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# Public open space contributions in Victoria: A preferred approach

Marcus Spiller, Jo Noesgaard & Aline Raad

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SGS Economics and Planning Pty Ltd
ACN 007 437 729
www.sgsep.com.au

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# Executive summary

**In this SGS Economics & Planning Pty Ltd (SGS) Occasional Paper, Marcus Spiller, Jo Noesgaard, and Aline Raad propose a preferred approach to the calculation of public open space (POS) development contributions under Victorian legislation.**

Councils rely heavily on development contributions under Cl53.01 of the Victoria Planning Provisions to acquire and develop public open space. However, there is little formal guidance from the State Government as to how the rates, which are potentially enshrined in Cl53.01, might be calculated and strategically justified.

Business-as-usual arrangements, under which most of metropolitan Melbourne is covered by contribution rates of 5% or less of site value, would see a rapid deterioration of access to POS given the projected strong growth of the city.

As councils review their Cl53.01 rates, it is important that they have regard to four key principles. These include: treating the municipality as one planning unit; ensuring that POS supply is adequate in quantum, accessibility, and quality; applying contribution obligations equitably regardless of the timing of development; and applying contributions to all residential and employment land use.

Cost apportionment for POS may be determined by applying one of a range of mutually exclusive conceptual models, including impact mitigation, value capture, user pays and inclusionary requirements. The latter two are generally the most appropriate when considering municipal open space contributions.

While the user pays framework is used extensively in the Victorian development contributions system for other forms of infrastructure, it is problematic with respect to POS provision in the established parts of metropolitan Melbourne. As new development is likely to be a relatively small proportion of the future pool of users, this approach generates unduly low contribution rates and limited revenue.

Under the inclusionary requirements approach, each successive unit of development is expected to equip itself with sufficient open space to meet its needs, or pay for this to be provided off-site. Such requirements are used elsewhere in the planning system, including for car parking and management of stormwater drainage, for example.

The inclusionary requirements approach itself may be applied in a variety of ways. The POS contribution may be fixed having regard to a planned program of acquisition and works, or it can be determined by reference to a provisioning standard, that is a rate of POS availability per capita.

A standards based approach is preferred because it avoids the fraught issue of determining long-term POS acquisition and programs in the absence of funding certainty. It also avoids arbitrary decisions about what investment is required to service future development as opposed to historic development.

There is a strong practice record for an aggregate provisioning standard of the order of 30 sqm per capita. This was first adopted for the purposes of open space planning in Melbourne as part of the 1954 Metropolitan Plan and is still used by many local governments today.

This paper argues for a standards based approach to the determination of open space contribution rates. This would see the contribution obligation being distributed across all development regardless of timing or land use type, based on treating the municipality as one planning unit.

A standards based approach avoids the fraught issues of determining long-term POS acquisition and programs, and deciding what investment is required to service future development as opposed to historic development.

# 1. Introduction

## 1.1 Overview

Delivery of adequate public open space (POS) for current and future populations is the responsibility of state government, local government and developers.

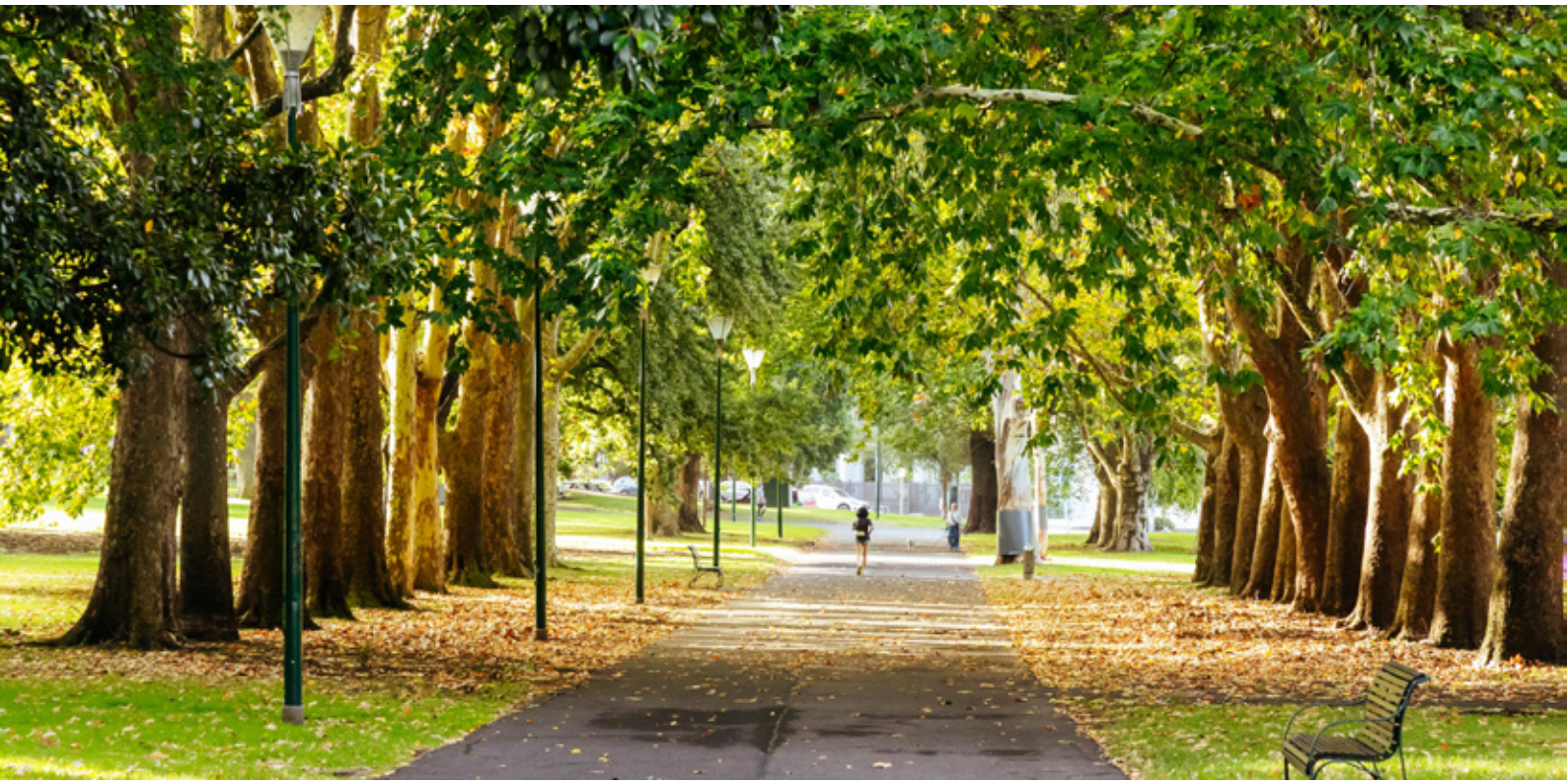
In this Occasional Paper, we propose a preferred approach to the calculation of public open space development contributions under Victorian legislation.

Councils in Victoria have a number of options for levying development contributions for the provision of municipal open space. They can:

- Embed levies in an Infrastructure Contribution Plan (ICP) or Development Contribution Plan (DCP) made under Part 3AB or Part 3B of the Planning and Environment Act 1987.
- Rely on the general power to levy development upon the creation of separate allotments under the Subdivision Act 1988. The Subdivision Act allows for contributions of up to 5% of site area or site value, but these amounts are appealable on a case by case basis.
- Codify the levy power under the Subdivision Act by incorporating municipal-wide or district/ area specific contribution rates in the Planning Scheme by amending Clause 53.01 of the Victoria Planning Provisions.

Councils in established areas almost exclusively rely on the third option. However, there is little formal guidance from state government as to how the rates, which are potentially enshrined in Clause 53.01, might be calculated and strategically justified.

Our focus in this paper is on metropolitan Melbourne, but the principles and methods we discuss are equally applicable in all development settings across the State and, indeed, across Australia.



## 1.2 The policy problem – a looming rapid decline in availability of open space

As shown in Table 1 Clause 53.01 provisions vary significantly across metropolitan Councils. However, the majority apply a contribution rate of 5% or lower.

This percentage rate refers to the proportion of developable land (residential, industrial, commercial) required to be set aside for public open space. If open space cannot be provided on the development site, or if the land in question is not suitable for open space provision, the council in question collects the nominated percentage of site value in cash.

Council is then responsible for deploying these funds on the delivery of additional open space and/or the redevelopment of existing open space. Funds can be expended on open space acquisition or embellishment in any part of the municipality. In contrast to levies made under DCPs and ICPs, contributions need not be applied in the vicinity of the sites that generated the revenue.

TABLE 1: CLAUSE 53.01 OPEN SPACE CONTRIBUTION RATES (AS AT APRIL 2026)

| | |
|---|---|
| Bayside | 5% for Strategic Development Sites, none specified elsewhere |
| Boroondara | None specified |
| Brimbank | 5% commercial and res, 2.5% industrial |
| Cardinia | Generally 8% (other figures apply in specific areas) |
| Casey | Typically 10% |
| Darebin | Typically 5%, Preston Market 10% |
| Frankston | 5% in most res areas, 8% in Frankston Activity Centre |
| Glen Eira | 8.30% |
| Greater Dandenong | Typically 6.3% |
| Hobsons Bay | Typically 5%, 7.1% in particular development areas |
| Hume | 2% to 4.8% |
| Kingston | 5%, 8% in activity centres |
| Knox | Typically 5% |
| Manningham | 5%, 8% in activity centres |
| Maribyrnong | 5.70% |
| Maroondah | Typically 5% |
| Melbourne | Typically 5% or 7.06% |
| Melton | Varies between 2.89% and 9% |
| Monash | Generally 7.61% |
| Moonee Valley | 5% |
| Merri-bek | Varies between 2.5% and 6.8% |
| Mornington Peninsula | Typically 5% |
| Nillumbik | Typically 5% |
| Port Phillip | 5%, 8% in Fishermans Bend |
| Stonnington | 5% and 8% |
| Whitehorse | 4% |
| Whittlesea | 8% to 11.3% (including encumbered land) |
| Wyndham | 2.65% to 9.9% |
| Yarra | Generally 8.65% |
| Yarra Ranges | 5% |

Source: Planning Schemes

Councils rely heavily on open space contributions to acquire and develop public open space. These contributions have become even more important in the context of rate capping, escalating infrastructure costs, and rapid population growth. Given the generally low rates of Cl53.01 contributions, headline access to parkland and open space in metropolitan Melbourne will likely decline significantly with the city's ongoing rapid growth.

We have made an estimate of the quantum of council-owned public open space per capita in 2043 versus 2023 based on the following assumptions and inputs:

- Metropolitan population forecasts as published by the Victorian Government
- Forecast population growth occurs at an average site density of 60 dwellings per hectare, covering both greenfield and infill development
- Local government-owned public open space per capita as reported by the Victorian Planning Authority (VPA) in a 2017 report[1]
- Open space contribution rates average 6%.

We calculate that municipal open space per capita stood at 23.5 sqm per capita in 2023 and, if development over the next 20 years contributed 6% to open space, this could fall to 18 sqm per capita by 2043. This is a reduction of almost 25%.

There is therefore an urgent need to overhaul Clause 53.01 provisions in metropolitan Melbourne if living standards - and all the health, cultural and economic benefits associated with local public open space - are to be maintained.

### 1.3 State Government policy

The State Government has published a number of reference documents to support councils in the preparation of open space strategies. These policies, strategies and guidelines address definitions of open space, the importance of equity and access, and assessment of future demand – albeit outside of greenfield growth areas, they are silent on how open space contributions should be quantified and assessed.

The Guide for Open Space Strategies (GOSS)[2] was developed by the Department of Energy, Environment and Climate Action, as part of implementing the Victorian Government's Open Space for Everyone – Open Space Strategy for Metropolitan Melbourne (2021) (OSE). The guide supports strategic planning and decision-making for the provision and design of open space. It delivers on one of the tasks within the enabling action 'modernise legislation, standards and guidelines' set out in OSE 2021. It guides public open space managers in preparing local open space strategies to protect, optimise, and grow open space networks. The guide recommends including definitions of accessible and restricted or encumbered open space to ensure they are not left exposed to the adoption of unsuitable land as a POS contribution.

The guide notes that the Department of Transport and Planning (DTP), responsible for managing infrastructure contributions, including POS contributions, is reviewing the infrastructure contributions system to ensure property developers contribute more fairly to funding local infrastructure, parks and services. The Plan for Victoria 2025 sets out a vision for the State through to 2050. The Plan prioritises investing in open space, shared community places, transport, streets and the many diverse places Victorians call home. Regarding open space, it outlines specific actions for the State Government, including the introduction of minimum standards and guidance for open space in established urban areas. The Plan promises better, more appropriate local open space provision for growing communities in established areas, delivered by DTP and DEECA.

The Plan adopts a broad definition of open space, covering various types of land like parks, gardens, and green areas at schools. Additionally, it foreshadows policy changes to ensure accessible open spaces near homes and promote shared use of school grounds after hours. However, the Plan does not address open space contributions.

Furthermore, the Plan introduces State Government Housing Targets and the direction to see 70% of future housing growth in established urban areas. The Guide for Open Space Strategies (GOSS 2025), developed by the Department of Energy, Environment and Climate Action, supports the modernisation of legislation and policies for open space. It provides guidance to public open space managers on developing local strategies to protect, optimise, and grow open space networks.

[1]https://vpa.vic.gov.au/wp-content/uploads/2018/02/Open-Space-Network-Provision-and-Distribution-Reduced-Size.pdf
[2]The guide replaces the previous Victorian Planning Practice Note 70 – Open Space Strategies 2015.

The GOSS notes that the Department of Transport and Planning (DTP), which has stewardship of development contributions policy, including POS contributions, was reviewing the infrastructure contributions system.

The Government's *Open Space for Everyone* (OSE 2021) strategy categorises open space as 'accessible', 'restricted', or 'encumbered' – see Table 2. Much of the restricted and encumbered land indicated in the table is not accessible to all community members. Often it is not appropriate for either passive or active recreation as a primary use. 'Accessible' public open space – which is the focus of Cl 53.01 contributions - is therefore the key resource in the context of this paper.

TABLE 2: VICTORIAN OPEN SPACE FOR EVERYONE - CATEGORIES OF OPEN SPACE

| Category | Accessible | Restricted | Encumbered or restricted |
|---|---|---|---|
| Primary purpose | Open space | Open space | Not open space |
| **Examples** | Parks | Botanical and zoological gardens | Government schools |
| | Coastal foreshores, bays and waterways | Conservation reserves | Retarding basins |
| | Pathways and promenades | Golf courses | Pipe tracks |
| | Community sports fields | Racecourses | Utility easements |
| | Off-road recreation trails | Community farms | Reservoirs |
| | Lakes and wetlands | | Cemeteries |
| | Gardens | | Boulevards |
| | Civic squares | | Road reserves |
| | Public forecourts | | Airspace over and space under transport corridors |
| | Piers and jetties | | Streets and transport corridors |
| | | | Publicly accessible rooftops |
| | | | Disused quarries in public ownership |

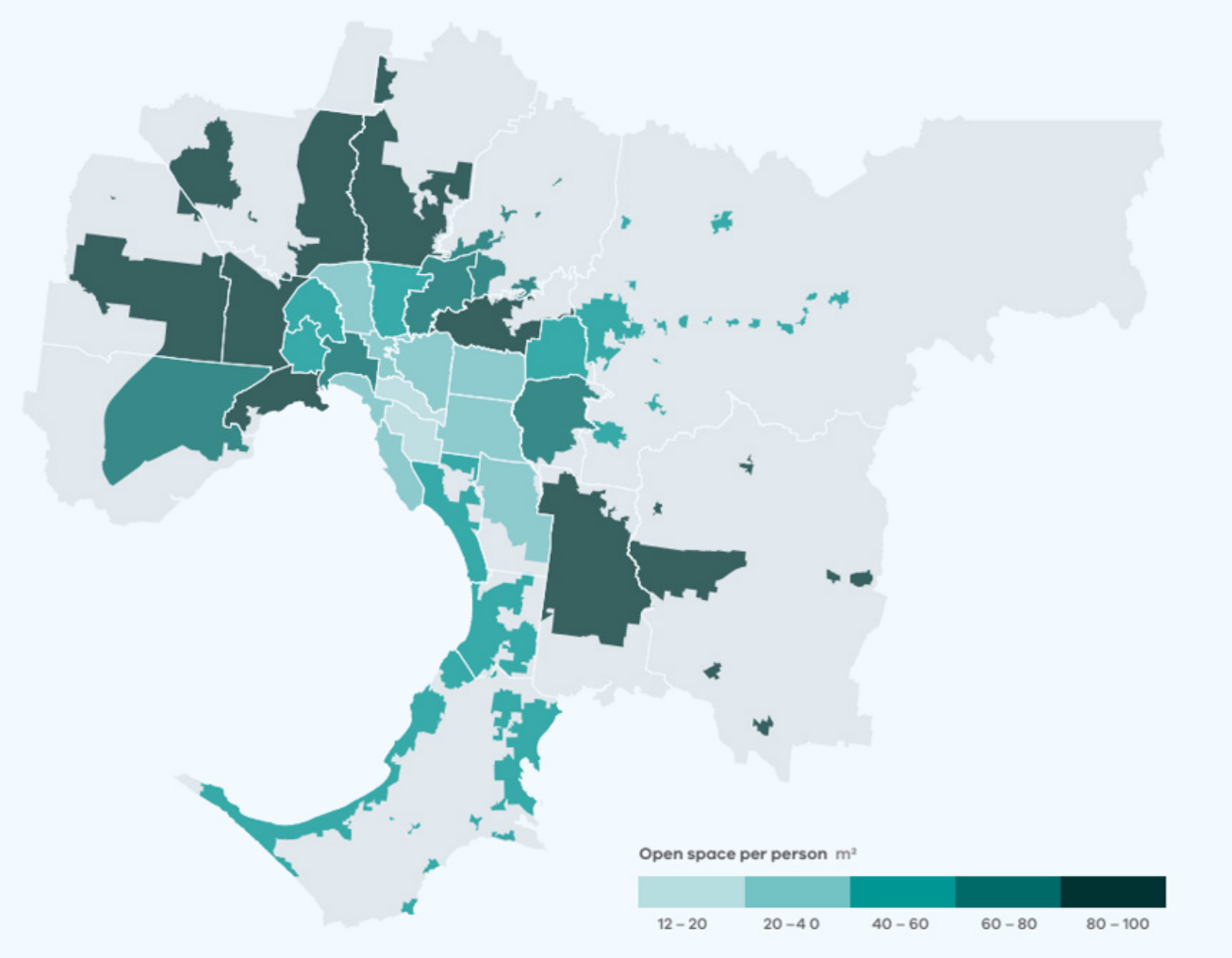
Source: Victorian Government, 2021 Open Space for Everyone

The OSE Strategy presents measures of open space per capita ranging across these categories. As noted in the Strategy itself, the measured availability of open space varies considerably depending on the spread of categories included in the count.

The City of Hobsons Bay provides a good example of this. While Hobsons Bay records a high level of broadly defined open space per capita (see Figure 1), much of this land functions as conservation reserves and is not fully accessible to the community. Moreover, a substantial proportion of this open space is comprised of planning buffers around Major Hazard Facilities.

Broadly defined open space provision varies greatly between local government areas, ranging from 12m2 per person to 100m$^2$ per person. It is noteworthy that inner and middle ring suburbs – which are expected to absorb around 70% of Melbourne's population growth over the next two decades - have relatively low provision.

FIGURE 1: OPEN SPACE (M2) PER CAPITA IN 2016 (INCLUDING ACCESSIBLE AND RESTRICTED OPEN SPACE)




Source: Victorian Government, 2021 Open Space for Everyone

The OSE Strategy notes that we *'cannot continue to plan for open space as we have in the past'*. This alludes to more creative approaches which might see better public access to land which at present is effectively off-limits. It also notes an imperative to generate more value from the accessible open space which is already in service.

The Strategy does not discuss how such innovations would ensure adequate access to open space for Victorians; it eschews the adoption of targets or standards by which adequacy of provision might be measured.

### 1.4 Scope and structure

Given the limited guidance from the State Government regarding how to calibrate development contributions for public open space, this paper outlines the authors' preferred approach based on our consultancy experience and self-funded research.

The paper is set out in four sections. Following this introduction, Section 2 proposes some overarching principles to guide the planning and funding of open space provision. Building on these, Section 3 canvasses and evaluates a range of approaches to cost apportionment in open space provision. Through this discussion, we identify the continuing importance of an open space provision standard as the lynchpin of a sound cost apportionment method. Finally, in Section 4, we present evidence on an appropriate standard for open space planning in Melbourne and Victoria.

# 2. Open space cost apportionment principles

## 2.1 Overview

We propose four overarching principles to guide the establishment of open space development contributions:

- The municipality in question should be treated as one planning unit featuring one open space network
- The local government area's (LGA's) open space network should be established and maintained with reference to adequate:
  - quantity
  - accessibility/distribution
  - quality/level of service
  - reliability of ongoing service provision
- All development should contribute its fair share towards an adequate open space network for the LGA, regardless of the development lifecycle of the municipality
- All development that benefits directly or indirectly from the open space network should contribute regardless of land use type.

## 2.2 Principle 1: One planning unit / one open space network

Municipalities are legally constituted as one community. Their open space network is open to and serves the whole community. It is reasonable, therefore, to treat the LGA as one unit for the purposes of POS planning.

It follows that development proponents have a shared and equal responsibility to ensure that the whole LGA has an open space network suitable to its needs.

Contributions under Clause 53.01 of the Victoria Planning Provisions may be deployed anywhere in the relevant municipality, regardless of where they are collected. This underlines the fact that the municipality may be treated as one planning unit for open space purposes.

## 2.3 Principle 2: Adequate open space network

Adequacy of open space provision needs to be judged with reference to a range of parameters, including:

- **Quantity:** this relates to the amount of public open space land available. We argue that, as with all infrastructure provision, a benchmark needs to be agreed upon. This benchmark is a starting point for understanding the level of current and forecast demand of open space (and any over- or undersupply). For the purposes of Clause 53.01, the quantity of *municipal* open space is of primary concern; that is, areas under the control of council specifically set aside for resort and recreation. As noted, measurement of quantity should relate to open space which is fully accessible to the public and is not compromised in terms of meeting local recreational needs. We recommend the application of a benchmark of 30 sqm per capita. The rationale for this standard is explained in Section 4.
- **Quality:** land area by itself is not sufficient to ensure that residents, workers and visitors gain the recreational value expected of POS assets. Quality, in terms of condition, facilities and infrastructure, must also be fit for purpose. Relevant POS attributes will include adequacy of drainage, fencing, landscaping, irrigation, toilet facilities, playgrounds, recreation infrastructure, pavilions, seating, lighting and the like. Alignment with the prevailing needs of the surrounding community, such as children, older people, people with disabilities, young people, and women, will also be relevant.

Furthermore, quality refers to the type of land. Public open space is land in which the primary purpose is open space that is freely available to the community. While encumbered land and restricted land may provide additional access to green space, they are unable to achieve the complete purpose of public open space.

**Public open space:** Publicly owned and accessible land in which the primary purpose is recreation, leisure, nature, or cultural conservation.

**Restricted open space:** The primary purpose of this land is open space, its public access is restricted or has limited access. This includes uses such as schools and joint use/lease agreements, specialised sporting infrastructure such as elite facilities, or conservation protection overlays.

**Encumbered land:** Land where the primary purpose is not open space, however, in some cases it may provide secondary open space functions such as linkages or access to nature. Generally, the primary purposes of this land are for transport, drainage, or utilities.

The value of 'resort and recreation services' offered by a particular POS asset will therefore be a function of quantity and quality, i.e.

***Value** of open space service **= Quantity** of open space **x Quality** of open space*

Importantly, this value axiom allows for a degree of substitutability between quantity and quality. Thus, a smaller area of open space provision may deliver the same value of open space services if developed with enhanced facilities. This should, however, be applied within limits. There will likely be a point where no amount of embellishment will compensate for the sheer lack of open space area.

The value axiom means that a provisioning standard relating to area, i.e. expressed in square metres per capita, may be adopted for the purposes of estimating a cash-in-lieu contribution requirement from proponents, but the proceeds may be applied to embellishment of parkland rather than acquisition of additional land.

- **Access** standards relate to the availability of different categories of open space services to residents, workers, and visitors. This is expressed in terms of a reasonable travel time or distance. The Victorian Planning Provisions include walkability standards. These are provided in Table 3. Access should be assessed based on actual walkability rather than "as the crow flies". This ensures that significant access barriers, such as major roads and waterways, are considered.

TABLE 3: ACCESS TO OPEN SPACE

| Type of Open Space | Benchmark |
|---|---|
| Local parks | Local parks within 400m of safe walking distance of at least 95%of all dwellings |
| Active open space | Active open space of at least 8ha in area within 1 kilometre of 95% of all dwellings |

Source: Victorian Planning Provisions – Standard C13

- **Reliability** relates to the continuity of open space services available to residents, workers, and visitors over an indefinite period. It intersects with the above-noted requirements and notes that municipal open space should generally be in the ownership by government to support perpetuity and ongoing free access.

### 2.4 Principle 3: All development should contribute a fair share, regardless of staging

This principle relates to equitable treatment of development over the long trajectory of development in a district or municipality.

In greenfield growth areas covered by Precinct Structure Plans (PSPs), there is a strong emphasis that all successive development makes an equal contribution to the planned open space network for the area. This includes an equalisation scheme under which landholders who are required to set aside a relatively greater proportion of their property for open space provision compared to the standard requirement are compensated for this via levies on landholders who have a 'lighter' obligation to provide open space on-site.

In these PSPs, proponents provide the same effective contribution towards the land and works required for adequate open space provision regardless of whether their developments occur early or late in the process of building out the planned district.

The same equity principle should apply in established areas. Proponents coming into a municipality with a relatively mature open space network should make their fair contribution to the provision of this infrastructure.

### 2.5 Principle 4: All development that benefits should contribute

This principle calls for non-residential development, as well as residential development, to contribute to municipal open space provision.

Industrial, commercial and retail development has the same requirement for access to council open space as residential uses. That is, non-residential uses must be supported with the provision of council open space in the same way as residential uses are, notwithstanding that the visitation they generate to these assets may vary from their residential counterparts.

To illustrate, a worker in an industrial area may jog around a local sports oval once a week, whilst a local resident may do the same jog five times a week. Both require access to this service for their respective employment and homes to be deemed to be in a functional and sustainable neighbourhood. The indivisibilities in council open space provision mean that the facilities cannot generally be scaled in line with visitation.

Moreover, industrial, commercial, and retail uses are part of the wider LGA community and a single planning unit. They benefit from being in a municipality that is properly equipped with essential infrastructure, including council open space. They therefore have a responsibility to help provide this infrastructure.

# 3. Approaches to cost apportionment

### 3.1 Methodology review

In the absence of State Government guidance, a variety of methods for apportioning open space network costs across development have been applied by Victorian municipalities.

These methodologies can be distinguished by reference to a four-part typology of 'development contributions', using that term in its generic sense rather than that attaching to levies under DCPs/ICPs implemented under Parts 3B and 3AB of the Planning and Environment Act. Depending on which conceptual frame is applied, significant variations in Clause 53.01 contribution rates can arise.

The four development contribution types are summarised in Figure 2.

Of the four mutually exclusive development contribution types depicted in the diagram, 'user pays' and 'inclusionary provisions' are most relevant here. The user pays framing follows the principles applied in Development Contribution Plans and the like, where the cost of specific planned works is apportioned according to the projected share of usage.

When this approach is applied to established urban areas, a relatively small proportion of the cost of future works and acquisitions will be recoverable from the Clause 53.01 provisions. This is because new development will generally comprise a small proportion of the total user base at the horizon year in question.

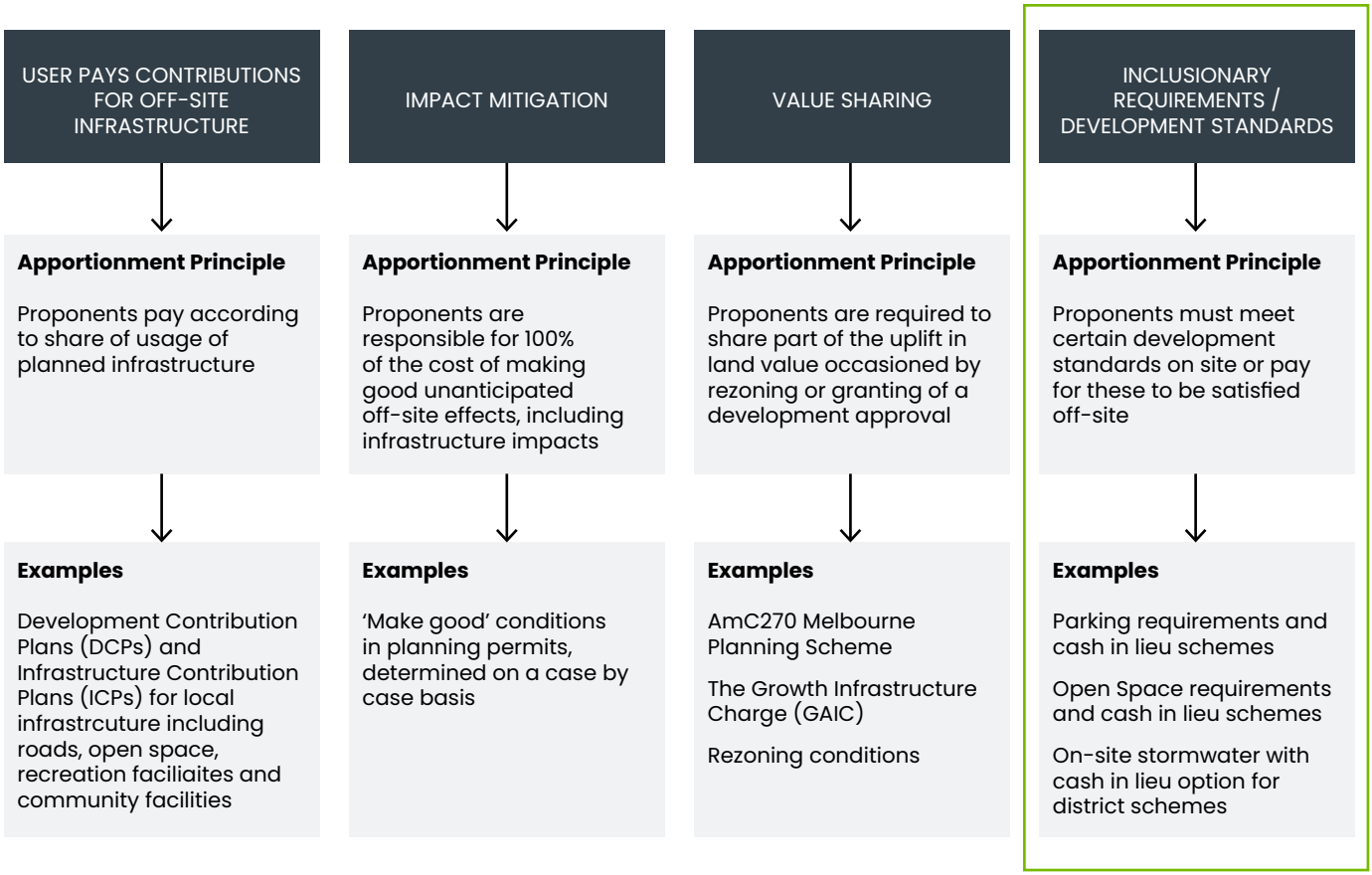
The shortcoming of the user pays approach in established areas is that new development does not pay its fair share of past investment in park acquisition and development. This contravenes the principles set out in Section 2. Furthermore, it does not allow for the fact that the marginal additional investment required in works and acquisition may be largely attributable to new development as distinct from the existing body of development in the LGA.

In contrast, the inclusionary provision approach relies on the principle that each successive unit of development should, in a conceptual sense, either equip itself with the POS it requires or pay for it to be met off-site. Assuming the same quantum and quality of planned open space, the user pays approach, and the inclusionary standards approach would only deliver the same Clause 53.01 requirement when all development is occurring in an entirely greenfield situation.

The inclusionary provisions approach typically relies on a planning standards framework, as applied, for example, with car parking provisions. The standards in question can be derived from a general provisioning metric, such as 30 sqm per capita. We discuss the selection of an appropriate standard in Section 4.

Alternatively, the inclusionary provision standard may not be a predetermined supply number, but can be the outworking of the cost of the POS network as already delivered and planned. This constitutes a customised provisioning standard.

FIGURE 2: DEVELOPMENT CONTRIBUTION TYPES




Source: SGS Economics and Planning

## Contributions and POS capital works and acquisition programs

The question of how much a proponent should contribute towards POS is independent of the question of what the council will commit to by way of an acquisition and works program.

Under the inclusionary provisions approach, the POS contribution is not a user charge that links to a program of infrastructure services. Rather, it is an obligation to contribute to a fund which is exclusively dedicated towards the creation of a single, community-wide, network of POS.

By separating the questions of quantum of contribution from that of capital outlay commitments, the community gains greater assurance that it will be equipped with the POS network it needs. This is so because there is a greater prospect of accumulating the funds required to establish an appropriate POS network.

By conflating these independent questions, good POS outcomes for the community may be compromised because a council may be reluctant, or unable, to commit to an appropriate long-term acquisition and capital works program. This could arise from capacity constraints within council and variable perceptions of fiscal risk across municipal electoral cycles.

An effective local 'Future Fund' for POS investment, sustained by a flow of contributions geared to POS sufficiency standards rather than acquisition and works programs, would mitigate these constraints.

Open space capital works programs should be used to ensure councils have a future delivery plan for deployment of contributions; however, they should not be used as the basis for calculating ongoing.

## 3.2 Preferred approach

### Overview

SGS treats a municipality as a single planning unit and applies the inclusionary frame with a provisioning standard of 30 sqm of POS per capita. This approach is fully congruent with the principles for fair and efficient POS contributions we proposed in Section 2.

This approach produces a uniform open space requirement, expressed as a percentage of site area or site value, for the whole municipality, with adjustments made only for very low-density or rural-residential development.

Establishment of an appropriate contribution through this approach does not require formulation of a long-term acquisition and works program, which may or may not be delivered, nor does it deliver arbitrary judgements about the proportion of costs attributable to the future community rather than the already established community.

It applies the following calculation method:

1. Treat the whole municipality as a single planning unit
2. Estimate the total amount of open space services required to meet the needs of the whole City at capacity with reference to a provision standard for this infrastructure, preferably, in our view, 30 sqm per capita (see Section 4)
3. Express the quantum of open space indicated at step (2) as a percentage of the aggregate area of all notionally developable lots in the City, including the quantum of existing POS. Inclusion of historically provided POS honours the principle that the future POS requirement should be taken from the full pool of land once available for development.

### Detailed method

To establish the contribution rate, it is essential to first determine both the Net Developable Area and the population capacity for the relevant Local Government Area.

1. The Net Developable Area is defined as all land within the planning unit that is available for development. It encompasses land zoned for residential use, most employment uses, and recreational park zones (PPRZ), while excluding conservation land, arterial roads, railway corridors, and special uses such as golf courses and other restricted uses.

This area is determined spatially using planning scheme zones and is further segmented as follows:

- **Standard density area:** Includes all residential land except for Low Density and Rural Living areas, all employment land (including industrial and commercial, but excluding certain uses such as Port zones, and all the PPRZ that fall within the above-mentioned land uses
- **Low-density area:** Includes Low Density and Rural Living Zones, as well as all PPRZ that fall within these land uses

Several manual adjustments may be needed to accurately reflect the developable land area. For example, major water bodies and golf courses are excluded regardless of their land use zoning, while planned residential land not currently included in the scheme may be added.

2. The amount of open space required considers the residential capacity of the municipality, assuming all land is fully developed and the implied population capacity. This figure can be calculated by multiplying the projected average household size (AHS) of occupied dwellings by the current number of dwellings plus the State Government's housing targets.

*Population capacity = Projected AHS × (Dwellings in 2026 + State Housing Targets)*

This method is intended to estimate the total population capacity of a Local Government Area that is being planned for via state and local housing directions. This ensures that open space planning aligns with the housing expectations of the LGA and essential infrastructure, such as open space, is available to support that growth.

The population capacity figure is then allocated between standard-density and low-density areas based on factors such as current development trends, greenfield versus infill targets, and planned growth areas. This allocation is determined on a case-by-case basis.

Once the population capacity and net developable area figures have been established, the contribution rate is initially calculated for the standard density area using the following steps:

- **Population capacity** of standard density (as per above)
- **Net Developable Area** of standard density (as per above)
- **Open space required** to accommodate population capacity; calculated by multiplying the population capacity by the open space provision standard of 30sqm per capita
- **Contribution rate:** calculated by dividing the open space benchmark by the Net Developable Area

*Contribution rate =*
*Open space required / Net Developable Area*

*Where: Open space required =*
*Population capacity x 30sqm benchmark*

**Open space contribution adjustment for Low Density Residential and Rural Living Zones.**

In some LGAs, it may be necessary to adjust the contribution rate calculated for standard density areas to account for very low density areas. This adjustment is based on the principle that the dollar value of open space contributions should be broadly comparable on a per-dwelling basis, regardless of whether a development is located in a low or standard density area.

The adjustment is calculated by considering both the average square metre value and the average lot size of properties in standard and low density areas within a given LGA, as reported by the Victorian Valuer General for the previous year.

*Ratio = average site value standard density ÷ average site value low density*

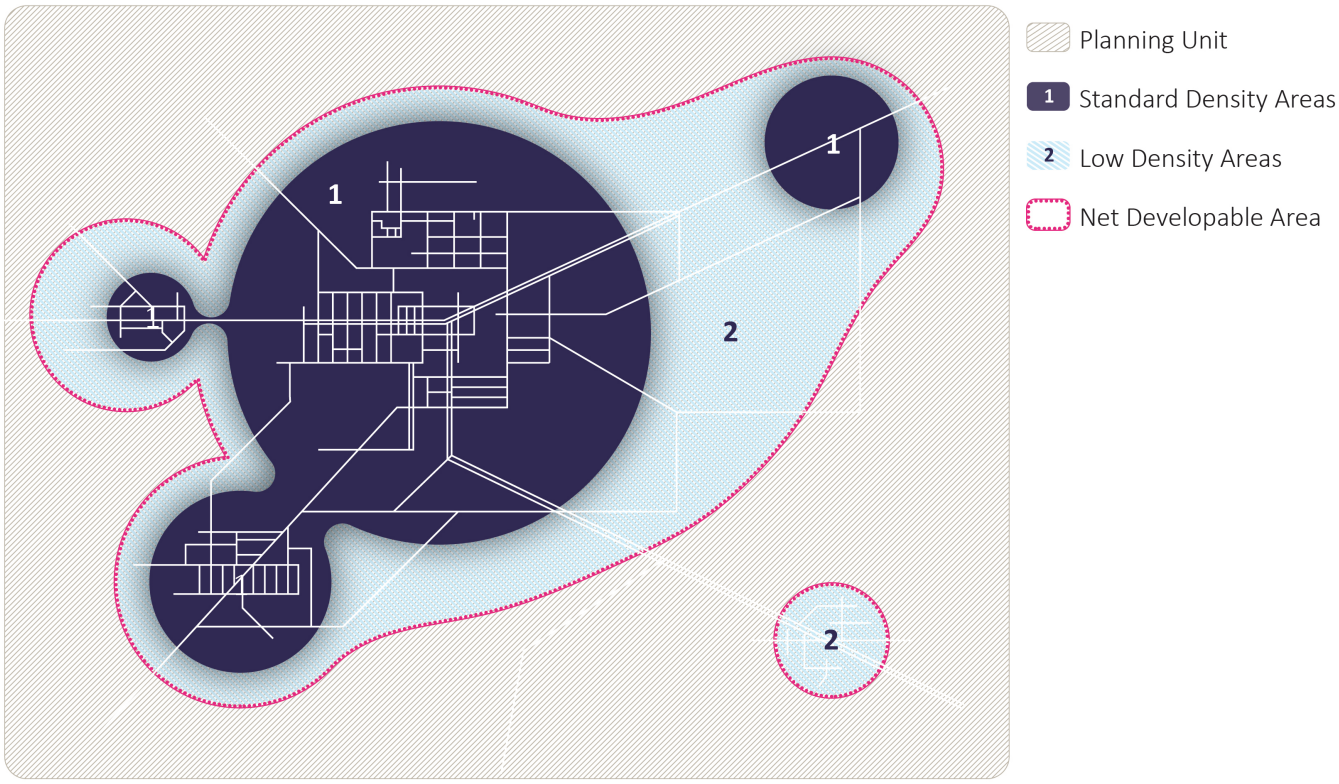
The ratio of the average site value in standard density areas to that in low density areas is multiplied by the standard density contribution rate to determine the contribution rate for low density areas.

*Contribution rate low density = Ratio × Contribution rate standard density*

The contribution rate considers the entire municipality as one Planning Unit but recommends two different rates to reflect variations in land size and land prices between established ('standard density') and very low density areas, ensuring a similar per-dwelling contribution.

**Example**

The visual below illustrates the spatial distribution of the Net Developable Area (NDA) and its associated density classifications within a Local Government Area. The assumed total NDA is 240,000,000 square meters, with 80,000,000 square meters falling within low-density zones and 160,000,000 square meters within standard-density zones.




Source: SGS Economics and Planning, 2026

| | Net Developable Area (sqm) |
|---|---|
| LGA | 240,000,000 |
| Low Density and Rural Living Zones | 80,000,000 |
| Standard Density | 160,000,000 |

This example also assumes a Local Government Area (LGA) with a total *current* population of 340,000, of which 290,000 reside in the standard density area. Of the 145,000 existing dwellings, 123,000 are located within the standard density area. According to State Government targets, the LGA is expected to accommodate an additional 55,000 dwellings, with 48,000 of these assumed to be located in the standard density area.

| | Dwellings 2026 | Housing Targets | Dwellings Capacity |
|---|---|---|---|
| LGA | 145,000 | 55,000 | 200,000 |
| Low Density and Rural Living zones | 22,000 | 7,000 | 29,000 |
| Standard Density | 123,000 | 48,000 | 171,000 |

Applying a relevant forecast Average Household Size of 2.4, the population capacity for this LGA is 480,000 people.

$$\textit{Population capacity} = \textit{Projected AHS} \times (\textit{Dwellings in 2026} + \textit{Housing Targets})$$
$$480{,}000 = 2.4 \times (145{,}000+55{,}000)$$

| | Dwellings Capacity | Average Household Size | Population Capacity |
|---|---|---|---|
| LGA | 200,000 | 2.4 | 480,000 |
| Low Density and Rural Living zones | 29,000 | | 69,600 |
| Standard Density | 171,000 | | 410,400 |

The open space benchmark, calculated by multiplying the population capacity by the 30-square-metre-per-capita benchmark, is 14,400,000 square meters (480,000 × 30).

The contribution rate is obtained by dividing the open space benchmark by the Net Developable Area.

*Contribution rate = Open space benchmark ÷ Net Developable Area*
*6.0% = 14,400,000 ÷ 240,000,000*

| | Nominal Population | Open Space Benchmark (30 sqm per capita) | Contribution Rate |
|---|---|---|---|
| LGA | 480,000 | 14,400,000 | 6.00% |
| Low Density and Rural Living zones | 69,600 | 2,088,000 | 2.61% |
| Standard Density | 410,400 | 12,312,000 | 7.70% |

Based on these results, a site valued at $1,000,000 in a low-density area would contribute $26,100 under the 2.61% rate, compared to $50,018 collected from sites valued at $650,000 in standard-density areas. These site areas and prices represent the averages for vacant rural and standard-density residential properties from the 2024 Valuer-General data.

An adjustment is therefore necessary to ensure an equitable contribution rate across the planning unit .
The proposed method is to structure the contribution rates for both standard and low-density areas to achieve a similar per-dwelling contribution. In this scenario, an average site in the standard density area, valued at $650,000, would contribute $50,018 based on a 7.7% contribution rate.

Similarly, an average site in a low-density area, valued at $1,000,000, should also contribute $50,018. To achieve this, the site would be subject to a 5.0% contribution rate, calculated as ($650,000 ÷ $1,000,000) × 7.7%.

| | Site Area (sqm) | Site Value ($) | Contribution Rate | Contribution Per Dwelling |
|---|---|---|---|---|
| Low Density and Rural Living zones | 15,000 | 1,000,000 | 5.0% | $50,018 |
| Standard Density | 800 | 650,000 | 7.7% | $50,018 |

# 4. Establishing need based on planning standards

### 4.1 Why a standards based approach?

Open space is a critical element of sustainable communities. It is an aspect of livability that is compromised at our collective peril. It is essential to plan for sufficient open space to meet the needs of present and future communities. All existing and future residents of established and developing municipalities are entitled to have access to a reasonable standard of open space.

Sufficiency standards are commonly used to assess the required provision of a range of community facilities such as childcare centres, hospitals, schools and libraries. Standards typically use a per capita or per household rate of provision. Occasionally, they are translated into a percentage of land area.

In our view, open space is, in principle, indistinguishable from other community infrastructure in the sense that provision should be determined based on a sufficiency standard.

Models of open space planning that gear the rate of provision to current demography and socioeconomic profile are problematic. Open space is a very long-term infrastructure investment that frames urban development. This infrastructure will witness multiple generations of 'community' over an indefinite period. In this context, current demography is important in the programming of open space infrastructure, but ought not be a driver in determining the *sufficiency* of provision, and appropriateness of open space contributions.

Unsurprisingly, open space provision standards are regularly applied by Victorian councils when compiling open space strategies to ensure equitable access to open space across their respective municipalities.

Consideration of open space standards at the municipal level is consistent with basic town planning principles that require all development to incorporate certain features so that, over time, all development in the municipality is functional and sustainable.

In keeping with this sound town planning approach, the State Government's Precinct Structure Planning Guidelines nominate a specific proportion of net developable area to be reserved as public open space as new suburbs develop in greenfield areas. This standard of open space is intended to ensure the entire future community covered by the Precinct Structure Plan has access to a reasonable standard of open space.

Planning for the open space needs of future communities in established areas has challenges that differ from those applying in growth areas, including the cost of acquiring suitable land. Notwithstanding this, people in all communities are entitled to the same or similar standard of open space service. This said, this same or similar standard of service provision may be achieved in different ways in different areas, pending the opportunities available. For example, in established suburbs, the standard of service provision may be met by improving the quality of existing open space.

Setting an appropriate standard for open space provision at the local government level is a keystone consideration.

The contemplation of this question must consider contemporary planning and sustainability challenges facing Melbourne. Ongoing development of the urban fabric, including that of middle and outer suburban areas, will occur in the context of climate change and increasing demands on existing infrastructure from a growing population.

More will be expected from our parks than in the past, for example, to mitigate the urban heat island effect and to provide recreational opportunities for a growing proportion of the population living in high and medium density housing with limited access to private open space. Business as usual in supplying (and, by implication, funding) public open space will not do in this context (see Section 1).

Inadequate open space – both in quantity and quality – acts as a handbrake on the urban consolidation required to build a more climate resilient, efficient and inclusive city. Growing demands on open space evident in, for example, the inability of local sporting clubs to accommodate more participants at convenient times, fuels resistance to densification in some communities.

### 4.2 Selection of an appropriate provisioning standard

**Survey of standards**

We prefer a 30 sqm per capita provisioning standard for planning a POS network that delivers active and passive recreational services. This includes local, district and regional passive open space as well as active open spaces. It excludes some forms of open space which might be found in or near a municipality, including:

- Regional parks which are under the control of other agencies (e.g. Parks Victoria) and which are intended to serve a larger catchment than the host municipality
- Encumbered open space which is primarily provided to serve a purpose other than municipal recreation, for example, managing stormwater flows or conserving particular habitats
- Parkland immediately across the border from the LGA in question, on the basis that the host municipality has no jurisdiction over these areas and cannot guarantee ongoing provision of open space services from these 'offshore' assets aligned to the needs of its residents.

There is a strong practice and evidence base for a 30 sqm per capita provisioning standard.

Application of this standard in Victoria can be traced back to the then-proposed 1954 Melbourne Metropolitan Planning Scheme prepared by the Melbourne and Metropolitan Board of Works (MMBW). The proposed Planning Scheme was underpinned by extensive research documented in an accompanying volume entitled *'Surveys and Analysis'*[3]. Based on a needs analysis of the existing and emergent recreational behaviours of the metropolitan populace at the time, the MMBW proposed specific standards for the planning of particular types of public open space, as summarised in the following table.

TABLE 4: STANDARDS ADOPTED FOR 1954 MELBOURNE METROPOLITAN PLANNING SCHEME

| Type of open space | Planning standard proposed by MMBW | MMBW standard expressed in sq metres |
|---|---|---|
| Outdoor field sports (excluding golf and racing) | 4 acres per 1,000 people | 16 sq m / capita |
| Parks and gardens (outside of central Melbourne) | 2 acres per 1,000 people | 8 sq m / capita |
| Children's playgrounds | 1.5 acres per 1,000 people | 6 sq m / capita |
| **Total** | **7.5 acres per 1,000 people** | **30 sq m / capita** |

Source: MMBW Metropolitan Planning Scheme 1954 – Surveys and Analysis pp 161 -165

[3]https://www.planning.vic.gov.au/policy-and-strategy/planning-for-melbourne/melbournes-strategic-planning-history/melbourne-metropolitan-planning-scheme-1954-survey-and-analysis

The MMBW standard, although empirically based in Melbourne, is open to criticism on the basis that it is over 70 years old, and the recreational needs of households and individuals have changed. However, if anything, the passage of time would most likely point to a need to lift the 30 sqm per capita ratio. For example, the research cited in the 1954 report extrapolated from the dominance of cricket and Australian Rules Football to determine playing field needs. Today, households enjoy and demand broader sports options.

Moreover, it is reasonable to hypothesise that public open space is a 'superior good' as defined in economics. That is, demand increases as incomes rise.

Research and practice-based standards for open space provision quoted elsewhere in the literature vary somewhat, though most are close to, or exceed, 30 sqm per capita. As noted, standards may be expressed as a percentage of net developable area or an amount per capita. Some published standards differentiate between types of open space, such as local versus district and active versus passive open spaces. Table 4 provides a sample of quantity-based open space provision rates and covers a range of jurisdictions.

Table 5: Macro-provision standards for open space

| Source | Total open space provision rate (m2 per capita) |
|---|---|
| British National Playing Fields Association (1938) | 28.3 |
| Legislated Parkland Dedication Rates in Canada's Provinces and Territories (2004) | 27.9 (average) |
| US National Recreation and Parks Association | 40 |
| NSW Department of Planning (1992) | 28.3 |
| DPIE (NSW) Recreation and open space planning guidelines for local government (2010) | 30 (assuming around 15 dw/ha) |
| National Capital Commission (Canberra 1981) | 40 |
| South Australian legislation | 10 - 40 |
| South Australian higher density guidelines | 30 |
| VIC Growth Areas Authority - Precinct Structure Planning Guidelines (2009) | 28 (based on 15dw/ha) |
| VPA - Precinct Structure Planning Guidelines: New Communities in Victoria (2021) | 21 (based on 20dw/ha) |
| Cardinia Shire Council Open Space Strategy 2023-33 | 50 |
| Frankston City Council Open Space Strategy | 30.3 |
| Darebin City Council Open Space Strategy 2019 | 30 |

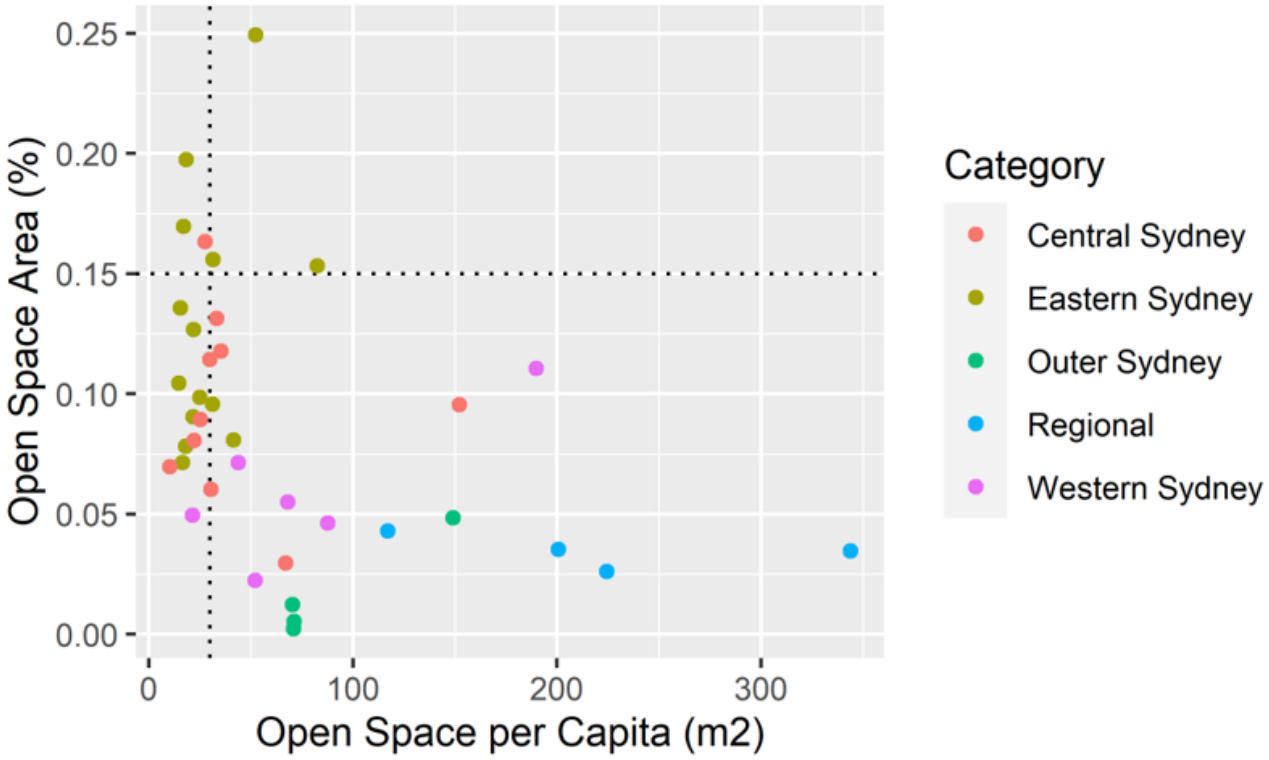
Both the current and superseded greenfield PSP guidelines published by the Victorian Government call for 10% of net developable area to be dedicated to (unencumbered) POS. At an average greenfield density of 15 dwellings per hectare, as was common at the time of the now-superseded guidelines, the 10% POS requirement translates to 28 sqm per capita. The current PSP guidelines set an average density target of 20 dwellings per hectare, at which level POS provision would reduce to 21 sqm per capita, assuming the same average household size.

Melbourne-based local governments included in Table 5 illustrate a range of macro provisioning standards between 30 and 50 square metres per capita.

Observed open space provision in metropolitan Melbourne supports a 30 sqm per capita standard. The VPA Metropolitan Open Space Network report[4] states that the total metropolitan stock of open space was 23,723 ha, including Crown Land, state land, local government land and public authority land in 2017. It further states that across the whole metropolis, some 12,719 ha, or 54%, of this total pool of open space was owned by local government. Local government-owned land is the best proxy for local parkland and playing fields in the VPA data. The VPA report also notes that total open space provision per capita across the metropolitan area was 57.7 sqm. Council POS provision is therefore estimated to account for 54% of this, equivalent to 30.9 sqm per capita.

It is also noteworthy that the modal provisioning rate of POS in metropolitan Sydney is of the order of 30 sqm per capita (see Figure 3).

FIGURE 3: PARKLAND PROVISION – MUNICIPALITIES IN METROPOLITAN SYDNEY (2021)




Source: SGS Economics & Planning Pty Ltd

We therefore regard 30 sqm per capita as a reasonable standard for the purposes of estimating POS development contributions. It is consistent with explicit and implied government policy across several relevant jurisdictions, and it reflects actual provision levels for Council parkland across metropolitan Melbourne, at least until recently.

[4]VPA, 2017 Metropolitan Open Space Network: Provision and Distribution

### 4.3 Critiques of standards

Notwithstanding widespread and long-standing application, use of provisioning standards in public open space planning has been critiqued in the academic literature.

A. J. Veal of UTS is particularly critical of this approach. He argues that:

- *"The original basis of the British and US standards, upon which Australian standards have traditionally been based, are of doubtful validity.... Furthermore, no documented rationale can be found which justifies their adoption in Australian conditions.*[5]
- *Despite the enormous variety of communities to be found in Australia, the standards assume a 'one-size-fits-all' model. .... Standards fail to take account of variation in residential densities".*[6]

On the first of these points, we repeat that the MMBW's standard of 30 sqm per capita was, in fact, empirically based on the then prevailing recreational behaviours of the population. If anything, the expansion and diversification of these behaviours since the 1950s imply that more POS per capita is required today.

The second of the above criticisms is certainly relevant to the task of site or precinct planning. As Veal et al (2021) point out, application of a standard such as 30 sqm per capita to a particular higher-density development precinct could result in an inordinate proportion of developable land being dedicated to POS. However, if the purpose of the standard is to ensure that a community defined at a higher spatial level – that is, metropolitan, town or municipality – is adequately serviced with POS infrastructure, which is what our method is suggesting, the criticism is not relevant. We would agree that the 30 sqm standard should not be provided at a site level.

The clear virtue of a standard when applied at the metropolitan, municipal or other higher-order spatial community level is that it provides an objective benchmark of sufficiency. Other things equal (incomes, tenure, recreational behaviours, culture), a higher order community with more POS per capita is likely to enjoy greater utility than one with less.

[5]See, for example, A.J. Veal (2013) Open space planning standards in Australia: in search of origins, Australian Planner, 50:3, 224-232

[6]Veal, A.J. and Piracha, A. (2021) Planning for Open Space and Recreation in High-Density Areas, Report 1: Guidelines Review, UNPUBLISHED DRAFT

# 5. Conclusion

Providing adequate POS is crucial to sustainable communities, especially in the context of climate change and the rapid densification of Australian metropolises.

Local governments in Victoria carry the bulk of the responsibility for ensuring that community members have adequate access to local parkland and sporting reserves. In metropolitan Melbourne, councils have custody of more than half of all open space and the vast bulk of POS, which is unencumbered and freely available to all citizens.

The principal means by which Councils fund investment into POS is via development contributions levied under Cl 53.01 of the VPP. While contribution rates of between 5% and 10% and higher apply in selected locations, most of the metropolitan area features contribution rates of 5% or less of site area (or the cash equivalent). In the absence of a substantial increase in average contribution rates, access to POS across Melbourne could fall by around 25% over the next two decades, given the sizeable increase in population anticipated for the metropolis.

The State Government has provided little guidance to Councils as to how these contribution rates should be set.

This paper argues for a standards-based approach to the determination of contribution rates. This would see the contribution obligation being distributed across all development regardless of timing or land use type, based on treating the municipality as one planning unit.

A standards-based approach avoids the fraught issues of determining long-term POS acquisition and programs, and deciding what investment is required to service future development as opposed to historic development.

By establishing local funds exclusively dedicated to POS network development, a standards-based approach provides the greatest assurance that communities will get the open space they need.

CANBERRA / NGAMBRI / NGUNNAWAL / NGARIGO

Level 2, 28-36 Ainslie Place
Canberra ACT 2601
+61 2 6257 4525
sgsact@sgsep.com.au

HOBART / NIPALUNA

PO Box 123
Franklin TAS 7113
+61 421 372 940
sgstas@sgsep.com.au

MELBOURNE / NAARM

Level 14, 222 Exhibition Street
Melbourne VIC 3000
+61 3 8616 0331
sgsvic@sgsep.com.au

SYDNEY / WARRANG

Suite 201/50 Holt Street
Surry Hills NSW 2010
+61 2 8307 0121
sgsnsw@sgsep.com.au

SGS Economics & Planning

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