

THE MCKELL INSTITUTE

Addressing Infrastructure Inequality:

A path to equality for Melbourne's outer suburbs

August 2022

About the McKell Institute

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The McKell Institute acknowledged the traditional owners of the land and pays its respect to elders past present and emerging. The Institute is committed to supporting truth-telling and justice.

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About this Report

The opinions in this paper do not necessarily represent the views of the McKell Institute's members, affiliates, individual board members or research committee members.



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Introduction

Infrastructure has a social purpose. Yet access to infrastructure is unequal and strongly reflects the regional and metropolitan divide, household incomes, and historic disadvantage. While access to health services, education, and jobs remain unequal, there is no equality of opportunity.

These were the observations in the March 2022 report, *Funding the Infrastructure of Tomorrow*. This McKell Institute deep dive into infrastructure inequality recommended funding pathways to deliver equal access to infrastructure.¹

Of all Australian Government jurisdictions, Victoria is in the lead when it comes to reimagining infrastructure as a mechanism for social equality and progress, rather than just an economic investment into roads, rail, and public amenities. While most state governments' infrastructure strategies examine access to infrastructure, Victoria is the only state that lists the reduction of disadvantage as a core objective of its infrastructure strategy.

Infrastructure is more than roads, bridges, hospitals, and schools. It underpins Victoria's economic productivity, social equity and connectedness, and ecological impact. It can help reduce social disadvantage.² – Victoria's Infrastructure Strategy 2021-2051

This reassessment of the value and purpose of infrastructure is timely, as the Victorian Government overtakes NSW as the largest investor in infrastructure as a proportion of Gross State Product (GSP)

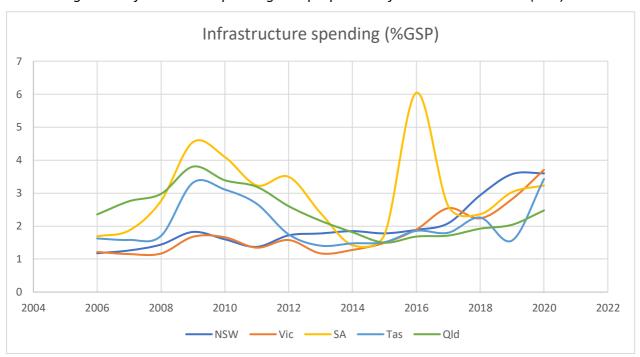


Figure 1: Infrastructure spending as a proportion of Gross State Product (GSP)

Source: Budget Papers, NSW, VIC, SA, TAS, QLD, 2005/6 to 2020/21



The McKell Institute has previously found that across Australia, areas of high historic disadvantage correlate with lower infrastructure provision. Victoria was no different.

The largest single investment category within the sector is transport infrastructure. While Melbourne has better access to transport than any other city in Australia, it also has the highest transport inequality rating of any Australian capital city.³

Additionally, a recent report from Infrastructure Victoria found that community infrastructure such as libraries and swimming pools were lacking in growth areas, many of which surround the Melbourne Metropolitan area.⁴

A new strategic approach backed up with record infrastructure investment is a perfect opportunity for Victorians to address infrastructure inequality. Understanding the unique challenges facing Victorian infrastructure development should guide this approach.

This report examines the unique mix of infrastructure inequality in Melbourne. It identifies the primary geography of infrastructure inequality in Melbourne, notably in its outer suburbs and the Interface Council (IFC) areas. Finally, it links these findings to the March 2022 report, "Funding the infrastructure of Tomorrow" which identifies pathways to address the gap in infrastructure services.

Just 26 per cent of jobs are available within 30 minutes in Melbourne

Transport accounts for the largest share of infrastructure expenditure. It also facilitates access to other infrastructure such as hospitals, schools, parks, employment, and recreational centres.

A recent study in the UK found that a one per cent increase in transport infrastructure accessibility leads to a 0.3-0.5 per cent increase in the number of businesses and employment opportunities. As such, transport access is an important measure of infrastructure inequality.

That said, proximity to public transport is only one measure of access, with the frequency of service and travel time also representing crucial measures. As governments seek to improve access to jobs and services, they increasingly look to time measures. Other states, such as Queensland and NSW, aim to provide access to key services or CBDs within 30 minutes.

Within the framework of the 30-minute city, and despite boasting an extensive transport system, Melbourne underperforms in access to jobs and workers, with just 26 per cent of jobs accessible within 30 minutes.

The number of jobs accessible within the allotted timeframe is closely related to the population of the city. Table 1 below shows that in general, the larger the population, the fewer per cent of jobs that can be accessed within 30 minutes.

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City	Per cent of Jobs Accessible within 30 minutes	Population ⁷
Melbourne	26	4,976,157
Sydney	26	5,259,764
Brisbane	31	2,568,927
Perth	43	2,192,229
Adelaide	38	1,402,393
Canberra	50	453,558
Hobart	51	251,047
Darwin	60	148,801

Crucially, despite a difference in geographical size and population numbers, both Melbourne and Sydney have the same number of jobs accessible within 30 minutes, indicating a challenge in accessing employment opportunities throughout the city.

Melbourne provides the best public transport system, but also the most unequal

The Accessibility and Remoteness Index of Australia (ARIA) is a composite index that includes a measure of "Transport Accessibility". It ranks urban centres on a scale of 1 to 5 for transport accessibility by Statistical Area Level 1 (SA1) using the following categories:

- 1. Very High Accessibility
- 2. High Accessibility
- 3. Moderate Accessibility
- 4. Low Accessibility
- 5. Limited Accessibility

Of all Australia's major capital cities, Melbourne has the lowest proportion of SA1 regions in the 'Limited Accessibility' and 'Low Accessibility' categories. This indicates that most of the population has at least a moderate level of public transport access. Similarly, Melbourne has the highest proportion of SA1s with a "Very High Accessibility" rating.

Yet despite these positive findings, transport access in Melbourne is still highly unequal and dependent on income.

Using the ARIA data, we can assess the likelihood that a person will live in an area with "Very High" public transport accessibility based on whether they are in the highest or lowest quartile of income earners.

Table 2: Transport inequality rating across Sydney, Melbourne, Brisbane and Adelaide

	P (accessible Q4)	P (accessible Q4)	Inequity rating
Melbourne	34%	22%	1.54
Brisbane	30%	22%	1.38
Sydney	32%	31%	1.02
Adelaide	25%	35%	0.70

What we find is that Melbourne has the highest level of public transport inequality. In Melbourne, communities with higher income earning capacities are 1.54 times more likely to live in an area with "Very High Accessibility" than those in the lowest quartile of income earners.

The analysis shows that while Melbourne has the best transport access of any capital city, that access is skewed more heavily towards wealthier communities. This leads to highly unequal access to transport infrastructure across the city.



Transport inequality is concentrated in the outer suburbs

To identify the geographic location of public transport services, we examine the use of public transport in relation to its closest substitute, the private vehicle. Public Transport use is a good indicator of access as it can account not just for the physical infrastructure, but the level and quality of service the infrastructure provides. Therefore, we surmise that the higher the use of private vehicles, the lower the quality of service and access to public transport.

Figure 2 below shows the concentration of public transport use in the Local Government Areas (LGAs) In particular, the ten outer suburban councils known as the Interface Councils (IFC) are concentrated in the bottom third of LGAs that utilise public transport infrastructure.

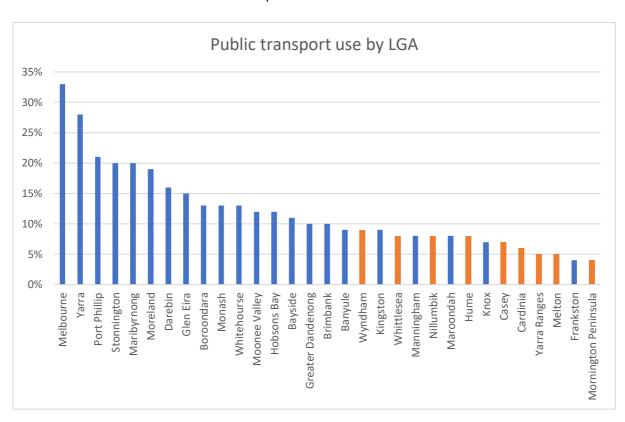


Figure 2: Public Transport use as a percentage of private vehicle use in Melbourne metropolitan council areas

Of the nine IFC councils with available data (Mitchell is excluded due to a lack of comparable data), eight are in the bottom third for transport access. All IFC councils have less than ten per cent public transport use, while public transport use is greater than ten per cent in 73 per cent of other councils.

Public transport use originating in the IFC councils averages just 6.7 per cent, half the 13.4 per cent average across Melbourne.

The five non-IFC councils with use below nine per cent are all geographically adjacent to IFC councils. Transport infrastructure has a network effect, which increases access as more locations become available to those using the infrastructure. The concentration of low use in IFC councils and their surrounding suburbs indicates a lack of suitable transport infrastructure.

Addressing the inequality in transport access will require concentrated investment in the IFC councils.

It is important to note that this analysis uses weekday transport data, which emphasises the role of work and education travel as opposed to weekend travel which often includes recreational use. However, for social participation, weekend travel may be just as important.



Melbourne's infrastructure inequality extends to community infrastructure

Inequality in the provision of transport infrastructure is indicative of a broader gap in services. As found in the research paper "Funding the Infrastructure of Tomorrow, 2022", inequality is overwhelmingly geographically concentrated, focused on new communities, and communities experiencing some form of disadvantage (historical or otherwise).

The concern among new communities is reflected in the Infrastructure Victoria report, "Social Infrastructure in Melbourne's new growth areas", which found "comparatively poor levels of current and future accessibility to existing facilities in new and future suburbs compared to other metropolitan areas."

This low level of service provision is made worse by the fact that many areas have high forecasted population growth. The report specifically examined access to libraries and aquatic centres before recommending increased funding over the next five years to facilitate the expansion and increased usage of these facilities in these communities.

Worryingly, many of the communities identified in the Infrastructure Victoria report also rank among the lowest in public transport access. Six of the eight councils with the lowest access to libraries per capita are IFC councils.

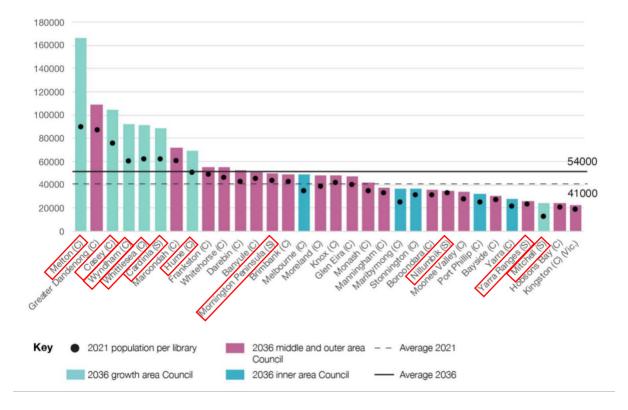


Figure 3: Libraries per person across Melbourne metropolitan council areas⁹

Similarly, the Victorian Planning Authority examined the geographical differences in access to open space, including sports fields and recreation precincts for the Metropolitan Open

Space Network. Its report calculated the per cent of public space as part of the municipal area.

The table below identifies the location of the ten IFC councils, nine of which fall in the bottom half in access to open space. Even the top-ranking ICF council, Nilumbik, has half the open space in percentage terms as the City of Melbourne.

Table 3: Open space as a percentage of the municipal area

Municipality	Municipal Area (HA)	Public Open Space (HA)	Per cent public open space
Melbourne	3,767	788	20.90%
Port Phillip	2,107	411	19.50%
Hobsons Bay	5,835	992	17.00%
Yarra	1,956	301	15.40%
Brimbank	11,122	1,697	15.30%
Manningham	7,029	1,060	15.10%
Banyule	6,263	890	14.20%
Knox	9,480	1,200	12.70%
Moonee Valley	4,312	527	12.20%
Darebin	5,347	649	12.10%
Kingston	7,091	807	11.40%
Maribyrnong	3,125	349	11.20%
Maroondah	5,939	629	10.60%
Nillumbik	3,436	352	10.30%
Moreland	5,104	525	10.30%
Boroondara	6,019	623	10.30%
Casey	22,889	2,251	9.80%
Whitehorse	6,427	607	9.40%
Frankston	8,482	777	9.20%
Hume	15,459	1,386	9.00%
Monash	8,147	716	8.80%
Bayside	3,745	327	8.70%
Whittlesea	19,060	1,490	7.80%
Yarra Ranges	5,652	420	7.40%
Greater Dandenong	8,951	572	6.40%
Wyndham	22,789	1,404	6.20%
Stonnington	2,563	151	5.90%
Cardinia	7,739	429	5.50%
Mornington	1,657	90	5.40%
Melton	20,701	1,070	5.20%
Glen Eira	3,869	171	4.40%
Mitchell	8,135	61	0.70%

The distribution of social infrastructure is more varied than transport infrastructure. While not perfectly correlated, many of the IFC councils with low transport access, are also suffering inequality in access to libraries, aquatic centres, and open space.

Social Infrastructure is plagued by inequality just like transport infrastructure and other services.

One of the most significant challenges when delivering social infrastructure is the many different local governments and state authorities involved. This is particularly pronounced where the State Government determines population growth centres, but councils must deliver local services.

The lack of a coordinated approach to funding and investment in infrastructure is a crucial reason for discrepancies in services between council areas, particularly in fast-growing communities.

Historically disjointed approaches to infrastructure planning make it difficult for local communities, their councils and industry players to forecast how the government will apply funding annually. In turn, this stymies the ability to make informed decisions leading to confusion, disappointment, and criticism.

Areas with significant infrastructure inequality would benefit from a coordinating body, particularly in high-growth precincts.

Value (\$ billion)

4.4

69.0

Addressing inequality requires sustained investment

Overcoming historic underinvestment in infrastructure cannot be done in a single budget or a single term of government. It will require collective governments to make equal provision of infrastructure a priority. Failing to do so will entrench infrastructure inequality.

Approximately 80 per cent of taxation revenue is collected by the Commonwealth and just over 16 per cent from state governments.¹⁰ Despite their limited access to revenue, state governments account for the overwhelming majority of infrastructure spending.

VIC TAS Commonwealth NT NSW SA QLD WA Output share (% 16.82 15.04 13.47 12.46 12.15 9.68 3.76 2.87 GSP/GDP) Per capita (\$) 17,850 10,299 10,268 7,941 6,769 4,074 1,946 7,222

13.5

3.9

35.2

11.0

50.8

Table 4: 2020-21 General Government Sector public infrastructure investment by jurisdiction

Victoria and NSW are driving the growth in infrastructure investment. Victoria has tripled its capital works budget since 2014-15. Both states have transitioned from the two states with the lowest infrastructure expenditure per GSP to the two highest in the span of ten years.

84.2

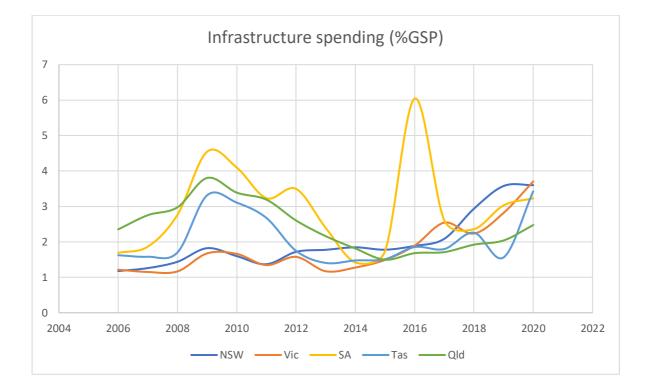


Figure 4: Infrastructure spending as a proportion of Gross State Product (GSP)

Source: Budget Papers, NSW, VIC, SA, TAS, QLD, 2005/6 to 2020/21

The strong growth of Victorian infrastructure expenditure has set a new 'normal'. Maintaining the new normal is vital to overcoming historic underinvestment and addressing infrastructure inequality.

All states, which are the drivers of infrastructure investment, are forecasting increased net debt following the COVID-19 pandemic. States also have less control over their revenue, with some relying on Commonwealth grants for more than half of their revenue.¹¹

While this debt was rightly incurred during COVID-19, it may add to increasing competition for scarce budget dollars. Yet failure to invest in new infrastructure overwhelmingly harms new communities and people experiencing forms of disadvantage. To deliver on the Infrastructure Victoria goal of addressing disadvantage will require sustained investment.

The Victorian Government has set a new standard for infrastructure investment. Investment is now \$7.7 billion per year larger than the long-run average.



Figure 5: Actual infrastructure expenditure vs projected expenditure before recent gains

Source: Budget Papers, NSW, VIC, QLD, 2005/6 to 2020/21

The McKell Institute report, "Funding the Infrastructure of Tomorrow" found substantial demand for public infrastructure from private partners, such as superannuation funds. The number of funds that allocate more than 10 per cent of assets to infrastructure has increased by 92 per cent since 2015.¹²

Attracting this funding will be crucial to maintaining the Victorian Government's high investment in infrastructure as net debt increases.

Findings and recommendations

Infrastructure provision in Melbourne is often better than in other capital cities but has a high degree of geographic inequality.

A gap in infrastructure provision is among large-scale, traditional infrastructure, such as transport as well as local community infrastructure.

This report finds that unequal access to infrastructure is concentrated in the outer suburbs of Melbourne, particularly among the Interface councils.

The Victorian Government is the largest investor in infrastructure of any Australian jurisdiction. It is also the most advanced in recognising social objectives in its infrastructure strategy.

Providing pathways for private capital, including superannuation funds, to invest in infrastructure will be crucial to maintaining the pipeline as state debt increases.

- Recommendation 1: The Victorian Government should set a target to maintain its infrastructure investment in the long run.
- Recommendation 2: The Victorian Government should facilitate opportunities for superannuation funds to better invest in public infrastructure to sustain its investment pipeline in the face of rising public debt.
- Recommendation 3: New infrastructure investment decisions should address communities with the greatest infrastructure inequality.
- Recommendation 4: The Victorian Planning Authority and Infrastructure Victoria should regularly report on access to infrastructure services.
- Recommendation 5: With the successful completion of the Level Crossing Removal Project by 2025, the Level Crossing Removal Authority should be redirected to developing and delivering a program of works that address infrastructure inequality.

Endnotes

⁵ Gibbons, S., Lyytikäinen, T., Overman, H. G., & Sanchis-Guarner, R. (2019). New road infrastructure: the effects on firms. *Journal of Urban Economics*, *110*, 35-50. Accessed online: https://reader.elsevier.com/reader/sd/pii/S0094119019300105

⁶ Wu, H., Levinson, D. (2019). Access Across Australia. *The University of Sydney*. Accessed online: https://ses.library.usyd.edu.au/handle/2123/20509

⁷ Australian Bureau of Statistics. (2021). Regional population. *ABS.* Accessed online: https://www.abs.gov.au/statistics/people/population/regional-population/2021

⁸ Infrastructure Victoria. (2021:25). Social infrastructure in Melbourne's growth areas. *Infrastructure Victoria*. Accessed online: https://www.infrastructurevictoria.com.au/wp-content/uploads/2021/09/Background-paper-Social-infrastructure-in-Melbournes-new-growth-areas-1.pdf

⁹ Infrastructure Victoria. (2021:25). Social infrastructure in Melbourne's growth areas. *Infrastructure Victoria*. Accessed online: https://www.infrastructurevictoria.com.au/wp-content/uploads/2021/09/Background-paper-Social-infrastructure-in-Melbournes-new-growth-areas-1.pdf

¹⁰ NSW Government. (2021). Taxation in Australia. *Treasury*. Accessed online:

https://www.treasury.nsw.gov.au/budget-financial-management/revenue-and-taxation/taxation-australia

¹¹ TAS Government. (2021). General Government Revenue. *Tas Treasury*. Accessed online: https://www.treasury.tas.gov.au/BudgetPapersHTML/Budget2021/BP1/2021-22-BP1-5-General-Government-Revenue.htm

¹² The McKell Institute. (2022). Funding the Infrastructure of tomorrow. *The McKell Institute*. Accessed online: https://mckellinstitute.org.au/wp-content/uploads/2022/03/McKell Super-Funding-Infrastructure.pdf

¹ The McKell Institute. (2022). Funding the Infrastructure of tomorrow. *The McKell Institute*. Accessed online: https://mckellinstitute.org.au/wp-content/uploads/2022/03/McKell Super-Funding-Infrastructure.pdf

² Infrastructure Victoria. (2021:6). Victoria's infrastructure strategy 2021-2050. *Infrastructure Victoria*. Accessed online: https://www.infrastructurevictoria.com.au/project/30-year-strategy/

³ The McKell Institute. (2022). Funding the Infrastructure of tomorrow. *The McKell Institute*. Accessed online: https://mckellinstitute.org.au/wp-content/uploads/2022/03/McKell Super-Funding-Infrastructure.pdf

⁴ Infrastructure Victoria. (2021). Social infrastructure in Melbourne's growth areas. *Infrastructure Victoria*. Accessed online: https://www.infrastructurevictoria.com.au/wp-content/uploads/2021/09/Background-paper-Social-infrastructure-in-Melbournes-new-growth-areas-1.pdf