Financing & Funding of Infrastructure in New Zealand

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Contents

Executive Summary

The financing and funding of infrastructure is an essential step in planning for effective and efficient delivery. It can have long term implications for users and providers of infrastructure.

Well-designed infrastructure funding and financing policies allow providers to recoup the initial and ongoing costs of providing infrastructure, incentivise provision of new or improved infrastructure when it is valued by users, and encourage people to optimise when, where, and how they use infrastructure services.

It is common for funding and financing to be used interchangeably, but from a technical perspective they have different meanings. Funding represents all the money needed to pay for infrastructure. It comes from the community through users, taxpayers, or ratepayers. Financing is about when we pay for our infrastructure. It could mean using cash surpluses now or borrowing from sources we need to service and repay later.

Six principles are identified to assist with addressing issues with how infrastructure is currently financed and funded – becoming touchpoints against which solutions can be assessed:

1. **Those who benefit pay** - Infrastructure services should be paid for by those benefiting from the services (the benefit principle) or creating a need for the service (the causer principle).
2. **Intergenerational equity** – Funding and financing arrangements should reflect the period over which infrastructure assets deliver services and be affordable for current and future generations.
3. **Transparency** – There should be a clear link between the cost to provide infrastructure services and how services are funded. Wherever possible, prices should be service-based and cost-reflective.
4. **Whole-of-life costing** - Funding requirements should include the ongoing costs to maintain and operate an infrastructure asset and the cost to renew or dispose of it at the end of its life as well as the up-front cost to construct or purchase it.
5. **Administratively simple and standardised** – Administrative costs for both providers and users should be minimised unless there are clear benefits from more complex funding and financing arrangements.
6. **Policies for majority of cases** - Funding and financing policies should be written to work for the majority of cases. If needed, alternative or supplementary mechanisms should be added to provide flexibility and ensure fairness.

The issues identified within this report arise from a multitude of drivers. Addressing them will require a range of solutions, from legislative change, to investigating behaviours, to promoting better practices.

While financing does feature amongst the solutions (primarily around the use of Special Purpose Vehicles), the solutions recommended in this report focus mainly on funding. Funding mechanisms that establish a clear and transparent link between the cost to provide infrastructure and the benefits of infrastructure provision can better achieve the multiple outcomes sought, including price signalling, demand management, and paying for the service.

The solutions recommended to address the identified issues are:

- Removing rates exemption for Crown land

- Single national legislative process for development contributions policy
- Consolidate existing separate infrastructure funds
- Distribution mechanism for single integrated infrastructure fund
- Debt off the balance sheet through special purpose vehicles
- Targeted funding tools – tourism
- Targeted funding tools - transport
- Targeted funding tools - wastewater
- Targeted funding tools – waste
- Value capture tools
- Amalgamation of service providers
- Infrastructure delivered through non-political vehicles
- Better communications
- More infrastructure funding from Government

Many of the issues and solutions identified within this report are not new, having been raised in some form in previous reviews and inquiries. However, the right funding and financing options work best within the context of a broader infrastructure strategy that outlines how they can be deployed alongside other mechanisms to enable delivery of the right infrastructure.

Context

Infrastructure: "A system of inter-connected physical structures that employ capital to provide shared services to enhance wellbeing."

From Te Waihanga's website

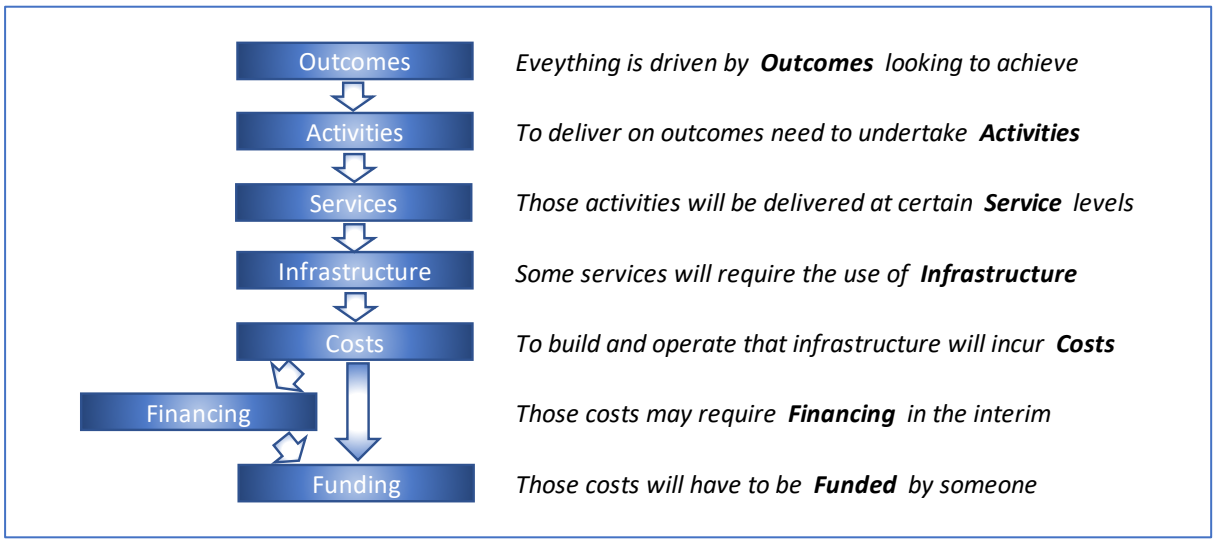
This section of the report provides some context to the financing and funding of infrastructure as it is simply one step in the planning for and delivery of infrastructure.

There are some misconceptions around the nature and use of certain funding tools, as well as what actually leads up to the point of a decision being made as to how the costs of infrastructure can and should be funded and/or financed.

The steps leading to determining how infrastructure should be funded

The determination of the appropriate funding of infrastructure is the last step in the planning process that starts with the outcomes being sought to be achieved. Each step in this process assists with determining how the infrastructure should be funded and by whom. Diagram 1 shows these fundamental steps and how the planning process moves through from outcomes to funding.

Diagram 1 Fundamental planning steps leading to funding determinations



When considering how to reduce a funding requirement, any of the previous steps in this diagram can be considered from reducing costs, to implementing a different infrastructure model, to reducing levels of service, to discontinuing an activity, to ultimately reassessing your outcomes.

The difference between financing and funding

As can be seen in diagram 1 all infrastructure costs must be funded but not all need to be financed. However, while financing is not always required, in the majority of cases it is financing that initiates infrastructure projects, enabling them to occur with the appropriate funding tools to follow.

Who and how infrastructure is ultimately paid for is determined by the funding (or revenue). Financing (or capital) is a temporary arrangement, which defers the funding requirement until a future date. The most common form of financing is borrowing, but it can also include utilising existing cash reserves, or public-private sector partnerships (PPPs), where a third party finances the initial capital outlay.

Utilising financing tools has three key purposes:

1. Deferring or spreading the funding requirement
2. Matching the funding of the costs to another factor such as usage or asset life
3. Enabling delivery of the infrastructure now

Other purposes of financing where mechanisms such as a PPP are involved may be to keep debt off the entity's balance sheet, and to transfer risks to another entity.

Funding mechanisms can have many purposes:

1. Enabling payment of the costs incurred
2. Managing demand
3. Signalling the value attached
4. Ensuring commercial discipline
5. Redistributing wealth

While financing is a useful tool to spread or defer the funding requirements, it needs to be noted that in most cases financing will in itself increase the costs to be funded, as time has a value, such as interest costs attached to borrowings.

Each financing and funding tool has its uses and constraints

While there are many different funding and financing tools that can be used to pay for infrastructure, it must be recognised that each has a distinct use and, in most cases, there are constraints around when they should be used, with these constraints sometimes being unique to the respective sectors.

One of the most obvious examples here is borrowings. The biggest constraint to borrowing more to finance infrastructure is often debt ratios, which are linked to credit ratings and conditions attached to existing debt issuances.

Another example is development contributions levied by a local government entity, which can only be used to fund growth related capital expenditure and must be assessed following rigorous processes outlined in legislation.

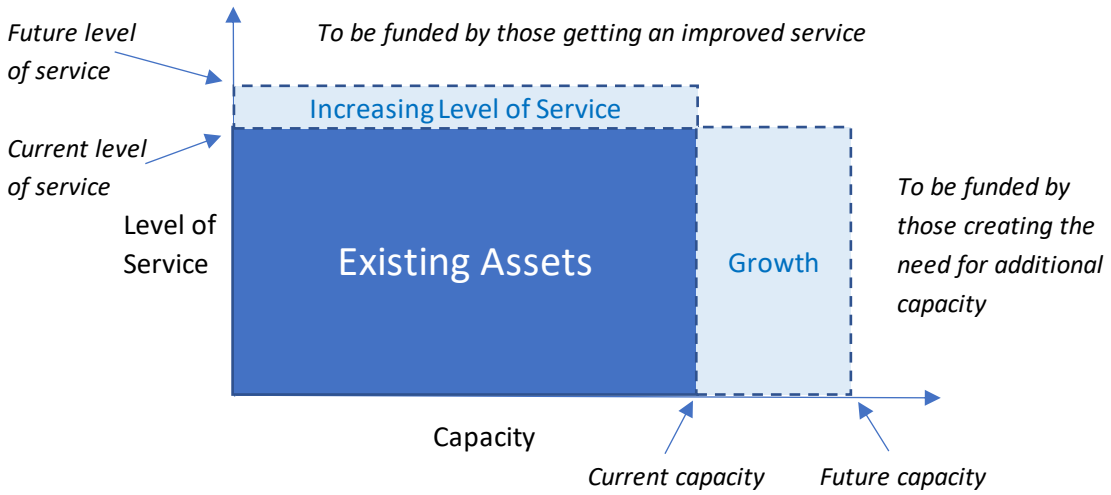
A third example is charging for the transmission, distribution, and supply of electricity, which is regulated in different forms by both the Electricity Authority and the Commerce Commission.

Infrastructure assets are built to a desired level and a required capacity

In basic terms an infrastructure asset (or network) is built to meet a required capacity and deliver services to a desired level.

Additional funds can then be spent to either provide additional capacity for growth, or to improve levels of service (with renewal works being to restore service levels lost through age or other factors). Diagram 2 shows this basic concept, which assists with the future determination of how that asset should be financed and funded.

Diagram 2 Two components of asset delivery are capacity and level of service



Infrastructure funding and financing is not just an economic or technical decision

Running parallel to the assessment of the right funding or financing tool based on economic and technical considerations, is another process that tests the appropriateness of the tool based on three other factors, with growing subjectivity as you move through the three:

1. ***Ability*** – whether the tool can be used under the circumstances taking into consideration legislative and regulatory requirements

   (e.g. low power usage charges are currently required to be made available through the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004, although this is to be phased out by 2027)

2. ***Appetite*** – whether the tool fits within the philosophical and political position of the board, council, or other governing group

   (e.g. a local authority may decide to levy a targeted rate to fund new infrastructure on the basis that users within a specific area have created the need for the works)

3. ***Acceptability*** – whether the implications of the tool are deemed affordable or even whether there will be a perceived willingness to pay

   (e.g. when introducing new monthly volumetric charging Watercare Services Ltd set up the Water Utility Consumer Assistance Trust, to help those unable to meet their water bills)

This parallel process reflects the fact that decisions around infrastructure can be subjective, which can either supplement or sometimes appear to contradict technical decisions.

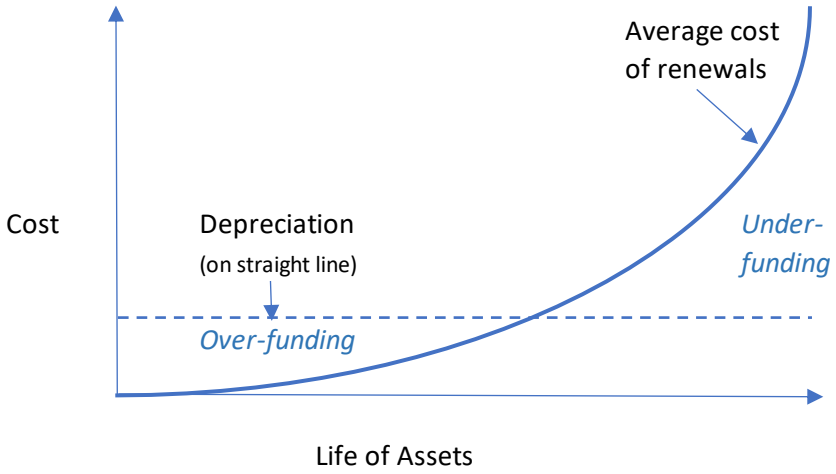
A network of infrastructure assets can be maintained in perpetuity

What often sets infrastructure assets apart from other assets is the concept of being part of a physical system or network. Combined with the requirement for continuity of service for the wellbeing of users, this reinforces the notion that an infrastructure network of assets will continue in perpetuity, as opposed to being used for a finite period and then disposed of.

In real terms this means that a section of cable, pipe, road surfacing, classroom block, etc. will be replaced without affecting the overall ongoing delivery of service. And ultimately over the originally intended life of the network all components will end up being replaced, to start the process all over again.

The implications of this maintenance in perpetuity are important when it comes to financing and funding decisions as a smoothed programme of costs and therefore funding over the life of the asset can be developed. This plays out in the correlation between the funding of depreciation and use of those funds to meet the costs of renewal works.

Diagram 3 Relationship between depreciation funding and probability of renewal works



What this shows us is that while the funding of straight-line depreciation over the life of an asset may reflect the use of the assets, this bears little relationship to the actual likely renewal programme, which increases as the asset ages.

With a network or series of networks it is likely that assets will be at different stages of the curve, and so on average come close to the depreciation line. The main exceptions being an overall young network, which requires much less renewals, and an overall older network, which requires much more.

Four key ways to reduce funding impact on any individual

The primary funding concern expressed by any user of a service is the cost to them individually. In basic terms there are four ways that the funding impact on any individual can be reduced:

1. **Reduce the cost** – in any public or quasi-public sector organisation there is an obligation to ensure that services are delivered as effectively and efficiently as possible to ensure that levels of required funding are kept as low as possible. Wherever there is an ability to tax, this responsibility becomes even greater, as generally the tax is imposed, unlike a charge where there is more discretion to utilise a service and then pay for it.
2. **Identify alternate source of funding** – reducing the net cost to end users can sometimes be achieved by identifying other parties that are willing to contribute towards the costs, such as government subsidies or grant schemes. Alternatively, there is also the possibility of financial support from the philanthropic sector, should objectives be complimentary.
3. **Spread funding requirement across a wider base** – identifying all of those benefitting from the infrastructure, can enable costs to be spread wider, thereby reducing the individual funding requirement. The wider base can reflect geographical spread, range of industries benefitting, timing of services provided, or the recognition of volumetric based usage.
4. **Provide relief mechanism** – for those that are unable to meet the costs for the services being received, relief in the form of hardship grants, reduced charges or other mechanisms can assist, targeting the relief to where it is needed.

Infrastructure consists of long-life assets

By their nature infrastructure assets usually have very long lives, which has several implications for their funding and financing.

Firstly, the initial construction or purchase cost, which can be quite substantial, should be funded over the service life of the assets. This matches the purpose of financing arrangements, whereby the initial outlay is debt funded with the debt being repaid by ongoing user funding over the life or a significant portion of the asset's life.

Secondly, the initial decision to construct or purchase an infrastructure asset creates a long-term implication for maintenance and operating costs. This creates an obligation to fund those costs on an ongoing basis for a very long time. And as a decision to reduce service levels is quite rare, it is very unlikely that the ongoing costs and therefore funding requirement will reduce, outside of efficiency gains.

New Zealand is a diverse little country

While New Zealand is a small country on the international scale with a population of under 5 million people and a Gross Domestic Product (GDP) of around $325b, when it comes to infrastructure, in many ways it is quite diverse from a provider and governance perspective:

- Local authority – 78 councils delivering various core infrastructure services
- Electricity – 5 main generators, 29 distributors, and 5 main retailers
- Natural gas – 1 distributor and 6 main retailers
- Telecommunications – 1 main fixed line operator and 3 main mobile operators
- Health – 20 district health boards and around 220 (public and private) hospitals
- Education – over 2,500 schools, 8 universities, and 16 polytechnics
- Justice – 59 district courts, 18 high courts, 18 adult correction facilities
- Plus, much more in defence, housing, community facilities etc.

Councils must balance their budgets

The Local Government Act 2002 requires each council to act prudently in how it operates. This doesn't mean acting conservatively, minimising all financial risks. It is understood that councils need to operate and make tradeoffs. In acting prudently local authorities are expected to carefully consider the implications of its decisions, weigh up options, and manage long and short-term needs.

As part of this acting prudently, councils are to make sure that over a ten-year period adequate provisions are in place to meet their expenditure needs. And in addition, for each year the council must have enough operating revenues to meet its operating costs (which is colloquially known as balancing the budget), unless there is a good prudent reason not to.

This is stricter than similar requirements placed in central government through the Public Finance Act 1989, where generally government is required to make sure operating costs do not exceed operating revenues, over a reasonable period of time. The exceptions to this are if debt is not at prudent levels, then government must look to reduce it, and that the Minister of Finance can decide otherwise if just temporary and explains why.

Conceptually these requirements are to ensure that short to medium term needs are met in the same period, thereby not impacting on long-term needs. In other words, if each year, or a relatively short to medium timeframe, costs are met by adequate revenues (e.g. funding), then longer term provisions (e.g. financing) are kept free to meet the costs of building and purchasing assets, including infrastructure.

Principles

This section of the report will outline several core principles relating to the financing and funding of infrastructure. These principles become key considerations in determining solutions.

These principles can also be used as future reference or "touch-points" when looking at the implementation or further refinement of decisions.

There is no inherent hierarchy of principles, with all being considered when assessing the appropriate solutions. These also need to be assessed within any regulatory or legislative requirements that must be considered when developing funding and financing decisions.

Principle 1: Those who benefit pay

Infrastructure services should be paid for by those benefiting from the services (the benefit principle) or creating a need for the service (the causer principle).

Infrastructure assets are built to deliver services, with the justification of the original construction being that the perceived benefits will outweigh the costs. It is therefore appropriate that as a guiding principle those benefitting from those services should meet the costs.

In some instances, the beneficiaries may differ from the users, and in other cases it may be hard to define the beneficiaries specifically, such as when there are environmental or social benefits to a community. This can include spill-over benefits to others not directly using the services provided. In some cases, these can be incorporated through value capture or targeted rating tools. In other cases, it is expected that costs will be passed on, for example, fuel and electricity costs incorporated into pricing. As this can quickly become a very complex analysis, decisions need to be based on the best fit (see principle 6).

In other cases, infrastructure assets may need to be built to remedy a shortcoming or disbenefit to others, such as extra demand on a stormwater system creating the need for retention tanks, in which case it is the exacerbator, creating that need, that should meet the costs of the additional capacity.

For infrastructure provided by public entities, cost benefit analysis should be undertaken to justify the project going ahead and identify who benefits (or receives value) to inform who should pay and how. For example, if individuals, then it may be user charges, if specific groups, then it may be targeted rates, and if the whole community (e.g. better environmental outcomes), then general rates.

Principle 2: Intergenerational equity

Funding and financing arrangements should reflect the period over which infrastructure assets deliver services and be affordable for current and future generations.

By nature, infrastructural assets are long-life assets, providing services over a long period of time. While the asset continues to deliver services, people will continue to benefit from it and therefore should be contributing towards the costs, including the costs to initially build the asset.

The most obvious tool is to finance the initial construction costs by way of debt, and for the debt to be repaid as the asset's usefulness is "used up". This avoids those present at the time of construction having to meet all of the initial costs.

The intergenerational equity principle relates to the first principle, reflecting the timing of benefits.

With the long-life nature of infrastructure assets and the long-term obligations that this creates, it is important that in planning for infrastructure assets, careful consideration is given to the ongoing user requirements, the value that will be delivered over its life, and the ability to adapt if requirements or technology change.

Principle 3: Transparency

There should be a clear link between the cost to provide infrastructure services and how services are funded. Wherever possible, prices should be service-based and cost-reflective.

Transparency in funding increases the accountability of the parties incurring the costs and often the acceptability of those being charged. This can be achieved by making the linkage between costs incurred and how they are funded as transparent as possible, through the use of targeted rates for local authorities and itemised billings for all services.

Transparency around the causation of costs provides more understanding of the commercial value of services being received and aids better decision making when determining funding tools.

Infrastructure service prices should generally be service-based and cost-reflective.

Service-based means prices reflect service types and levels. This is how most of us pay for electricity or telecommunications. For example, there are different prices for phone and data services depending on how many calls you make or data you use and whether you use voice or data services. Cost-reflective means prices reflect the cost of supplying the service.

Cost-reflective pricing often means that there is a fixed cost, as well as some charges that vary with use. A fixed access charge (to cover the fixed costs, such as the cost of an electricity connection) can be set alongside charges that cover variable costs, such as the amount of electricity used.

Principle 4: Whole-of-life costing

Funding requirements should include the ongoing costs to maintain and operate an infrastructure asset and the cost to renew or dispose of it at the end of its life as well as the up-front cost to construct or purchase it.

While the initial construction or purchase of an infrastructure asset can be substantial, requiring financing to procure, any decisions around the funding of the asset will also need to take into consideration the ongoing costs to maintain and operate the asset, as well as what happens at the end of life. These ongoing costs can include depreciation expenses, regulatory costs to enable it to be used as intended, and the interest costs arising from a financing arrangement.

This is important so as to differentiate who pays for which components and thereby avoid what is colloquially known as "double dipping" where some in effect pay twice for the same services.

By seeking to minimise the whole of life costs, and not just the initial outlay, a true cost benefit analysis can be undertaken, and better decisions reached. It is quite possible that increasing the initial outlay will decrease future costs, and thereby reduce the overall whole-of-life costings.

Alternatively, a robust business case may also identify a non-built option as being the best approach for delivering the required services to the minimal overall cost.

Principle 5: Administratively simple and standardised

Administrative costs for both providers and users should be minimised unless there are clear benefits from more complex funding and financing arrangements.

Each funding or financing tool will have a different administrative footprint, potentially including public consultation, prospectus, regulatory compliance, complex process calculation, complicated documentation, etc.

Therefore, when assessing the appropriateness of each tool, how simple it is to administer should be a consideration, as well as making the process to set and recover the funding as simple as possible to follow once decided upon.

Another aspect to the principle of keeping things as administratively simple as possible is enabling easy access to funding, by making the purpose of funds clear and transparent. By way of example any grants schemes made available by the government should be well advertised, and the application processes as easy to follow as possible.

Principle 6: Policies for majority of cases

Funding and financing policies should be written to work for the majority of cases. If needed, alternative or supplementary mechanisms should be added to provide flexibility and ensure fairness.

As a principle the starting position for policies to determine how infrastructure costs will be met, should aim to be the best fit in the majority of cases. Attempting to develop policies for every exception to the rule, or to ensure affordability for every user, is highly problematic and unlikely to achieve the outcomes sought.

Following this principle does however mean that the exceptions need to be considered, so that other mechanisms can be out in place, for the portion that the policy doesn't work for.

Most sectors have support policies around hardship grants for those unable to pay policy developed charges. These support mechanisms can also be available from other parties such as the Government's rates rebate scheme, and reverse mortgage arrangements provided by the banks.

This also covers the notion that price does not always equate to value. In some cases, a proxy of value must be used in determining price, such as fuel consumption as an indication of road use and value. Also, the fundamental basis of rating in New Zealand uses property values as an indication of ability to pay, with a correlation being sought for the majority of cases, not an exact relationship.

Issues

This section of the report will outline issues relating to the financing and funding of infrastructure that need to be addressed. Many of them are not new, having been highlighted in various forms in previous reviews. Some are even being partially addressed at the moment.

1. Crown land not paying rates

With more government funds being made available for local government initiatives, and growing transparency between costs and funding, it is more important than ever that there is seen to be equity across the country.

A current inequity is the fact that a large portion of Crown land is exempt from paying rates, even though it will use local government infrastructure. Examples include land used for health, education, and defence purposes. These sectors require significant infrastructure investment. Local authority rates will still be payable for some water and wastewater services, but these Crown properties will be exempt from or have modifications for the majority of rates.

The inequity is created as each council will have a different proportion of its overall rating base taken up by Crown land, with the remaining ratepayers having to then cover the shortfall through their rates for that exempt portion.

> *As of 30 June 2016, the school property portfolio of the Ministry of Education included more than 2,100 operational state schools and was valued at about $14 billion. This is equivalent to the entire rateable value of all properties in Palmerston North at the time.*
>
> [OAG (2017)]
>
> *From the Treasury interim financial statements for May 2021, we see that Crown owned land and buildings total $99 billion, a material portion of which will be non-rateable for most rates levied by local authorities.*
>
> [The Treasury NZ (2021)]

2. Challenges to development contribution policy

Development contributions levied under the Local Government Act 2002, can be legally required by a local authority, provided a good process is followed and, in simple terms, two key criteria met:

1. ***Meets a need*** – the effect (or cumulative effect) of the development must require the local authority to create new or additional capacity
2. ***Meets a cost*** – the developer should pay a proportionate share to cover the costs of the capacity, without enabling the local authority to over-recover

The concept of development contributions is therefore quite straightforward – divide the cost of building infrastructure for growth, by the level of growth driving that cost. However, there is a significant amount of detail within the process; both the initial calculation of the contribution schedules, as well as the individual levying for a specific development. The process is open to interpretation and therefore challenge, and with the contributions quickly becoming material as the scale of the developments get bigger, debate and delays are not uncommon.

To assess both the capacity requirements, and the relevant costs, where it is quite usual for a project to both build new capacity and replace existing aging infrastructure, let alone change existing service levels, requires a huge amount of data. This includes existing condition ratings, consumption levels,

growth projections, changes to trends, geographical catchments, contract unit rates, household occupancy rates, impermeable surface data, and much, much more.

As assumptions and professional judgement are required, this leaves the process open to differing opinions. Legal challenges can be made to independent commissioners if a developer believes that their contribution has been assessed incorrectly, the policy has been applied incorrectly, or the information in the assessment was incomplete or erroneous. While this does appear to mean that it is only the specific assessment for the individual development that is open to challenge, and not the development of the policy itself, the two are so intrinsically linked that challenging the individual assessment (micro-level) is testing how the policy (macro level) was constructed.

The other issue arising from this macro versus micro discussion is that planning for infrastructure requires judgements and assumptions around the nature of development that will occur in a catchment and therefore the level of infrastructure required. Individual developments are likely to differ from these judgements, with any reduced demands or other mitigations, quite rightly reducing the contributions payable, but then leaving the surplus to fall onto others to fund.

At the moment, it is generally the local authority that takes on the risk of under-recovery from contributions, as an averaging per catchment takes place. For example, the local authority estimates costs, timing, and level of infrastructure required for a catchment, but should a medium to large developer believe they can do things cheaper, then they can test those assumptions, or attempt to negotiate. It is safe to say that there will no such challenge should things go the other way (i.e. end up costing more).

The relatively new objection process of an independent commission does not stop a judicial review proceeding being initiated through the High Court, although this is primarily about how the decision was made and not whether the right decision was reached. While there haven't been a lot of judicial reviews in recent years, there have been a handful, with a joint group of developers currently taking proceedings against Hamilton City Council.

3. Multitude of separate Government infrastructure related funds

There have been or currently are a range of infrastructure related funds available through the Government, each with their own criteria to access. While this may create transparency at to what the funds are to be used for, it does create its own challenges as to whether this is the most economically advantageous way to allocate funding resources. Some examples of some of the most significant funds (or related mechanisms) established over the last decade include:

- Ultrafast Broadband Initiative (announced 2011) with the first phase at an estimated costs of $1.5b
- Housing Infrastructure Fund of $1b (opened for applications in May 2017) consisting of 10-year interest free loans
- Provincial Growth Fund of $3b over a three-year period (announced Nov 2017)
- NZ Tourism Infrastructure Fund of $25m per annum (established in Feb 2019)
- New Zealand Upgrade Programme of $12b (announced Jan 2020) with additional $1.9b added after a reset in Jun 2021
- Regional Investment Opportunities (initial allocation in Feb 2020) was given $300m out of the New Zealand Upgrade Programme, later being brought in under the Provincial Growth Fund after May 2020 allocations
- COVID-19 Response and Recovery Fund (announced in May 2020) included $3b for infrastructure funding

- "Shovel-ready" infrastructure projects (announced Mar 2020), which is around $3b on top of the Provincial Growth Fund and New Zealand Upgrade Programme
- Three Waters Reform Programme (launched in Jul 2020) with $761m stimulus package
- Investment in recycling infrastructure of $124m (announced Jul 2020) as part of the COVID-19 Response and Recovery Fund
- Infrastructure and Financing Act 2020 (enacted in Aug 2020) enabling special purpose vehicles to finance major infrastructure projects
- Māori and Public Housing Renewable Energy Fund (established Aug 2020) of $28m to trial renewable energy technologies on Māori and public housing
- Infrastructure Acceleration Fund of $1b (announced March 2021) administered by Kāinga Ora as part of the $3.8b housing acceleration fund
- National Land Transport Programme, is main funding source for land transport initiatives
- Three Waters Reform Programme support package of $2.5b (announced Jul 2021) to support the transition of councils to the new water entities

4. Limited debt capacity

Primarily an issue for councils, especially those in high growth areas, the capacity to raise debt can be a limiting factor when it comes to investment in infrastructure. This is primarily due to limited certainty around future revenue streams in a political environment. There is also the issue around councils providing such a wide range of services, including hard and social infrastructure, meaning that only a portion of the services are determined on a strictly commercial basis.

The capacity limits are mainly reflected in debt ratios, especially debt to revenue, which gives an indication of debt serviceability. While debt ratios are self-imposed by each council, these have flow on implications for credit ratings, public perceptions of prudence, and future debt servicing requirements.

While councils could amend their own treasury ratios through public consultation and thereby increase debt capacity, this is problematic for several reasons:

- There is also debt to revenue ratios in place for any councils that borrow through the Local Government Funding Agency, a Council-Controlled Organisation (CCO) established in 2011 to provide more efficient funding costs and diversified funding sources for New Zealand local authorities and other CCOs.
- Debt has quite a high public profile and is often used as an indicator of how prudently a council is managing its finances, especially in an environment with growing infrastructure programmes, that has led to debt increasing over recent years.
- Increased debt levels still have to repaid and incur interest costs, and while currently interest costs are relatively low, there is no certainty that they will stay low.
- Strong financial disciplines need to be maintained around the use of debt, as any use of debt funding for ongoing operational costs, can create an ongoing obligation to borrow each year.

The above observations can all be extended to the argument that the right economics in many cases is also to borrow and deliver infrastructure now as this will deliver the outcomes sought, and possibly reduce future operational costs. However, other considerations are often relevant for local government decision-making.

5. Targeted funding tools

There are several areas where funding tools aren't being used as effectively as they could be to send true pricing signals, assist with demand management for the services, and better link costs and funding by activities.

Examples of activities include transport, wastewater, waste management and tourism.

In some case the constraints are legislative (e.g., tolling, congestion pricing, volumetric wastewater charging) and in other cases it is how the existing funds are being used (e.g., tourism levy).

Technology has continued to improve to support the implementation of such tools, meaning that they can now be applied relatively efficiently.

Targeted rates are one tool, that by definition, can enable more targeted charging to users of services. However, to ley a targeted rate, specific legislation (namely the Local Government (Rating) Act 2002) must be followed to avoid invalidating the rates levied:

In 1997 Tauranga City Council resolved to start a 2.5-year programme to install what ended up being around 39,000 water meters. Identified benefits include:

- *Public perception of fairness & equity*
- *Reduction of 30% peak demand*
- *Reduction in average demand of 25%*
- *Corresponding reduction in wastewater*
- *Reduced wastage and leakage*
- *Substantial capital work deferrals*

[Sternberg J and Bahrs P (2009)]

1. **Who can be rated** (Schedule 2) – to set a targeted classification, the council can use such things as: how the property is used or able to be used, where it is, the size of it, what services it gets, and the property's value.
2. **How the rate can be calculated** (Schedule 3) – to determine how much can be charged, the council use such things as: services the property has or could get, the value of the property, area or area that is built on, floor area of buildings, number of connections, etc.

An important aspect when considering targeted rates is to remember that they are based on characteristics of the property, not the occupier, and so while targeted, they cannot be directly based on the number of people in the property, the income earned, employment status, etc.

Some councils are utilising the "extent of provision of any service" clause within the schedule to rate volumetrically for water supply and wastewater. Care needs to be taken here as there is a note to that clause of the schedule which states "the extent of provision of a service to the land must be measured objectively and be able to be verified". It is assumed that well maintained water meters should cover this requirement.

Another important consideration when considering targeted funding tools such as targeted rates for the funding of infrastructure is their short-term nature. While initial business case assessments will identify how long the charge will need to be applied for, it is always possible for a board or council to decide to change that decision. However, this is always true when it comes to the funding of infrastructure across all sectors, with a requirement for the decision makers to carefully consider the implications of any change from original intentions. This is dictated through the obligations placed on board directors and elected members through various legislation.

6. Value creation not being captured

Outside of specific development agreements, there is a significant amount of value being created to parts of New Zealand through the provision of infrastructure that is being gained by parties outside of those responsible for providing the infrastructure. In many cases this may be appropriate, especially where the value created is environmental, social, or cultural in nature.

However, where there are economic gains, then it may be more appropriate for the infrastructure provider to capture some of the economic value created. Without this reciprocal capture, the provider is forced to recover the costs of provision through its existing base of users through whatever mechanisms it has available.

Targeted rating has been cited as an existing value capture tool that could be more utilised. However targeted rating can't use a value uplift between two points in time, which is the change that value capture is all about. There is also the issue that if it could, it is fundamentally a tax on the unrealized capital gain on a property, which could be quite contentious.

Similarly, development contributions are also cited as a tool already available, but development contributions are purely a cost recovery mechanism for additional growth-related units, and so do not consider existing parties who have had a value uplift as a result of infrastructural works in their area.

7. Economies of scale

With 67 local authorities responsible for the provision of roading, public transport, water, wastewater, and stormwater infrastructure in their respective areas, it is difficult to achieve the economies of scale that are desirable.

Similarly in the health sector, a recent health and disability system review identified that the current 20 district health boards, could be amalgamated to some degree to simplify their operations and achieve better outcomes for New Zealanders. This includes getting better economies of scale through appropriate nationally commissioned services.

Lack of scale can manifest itself in many ways, such as the inability of smaller organisations to attract top caliber employees, peaks and troughs in workloads that are hard to resource for, in addition to the more obvious reduced buying power to ensure the best procurement options.

Economies of scale can be achieved in a variety of ways, as evidenced by the two examples given here, with one being amalgamation and the other a contract for services.

There is also a risk that financial gains through better economies of scale can lead to reduced representation, and more administrative layers when it comes to decision making, and so all aspects need to be considered when assessing options.

In 2019 Waikato District Council entered into a contractual arrangement with Watercare Services Ltd to provide water services, with an estimated $28m savings over ten years through economies of scale.

[Waikato District Council, 2019]

Eight Auckland councils were amalgamated on 1 Nov 2010 into the new Auckland Council, and after ten years it was confirmed that around $2b of accumulated savings had been achieved through the amalgamation.

[Auckland Council (2020)]

8. Prioritisation in Local Government environment

The diversity of services provided through the highly political environment of local government makes the prioritisation of individual infrastructure decisions more difficult than in a single industry focused entity. With political decision-making ranging from urban planning rules, to infrastructure projects, to animal management, to environmental concerns, to service level setting, to property management, to budget setting, to performance monitoring, to community engagement, to a multitude of other things, it is very hard to set priorities.

In addition, with constrained financial resources, and significant public input to decision making, there is a lot of competition for those limited resources when it comes to deciding when and where they are needed.

On top of this there is also the nature of local government politics, driven by a three-year election cycle, which introduces more subjective thinking to some decisions than would necessarily be found in a private company dealing with large scale infrastructure considerations.

9. Disconnect between what people get and what they pay

How infrastructure related services are funded can generally be classified into two types, namely those based on user pays, and those based on taxes (including council rates). As soon as services are based on taxes, there is a disconnect created between what you pay and what you get.

Inherently if there is no connection then people do not place the same value on the services that they are receiving, and there are no pricing signals given to those users, to encourage more efficient use or exploring alternatives.

This disconnect also contributes to the notion of willingness to pay, as with a lack of transparency the funding provided appears to enter an unexplainable “black box”, with people seeing that they are paying a tax, but not necessarily seeing a corresponding service being provided.

Generally, in the provision of utilities (electricity, gas, telecommunications, and to some degree water and wastewater) there

Auckland Council proposed to introduce a new targeted rate to fund infrastructure works to improve water quality in the region as part of its 2018-28 Long Term Plan. 61% of submissions supported the proposal, with the clear connection between the funding and what would be achieved.

[Auckland Council (2018)]

is more transparency around funding, with charges often being partially on a volumetric basis, so people feel that they have more control.

All councils must consider how they intend to fund services when compiling a revenue and financing policy, taking into account such things as distribution and timing of benefits. How well this is understood by communities and customers must be questioned.

10. Insufficient infrastructure funding

Most recent reports on the provision of infrastructure within New Zealand have identified an historical under-investment, with a lack of adequate funding identified as one of the reasons for this.

Ironically, under-investment can end up costing more in the long-term as it increases maintenance costs, reduces the efficiency of network planning, and inhibits optimal asset management planning.

Within more recent times, as shown previously in this report, there has been a general move to more funding being made available by Central Government to fund different forms of infrastructure investment. However even with this additional funding, there are additional cost pressures being placed on infrastructure that will need to be met.

In their briefing to the incoming Minster of Infrastructure in Nov 2020, Te Waihanga referred to various estimates of the current infrastructure deficit of between $25.9 billion and $75 billion.

[Infrastructure Commission, 2020]

The Infrastructure Commission in its recent consultation document "Infrastructure for a Better Future" identified a number of cost pressures:

- *Current deficit*
- *Changing population*
- *Improving levels of service*
- *Climate change*
- *Depreciation and renewals*
- *Increasing costs*

[Infrastructure Commission, 2021]

Solutions

This section of the report will look to address each of the issues identified in the preceding section, using the six principles as guides to how they may be addressed.

As with most solutions, these can't be considered in isolation, and so in implementing them, there needs to be an awareness of the other suggested solutions and anything else occurring with the infrastructure environment at the time.

1. Removing rates exemption for Crown land

Removing the legislative rate exemption for Crown properties that use local government infrastructure will enable each authority to more equitably spread its rating requirement over all rateable properties in its area, and not be disadvantaged, simply due to the amount of Crown land falling within their territory.

Rate exemptions currently include schools, hospitals and partially for defence force land, which all require substantial infrastructure investment to support their operation, towards which they do not, or do not fully, currently contribute.

In addition to the equity issue for local authorities this also gives a more accurate picture to central government of the true cost of their operations and may assist when comparing to comparable services provided by the private sector, or in making future commercial decisions.

This solution is not a new one and has been raised formally in the past as part of the Funding Local Government Inquiry (or "Shand" Report) in 2007.

2. Single national legislative process for development contributions policy

A single legislative process, similar to national building standards, to assist individual territorial authorities in interpreting the legislation for determining development contribution policy.

Such a consistent and clarified process should reduce legal challenges (outside of the objection process) and therefore confusion and costs in what is a critical and currently contested infrastructure funding source.

With price differentials around the country, this standardisation won't be able to go far as common charges for all locations, but it should be able to standardise the calculation methodology for all local authorities to use.

This will bring clarity to all parties (developers and councils) as to what the expectation is around the infrastructure costs associated with development. It will also highlight the importance of how infrastructure is funded, creating a very clear link between development, infrastructure and funding.

The costs of development contribution challenges have significantly reduced since the introduction in 2014 of independent commissioners to consider objections, simplifying the process. However, the Commissioners are only looking at the individual assessment for a specific development, not the formulation of the development contributions policy (DCP) itself. This is shown in the objection raised by Mapua Joint Venture in 2015 against Tasman District Council, where the commissioners

decided that “we do not look behind the DCP in making our determination”, meaning that they could only look at how the policy had been applied in this case.

This therefore leaves legal challenges open through judicial review proceedings on the formulation of the policy, with each territorial authority that adopts such a policy interpreting the legislation in their own way.

The Department of Internal Affairs (DIA) has a very useful guide to development contributions, but its status is that of a guide. It would be useful for some of the guidance to be embedded in legislation. Finding the right balance between what is legislated and what is open for individual local authorities to apply in their own context will be crucial here.

By way of example the determination of how many units exist within a development could be articulated where appropriate within legislation to create a national consistency. The legislation uses the term units of demand, which individual councils then have to define, often using Household Unit Equivalents (or HUEs) for each activity, based off a variety of factors such as Gross Floor Area, number of bedrooms, impervious surface area, etc. This impacts on calculating the scheduled amounts, and also the individual assessment for a development.

If legislative standards were set then each council would still assess its contributions using those standards, with DIA continuing to provide guidance to support the legislation.

As information is such a key aspect to the calculation of development contributions, a national led approach bringing standardisation to the inputs to the process, could be a significant enhancement. Not only will it assist with clarity for both developers and councils, it should also reduce the cost of creating the required inputs to the development calculations, as each council will not have to determine and develop the methodology. Comparability between councils will also become much easier and it could reach the stage where a central repository of data could be held, perhaps created and maintained by one organisation.

3a. Consolidate existing separate infrastructure funds

A single integrated infrastructure fund could better prioritise and coordinate programmes to achieve the best value from each investment decision, within an overall programme of initiatives.

It would have to align to a robust long-term infrastructure strategy, for instance be targeted towards achieving the strategic objectives in Te Waihanga’s *Infrastructure Strategy*.

While focusing separate funds for specific purposes may appear to create transparency from the perspective of what the funds will be used for, a fragmented basis does not give the opportunities that a single integrated fund could provide.

By consolidating all available funds into a single fund, this would enable Government to clearly show how they have prioritised programmes at a national level against identified outcomes, giving greater public transparency.

Having a single integrated infrastructure fund does not mean that portions of the fund couldn’t be earmarked for specific purposes, to ensure that there is transparency in use, and budgeting commitments can be honoured. However, at the time of decisions being made around allocation of those earmarked funds, they would be considered with the wider context and be cognisant of other funding decisions that may be related.

3b. Distribution mechanism for single integrated infrastructure fund

How the funds held in a single integrated funding source could be distributed should be investigated to determine how best equity and sustainability issues can be addressed

Consolidating the various funding sources into one will provide the benefits identified in the previous section. However, it is also worth an investigation into how this single source is best managed and in particular how the funds are held and then distributed. Putting aside the qualifications to be met by applicants and the criteria to assess their applications upon, there are variety of models that could be considered, each with their own strengths and weaknesses.

Some examples of possible options to consider are:

- **Grantor**: distribute funds by way of grants, distributing either entire balance or only annual amount of budget made available
- **Lender**: distribute funds by way of loans, with interest and principal to be repaid back into the fund
- **Favourable Lender**: distribute funds by way of interest-free or discounted rate loans, with principle to be repaid back into fund
- **Investor (Grantor)**: invest funds, to earn returns, with only returns distributed for funding, retaining the original capital
- **Investor (Lender):** invest funds, to earn returns, with only returns being lent out, retaining the original capital
- **Investor (Favourable Lender):** invest funds, to earn returns, with only returns being lent out (interest free or discounted), retaining the original capital
- **Combination of the above**

4. Debt off the balance sheet through special purpose vehicles

Explore Special Purpose Vehicles (SPVs) as a mechanism for new infrastructure investments, as a way of accessing alternate financing, and avoiding debt sitting on a council's balance sheet.

This was part of a key recommendation from the Productivity Commission's report of 2019 on local government funding and financing.

Things have progressed down this path with the enactment of the Infrastructure Funding and Financing Act 2020 (IFF), and so local authorities should be encouraged to explore the validity of SPVs for both green (new) and brownfield (existing) developments.

The IFF covers new and upgraded infrastructure, so technically brownfield developments can be part of a proposal within the intent of the Act. However, brownfield development is more problematic, as it will involve levying existing households if improved services are created, and with the magnitude generally quite a bit higher any standard rate increases; it may price people out of their area, subject to the following point.

A key outcome of the IFF is enabling the funding of infrastructure to be paid over time, rather than requiring an upfront contribution. For those that find the payments over time unaffordable, then as with regular rates, mechanisms do exist to assist, such as reverse mortgage schemes, administered

by most banks. Many councils have rates postponements schemes, although this is less helpful for the councils as rates postponed create a debt on the council's balance sheet. An alternate option being considered at the moment is the Ratepayers Financing Scheme (RFS), which is similar to rates postponement, but has the added advantage of placing the resulting debt on a third party's balance sheet.

5a. Targeted funding tools – tourism

Encourage the International Visitor Conservation and Tourism Levy (IVL) to be used for tourism infrastructure, especially for local authorities with high international visitor numbers that are otherwise struggling to secure funding sources.

The International Visitor Conservation and Tourism Levy (IVL) was introduced in July 2019. To date, and perhaps not unexpectedly, almost all of the projects that have been funded by the IVL are primarily planning, establishing management practices and other process related costs.

If the funds created from the levy could be more focused on tourism related infrastructure, this could significantly assist those local authorities with high international visitor numbers to fund infrastructure pressures caused by tourism (albeit once international tourism numbers pick up again), and thereby support the local tourism-based businesses that rely on the infrastructure networks.

5b. Targeted funding tools - transport

The introduction of a pilot transport congestion pricing scheme in Auckland, and possibly Wellington would have several beneficial outcomes for transport in those locations.

Work can also start now on the investigation and development of a plan to shift to charging all vehicles on time, distance, and level-of-service-based pricing.

As well as creating a funding source for transport purposes, it is an effective demand management tool, sending very clear pricing signals to users.

Technology today makes this a relatively efficient tool, with registration plate reading tools, and geo-tagging meaning that zones, residential concessions, and time windows are easily dealt with.

Similarly tolling of highways, where users can see a direct timing benefit can use the same solutions, creating a funding stream to pay for the initial construction costs.

Ultimately with GPS tracking and electronic charging all vehicles could move to time, distance, and level-of-service-based pricing, and so the investigation and development of a plan to shift to this basis could be started now.

The targeted funding tools above, can be used to replace existing rates and other charges, or with clear linkages to what it is funding could be used to create a new funding stream, thereby enabling an increase to infrastructure delivery in a focused and transparent way.

The tools should consider how best to meet future needs as a fit-for-purpose solution, incorporating changes to technology and consumer trends. The tools can also promote sustainable outcomes, through demand management and clear price signalling.

5c. Targeted funding tools - wastewater

Introducing legislative change that clarifies the ability of local authorities to direct rate wastewater based on volumes, would create a better linkage between services and costs to users.

There is currently a much clearer legislative link for the charging of water supply on a volumetric basis, as the water meter is showing how much water is being drawn into the property for whatever uses. This ties in quite strongly to the wording in the Local Government (Rating) Act 2002, around the extent of the provision of a service, which in this case is kilolitres of water supplied. However, using a percentage of water in as water out for the purposes of wastewater services provided is more tenuous, and so clarification through legislation for the volumetric charging for wastewater would greatly assist local authorities.

Of course, should water reform occur as is currently being proposed within the Three Waters Reform programme then this will become a moot point as charging would be based on contractual arrangements and not rating legislation.

5d. Targeted funding tools – waste

An investigation into what funding mechanisms will best achieve the objectives of the Waste Minimisation Act 2008 and National Waste Strategy.

Generally, waste to landfill consists of a combination of government levies and local charges, with most of the charges being based on volumes and the nature of the waste.

While there is a straight economic argument here, in calculating the true cost of processing waste, there are significant behavioural issues to address at the same time, as to what will incentivise and disincentivise people from acting in the best way to support the objectives.

To understand the behavioural aspects would require substantial research and public consultation, linking pricing, processes and outcomes sought.

An investigation would also need to cover off household, commercial and construction waste, as each contributes towards waste to landfill.

6. Value capture tools

Value capture tools enabled through legislation will ensure that value becomes a driver of service provision, and not just cost.

Whereas there are cost recovery tools available to infrastructure providers, such as access charges for utilities and development contributions for local authorities, any multiplier over and above a benefit cost ratio of 1:1 is lost to the provider. By moving to a value basis, decisions move to become more economically driven, with true economic gains being shared, efficiencies more readily being incorporated, and better decisions being made as to where and when to provide infrastructure.

The nature of which value capture tools would work best in a New Zealand environment will need to be investigated, as different jurisdictions have different drivers and different methodologies. By way of example the Tax Incremental Funding that is quite popular in places such as parts of the United States utilises a property tax system that differs from how rates are calculated in New Zealand. In the US, property taxes increase/decrease in direct relationship to the property value, whereas in

New Zealand, property values are simply used to determine how to allocate out the total amount of rates required.

Another tool that can be used overseas for value capture is the equivalent of development contributions. The Ministry of Housing, Communities & Local Government in the UK issued a white paper in 2020, exploring the notion of infrastructure levies being levied at a fixed rate based on the development value (above a certain threshold). This moves the tool from a cost recovery mechanism as in New Zealand to a value capture tool, a fundamental shift.

7. Amalgamation of service providers

An investigation into the benefits of amalgamation of service providers to gain better economies of scale, especially in the area of transport could refocus if not reduce funding requirements.

The Water Reform programme currently underway is proposing an amalgamation of water services into four providers to bring the economies of scale sought, amongst other outcomes. There is already some amalgamation intended for the health sector following a recent review.

When proposing amalgamations, it is important to separate services versus governance. At one end of an amalgamation spectrum is the full amalgamation of entities, at a governance level, reducing their actual number. At the other end is the shared procurement of services to get economies of scale. Sitting in between is the amalgamation of service provisions, such as when the separate entities continue to exist as decision makers, but they have a single entity provide them with the services required. One of the key benefits of the latter two examples is that the local decision making and connections to the communities continue to exist, but the costs of providing services can hopefully be reduced.

Economies of scale to reduce costs as a result of amalgamation can take several forms. The most obvious is a greater buying power through accumulated procurement, which is based on the premise that suppliers can in turn reduce their costs when they are dealing with a single large procurement. On large scale projects this can include optimising the efficient use of equipment, such as reducing the downtime of expensive machinery, reduction in number of depots required, and reducing travel costs for moving equipment around a region. Another form of economy of scale could be the longer-term planning and training of resources, when it is better known what resource requirements will be, over a longer timeframe and wider need.

In reviewing the various forms of amalgamation and consolidation of service provisions, consideration will need to be given to administrative effectiveness, democratic representation, potential diseconomies of scale, as well as the economic benefits.

8. Infrastructure delivered through non-political vehicles

An investigation into whether the delivery of the infrastructure-related services being undertaken by separate entities could deliver additional benefits should be undertaken.

While local authorities should still be deciding where development should be occurring and setting the design standards for infrastructure, the actual delivery of infrastructure-related services could be undertaken by separate entities.

This should mean that the relevant asset class shouldn't have to compete as much for limited funding. In addition, there is likely to be an extra focus on decisions being driven by robust asset management principles and demand management criteria.

The vehicles to enable this separation could take many forms as has been explored in the Three Water Reform review currently underway and has been in place in varying forms in the past through the use of Council Controlled Organisations, or potentially even contracted arrangements.

The ownership of the entities would be part of the investigation, as would the ongoing governance relationships, to ensure that the best interests of the area are met, as are the wider balancing of outcomes sought.

Another important aspect considered as part of the Three Water Reform is the role of regulators – one economic and one environmental. If the delivery of infrastructure is taken away from the democratically elected local authority, then there needs to be a mechanism to ensure that the best interests of the public and the environment are still looked after.

9. Better Communications

There is merit in investigating the possibility of an over-arching communications piece to explain how infrastructure is used in New Zealand to provide services and how it is paid for.

While there is a vast amount of communication from all service providers, these tend to be very specific to the industry, if not the issue being addressed at the time. A more focused piece on the overarching principles of infrastructure and its funding could show that the same rationale exists for most sectors, is a necessity for the productive and efficient operation of the country and is something that everyone uses, directly or indirectly, every day.

There is an argument that the public don't necessarily have to know how infrastructure works and who has responsibility, just what services they can get. However, this creates a large disconnect between what taxpayers and users pay and what it costs to provide those services. The public should also know the important relationship between infrastructure spend and the management of services, including security and availability of supply.

Substantial work currently underway in the development of an infrastructure strategy by Te Waihanga, as well as recent work by the Productivity Commission, Central Government, and others, means that there is ample ground work that can be utilised. An initial foundation piece could be produced outlining the basic principles and purpose, followed up with semi-regular updates, explaining the pipeline, recent progress, and what's happening in "my area" (and why).

10. More infrastructure funding from Government

An assessment be made, whether within the context of the other strategic changes, an overall higher level of funding should be made available on a long-term, more consistent basis.

On face value, a higher consistent level of funding would enable the planning for and delivery of infrastructure to be vastly improved and be able to be delivered on a more efficient and cohesive way.

Central government has the highest credit rating in the country, and so can access the lowest cost financing, passing on the benefits to others.

Utilising this, the Government has increased the level of infrastructure funding (and in some cases with interest free loans the financing) in recent years.

While the funding and financing steps are the last ones in the overall planning steps of delivering infrastructure, a more predictable and higher amount would enable better planning up front, to secure better procurement arrangements, and link timing opportunities or even dependencies in a more efficient way.

While more funding is the ultimate goal, additional financing or indemnification would also enable more efficient planning. This can help to kick start infrastructure works but won't address the other associated issues like limited debt capacities.

More funding up-front can also reduce future operational costs, as preventative maintenance and replacement is much more efficient than reactive works.

Another significant advantage as shown in the COVID Response Package is that Government spending on infrastructure creates jobs, enables local businesses and therefore drives the national economy and productivity.

Diagram 3: Summary of solutions to issues and principles driving change

ISSUES	***Principle 1*** : Those who benefit pay	***Principle 2*** : Intergenerational equity	***Principle 3*** : Transparency	***Principle 4:*** Whole-of-life costing	***Principle 5*** : Administratively simple & Standardised	***Principle 6*** : Policies for majority of cases	SOLUTIONS
1. Crown land not paying rates	✓		✓		✓		1. Removing rates exemption for Crown land
2. Challenges to development contribution policy			✓	✓	✓		2. Single national legislative process for development contributions policy
3. Multitude of separate Government infrastructure related funds			✓	✓	✓		3a. Consolidate existing separate infrastructure funds
		✓	✓		✓		3b. Distribution mechanism for single integrated infrastructure fund
4. Limited debt capacity		✓	✓				4. Debt off the balance sheet through special purpose vehicles
5. Targeted funding tools	✓						5a. Targeted funding tools – tourism
	✓		✓	✓		✓	5b. Targeted funding tools - transport
	✓			✓		✓	5c. Targeted funding tools - wastewater
	✓			✓		✓	5d. Targeted funding tools – waste
6. Value creation not being captured	✓						6. Value capture tools
7. Economies of scale				✓	✓		7. Amalgamation of service providers
8. Prioritisation in Local Government environment			✓			✓	8. Infrastructure delivered through non-political vehicles
9. Disconnect between what people get and what they pay			✓				9. Better Communications
10. Insufficient infrastructure funding		✓		✓			10. More infrastructure funding from Government

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