



CONSTRUCTION CLIENTS' GROUP

The 1st National Workshop Delivering New Zealand's Future

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Infrastructure Commission**

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Wednesday 16th September 2020 07:30am - 09:00am

Te Waihanga (Infrastructure Commission)

The reo Māori name for Infracom, Te Waihanga, means a cornerstone, or to make, create, develop, build, construct, generate.

Te Waihanga is concerned with future infrastructure planning and investment.





Ma tini ma mano ka rapa te whai

"By many thousands, the work will be accomplished."

Te Waihanga/Infracom



- Infracom has been established to ensure quality infrastructure investment
- Infracom seeks to lift the level of infrastructure planning and delivery
- To improve New Zealanders' wellbeing.



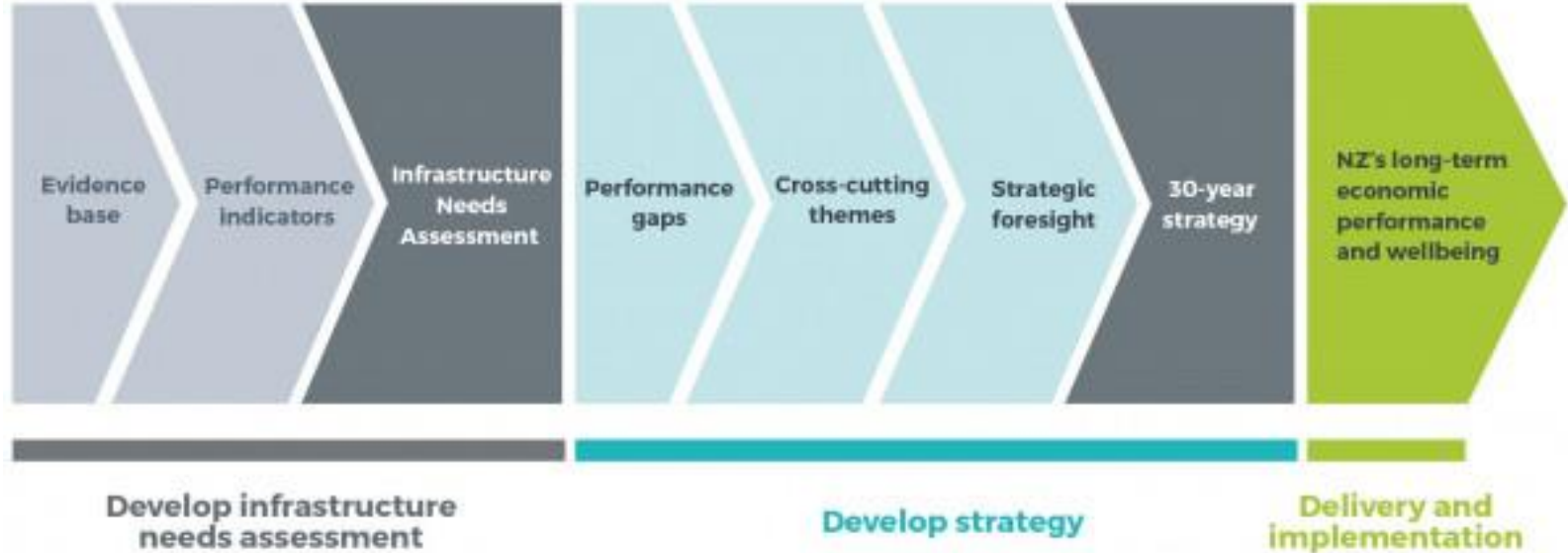
Construction Clients' Group



- CCG provides an independent collective voice for public and private sector
- Aiming to lift client performance.



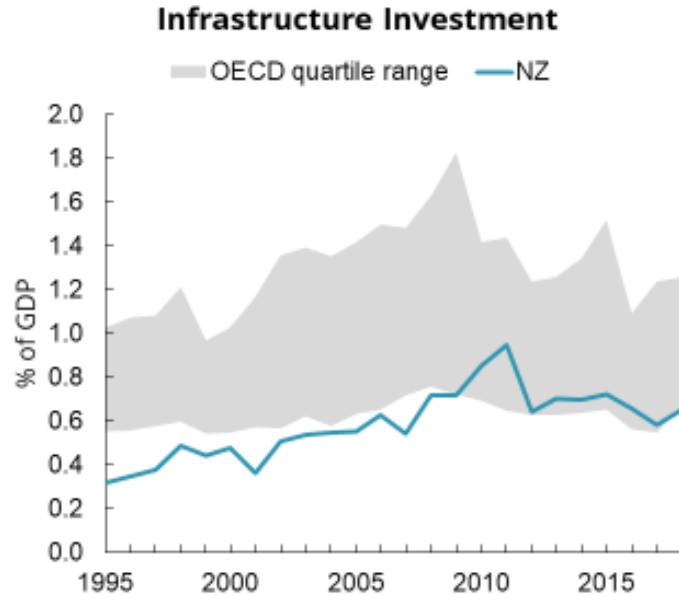
Our 30-year Strategy development process





Toward a New Zealand Infrastructure Strategy

Have we been investing enough?



Source: OECD, Statistics NZ, Sense Partners.

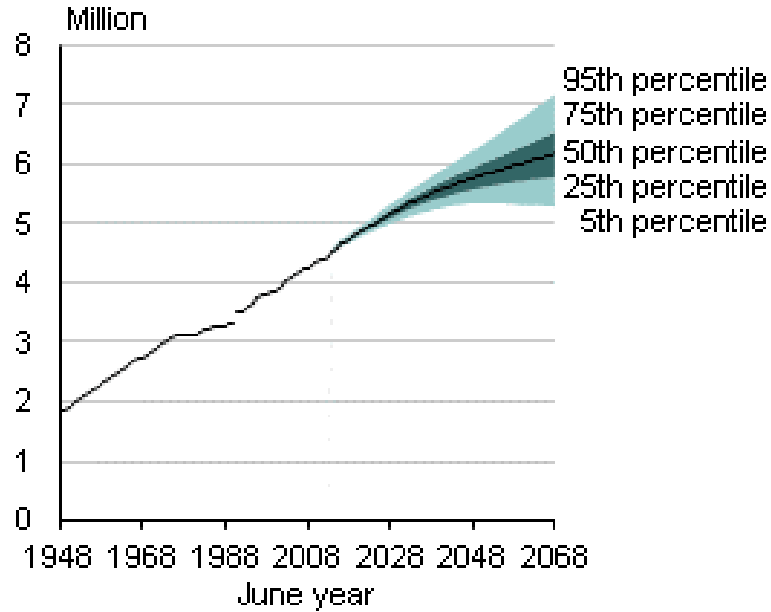
"The infrastructure shortfall may be as high as \$75bn in 2019, or 25% of GDP"

Source: Infrastructure for the long haul

Infrastructure is about where and how we live

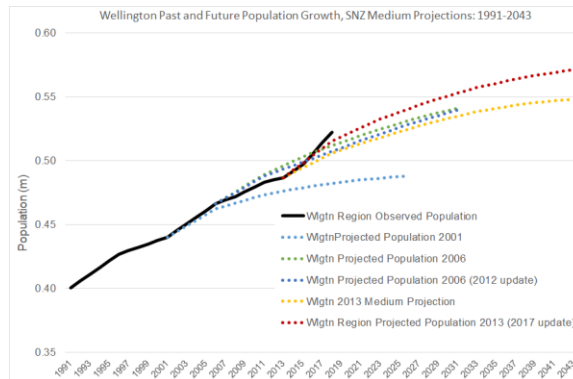
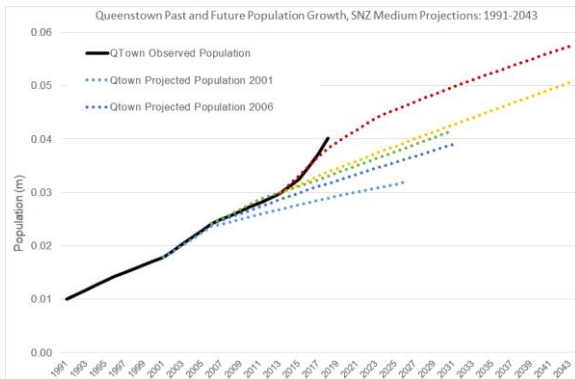
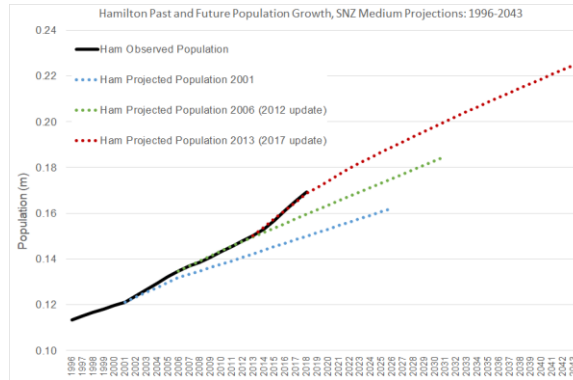
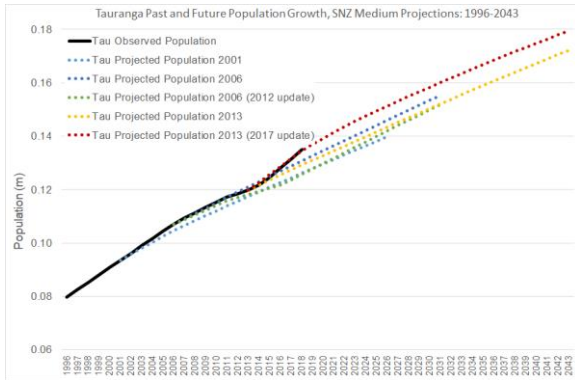


New Zealand is in demand



Source: Statistics New Zealand

But do we keep underestimating ourselves?

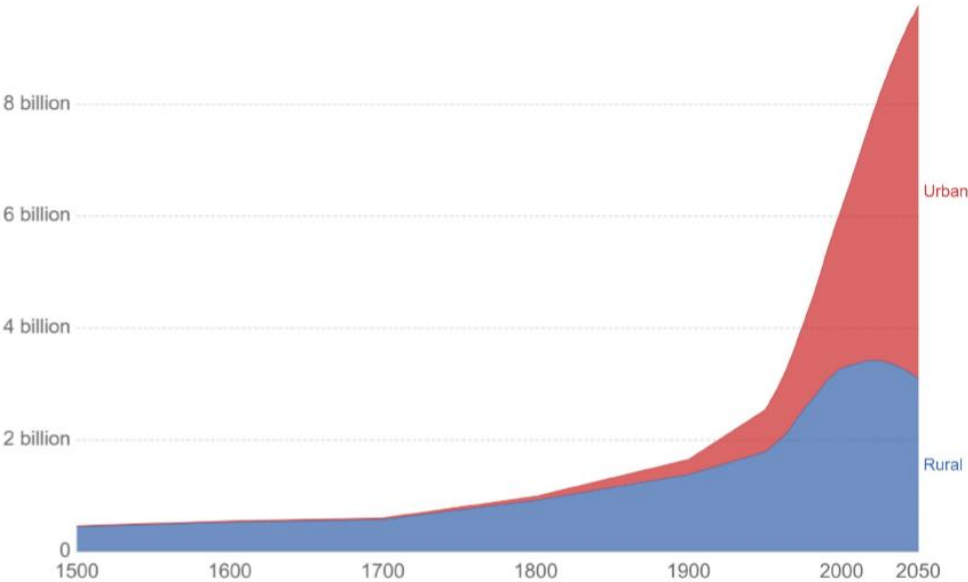


The urban juggernaut and the rise of the city

Urban and rural population projected to 2050, World

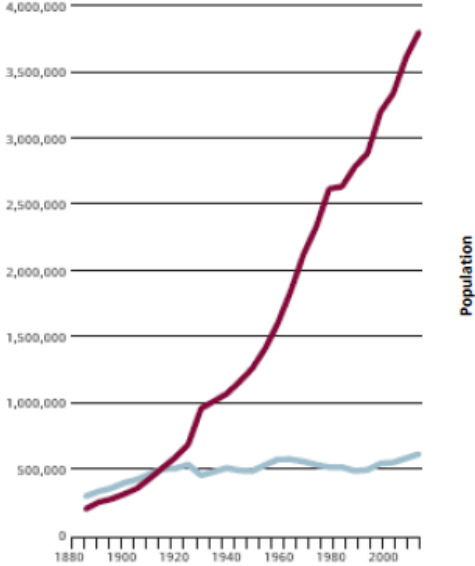
Total urban and rural population, given as estimates to 2016, and UN projections to 2050. Projections are based on the UN World Urbanization Prospects and its median fertility scenario.

Our World in Data



Source: OWID based on UN World Urbanization Prospects 2018 and historical sources (see Sources)

CC BY



Source: Statistics New Zealand, NZ Institute of Economic Research

Infrastructure can change land use substantially

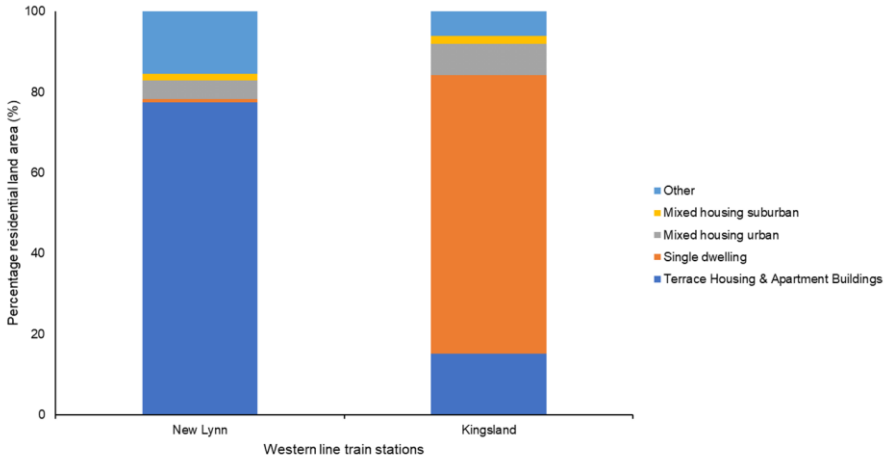
In the first ten months, ~4m vehicles used the bridge (1959). The total was 5.5m in 1961, 15m in the year to 1970 and exceeded 32m by the mid-1980s ...

The bridge triggered an explosion of development on the North Shore and the early traffic growth at more than 13 per cent a year led to the decision in 1964 to add two more lanes on each side of the bridge.

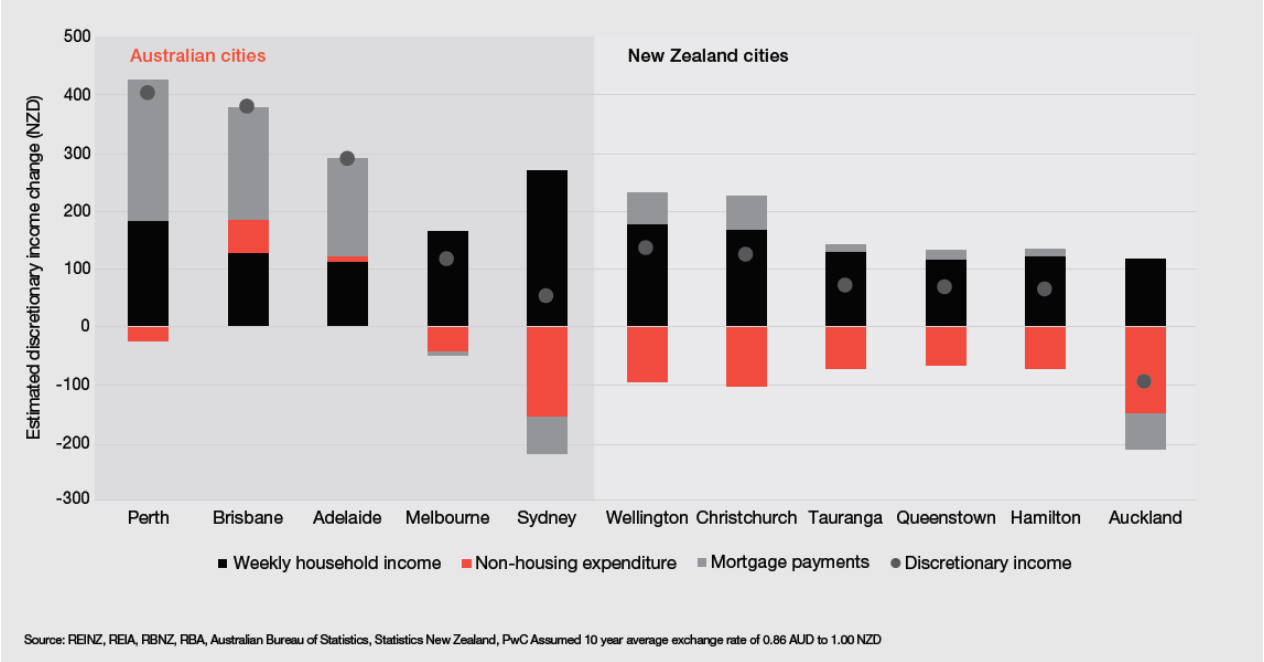
Grimes, 2011



Are we making the most out of our existing infrastructure?



Congestion and living costs drive discretionary income down and price out new entrants



Source: PwC

A digital age

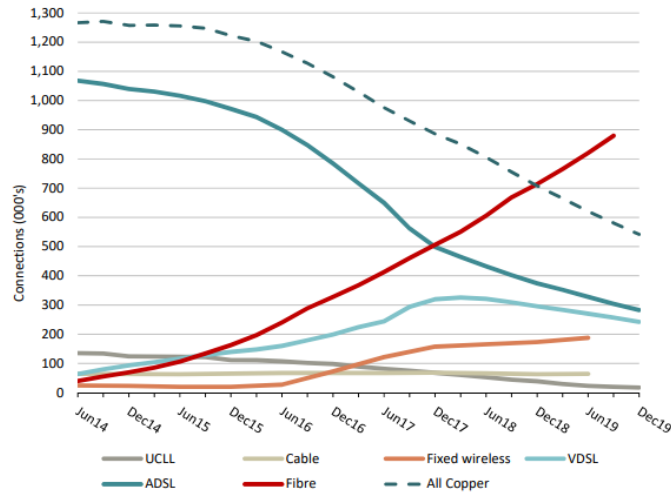
How will our infrastructure adapt?



Technological change is occurring with speed

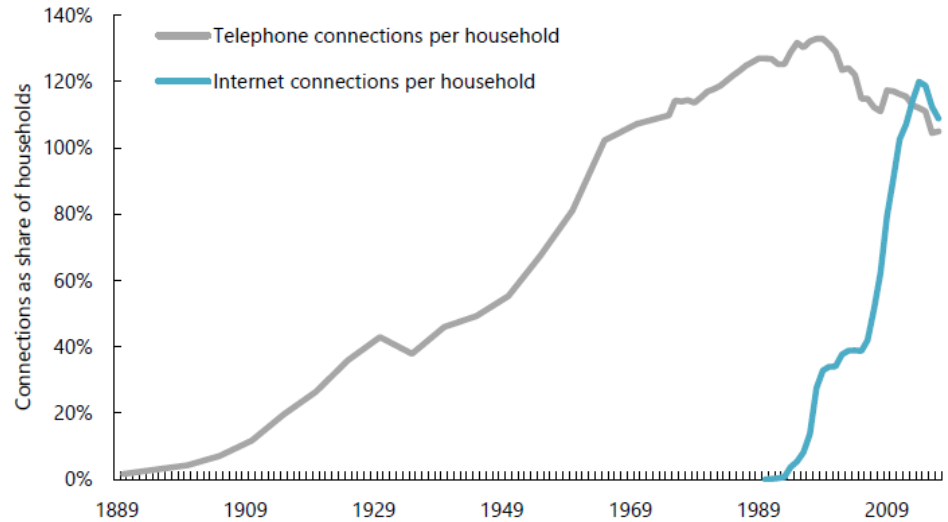
How are we positioned to keep up?

Figure 1: Fixed-line broadband connections by technology



Source: Chorus, MBIE, annual telecommunications questionnaire

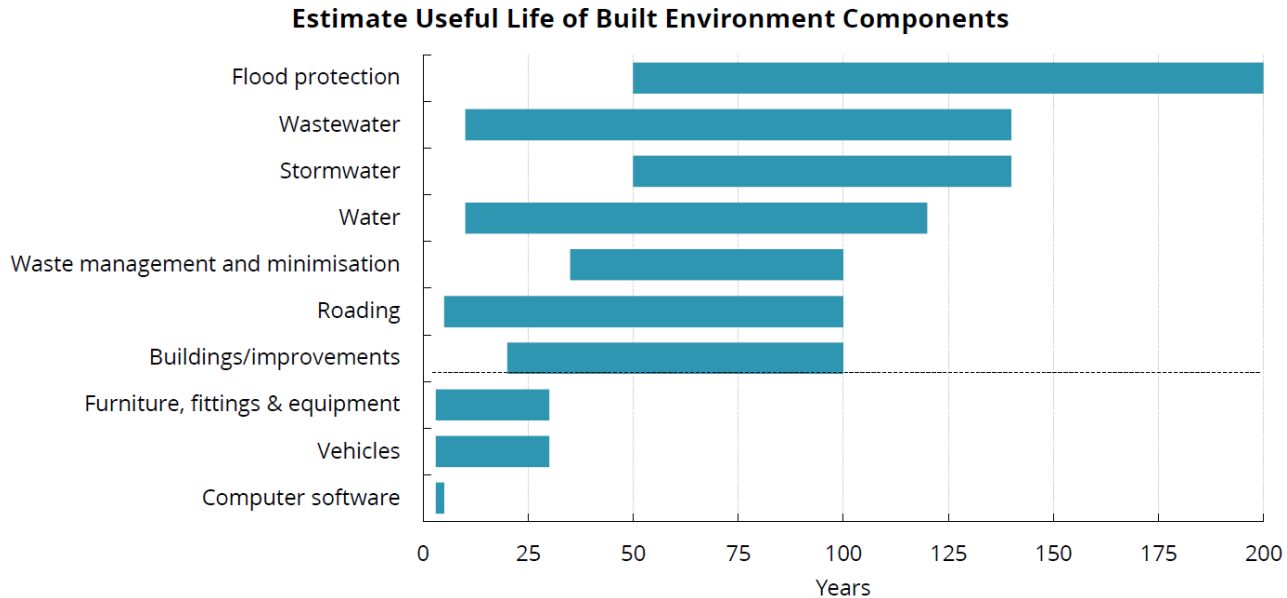
Telecommunications connectivity



Source: Sense Partners

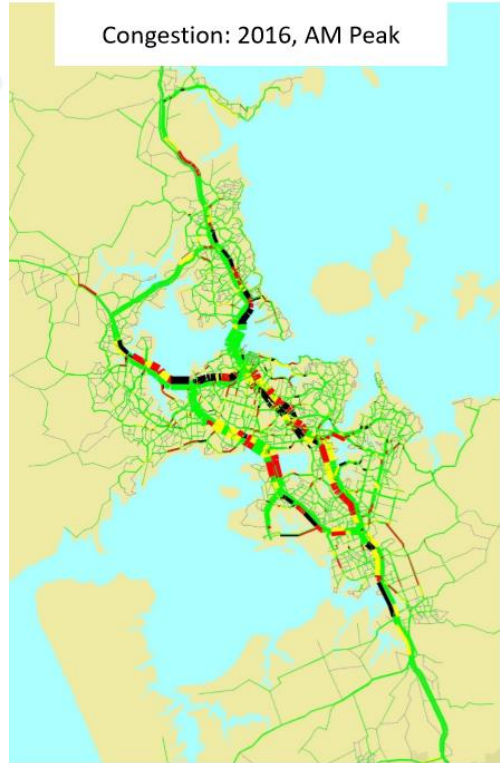
Long-term infrastructure

Today's infrastructure decisions will persist for decades



Source: New Plymouth District Council, Sense Partners

What about non-built infrastructure solutions?

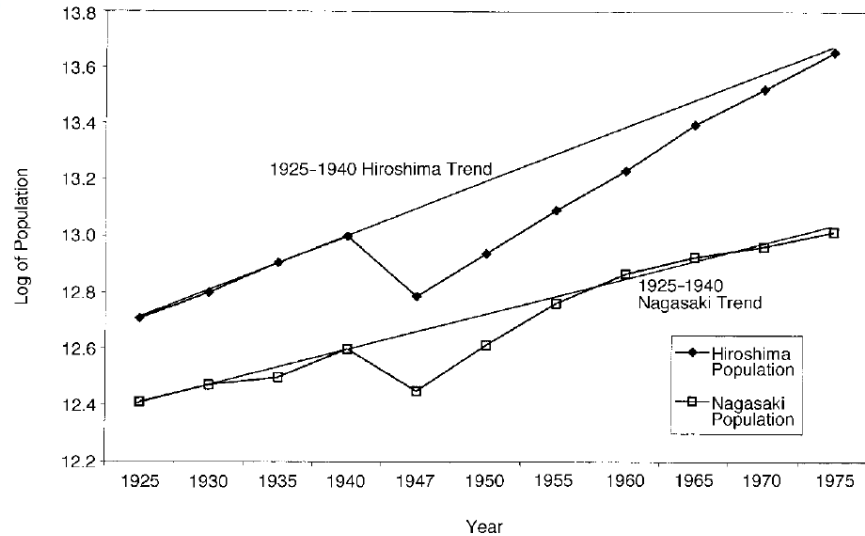


What about non-built infrastructure solutions?



The impact of COVID-19 and density

Path dependence vs increasing returns



Source: Davis & Weinstein

Dealing with distribution: Who gains? Who pays?

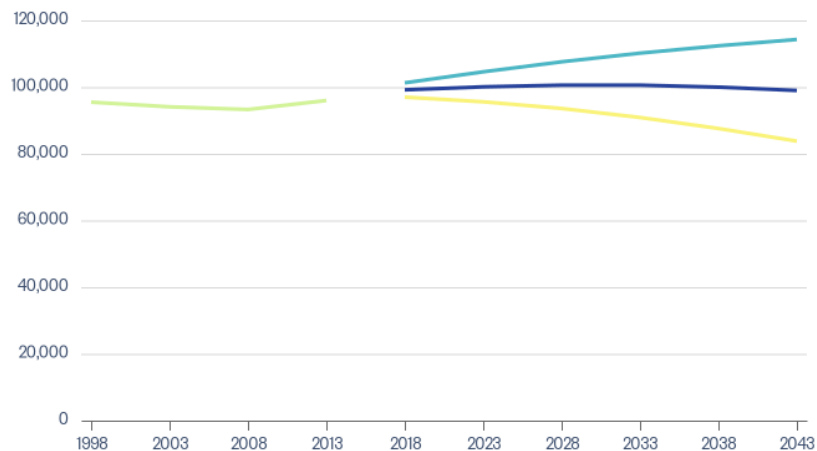


Infrastructure in declining towns

What role can infrastructure play in economic resurgence?



Population projection – Southland Region

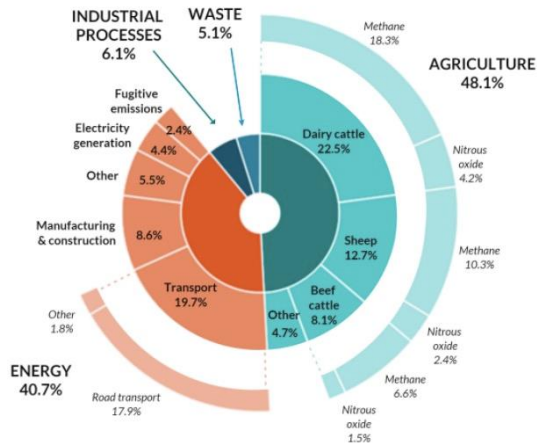


Source: Figure.NZ, Statistics New Zealand

Climate change and resilience in infrastructure planning

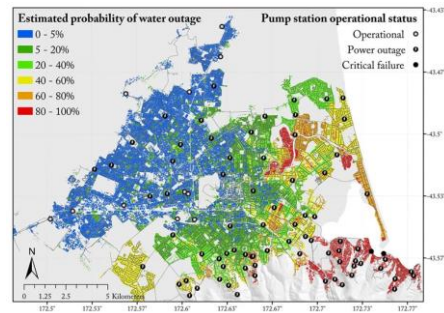
NEW ZEALAND'S Greenhouse Gas Emissions

Source: New Zealand's Greenhouse Gas Inventory 1990-2017, published April 2019



Note: Percentages in the graph may not add up to 100 due to rounding.

Fugitive emissions are from the leakage, burning and controlled release of gases in oil and gas operations as well as escaping gases from coal mining and geothermal operations. Agricultural methane is mainly from livestock digestive systems and nitrous oxide is mainly from manure on soil.



Setting this scene: key questions for you

- Opportunities: What do you see as the potential opportunities in the medium term (1-10 years)?
- Barriers: What do you see as the potential challenges in the medium term (1-10 years)?
- System wide: What are you seeing as system wide issues facing NZ now and into the future?
- What potential recommendations could Infracom include in the 30-year Infrastructure Strategy?