Insights

Topical commentary on the Auckland economy

September 2017

How should we fund our greenfield infrastructure?

- The indicative cost of new bulk infrastructure to service greenfield areas is $20 billion over the next 30 years.
- Those who benefit most from this new infrastructure should pay for the bulk of it.
- If we do not cost-recover from those who benefit, general ratepayers will subsidise greenfield areas and skew development towards them.
- The cost of new infrastructure could be passed on to those who benefit via development contributions or targeted rates.
- Targeted rates provide greater certainty on timing of funding, spread costs inter-generationally, and incentivise quicker, more affordable development.
- Even using targeted rates will require more external financing to overcome council's borrowing constraints.

Infrastructure is expensive

The Auckland Unitary Plan identifies about 15,000 hectares of rural land for future urbanisation (10 per cent reserved for business uses) with the potential to accommodate roughly 137,000 dwellings. Because this land is currently rural, it requires substantial investment in infrastructure before urbanisation can occur. The indicative total cost of new bulk infrastructure required is $20 billion – or about $146,000 per dwelling on average. Not all this cost will be borne by Council as the total cost breaks down as $5.2 billion for water, wastewater and stormwater projects; $11.3 billion for transport (which includes NZTA and Kiwi Rail investments); and $3.5 billion for parks and community facilities.

Development contributions (DCs) are currently the main recovery mechanism for infrastructure costs. Developers pay DCs to council at the time of residential sub-division. DCs in greenfield areas currently range between $21,900 and $27,500 per dwelling, plus an additional $11,300 per dwelling in water infrastructure growth charges. This means if DCs remain at current levels, they are likely to cover only a fraction of the total infrastructure cost.

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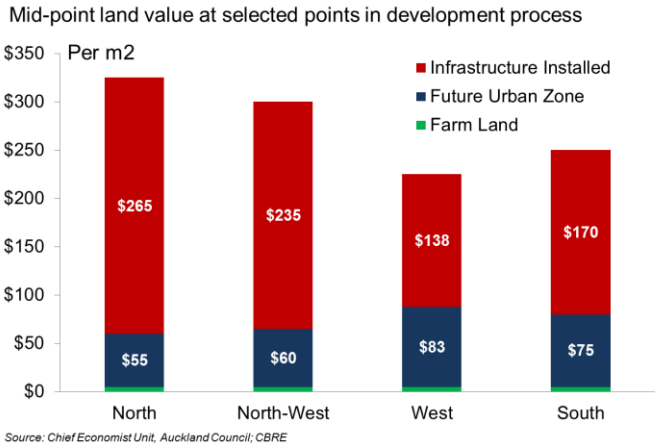
Bulk infrastructure required for urban growth often needs to be in place before development can take place. This makes land serviced with infrastructure more valuable than non-serviced land. A July 2015 report by CBRE shows how servicing land with infrastructure increases its value in different greenfield areas of Auckland.



Infrastructure servicing adds between $138 and $265 per m^2. For a 500 m^2 section, this amounts to an increase of $68,750 to $132,500.

This is over and above the value uplift that occurs when land is rezoned from rural to future urban land. Using REINZ data as a starting point, we estimate the value of rural, unserviced land at about $5 per square metre. This means the total value of announcing imminent infrastructure, and then providing that infrastructure, ranged from $110,000 to $160,000 (a multiple of 44 to 64 of median farm land value) for a 500 m^2 section across Auckland.

To ensure that our system of funding infrastructure is economically efficient and ensures that those who benefit from it also pay for it, we need to consider the following three questions:

- To what extent should the overall cost of infrastructure be split between those who benefit directly from it, general ratepayers and taxpayers?

- To what extent should the charges paid by developers vary according to how expensive it is to service a particular piece of land with infrastructure?

- To what extent should the charges paid by developers be paid at the time of sub-dividing, or spread over time?

Who should pay for new infrastructure?

The first question is the easiest to answer. In general, those who benefit from new infrastructure should fund the bulk of the costs, as we argue here.

Landowners in the areas that get serviced by new infrastructure receive benefits through increases in land value, as urbanisation would not be possible without the investment. However, certain projects like new or upgraded roads, train stations and new parks may also benefit a wider catchment of residents and businesses beyond the new development, so they should contribute a share toward the costs.

Counter-arguments against beneficiary pays

Some argue that making developers pay a fairer share of infrastructure costs will push up house prices. But economic arguments lend support to a very different outcome. If developers are required to contribute a more proportionate share of the cost of new infrastructure, they will likely pass the cost increase 'upstream' by paying less for developable land. This would result in lower profits for the original land owners rather than increased house prices for the final buyers. And as CBRE demonstrated, the uplift in value at the time of rezoning, which incorporates an assumption of future infrastructure, is huge. When general ratepayers fund the infrastructure, it allows the original land owner to receive exceptionally large profits despite little contribution toward the infrastructure that will ultimately service the new development.

The subsidy on infrastructure from general ratepayers is reflected in the correspondingly high price of serviced land, thus creating a benefit to the land owner without a proportionate contribution towards costs. A change to a policy towards fuller cost-recovery will therefore likely see those who benefit from infrastructure (land owners) contributing more towards its costs.

We note that some developers may have already purchased land at an elevated price in the expectation that general ratepayers would foot most of the bill for the infrastructure they will need. This is no different to the risks that businesses take in every other industry, and is no reason not to begin more fully recouping infrastructure costs from those who benefit from land value gains.

An announcement that clearly signals a move to fuller cost recovery might help potential developers more accurately price land that they may be looking to purchase.

Incentivise development where it is cheapest

The second question considers whether developers should pay varying amounts based on the cost of providing infrastructure specifically to their land. The clear answer is "yes".

Some areas are inherently more costly to urbanise due to topography, location, and the availability of existing infrastructure capacity. This means we also need to capture these differences as accurately as possible to incentivise development in areas where the cost to provide infrastructure is lowest.

Council's existing DCs do vary across the region. Park charges vary at Local Board level, and stormwater charges vary by water catchment areas. It is important to reflect variations in servicing costs by infrastructure type and geographic area, to send the correct price signals to the development market.

Comparing alternative funding mechanisms

The third question relates to *when* those who benefit should pay for the infrastructure that will increase their land value.

DCs are the main mechanism whereby developers contribute to the costs of new bulk infrastructure. DCs are paid at the time of sub-dividing as a lump sum at a pre-determined per-dwelling rate.

Because DCs are charged as a 'lump sum' payment at the time of development, they can create a number of issues:

- **Uncertainty of timing**: They are only paid when development occurs, which can be many years after infrastructure is built. General ratepayers end up funding the infrastructure in the interim.

- **Slower development**: When land values are increasing much faster than the holding costs of land, the incentive to develop land quickly is weak. DCs can act as a further incentive to land-bank as they are only charged when development occurs.

- **Higher upfront section prices**: As discussed in the previous section, because a DC is charged as a lump sum, it may be added to the cost of a section, increasing upfront section costs.

The Unitary Plan has dramatically expanded the areas where growth can occur. But there is no guarantee that actual development will match forecasts. If revenues only come in several years after debt has been issued, it affects council's ability to finance infrastructure projects. This makes DCs a risky mechanism for funding infrastructure.

It might be time to consider greater use of an alternative funding mechanism – **targeted rates.** Targeted rates recoup infrastructure costs over time and are imposed specifically on the land owners who benefit from infrastructure that enables urban growth. There are several benefits to targeted rates:

- **Incentivise faster development:** Where land that is re-zoned to allow urbanisation has increased in value, targeted rates provide a stronger incentive to develop rather than land-bank.

- **Stabilise short-term affordability:** Using targeted rates to recover infrastructure costs might also be effective in addressing concerns about housing affordability and disruptions to housing supply in the short term. They spread the costs over time and developers pass on the responsibility of paying targeted rates on sale.

- **Provide timing of funding certainty:** Targeted rates provide more certainty to council about the timing of funding.

- **Provide inter-generational fairness:** Targeted rates spread the cost of repayments so that those benefitting from the infrastructure over the life of the assets share in the costs as well.

Making targeted rates work in practice

Targeted rates may create cash flow issues for land owners, and this concern is valid particularly for those who have lived on their land for a while and have no intention of developing it in the short term. Purchasers of sections or houses with targeted rates in place need to be made aware of the impact on their rates bill so they can value them appropriately.

Overcoming limits to council borrowing

The council faces limits on how much debt it can hold at any point in time as a multiple of its revenues (as we discuss in detail here). Also, while DCs or targeted rates can help pay for infrastructure, there is a time lag between when infrastructure is built (and is paid for) and when DCs or targeted rates are collected.

This poses a challenge to council staying within its debt-to-revenue ratio limits, which is crucial to maintain its AA credit rating and lower borrowing costs. The scale of growth that Auckland is likely to witness means we need to access funds from somewhere else that will not push council debt above its limits.

One example of this is Crown Infrastructure Partners, an entity financed by central government, which has been created to help speed up infrastructure development. It will finance new bulk infrastructure projects using its balance sheet rather than council's and may recover some of these costs through targeted rates or DCs and recycle these revenues into future projects.

Financing approaches like this may be able to attract private capital, by covering demand risk at the initial stages, with cost recovery via DCs or targeted rates on the properties that benefit from the infrastructure. Private capital will be an added boost to help develop at the scale required in Auckland.

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