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Funding the world's most liveable city: the missing third leg?

Auckland's potential will only be unlocked if investment funding can be found to deal with infrastructure bottlenecks. This *Insight* explores the role of private capital in funding Auckland's infrastructure. It concludes that greater effort to attract private capital through the provision of more investor-ready information and a pipeline of investor opportunities could speed up Auckland's development and deliver improved economic and social outcomes.

Auckland has the potential to deliver more for New Zealand…

Auckland is on the cusp of leaving its awkward adolescent phase to take the stage as a truly global city, at least on a par with big sisters Sydney and Melbourne. The current record level of net migration, in large part due to Kiwis choosing to move back or move to Auckland for the first time, is a huge vote of confidence. Auckland is well on track to top two million people by the end of the next decade.

Bigger cities generate more ideas and innovation, lower business costs and boost national competiveness. But bigger cities bring challenges too, and these need to be addressed now to allow Auckland to unlock its potential.

…but infrastructure funding constraints are choking off opportunities

The vote of confidence should not be taken for granted; it depends critically on Auckland's ability to manage its growing pains. Eye-wateringly high house prices are just one symptom of mismanaged growth.

Traffic congestion is getting worse; a study commissioned by the NZTA estimates this already costs the region $1.25 billion per annum.[1] Some transport planners raise the spectre of gridlock being the norm rather than the exception in the CBD, unless significant public transport investment is put in place now. The risk to Auckland's ambitions if the housing, infrastructure, and other demand pressures more people bring and not catered for is well recognised. In short, people and business will shift. Some will go to the surrounding regions, particularly support services and manufacturing. In part this is inevitable as Auckland grows, and is a benefit to the wider region. But probably a greater number of people, and the highest value-add businesses in sectors which depend on vibrant dense cities (such as finance and the creative industries) will head offshore.

Some of these problems can and should be alleviated by technological innovation, for example, roading networks can become much more efficient if large scale smart car technologies are adopted. Some funding could also be freed up by redirecting resources away from infrastructure projects that do not offer good value for money when they are examined using comprehensive cost-benefit analysis techniques. But there is no escaping the fact that very large cheques need to be written to improve Auckland's infrastructure and deliver better economic and social outcomes.

[1] This figure is based on comparison with free flow conditions. The cost is $250 million per annum compared to networks operating at full capacity. See Wallis, I and Lupton, D (2013) *The Cost of congestion reappraised*, NZTA Research Report 489.

…while central and local government continue to lock horns

Much of the debate over the past few years has centred on who pays the cheque, and by when. Local and central government haven't yet agreed on the optimal approach.

Given constraints on Crown finances, the default government position is to kick the can down the road. This risks never getting started and introduces unhelpful uncertainty into multi-year planning and development timeframes.

But Auckland Council recognises that it can't fund the investment alone. Funding purely through rate rises would be unpalatable and probably inequitable given the benefits of infrastructure accrue over long term horizons. It would also be imprudent to issue council debt to the levels required. In response, new revenue sources, including user charges on existing motorways or regional fuel taxes, have been suggested.

A well-designed road charging mechanism would improve the efficiency of the existing roading network and raise the bar for any future developments. But this is only a partial solution. A broader option is to consider the role private capital can play in funding Auckland's investment needs – both by providing capital for new projects, and as a source of capital for fully-developed assets on the Council's books. To date this funding source has not received as much attention in the debate. We think it merits careful consideration.

The funding opportunity from private capital

Private capital essentially spreads the burden of funding Auckland's investment from today's rate and tax payers to future generations. Development is funded today, in exchange for a stream of future cash flows (whether from direct user charges, local government transfers, or some combination) from the assets developed. So long as the development offers a good economic return, this is more equitable than placing the burden on today's rate payer given the benefits of assets such as sewage systems, social housing, tunnels and railways are spread over a long-term horizon.[2] Private capital can also reduce build-costs and improve operational efficiencies given the sharper commercial incentives it operates under. If well regulated, this translates both into cheaper prices for end users and a satisfactory commercial return to investors.

One increasingly popular way to bring in private capital is via a private-public partnership (PPP) wherein government contracts the private sector to do some combination of design, build, finance, maintenance and operation of the asset concerned. After two decades experience in pioneering countries such as the United Kingdom and Australia, lessons have been learnt and PPPs are now being used to help local and central governments fund transport infrastructure (rail and light rail, roads, air, and sea ports), energy and water infrastructure (wastewater treatment, transmission lines, waste-to-energy, etc.), and a range of 'social infrastructure' (hospitals and clinics, educational facilities, and prisons) in many OECD and developing countries.[3]

In 2009 the National Infrastructure Unit was established in to support development of PPPs in New Zealand. While this is beginning to bear fruit (see Table 1), New Zealand still considerably lags behind Australia in the PPP model's application and future pipeline (see Table 2). The difference in part reflects that very few historic or prospective PPP projects have been developed at the sub-national government levels. As is detailed in a recent Mayoral position paper, the PPP infrastructure funding model can be widely utilised to support Auckland's development needs.[4]

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[2] It should be stressed that private sector funding is no panacea for poor projects – it is not equitable to burden future generations with the cost of assets that offer a poor economic and social return. However, such projects will in general be of much less interest to private sector investment because they will require heavy state subsidy to be commercially attractive, which in turn raises the risks around the sustainability of this support. This risk has become much more appreciated by both the public and private sectors over the past couple of decades.

[3] See http://infrapppworld.com/pipeline-html/database-of-ppp-projects.

[4] See "Mayoral Position Paper on Public Private Partnerships" (2013) by Ernst & Young http://www.aucklandcouncil.govt.nz/SiteCollectionDocuments/aboutcouncil/mayorelectedrepresentatives/mayoralpositionpaperonppps20131127.pdf

Table 1 Individual PPP projects in New Zealand since 2012

Project	Stage	Value ($M)	PPP partner role
PPP for 4 schools in Auckland, Christchurch and Queenstown	Project out for tender	around $170	Design, build, finance, and maintain
Transmission Gully highway	Contract awarded, construction has begun	$850	Design, build, finance, maintain, and operate
Auckland Harbour bridge cycleway	Project in planning phase	around $27	Will likely include financing
Hobsonville Point primary school	Contract awarded, construction has begun	$41	Design, build, finance, and maintain
New wing at Paremoremo Prison	Project out for tender	around $169	Design, build, and maintain
Wiri Prison	Contract awarded, construction has begun	$248	Design, build, maintain, and operate
Total		**Around $1.5b**	

Source: NZIER

Table 2 PPP projects in New Zealand versus Australia since 2012

Project	New Zealand	Australia (figures in NZDs)
Total project value of PPPs over past three years	Around $1.5b for 5 projects	Around $66b or 125 projects
Identified project value of PPP pipeline	Around $1-$1.5b*	Over $33b
Average equity cheque size written by individual investors	$75m (maximum $150m)	Around $145m (maximum $550m)

* subject to the Puhoi-Wellsford highway proceeding as a PPP.

Source: NZIER

But wouldn't this be expensive?

It is sometimes argued that private capital is less desirable than public funding because in theory it has a higher long-term cost of capital, and hence requires a higher long-term return to cover this cost. But the world we are in today is far from this. It is awash in capital and investors willing to pay very high prices, or on the flip-side accept very low yields, for assets with long-term real income streams. This is a function of the low level of global long-term interest rates, concern over inflation risks and investor willingness to pay for assets that are perceived to offer inflation protection, and an under-allocation to infrastructure assets compared to strategic benchmarks in the institutional investor community.[5] These factors should not persist in 'equilibrium', but are likely to be with us for a considerable period of time yet.

Contrast this with the Auckland Council's Consensus Building Group 2013 report that considered selling council assets.[6] It said on page 26:

> *"Selling the assets would broadly realise the same total value of contribution as the forecast future earnings. Accordingly, asset sales would not reduce the funding gap beyond our current estimates."*

[5] See World Economic Forum (2014) "Infrastructure Investment Policy Blueprint" http://www.weforum.org/reports/infrastructure-investment-policy-blueprint

[6] Consensus Building Group (2013) *Funding Auckland's Transport future. Final report, Alternative funding for transport.* keepaucklandmoving.org.nz

This is not true when the private sector discounts those future benefits at a lower rate than does the council.

Over the ditch, the attraction of infrastructure for institutional investment is well recognised. Australian State Governments facing similar funding constraints and development needs to Auckland have launched ambitious programmes to attract capital – both to fund new investment typically via PPPs, *and* to re-cycle capital back to State coffers via asset sales. The very healthy $5 billion the NSW State Government received via its sale of Port Botany and Kembla to a consortium of local and international institutional investors is but one example.

Table 3 below presents a selection of recent Australian transactions for fully-developed transport infrastructure. Vendors of these assets were able to achieve prices around 50% higher than they might have considered 'fair-value" based on longer-term, historic earnings multiples (around 18 or so). In other terms, as illustrated in Table 4, the discount rate investors are implicitly applying to the earnings stream from these assets appears very low at the present time, even under very bullish long-term real growth assumptions for these earning streams.[7]

Table 3 Recent infrastructure transactions in Australian cities

Asset	Price paid, A$	Parties to the transaction
Queensland Motorways	$7.06b, 27x EBITDA*	The Queensland State investment fund (QIC) sold to an Australian commercial infrastructure fund manager (Transurban), an Australian pension fund (Australian Super) and a sovereign wealth fund (Abu Dhabi Investment Authority, ADIA)
Port Botany and Kembla	$5.1b , 25x EBITDA	NSW State Government sold to a consortium of Australian superannuation funds and ADIA
Port of Brisbane	$1.4b, 25x EBITDA	Global Infrastructure Partners sold 27% stake to Canadian pension fund Caisse du Depot et Placement du Quebec
Port of Newcastle	$1.75b, 25x EBITDA	NSW State Government sold to an Australian commercial fund manager (Hastings Fund Management) and a Chinese SOE (China Merchant)

EBITDA is annual earnings before interest costs, tax, depreciation and amortisation.

Source: NZIER

[7] Note the discount rate concept applied here should be thought of an investors required return. This is investor specific and will depend upon their required compensation for bearing the risks of the asset and the extent to which the risks diversify other exposures in their portfolio. This is not the same as the weighted average cost of capital of a project, which depends upon how much of the project is financed by debt versus equity, and the after-tax cost of these funding sources.

Table 4 Implied investor discount rates

Assumed long-term real growth rate of earnings	Implied real discount rate required to achieve a 25x earnings multiple
0%	4%
1%	5.2%
2%	6.1%
2.5%	6.75%
3%	7.25%

Note: The implied discount rate is based on a 100-year earnings stream with no residual asset value. This approximates the long-term lease arrangements for the Australian port transactions. The calculation also abstracts from leverage, tax, and other factors that can impact net earnings such as CAPEX. The different discount rates stem in the table are a function of the differing assumptions for the long-term real growth rates of the earnings streams. We would note that the 0-2% real earnings growth range is much more plausible under a long-term horizon than the +2% figures.

Source: NZIER calculations

Auckland should be attractive to international and local investors

Like Australia, New Zealand is exceptionally well-placed to capitalise on this demand. It is one of only a few OECD countries that can offer the combination of a positive demographic outlook, a world-class regulatory environment, a stable fiscal outlook, and relatively normal monetary policy settings. The laundry list of many of the risks that investors worry about is less of an issue here.

New Zealand assets also generally offer welcome diversification benefits for any institutional investor's portfolio, given they will likely hold relatively small New Zealand exposures. Auckland's natural beauty, multi-cultural population, and single local Government point of contact complement the picture – it is easier and more pleasant to get business done.

As a consequence, the return international investors will demand from investing into Auckland today and for the foreseeable future will likely be very low, as it is currently in Australian cities.

Along with international investors, there are many local investors with an appetite to write large cheques for Auckland's investment needs. Investors such as the ACC, the New Zealand Superannuation Fund, Māori investment entities, and Morrison and Co. are potentially natural investment partners given their local knowledge, and perhaps greater willingness to take earlier stage project development risks. For example, the ACC is an investor in the Transmission Gully project, and Morrison and Co. and the New Zealand Superannuation Fund are investors in the Hobsonville Point primary school PPP.

But we need to work harder to inform investors…

What's missing right now is investor-ready information on opportunities. The key requirement for attracting private capital to help fund Auckland's investment needs is, first and foremost, to provide potential investors with a well-articulated account of the commercial risks and how they might be shared between the public and private sectors. Once these are understood they can be priced. Getting to this point requires ongoing engagement with the potential investment community.

Putting Auckland more firmly on the global investment radar also requires the development of a pipeline of potential investment opportunities, and a credible and transparent transaction process. Large institutional investors are more likely to commit the organisational resources required to bid for a complex PPP project, for example, if there is a programme of opportunities ahead.

…and make capital allocation choices

Like the Australian State Governments, Auckland Council should develop a framework that enables it to robustly consider the trade-offs involved in re-cycling capital. This makes economic sense when the return from holding an existing asset – both the direct commercial return and the broader economic and social return – is assessed to be either less than the burden from servicing existing debt, or the overall return from investing into new assets. With a balance sheet of over $40 billion (roughly half of which is roads), the Auckland Council could in principle fund many large projects via asset sales to long-term investors. As discussed above, the present pricing environment for fully-developed assets makes it particularly opportune to consider this type of trade-off. The principle equally applies to other councils in New Zealand, and the central government balance sheet.

We recognise asset sales are politically sensitive regardless of their economic merit. It is important to note, however, that bringing private capital to the table does not mean wholesale asset sales to offshore interests, nor does it imply alienating New Zealanders from their land. Many of the infrastructure developments and fully-developed asset sales in Australia, including the Port of Botany sale, are for long-term leases rather than free-hold title. Land remains in the hands of State governments. In all of the PPP projects New Zealand has undertaken so far, land title has also remained with the Crown. Increasing public awareness of this may reduce some of the resistance to bringing in private capital.

Time for a change?

Realising Auckland's potential is not a given. At a time of central and local government funding constraints there is a risk that the investment required to lift competiveness, reduce bottlenecks, and improve social well-being occurs too little and too late.

As far as we are aware, there are no legislative or regulatory barriers preventing Auckland Council and related entities from tapping into private equity sources more aggressively. And central government has already demonstrated its willingness to explore different funding approaches.

A greater effort to bring private capital into the picture would better enable Auckland to realise its global city aspirations.

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