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Submission made by RP Data Pty Ltd trading as CoreLogic Asia Pacific

Introduction and Context

CoreLogic welcomes this iPART initiative to cultivate feedback from participants in the planning, development, assessment and delivery of Contributions Plans (CPs).

The need for new development to support housing for a growing population in the Sydney basin is paramount, and the associated infrastructure must be properly funded through fair contribution rates consistently throughout each stage of the lifecycle of each CP.

Land costs represent a significant proportion, on average 40%, of the cost associated with contribution plans. With revenue shortfalls in the budget for infrastructure costs often unapparent until later in the tenure of CPs, the contemplation of fair and reasonable indexation methods for calculating the land components of base contribution rates is an important opportunity to ensure infrastructure needs are equitably funded at every stage of development of a precinct.

IPART's review paper key question two seeks feedback from proponents on the support and use of a suitable land value index for updating costs in CPs.

CoreLogic is a property risk and analytics firm. In 2019 we developed the CoreLogic Land Value index, published on quarterly basis, to, providing an alternative benchmark to the ABS Sydney - All Groups CPI figure. At the time of submission, the CoreLogic Land Value Index is used by Blacktown City Council and Hawkesbury City Council for a subset of both councils' contribution plans to index contributions for yet to be acquired land.

Each quarter the index estimates value changes based on weighted attributes such as sales, land area and location. This ensures that quarterly contribution plan calculations are based on market-based evidence that same quarter, helping ensure the updated calculations reflect the latest market behaviours.

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Our submission highlights the adoption and use of the CoreLogic Land Value Index, its comparative fairness, the statistical methodology it uses, and its performance to date as a market based and statistically robust indexation approach for ensuring infrastructure needs are adequately and equitably funded in the CP process.

Our feedback

EP&A Regulation clause 32(b)(ii) (now clause 215(5)(b), with minor amendments) allows the council to update the contribution rates by index figures in adopted contributions plans.

Blacktown City Council commissioned CoreLogic to develop and disseminate a quarterly Unimproved Land Value Index (LVI) for the North West Growth Area (NWGA). The CoreLogic Land Value Index quantifies the variation in the underlying land values for detached housing across different geographic boundaries.

CoreLogic's hedonic model exclusively considers land area and location attributes by subtracting the market value of individual characteristics that are used to improve residential land.

As outlined in iPART's final report[1] in relation to Blacktown City Council's proposal to index base contribution rates for unacquired land for its CP No. 24 Schofields Precinct (2022) using the CoreLogic Land Value Index:

> *"Over recent years, changes in land values have varied significantly from the changes in prices, as measured through the Australian Bureau of Statistics' (ABS) Consumer Price Index (CPI). In general, the value of residential land has grown much faster than the CPI. This discrepancy between CPI and land values can ultimately mean the council does not receive enough revenue from contributions to fully fund the land required to service the development, depending on:*
>
> *• on how much land councils need to acquire to deliver essential infrastructure to new developments*
>
> *• how the forecast costs of that land have been estimated and escalated in the plan.*

[1] Assessment of Contributions Plan No. 24 – Schofields Precinct (2022), Blacktown City Council, Final Report October 2023

One way of setting contribution rates that reflect the changes in costs associated with difficult-to-forecast changes in land values is to escalate the costs of land within that plan using an LVI."

We highlight in this submission the underlying statistical technique of the CoreLogic Land Value Index to encourage stakeholders that are contemplating a more fit-for-purpose indexation methodology than the ABS Sydney CPI – All Groups measurement, which uses 11 baskets of general goods and services.

We are grateful for the continued support from iPART and councils managing CPs, who have recognised the value of using a suitable Land Value Index. To-date, the CoreLogic Land Value Index has performed consistently with **Figure 1** below. This helps reduce the long-term risk of budget shortfalls and provides a more accurate assessment of changes in land values compared with a broader CPI measure.

The CoreLogic Land Value Index is shown in Figure 1 below for both Greater Sydney and the Blacktown North West Growth Area. The figure also contains the Sydney – All Groups CPI line over the same time period. In this plot all three indices are rebased to have a value at 100 at September 30th 2020.

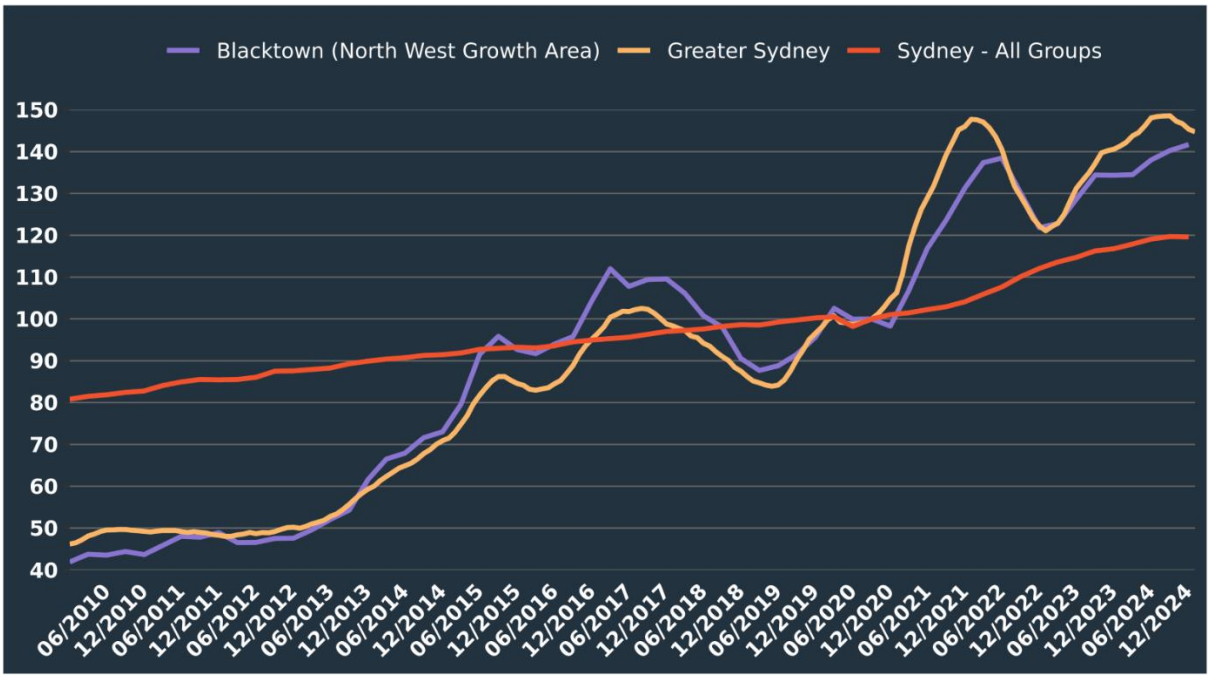

FIGURE 1: CORELOGIC LAND VALUE INDEX FOR GREATER SYDNEY AND BLACKTOWN NORTH WEST GROWTH AREA WITH SYDNEY – ALL GROUPS CPI

The CoreLogic Land Value Index is able to measure changes in the property market which will not necessarily be captured fully within the bundle of goods for CPI. While there is difference in the trends between the indices at a local scale, a more considerable issue is the difference in value changes over a large time frame. While CPI has roughly gone up by 50% since the beginning of 2010, land values in Sydney have nearly doubled. The methodology behind the LVI is covered in the following sections, and is intended to provide insight and transparency around the process.

CoreLogic's website publishes the Land Value Index at the same schedule as ABS's Sydney – All Groups CPI here:

https://www.corelogic.com.au/our-data/corelogic-indices/land-value-index

A broader overview of the headline CoreLogic Home Value Index (HVI), of which the CoreLogic Land Value Index is a specialised version, is provided later in the submission. The term 'Hedonic' refers to the ability of the commodity, in this case a residential property, to be decomposed into the sum of its parts. The Land Value Index is therefore able to break up any property where there is sufficient attribute and sales data into prices associated with the unimproved and improved attributes. In many areas of Australia, there is insufficient sales data for land to build an accurate index, so a hedonic decomposition provides a more accurate and stable index.

What is the methodology of the related CoreLogic Home Value Index?

CoreLogic's Home Value Index is a widely trusted and adopted index for estimating the value of *improved* residential properties which uses the same hedonic imputation approach that forms the foundation for our development of a statistically valid Land Value Index for consideration by NSW local councils.

First launched in 2007, with subsequent iterations, the CoreLogic Home Value Index is designed to provide a reliable and consistent set of benchmarks for the Australian residential real estate market. The market includes all properties that are defined as residential units (apartments) and houses.

The hedonic imputation index is the preferred index over other measures of price and value changes as it has the following characteristics:

1. **Avoids compositional bias**
   - With only a small proportion of homes transacting each year, measuring the price change of only those properties that sell may not accurately reflect changes across all housing stock.

2. **Quality adjusted**
   - The hedonic regression method inherently values a property based on its components rather than assessing price changes as if all housing was homogenous.

3. **Timely**
   - The index is calculated monthly. The model utilizes all available decision points to impute the value of individual properties.

4. **Compensates for capital injections**
   - The hedonic index is designed to measure pure returns and exclude value added from capital works (renovations and new stock). To ensure capital works are removed wherever possible, the portfolio of housing stock remains consistent from period to period.

5. **Overcomes sampling issues associated with transaction-based methods**
   - Regions with low turnover or a small number of recent transactions show inherent volatility in other pricing-based measures. As a portfolio-based measure, the hedonic index provides a contemporary measure of housing market performance despite only a small sample of observations being available. The model places greater weighting on the most recent sales.

6. **Internationally endorsed as best practice**
   - The methodology is the recommended method for measuring housing prices by European Statistical Office, as well as the International Monetary Fund and Bank of International Settlements.

Conclusion

We thank iPART for conducting this review to inform opportunities to improve the Contributions Planning process.

CoreLogic is committed to the continued delivery of the CoreLogic Land Value Index. We hope our submission highlights the optionality of indexation methods and provides an example of how a suitable Land Value Index can help streamline the contribution planning process.

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