

Pipeline snapshot

September 2023

The National Infrastructure Pipeline

The **National Infrastructure Pipeline** (Pipeline) is New Zealand's national dataset of infrastructure project information. It provides a forward view of infrastructure project activity that is used to inform decision-making and facilitate coordination and planning within and across regions, between sectors, in our construction markets, and in developing the workforce we need.

This snapshot report is based on the Pipeline as of 30 September 2023, which included projects totalling close to \$95 billion in value. In the coming months we expect to see some changes in the Pipeline that reflect the priorities signalled by the Government. However, in many cases, there won't be changes caused by decisions around prospective programmes or initiatives like Auckland Light Rail and Lake Onslow as these hadn't reached a degree of funding certainty to be included in the Pipeline.

The Let's Get Wellington Moving programme which has several projects in the Pipeline, including some in delivery, will be updated as more information becomes available. We also anticipate more projects associated with the recovery from North

Island Weather Events earlier this year to be added to the Pipeline as the recovery continues to build momentum.

The Pipeline reflects information we receive from our contributors across the infrastructure system including, from central government, local government, and the private sector. Our aim is to keep this information regularly updated with the support from these contributors. However, this information isn't always perfect. We continue our work to expand the coverage of the tool, and to resolve some quality issues that remain, including status and timeline conflicts, and out-of-date information.

For the pipeline to inform good decision-making, it's crucial that the information is complete and up-to-date. As we publish this snapshot on the September quarter, we are working with our contributors to address quality issues and to process updates for the December quarter. Please reach out to contribute or update data, or if you have a question regarding the information in the Pipeline: pipeline@tewaihanga.govt.nz

Total value in the Pipeline increased by \$2.8 billion to \$94.9 billion

In September 2023 the total value of infrastructure projects in the Pipeline stood at \$94.9 billion. This was up 3 per cent from \$92.1 billion in June 2023.

The main drivers of the change in value from June are outlined in the list below and Figure 1.

Increases in Pipeline value:

- \$1.5 billion from new contributors providing project data
- \$4.8 billion from additional projects from existing contributors
- \$4.2 billion due to an increase in the value of existing projects

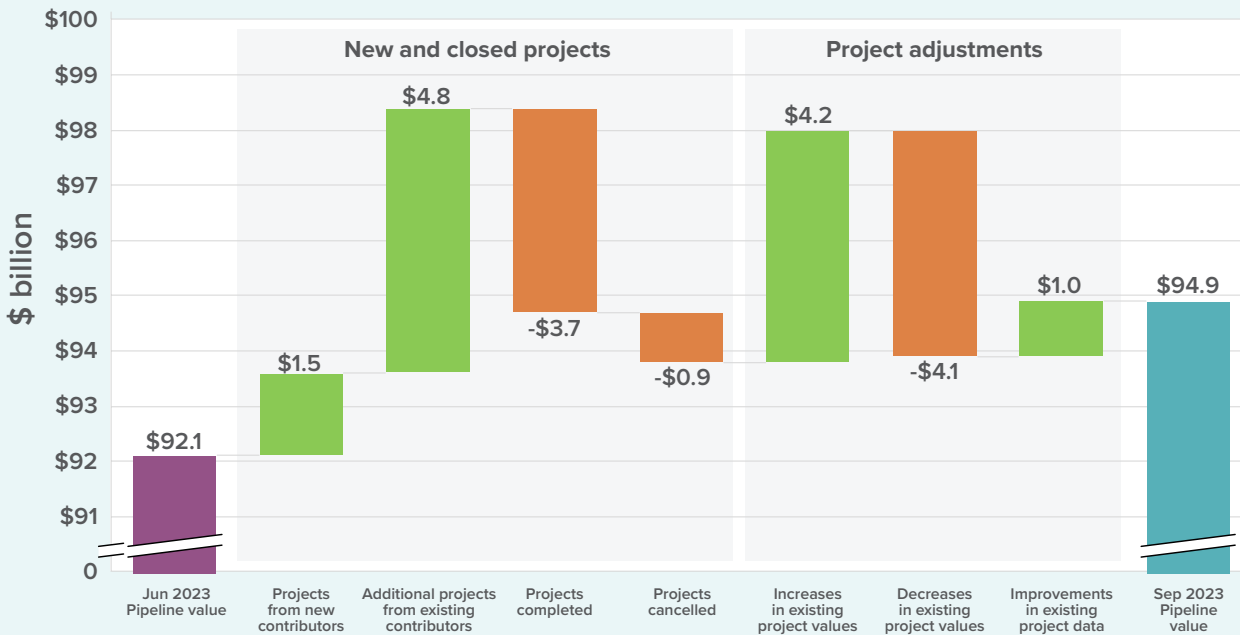
Decreases in Pipeline value:

- \$3.7 billion from projects completed during the quarter
- \$0.9 billion from projects cancelled during the quarter
- \$4.1 billion from a reduction in the value of existing projects

We are committed to working with Pipeline contributors to improve data quality. Data quality improvements resulted in an increase of \$1.0 billion in Pipeline value during this quarter.

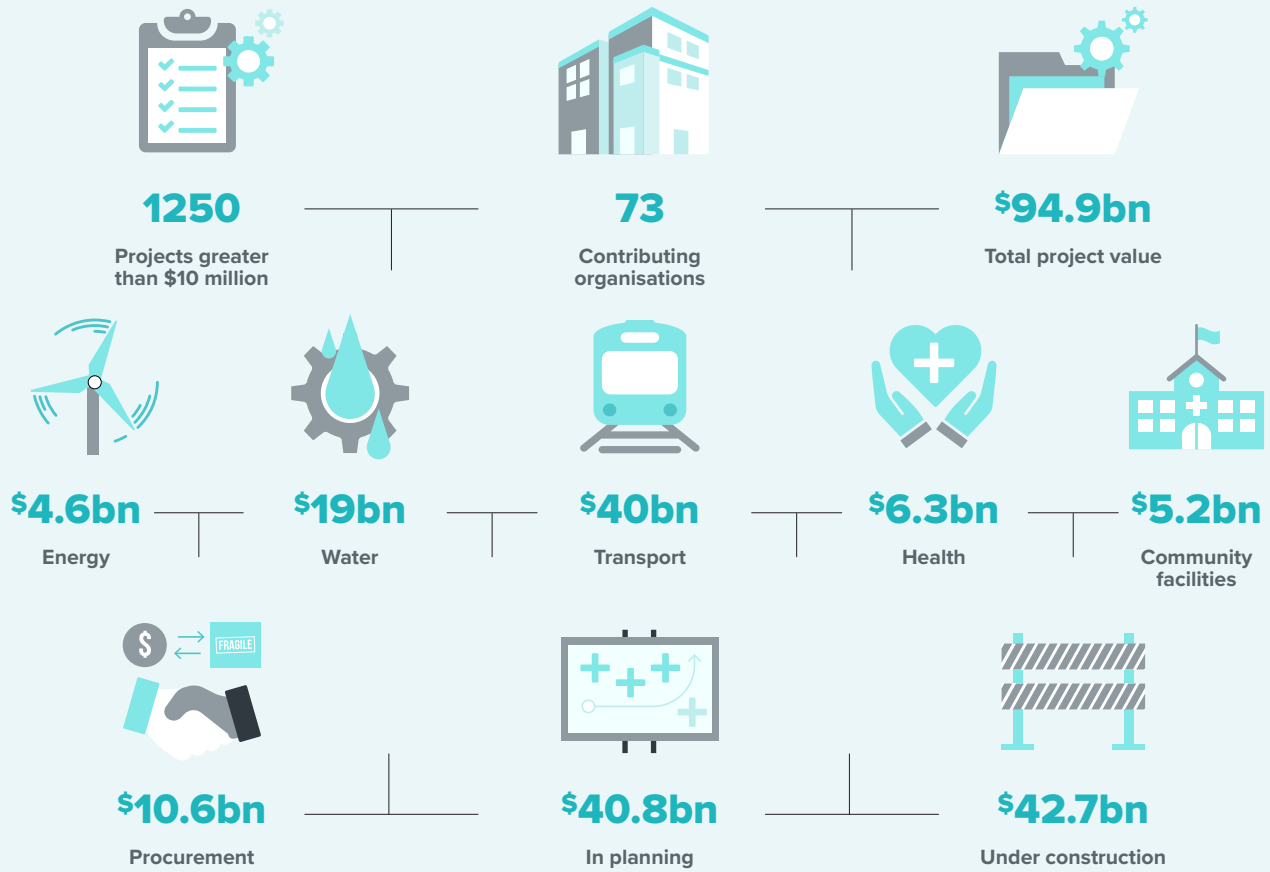
Figure 1:

Changes in total Pipeline value, June – September 2023



Seventy-three contributing organisations provide project information to the Pipeline on more than 4,500 planned and active projects for 139 infrastructure providers. The September update received a good response from contributing organisations with 88 per cent of contributors providing project updates, making changes, or confirming their information.

Welcome to Connexa, Hawke’s Bay Regional Council, and Thames-Coromandel District Council that joined as new contributors during this quarter. The efforts from all our contributors are appreciated.



Note: Dollar amounts are rounded.

Forecast spend by sector

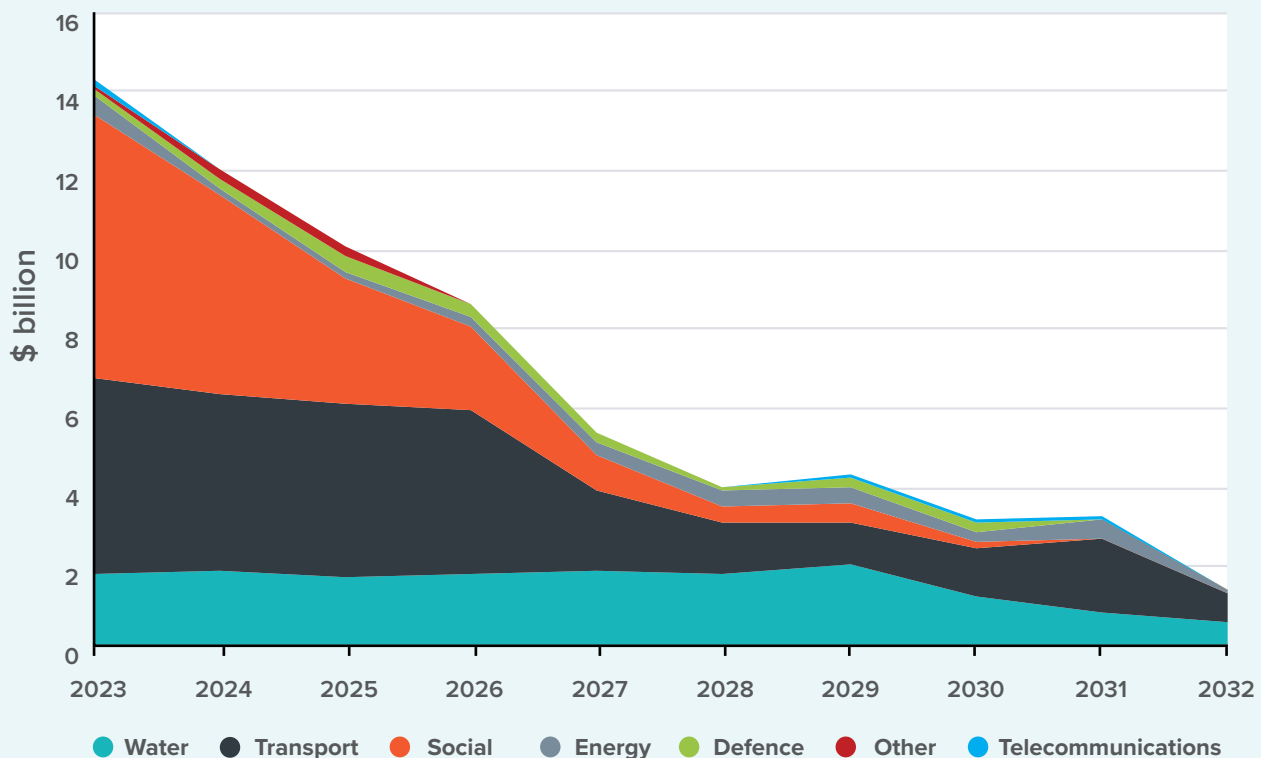
The forecast annual spend by sector for the projects in the Pipeline has been modelled and is illustrated in Figure 2. Project certainty and demand typically decreases over time. The degree of certainty and rate it declines varies between sectors and is dependent on planning horizons. How far ahead projects are planned within each sector is influenced by a number of things, including the relative size of an individual project (to the size of the market), the project scope and complexity, along with other factors.

The forecast spend will continue to evolve through time as projects are completed, new projects are planned or gain certainty and are added to the Pipeline, and as new contributors come onboard. Any impact of changing priorities from the new Government, and the progression in recovery planning in response to the impact of the flooding events experienced across the country in the first quarter of 2023 may also influence future forecasts.

Figure 2:

Spending in transport, water, and social sectors dominates infrastructure spending over the next five years

Forecast project spend by sector, 2023 – 2032



The September 2023 update to the Pipeline shows a total of \$14.3 billion in forecast annual spend for 2023. The forecast annual spend for 2024 is currently \$12 billion. Spend in the social sector continues to dominate the Pipeline in the near term, accounting for \$5 billion or 42 per cent of total forecast spend in 2024. These social infrastructure projects include 30 per cent on housing, 26 per cent on education facilities, 22 per cent on community facilities and 19 per cent on health infrastructure.

The forecast value of transport project spend in 2024 is \$4.4 billion, or 37 per cent of the total annual infrastructure spend. This value remains reasonably consistent until 2026 based on current information then lowers further to \$1.9 billion in 2027.

Annual spend on water projects is currently forecast to peak in 2027 at around \$1.9 billion. The annual spend between 2024 and 2029 remains reasonably consistent, fluctuating between \$1.7 billion and \$2.0 billion throughout.

The workforce needed to deliver the Pipeline

We are working to build our understanding of the capacity of the New Zealand construction market to maintain our infrastructure assets and deliver our infrastructure projects. Over the last two quarters we have been working to develop and release new workforce modelling.¹

An early view of workforce needs supports infrastructure providers to plan, coordinate,

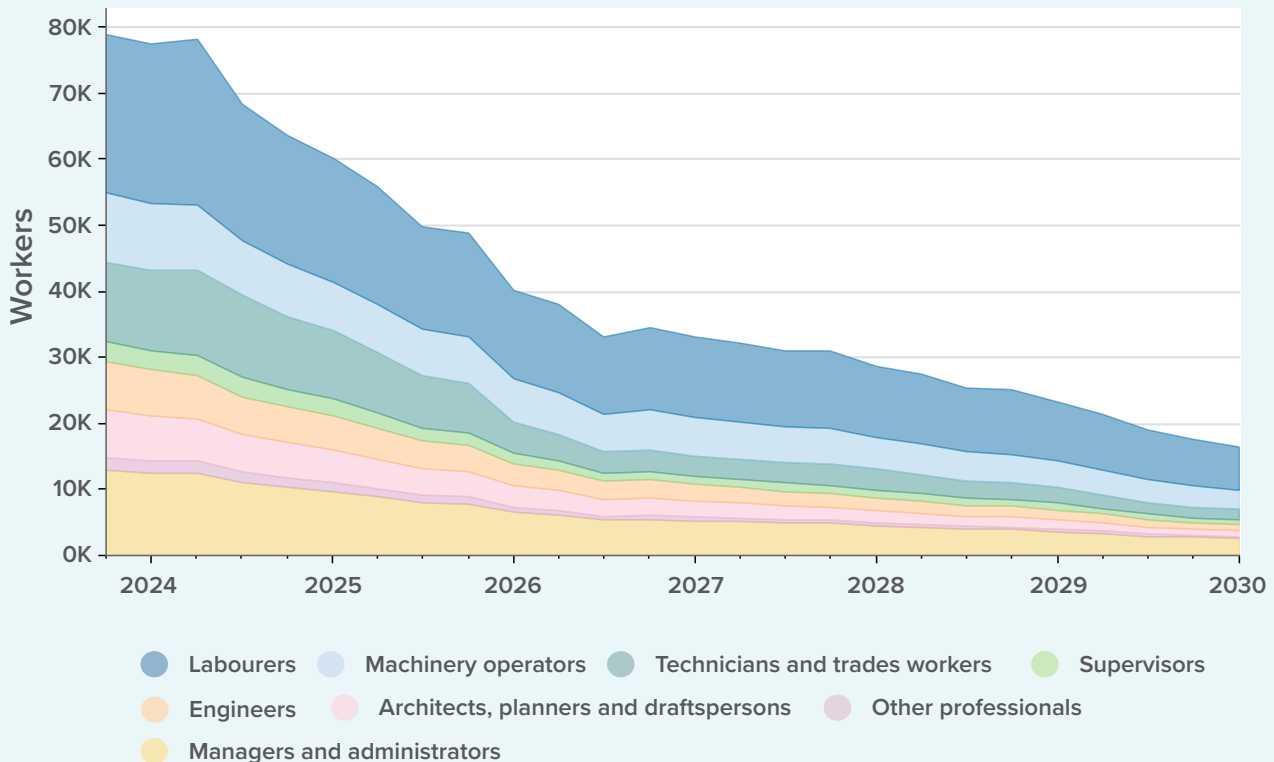
and schedule their work. It can also help the training institutions and the construction sector to prepare and invest in developing the workforce capability that will be needed.

The projected workforce by occupation group required to deliver the projects in the Pipeline has been modelled and is illustrated in Figure 3.

Figure 3:

Projected workforce required to deliver Pipeline projects

Workers by occupation group, 2023 – 2030



The workforce numbers presented in the projections include estimates of both workers needed on projects full-time and workers needed on projects part-time. Projections of the number of workers needed will generally be larger than the number of full-time equivalents (FTEs) needed due to the presence of workers that are only required for part of the time. The workforce projections will continue to change, in the same way as the spend modelling, as new project information is submitted to the Pipeline.

Anyone can view and explore the workforce projections by signing up to access our new Insights Platform – insights.tewaihanga.govt.nz.

¹ Our workforce modelling currently uses a different model to the spend modelling and some differences may arise because of this. Over time we will integrate these two models.

Using the Pipeline

The Pipeline is used to inform prioritisation, coordination, and planning decisions amongst infrastructure providers. It's also used by the construction sector to support their planning and investment in their capabilities and capacity to deliver projects.

Te Waihanga is developing a range of tools to provide insights on New Zealand's planned infrastructure projects to support decision-makers and planners within the infrastructure sector. Users can access our insights and tools via the following methods.

- Visit our [website](#) and search the Pipeline for projects and their timings, sectors, regions and more.
- Register on our [Insights Platform](#) for access to our growing suite of insights and tools including the Pipeline and the workforce projections (you will only need to do this the first time you access the tool).

How to register

1. Visit insights.tewaihanga.govt.nz and use the 'Sign in' button on the top right of the page. A window will appear asking for you to sign in.
2. Create a new account by clicking the 'Sign up now' link under the large 'Sign in' button in this window.
3. Follow the instructions to create an account.

Supporting the recovery planning and coordination from the North Island Weather Events

Rebuilding from the impact of the weather events in the North Island in early 2023 will place a significant demand on the construction and infrastructure sector. To support infrastructure providers in their planning efforts, we have worked in partnership with affected regions to produce projections that estimate the construction workforce that might be needed to deliver potential recovery projects, such as the repair or replacement of damaged public assets including roading, water and energy infrastructure.

Current workforce projections indicate that prospective recovery projects may create a peak annual demand for on-the-ground construction workers from 2025 until 2027 across the affected regions. It's important to note that the projected workforce numbers will change over time as decisions are made, projects are funded, and as planners use information like that provided through the Insights Platform to help prioritise, coordinate, and schedule work across the infrastructure system.



Progress towards a complete Pipeline of infrastructure projects

Te Waihanga first published the Pipeline in the second quarter of 2020 (with regular updates since the fourth quarter of 2020) to support statutory functions required under the New Zealand Infrastructure Commission/Te Waihanga Act 2019.

The Pipeline continues to build towards a trusted and complete view of infrastructure project activity in New Zealand providing a forward view to the construction market. The continued development and enhancement of the Pipeline will facilitate improved planning, coordination, and delivery within New Zealand's broader infrastructure system.

We invite organisations not yet represented in the Pipeline to submit project data as we increase the breadth and depth of the infrastructure projects in the Pipeline. The September 2023 quarter saw our contributing partners reach 73, up 33 per cent on 12 months ago. We thank our partners for their efforts with 88 per cent providing updates.

Figure 4:

Organisations contributing to the Pipeline continues to grow

Pipeline contributors, June 2020 – September 2023



*Pipeline project information was not updated in the third quarter of 2020

Are you aware of an infrastructure provider or project that we are missing?

Organisations do not need to be invited to submit their data; if your organisation has project information that is not included in the Pipeline, please contact the Pipeline team on

pipeline@tewaihanga.govt.nz. View the Pipeline at www.tewaihanga.govt.nz/pipeline