

# Who *really* pays for open space contributions?

## Snapshot

Councils and state governments routinely charge fees on property development.

Developers do not have the market power to simply add these development costs, including open space and affordable housing contributions, onto the price on new homes.

Instead, developers start with the expected revenues from a project, subtract all costs (including contributions) and their profit margin, before deciding on what price to pay to the current land owner for developable land.

The cost of contributions is effectively 'passed back' to existing land holders. This is widely understood industry practice and observed in the Australian data.

## Introduction

Councils and state governments routinely charge fees on property development. Common examples include public open space contributions, drainage and sewerage charges, application fees or infrastructure charges, like the Growth Area Infrastructure Charge or Development Contributions Plans.

As existing suburbs redevelop at much higher densities, Councils are also requiring developer contributions towards increased open space and affordable housing. These forms of contributions are often justified on the basis that open space and affordable housing are essential infrastructure for a well-functioning, livable and affordable community.

As these forms of contributions are currently under consideration in the City of Monash, it is a reasonable time to ask, 'who *really* pays these fees?'

This short document outlines how developers incorporate these types of contributions into their project finances, explains the economics behind where the cost of the contributions occurs and gives worked examples of the impacts of such contributions.

## Fees and charges are passed back

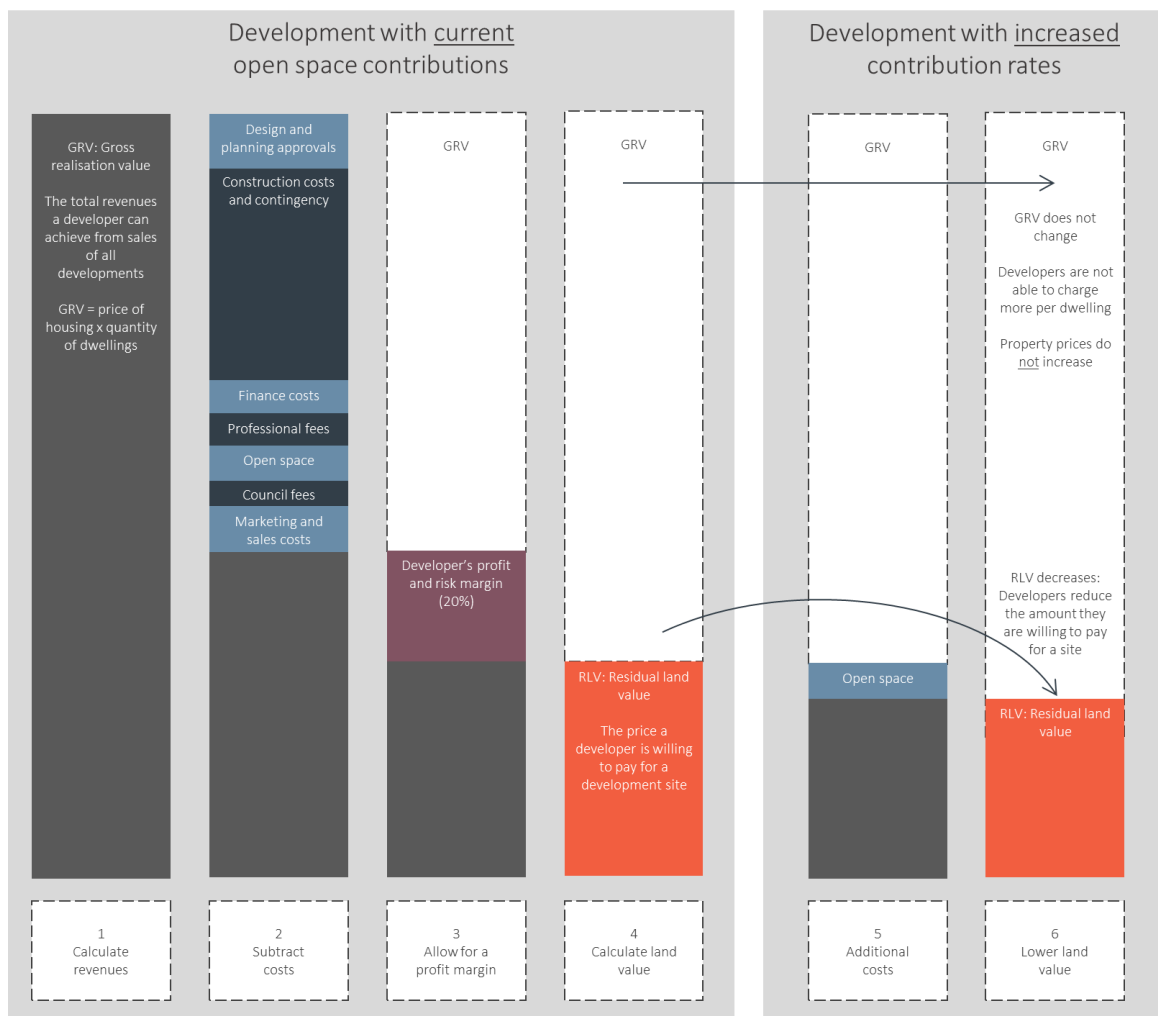
Developers do not undercut themselves or the housing market— they charge the highest prices for housing they can get given the housing market they are operating in. This means that, when looking for development sites, they start with the highest price they can charge per dwelling and work backwards. They must build all the expected project costs into the price they are willing to pay for land.

Developers revenues are driven by property prices, and property prices, especially in established urban areas, depend on factors that are beyond the control of individual developers, such as infrastructure, schools, transport and access to jobs, land size, quality and overall location.<sup>1</sup>

The value of those factors is determined by how much buyers are willing to pay for them. Developers cannot simply increase the price of their product without building bigger dwellings or using better quality materials. Even then this is only at the price margins and is of limited benefit as it generally involves additional material cost to the developer in any event or risks over capitalising the property.

The development costing process is shown through the steps in the diagram below.

**PROJECT FINANCES, WITH AND WITHOUT INCREASED OPEN SPACE CONTRIBUTIONS**



Source: SGS Economics and Planning, 2021

<sup>1</sup> Although some large developers can influence the timing and release of housing, as discussed in the next section.

### *Step 1: Determine final revenue from project*

Developers start with the expected revenues, the 'Gross Realisation Value', that they can earn by building new dwellings on a site. This the total of sales revenue from the development. .

### *Step 2: Determine all costs for the project*

Once expected final project revenue is determined, developers calculate all of the costs they will need to pay to complete the development. This encompasses the costs of the design process and planning approvals, construction costs, infrastructure connections, marketing, sales and finance costs, plus council fees and professional fees.

### *Step 3: Determine profit margin*

Developers allow their margin for profit and risk, typically around 20 per cent of costs.

### *Step 4: Determine land value*

Finally, after deducting amounts from Steps 2 and 3 from Step 1, the 'Residual Land Value' that remains is the price that developers are willing to pay for developable land to make their project viable.

### *Steps 5 and 6: Accounting for increased open space and affordable housing contribution rates*

The left panel shows development with the current open space contribution rate and the right panel shows development with increased open space and affordable housing contributions.

These are additional costs and treated that way by developers. The contributions are subtracted from the expected revenues (Step 5) and further reduces the amount they are willing to pay for land (Step 6).

The process above demonstrates how development fees are passed backwards, not forwards. The 'economic incidence' of expected taxes and charges feeds into the land value, so that the "cost" falls on existing land holders in the form of lower bids for development sites. It does not fall on future home buyers in the form of higher house prices.

This approach is widely adopted industry practice and built into standard financial assessment tools used in property development, like the prevalent Estate Master (Murray, 2021). We also see it in the market evidence, for example, the introduction of higher infrastructure charges in Queensland reduced the value of developable sites but did not affect the price of new housing (Murray, 2018).

## **Price setting and competition in property markets**

The degree of competition in property markets determines the ability of developers to set home prices. In more competitive markets, such as established urban areas where there is already a substantial supply of housing, buyers and sellers are 'price takers', with the price of goods set by external forces of supply and demand. In less competitive, or monopolistic markets, sellers are 'price setters' who can raise prices without fear of being undercut or buyers not wanting their products.

Property markets are not perfectly competitive, nor are they perfect monopolies. Developers operate in local markets with varying degrees of monopolistic competition (Barlindhaug and Nordahl, 2018). Nor are property markets readily comparable to other markets involved in the production of other goods such as appliances, groceries or car sales that are much simpler to compare.

As noted, many factors that determine home prices are beyond the control of developers. They compete on size, quality and location, school zones, open space, access to jobs, and they have little influence on the willingness of buyers to pay for these factors. Buyer willingness to pay is driven primarily by household incomes, the cost of finance (interest rates) and other demand factors, like migration (see Saunders and Tulip, 2019).

However, such competitive, price-taking behaviour does not fully capture the market behaviour of developers. Notably, there is weak competition on quantity – the amount of housing that developers and supply to the market. Large developers hold substantial land banks and strategically stage housing development over time, including some with over a decade’s worth of housing supply (Murray, 2020).

In other words, developers don’t flood the market with new supply to deflate housing prices. In fact, in most instances they control their supply into the market to keep prices up. This can be readily seen in staged lot releases in larger developments

While developers have some indirect influence on property prices through their supply decisions, they already charge as much for homes as the market will allow. They do not have the market power to simply place additional costs (like increased open space contributions) onto the price on new homes. This leaves developers with no choice but to factor these costs into their land purchasing decisions and pass payment of the contributions ‘back’ through to existing land owners in the market value of the land as a development site.

It is worth noting that contribution requirements cannot simply be added onto development ad infinitum. If added costs reduce the residual land values of new development to a point below the existing use value of the land, there will not be a financial incentive to develop. Additionally, some land holders may be temporarily less likely to sell sites when faced with lower offers from developers, reducing the supply of available development sites. However, this effect is not permanent and to reduce its impact, new contribution requirements should be pre-notified to the market and phased in over time to smooth the impact on land markets.

## Worked examples

The hypothetical examples below illustrate how increased open space and affordable housing contributions would be factored into a new housing development. Two case studies are considered:

1. A townhouse development, consolidating two detached dwelling into 7 townhouses
2. A redevelopment of brownfield industrial land into a multi-tower project of 2000 apartments.

In each example, a simple feasibility analysis is shown before and after the increased contributions. The current contributions require 2-5 per cent of land value dedicated to open space and the increased contributions require 10 per cent. These basic calculations mimic real-work development feasibility studies, which developers utilise before entering into projects or purchasing sites for development.

Under both scenarios, the development feasibility starts with the dwelling yield and expected revenues. After subtracting all project costs and the profit margin, we arrive at the ‘residual land value’, which is the value a developer would be willing to pay for the respective development sites. As explained earlier, the impact of the contributions is a reduction in the residual land value, rather than an increase the price of the homes in each project.

Note that these examples are not based on real sites and the analysis is simplified for the purpose of illustration. The contributions are shown as cash contributions as opposed to in kind contributions on site (for open space) or in floorspace (for affordable housing). In a full analysis, additional contributions would also require adjustments to various factors like holding costs, finance costs and the profit margin.

#### DEVELOPMENT FEASIBILITY, WITH AND WITHOUT INCREASED OPEN SPACE CONTRIBUTION

PROJECT	TOWNHOUSE	BROWNFIELD
Land size	1500 sqm	3 ha
Original use	2 detached dwellings	Disused car yards
New use	7 townhouses	2000 apartments
<b>DEVELOPMENT WITH CURRENT CONTRIBUTIONS</b>		
Revenues	\$6.3 m	\$1,122.7 m
- Costs	\$3.1 m	\$849.5 m
- Profit and risk margin	\$0.8 m	\$168.9 m
- Open space contribution (5% of land value)	\$0.1 m	\$5.2 m
= Residual land value	\$2.3 m	\$99.1 m
<b>DEVELOPMENT WITH INCREASED CONTRIBUTIONS</b>		
- Additional 5% open space (10% in total)	\$0.1 m	\$5.0 m
= Residual land value	\$2.2 m	\$94.1 m

Note: Individual costs may not sum to totals due to rounding

Source: SGS Economics and Planning, 2021

## References

- Barlindhaug, R. and Nordahl, B. I. (2018) "Developers' price setting behaviour in urban residential redevelopment projects", *Journal of European Real Estate Research*, 11 (1), 71-86.
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