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Towards a social progress index for urban liveability, productivity, and sustainability

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Introduction

Over the past three decades Australia has experienced enviable and unprecedented economic growth, yet our social progress has not kept pace. Social progress is key if we are to create urban areas for the future that are liveable, productive, and sustainable.

This chapter examines social progress as a concept, what it means for helping to understand and address social inequities, how we are going as a country, and why tracking and focusing on it at local, state, national, and international levels are important for urban policy now and into the future. The social progress index is suggested as a suitable instrument for operationalising these imperatives.

Problems and issues

Australia has an undeniably successful economic track record. Until the recent Covid-19 pandemic, Australia experienced 29 years of continuous economic growth, with gross domestic product (GDP) increasing on

average every year since 1991 (ABS 2020). Economic growth has been of significant concern for all recent Australian governments, with the previous federal Liberal–National Coalition in particular prioritising policies that ensured the economy was kept strong and a focus for Covid-19 recovery (Frydenberg and Birmingham 2020).

Economic success, however, does not always accurately reflect the lived experience of communities. While Australian GDP has displayed ongoing growth, there are many areas of socioeconomic inequality, including housing stress and unemployment, that are increasing among certain groups and geographical areas (AIHW 2020). Globally, there are numerous instances of economic development initiatives that have actively harmed the social progress of society and its citizens (Costanza et al. 2009). Australia has its own examples. Mining company Rio Tinto's May 2020 detonation of explosives at Juukan Gorge, Western Australia, for example, resulted in the destruction of 46,000-year-old cave shelters that were of personal, community, national, and international significance for the culture and history of the Puutu Kunti Kurrama and Pinikura peoples and Indigenous peoples more widely (Joint Standing Committee on Northern Australia 2020).

The value of a strong economy is tied to urban development: new housing and infrastructure have positive implications for employment and population growth and, ultimately, should contribute to a more efficient and productive economy. A challenge for sustainable and progressive urban development is to think about development beyond, say, just provision of housing to consciously plan developments that surround affordable and accessible housing with adequate social services, medical care, and education, while also ensuring developments are environmentally sustainable.

Economic indicators are critical to society's progress, but to accurately understand and measure the progress of a society, there must be initiatives that include indicators outside the economy. In particular, by measuring components of progress that are more explicitly social and environmental, it is possible to correlate findings with economic indicators to determine the relationship between the two.

Numerous policy frameworks have been advocated for cities and urban locations to be 'productive, liveable, and sustainable'. In 2011, the Australian Government published its National Urban Policy, reflecting the 'Australian Government's intention to improve the productivity, sustainability and liveability of major urban centres' (DIT 2011: 7). This framework is a

cohesive approach responding to 'the need to improve productivity growth; provide affordable and accessible housing; create safe community spaces; meet the needs of a growing and aging population; ensure an inclusive and cohesive society; and address the implications of climate change'.

These three tenets—liveability, productivity, and sustainability—have since driven policy frameworks and advocacy for urban planning more generally. In 2011, the Victorian State Government partnered with the University of Melbourne 'to create evidence to inform public policy that can build healthy, liveable and sustainable communities in Victoria and beyond' (Lowe et al. 2013: 5). The Australian Sustainable Built Environment Council (ASBEC 2013) developed a plan of action for 'productive, liveable and sustainable cities for Australia'. In 2021, this framework was still being used by the Greater Cities Commission and the NSW Department of Planning and Environment to inform district plans and set a direction for Greater Sydney 2056 (Department of Environment and GSC 2017; Greater Cities Commission 2021).

The Australian Social Progress Index (SPI), the analytical focus of this chapter, is a holistic framework that can inform the planning of urban developments that are liveable, productive, and sustainable. It can also be used to track the extent to which urban spaces are delivering against indicators for people and communities.

Social Progress Index as a concept

Recognising the limits of considering only economic measures as indicators of progress, the SPI was first used in 2013 as a complementary indicator for development and progress within society. The nonprofit Social Progress Imperative defines social progress as

> the capacity of a society to meet the basic human needs of its citizens, establish the building blocks that allow citizens and communities to enhance and sustain the quality of their lives, and create the conditions for all individuals to reach their full potential. (Stern et al. 2018: 3)

Based on this definition, the SPI comprises three broad 'dimensions' of social progress: basic human needs, foundations of wellbeing, and opportunity. Four underlying components for each dimension speak to the concepts the data are trying to capture. When deciding which indicators to include,

the Social Progress Imperative has developed what are termed 'universally important questions' to help conceptualise a shared SPI framework (Figure 16.1). The index scores each included jurisdiction from zero to 100, and ranks them relative to one another, based on the outcome indicators that are included in the SPI's calculation. A jurisdiction is generally doing better at achieving social progress the closer to 100 are its scores.

The SPI has been calculated at a global level annually since 2013. The 2020 index captured 163 countries, using indicators collected and held by global agencies. Using the same framework and methodology, 'subnational' indexes have been developed for individual countries such as India and the United States (Kapoor and Debroy 2019; Social Progress Imperative 2018b), transnational jurisdictions such as the European Union (Annoni and Bolsi 2020), and local government districts (LBBD 2021). Paraguay was the first national government to adopt the SPI as part of its 2030 development plan, and index findings directed spending that resulted in an increase in internet access and a reduction in child stunting over four years. The SPI for Costa Rica Tourism Destinations provides key social indicators for the country's main tourist areas and has triggered discussions about the relationship between tourism and social progress (Social Progress Imperative 2018a). Subnational indexes allow for granularity (for example, by cutting data by state or community categories), as well as identification of indicators that are politically or contextually important for that jurisdiction when conceptualising each of the SPI domains. In 2018 and 2019, we led the development of an Australian iteration of the SPI, using locally relevant indicators and data (Weier et al. 2020).

Figure 16.1 Social Progress Index framework

Source: Stern et al. (2018). Reproduced with permission.

Australia's social progress

The first Australian SPI was calculated as a time series, comparing states and territories on overall social progress and its related domains between 2015 and 2018 (CSI 2020). The index is calculated from publicly available outcome data that can be addressed by changes to policy or programs to yield better outcomes (such as the estimated homelessness rate or the proportion of people who feel safe using public transport). Datapoints were converted to standardised scores using identified 'best-case' and 'worst-case' scenarios. Wherever possible, these scenarios were based on state, national, or international goals, such as New South Wales's commitment to reduce homelessness by 50 per cent, or targets set out in the United Nations' Sustainable Development Goals. Where no relevant goals were identified, historical datapoints were used. The use of best and worst-case scenarios standardises the index and component scores, but also serves as an advocacy tool that demonstrates there is always room for improvement in how programs and services are delivered.

Due to data availability, the index could only be calculated at a state/territory level of granularity, using 52 indicators that included survey responses, administrative data, and environmental data such as air-quality ratings (Figure 16.2). This results in a 'smoothing out' of statistics that cannot reflect the diversity of outcomes experienced dependent on location. However, an examination of results between 2015 and 2018 provides insight into Australia's development in social progress. All states and territories had higher overall social progress scores in 2018 than in 2015. The Australian Capital Territory ranked first each year, while Western Australia and the Northern Territory ranked seventh and eighth, respectively.

The Australian Capital Territory is the smallest geographic jurisdiction in Australia, comprising only one major city. Western Australia and the Northern Territory, in contrast, have the highest proportions of residents living in remote and very remote areas, including the highest proportions of residents who are Aboriginal or Torres Strait Islander and/or living in a remote community. This distribution of the population has implications for the availability of appropriate and supportive services that can be easily accessed. As the indicators included in the SPI rely on outcome data, the results suggest that access to appropriate care and services is not equitably distributed across jurisdictions.

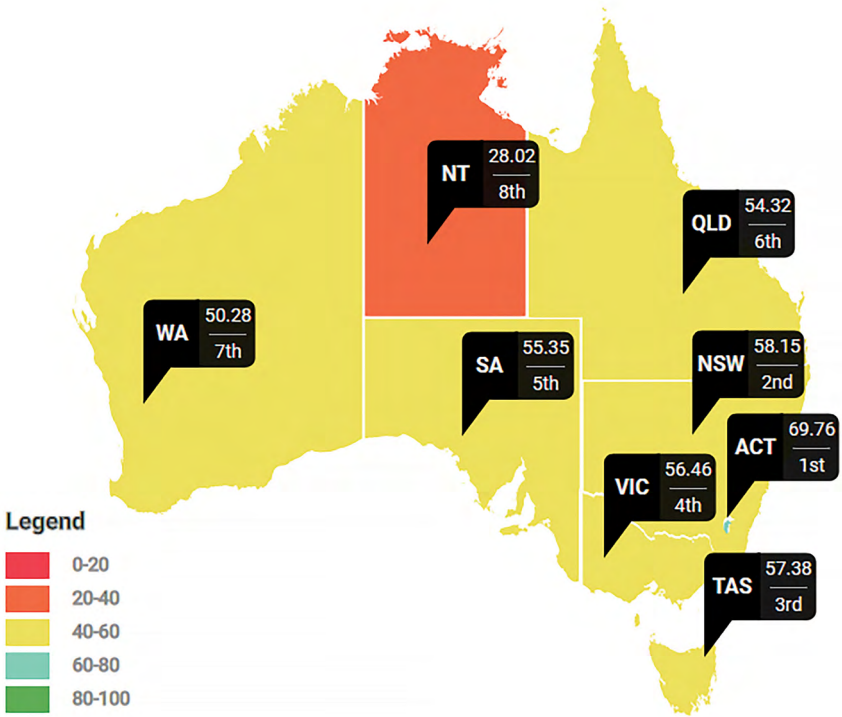

Figure 16.2 Australian Social Progress Index 2018 scores and rankings
Source: CSI (2020). Reproduced with permission.

Based on the included indicators, several components received mid-range scores (between 40 and 60 out of 100) across each state and territory that suggest average performance compared with stated national goals. Access to information and communication was one of the lowest-scoring components across the entire index, alongside personal freedom and choice, inclusiveness, and the accessibility of advanced education. While these components of social progress are not at first glance directly the responsibility of urban policy more generally, the indicators used to calculate the scores, and the universal guiding questions for these components, highlight the need for a multi-lens approach to urban planning. Developments must provide housing and access to amenities and infrastructure, but to be truly liveable, they must also be designed in ways that help to address social inequities and improve quality of life for all residents (Manaugh et al. 2015; Tahmasbi et al. 2019).

Helping to understand and address inequities

Even before the economic impacts of the Covid-19 pandemic, income inequality was a matter of policy concern and priority. Despite relatively high average household incomes by international standards, Australia's wealth is unequally distributed. It has been estimated that in 2018 the top 20 per cent of households held 90 times the amount of wealth of the bottom 20 per cent (Davidson et al. 2020). The fact that more than half of household wealth is held in property demonstrates the role that urban development can play in contributing to and helping to address social inequities.

Ensuring urban planning considers employment opportunities and income levels is critical, but it is not sufficient to help determine whether an urban area is liveable, productive, and sustainable. The Australian SPI demonstrates that for overall progress to improve, policies, programs, and services must be designed with inclusivity and equity in mind. A similar approach can be taken to urban planning. The SPI's framework and universally important questions create a structure for a variety of stakeholders to join in planning urban development, by considering factors such as:

- Is the planned housing inclusive of social and affordable housing?
- Is there adequate infrastructure to support fast internet connections?
- Are there schools and other education centres close by?
- Is there easy access to health and welfare services?
- Are parks, shopping centres, and other public spaces designed to ensure that people feel safe and included?
- What is the environmental impact of the development, and how can the development ensure it is using environmentally sustainable design?

Influencing future social progress in urban areas

With improved technological capabilities it has become possible to draw on diverse data sources to create multidimensional community profiles or 'social atlases' (.id community 2021) that can provide snapshot insights into small-area community differentiation, education levels, employment, and family composition. This also builds on earlier work by social scientists (Vinson 2009; Vinson et al. 2015) using administrative and geographic datasets. While understanding demographic profiles through mechanisms

such as the census is vital for directing funding and services, they cannot provide insight into the social outcomes that are a result of urban design or service delivery. A statewide SPI cannot identify the complexities or areas of challenge for urban areas undergoing development. More disaggregated data, which are collected consistently across jurisdictions and at least at the scale of local government areas (LGAs), should be a long-term goal for understanding the priorities for developing progressive and sustainable societies.

This will require data that can identify the policy and program needs of communities. As a starting point, existing indexes, such as Socio-Economic Indexes for Areas (SEIFA), can be used to determine and prioritise need levels in different communities. However, as demonstrated by others (for example, Saunders 2008; Lim et al. 2011), the use of SEIFA alone to identify low socioeconomic status or other indicators of individual disadvantage is not necessarily accurate, nor does it consider the ways in which policy application may be producing or increasing disadvantage. Using a measure such as the SPI, which is based on the outcomes of policies or programs, would help to determine which social planning activities are contributing to disadvantage. The SPI methodology can then be used to determine localised social progress. This would inform the design of urban developments in responding to the needs of communities, address gaps where they exist, capitalise on structures and services contributing to positive outcomes, and track social progress over time to ensure urban areas continue to evolve, adapt, and improve.

Designing future liveable, productive, and sustainable urban areas: Sydney's west as an example

'As part of Sydney's growth, a city the size of Adelaide and Canberra combined is being built now in Sydney's west' (UNSW et al. 2017). So, how can we make sure future opportunities are available to all our citizens? How do we make sure that all young people have equity of access to the jobs and other opportunities of the future? How do we make sure these urban areas are liveable, productive, and sustainable?

The Western Sydney City Deal and other initiatives, like the new airport (Collins 2021), offer unparalleled opportunities for growth and evolution. The Greater Cities Commission (2021) is endeavouring to implement the 'Greater Sydney Region Plan: A Metropolis of Three Cities' at a district level with the aspiration of 'liveability, productivity, and sustainability'. Given the opportunities and investments currently under way, now is the time to ensure that we maximise equity of opportunity in all aspects of this major development commitment.

Based on the commission's districts, the areas of growth in the west of Sydney include four Central City LGAs and eight Western Parkland City LGAs (Table 16.1). The original inhabitants of the lands identified herein are the Bidjigal, Cabrogal, Darkinjung, Dharawal, Dharug, Gundungura, Gweagal, and Tharawal peoples.

Table 16.1 Greater Sydney Region Plan: District boundaries in the west

Central City LGAs	Western City LGAs
Blacktown	Blue Mountains
Cumberland	Hawkesbury
Parramatta	Penrith
The Hills	Camden
	Campbelltown
	Liverpool
	Fairfield
	Wollondilly

Source: Department of Planning and Environment (2021).

Yet, if social progress goals are to be achieved, urban planning must not only aim for increased equity, but also address inequities that are already entrenched. To determine social need, indicators such as SEIFA from ABS Census estimates are used as proxies for determining disadvantage. One subindex of SEIFA, the Index of Relative Socio-Economic Disadvantage, illustrates that communities in many western Sydney LGAs are faring worse than other areas in Australia and New South Wales (Table 16.2). These scores are based on population factors such as the proportion of households on low incomes, private dwellings with no internet connection, and the proportion of people with a long-term health condition or disability.

Table 16.2 Western Sydney district indexes of relative socioeconomic disadvantage

Area	2016 index	Percentile within Australia[a]
Blacktown City	986	37
Blue Mountains City	1,045	73
Camden Council	1,056	80
Campbelltown City	950	21
City of Canterbury-Bankstown	935	17
City of Parramatta	1,039	69
Cumberland Council	929	15
Fairfield City	856	6
Hawkesbury City	1,028	62
Liverpool City	952	22
Penrith City	999	44
The Hills Shire	1,107	98
Wollondilly Shire	1,043	72
Western Sydney (LGA)	978	33
Greater Sydney	1,018	56
New South Wales	1,001	45
Australia	1,002	46

[a] Percentile ranking provides an approximate position of this locality in a ranked list of all Australian localities. Higher percentile rankings indicate there are fewer locations that are less socioeconomically disadvantaged than that area.

Source: .id community (2020). Compiled from ABS Census of Population and Housing 2016.

As this profile shows, these areas have higher levels of disadvantage compared with Greater Sydney. Yet, this analysis is based primarily on household or individual-level factors, rather than demonstrating disadvantage that is created through inadequate access to services or social support. Given the sheer growth and economic investments occurring in this region, now is the time to ensure that disadvantage is reduced (rather than compounded) in all aspects of urban planning and service provision. This includes leveraging and building on existing infrastructure and services and focusing on geographical areas showing indicators of disadvantage, as discussed below.

Table 16.3 Key demographics of western Sydney communities

	Median age	Aboriginal or Torres Strait Islander population (%)	Households with children (%)	Households with 6 or more residents (%)	Unemployment rate (%)	Born overseas (%)	Language other than English spoken at home (%)
Blacktown City	33	2.8	59.4	7.7	7.3	40.4	41.0
Blue Mountains City	44	2.4	40.5	2.7	4.7	16.8	6.0
Camden Council	33	2.5	57.3	5.6	4.1	17.6	14.4
Campbelltown City	34	3.8	54.2	6.7	7.9	31.4	30.3
City of Canterbury-Bankstown	35	0.7	52.9	7.9	8.2	44.0	60.1
Cumberland Council	32	0.6	53.1	9.7	9.5	52.2	65.6
Fairfield City	36	0.7	60.2	11.0	10.5	53.9	70.7
Hawkesbury City	38	3.7	48.4	5.0	4.3	12.3	5.9
Liverpool City	33	1.5	59.5	8.8	7.5	40.7	51.9
City of Parramatta	34	0.7	47.5	3.9	7.0	49.5	52.0
Penrith City	34	3.9	51.4	5.5	5.7	21.6	16.8
The Hills Shire	38	0.5	61.4	5.7	4.6	35.1	31.8
Wollondilly Shire	37	3.2	52.9	6.2	4.0	11.8	5.6
Western Sydney (LGA)	35	1.8	54.4	7.1	7.1	38.6	43.6
Greater Sydney	36	1.5	45.8	4.0	7.1	27.6	25.1
Australia	38	2.9	40.7	3.4	6.9	26.3	20.8

Source: .id community (2020). Compiled from ABS Census of Population and Housing 2016.

Based on projections from the previous ABS Census (.id community 2020), there are an estimated 2.59 million people living in the western Sydney LGAs. In general, people living in western Sydney are younger and more likely to have children, be unemployed, be born overseas, and speak a language other than English at home compared with the rest of New South Wales and Australia (.id community 2020). As Table 16.3 shows, cultural diversity—including the proportion of residents who are Aboriginal and/or Torres Strait Islander—varied greatly across LGAs.

Disadvantage has increased in these areas in recent times with the proportion of people on social security rising at a higher rate than the Greater Sydney and NSW averages. It increased from 4.8 per cent in March 2020 to 8.4 per cent in January 2021, compared with 6.6 per cent of the population in Greater Sydney and 7.6 per cent across all New South Wales (DSS 2021). The role western Sydney plays in delivering social services was demonstrated in one of the largest outbreaks of Covid-19 cases in Australia, with the majority of infections occurring in western Sydney LGAs (NSW Health 2021). It is speculated that spread occurred in these areas in large part because of the higher proportion of residents who were employed in 'essential' services or insecure work and were therefore less likely to be able to work from home or stay home when unwell. The proportion of households with six or more residents is also higher in these communities of concern, contributing to family spread of infections.

While many of these communities face significant challenges, the right planning, services, supports, and infrastructure can mitigate the impacts and help create equity of opportunity for children, families, and communities. There is great opportunity especially given the high proportion of children and young people in these areas.

Continuing the tracking of advantage and disadvantage through SEIFA over time is important, but it does not directly assist communities or policymakers to make refined changes to social issues and determine where and whether they are making a difference to social progress. Extending the calculation of the Australian SPI to a community level could assist because it would not only provide a high-level globally, nationally, state, and (potentially) community comparable index, it would also provide granularity for practical application. While community-level indexes have not yet been calculated within Australia, we are beginning work with local councils that use the SPI framework and its universally important questions

to help guide planning and prioritisation, but also to directly identify the anticipated outcomes that can be measured over time to evaluate whether a social progress mindset in urban planning yields its anticipated outcomes.

In the case of planning for Sydney's west, this could involve: access to safe, affordable, and appropriate housing; ensuring environmental sustainability is addressed in planning within households and across the community; ensuring that educational opportunities and health services are available, accessible, appropriate, and acceptable across the life cycle; ensuring that food scarcity is addressed and people can access three nutritious meals a day; addressing domestic and family violence; ensuring that inclusion is addressed in regard to physical infrastructure, community belonging, and lack of stigma; and addressing digital inclusion through hardware, skills, data availability, and capability. A planning approach based on SPI principles means we would be building in not just jobs, but also the opportunity to access those jobs, and setting up children and young people with the skills and resources to support them to make the most of the opportunities from the future growth in these districts. In the long term, a community-level calculation of an SPI could act as a complement to SEIFA scores everywhere, identifying where individual disadvantage is compounded by poor outcomes from inaccessible or inappropriate service delivery.

Conclusion

Australia has experienced remarkable and unparalleled economic growth since the 1970s. Yet, there are great disparities between this growth and our social progress, demonstrating that tracking economic growth alone is not sufficient to understand how we are faring as a society. At federal and state levels, urban policy frameworks are embracing urban design approaches that support productive, liveable, and sustainable outcomes. However, design alone is insufficient. We must also be able to understand whether and where we are making social progress. Are we meeting basic human needs, establishing the building blocks that allow citizens and communities to enhance and sustain the quality of their lives, and create the conditions for all individuals to reach their full potential?

The SPI has promise. Social progress as a concept, and the SPI, was first used in Australia in 2018–19 with nationally relevant indicators and data. There is a significant opportunity for the SPI to be further adapted to measure social progress at a smaller scale. The issues accompanying

growth in Sydney's west are one such opportunity, in an area in which social progress is at a crossroads. Urban designers and policymakers could use the components of the social progress framework to ensure that basic human needs, foundations of wellbeing, and opportunity are built into infrastructure and social scaffolding within communities.

There are of course challenges in using the SPI in a design and evolution process. For example, government responsibilities exist at local, state, and federal levels (requiring better integration and coordination); there are major gaps in the tracking and reporting of data; and results must be acted on by different players across government, business, not-for-profit, and community sectors in addition to individuals in the community. In selecting indicators at a community level, we also considered the annual availability of data, granularity, the adequacy of the sample sizes, and the reliability and transparency of the data collection processes. There are current limitations because of a lack of consistent environmental indicators, irregular collection of social indicators, and the 'deficit approach' of available Indigenous indicators. Finally, it will be important to also examine socio-spatial equity within communities.

Nonetheless, the social progress framework is a potentially positive tool for urban policy and the SPI can measure changes over time to see where and whether design and interventions are making a difference and can be used to adapt and apply changes with real-time, community-based responsiveness.

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