

Characteristics of 'the right locations' to which they refer include:

- 'accessibility to jobs, noting that over half of Greater Sydney's jobs are generated in metropolitan and strategic centres
- efficient interchanges with a comprehensive walking and cycling network
- catchment areas within walking distance (up to 10 minutes) of centres with rail, light rail or regional bus transport
- alignment with investment in regional and district infrastructure which acknowledges the catalytic impacts of infrastructure such as Sydney Metro City & Southwest, WestConnex.'

HillPDA notes that 67-75 Lord's Road, Leichhardt is consistent with the above attributes promoted by the Greater Sydney Commission. Providing housing in an area with high accessibility to public transport and closer to jobs and services is consistent with the Greater Sydney Commission's objective. In addition, the enclosed HillPDA report demonstrates that housing delivery in Leichhardt has relatively lower transport cost to the consumer and the wider community when compared to other locations in Sydney.

We trust this information is of assistance to you.

Yours sincerely,

Signed by

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Martin Hill

Director

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