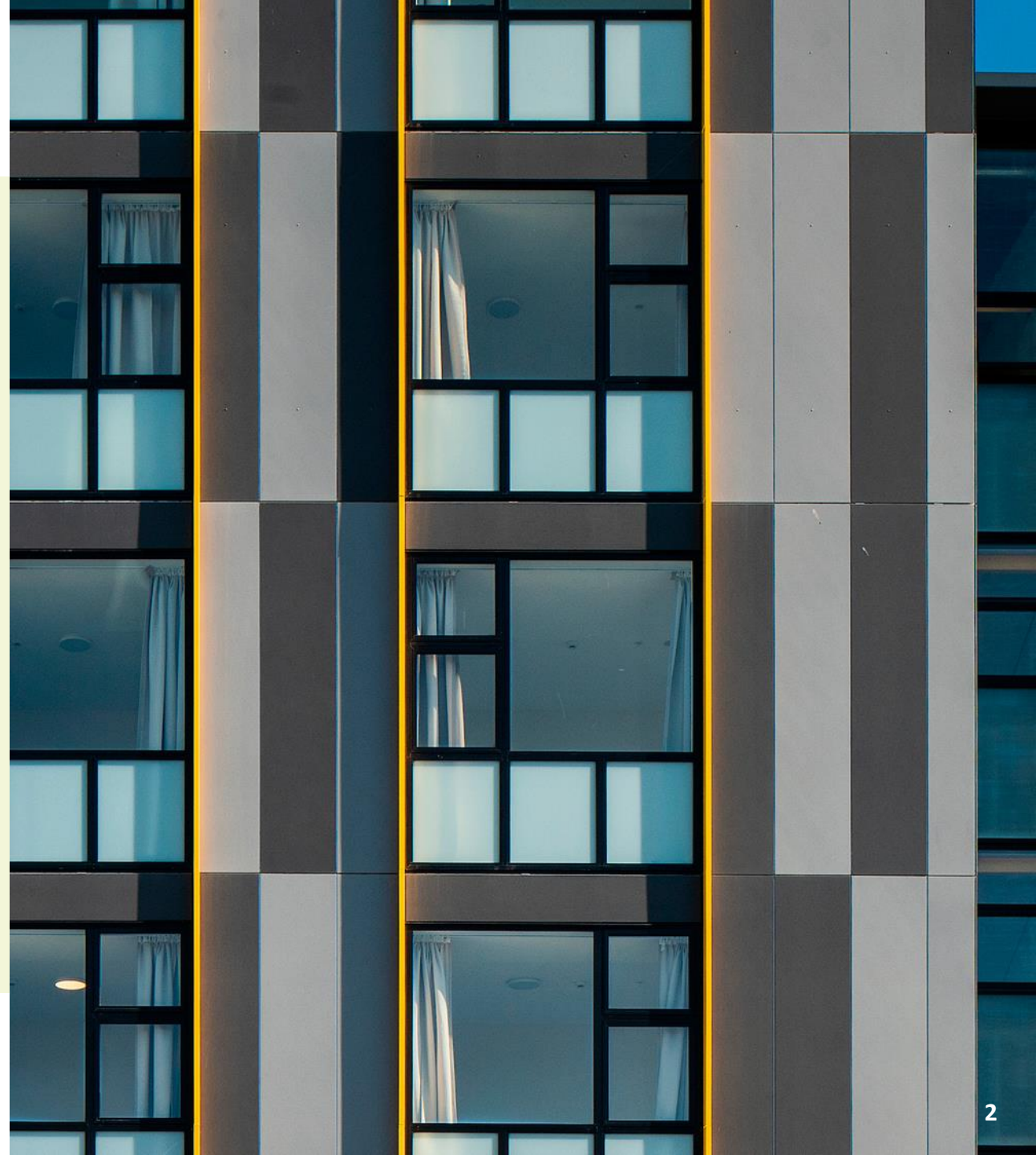


Andrew McKenzie

Chief Executive, Kāinga Ora – Homes and Communities



Context



Kāinga Ora at a glance

Kāinga Ora was established as a Crown Entity on 1 October 2019 under the Kāinga Ora – Homes and Communities Act 2019 (the Act).

Our objectives are:

- to contribute to sustainable, inclusive, and thriving communities that provide people with good quality, affordable housing choices that meet diverse needs;
- support good access to jobs, amenities, and services;
- and otherwise sustain or enhance the overall economic, social, environmental, and cultural well-being of current and future generations.



Kāinga Ora Scale

Asset base and annual activity

70,000 homes in portfolio with almost 200,000 New Zealanders living in them

Nationwide construction programme

- 4,5000 new builds a year
- 1,000 renovations a year
- 3309 sqm of land under development
- 5837 sqm of land sold in 2022/23
- Delivering government services



Challenges

Complicated environment

Infrastructure condition

Changing spatial and
infrastructure standards

Cost of physical works

Community contribution

Timeliness of delivery

Economic cycle

Multiple Objectives

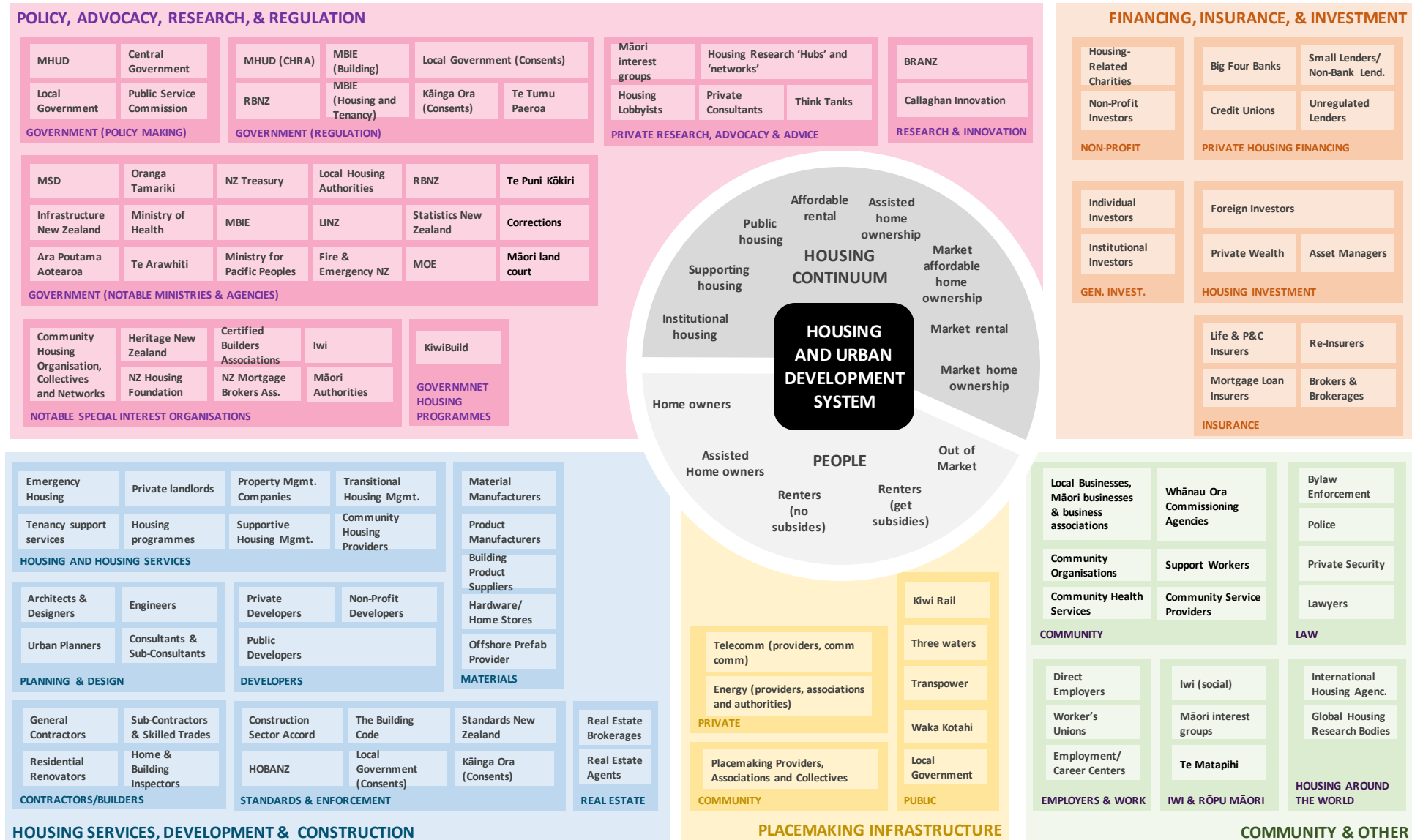
- Financial
- Sustainability
- Housing supply
- Home ownership
- Affordability

Affordability impact

- Can the community afford it
- What house prices can you achieve
- Consequences for organisation financial results



The Housing and Urban development system in Aotearoa is complicated



Improve sector performance

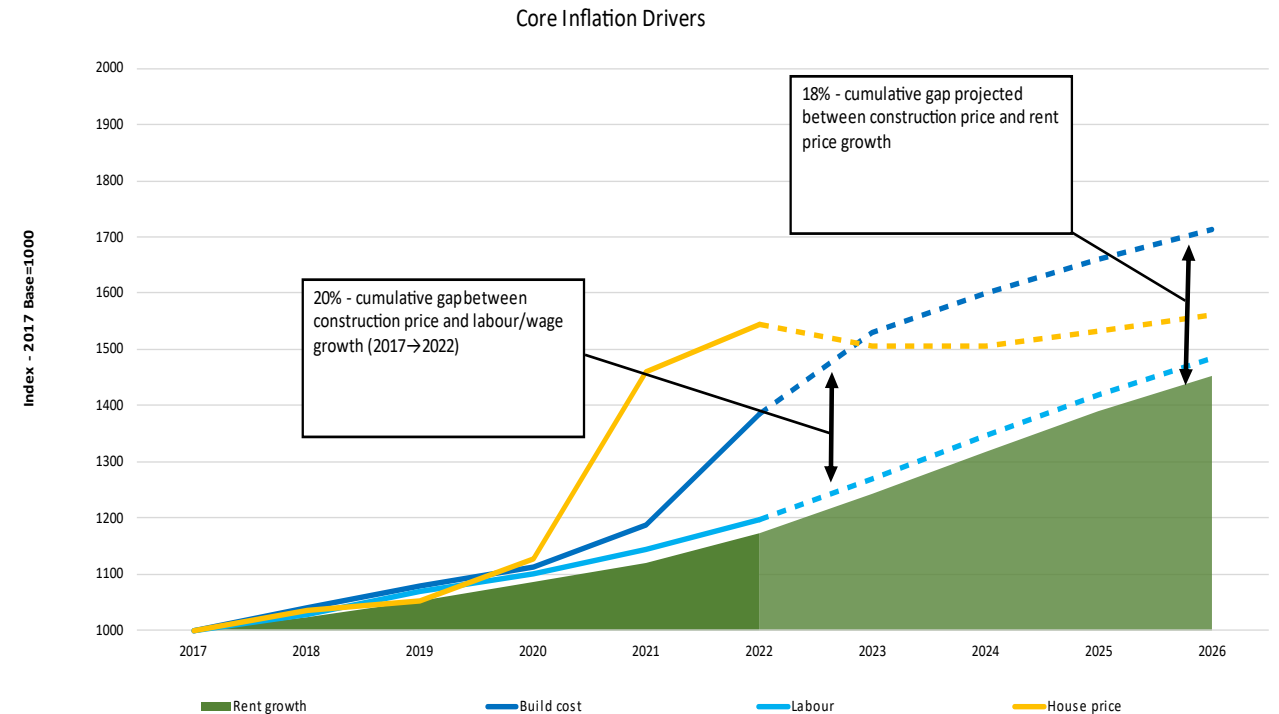


Smarter buyer

Traditional government approach.

Aim: to transform the speed, predictability, input quality and cost of delivery

- We were a buyer –procuring projects through Design Leads and Head Contractors
- Assumed the competitive process gave us value-for-money and access to innovation
- Asked the market what we should do differently to get value-for-money, and tried everything – Standard designs, three year take or pay contracts for large volumes, removal of contractual sticks, our own building consenting team, set up Alliances, novated designs, ECI's
- Still seeing errors throughout process, erratic delivery against programme, time extensions and cost escalation



Why we needed to change

Challenges with the Construction Sector in New Zealand

A highly **fragmented ecosystem** both vertically and horizontally

Lack of collaboration and **under-investment in planning**

Industry has a **project-based building approach performed on site**, immature project definition and technical assessment

Choreography within projects is **overly complicated and often inefficient**

Culture of risk mitigation, contingency, margin-on-margin and time extensions

Misaligned contractual structures and incentives where claims and passing on risks often trump customer and supplier relationships. This creates risk aversion, higher costs, unreliability and often compromises outcomes

Unstable workforce, high levels of casualisation of labour with limited long-term investment

Playing a bigger role

We developed the Housing Delivery System, our new way of planning and building to deliver much needed, quality homes faster for New Zealanders at a lower cost.

Aim: to transform the speed, predictability, input quality and cost of delivery

- The HDS works by coordinating the thousands of tasks involved in planning and building a home to efficiently schedule the work and resourcing and remove waste. Kāinga Ora employees schedule and coordinate the delivery against those tasks.
- Measurement of everything, variance is a learning opportunity, materials drive productivity, waste is endemic, margins are opaque
- Given the improvements we are seeing we are moving to use it for as much construction activity as possible, finish existing projects and transition to HDS.



Housing Delivery System

Guiding Principals



HDS Benefits to date

Time

94% decrease in planning and design time from 17 months to under six weeks.

Reduce construction times by at least half, targeting a consistent **80%** reduction.

Best scheduled construction performance utilising the system, **49 days** for a three home project scheduled in Christchurch (58 days current best).

Cost

Pre-construction billable hours **995** hrs per project (3 houses)(BAU/523 Days) to Christchurch current range **668-369**hrs per project (25-34 Days) (average 5 houses).

Construction planned billable hours from **6,312**hrs(BAU/253 Days*) to **3,456**hrs (62 Days).

Just by being faster we are saving **\$91,000** per unit on delivered projects

Currently achieving **14%** cost savings, with a projected **37%** reduction in construction costs by 2026/27.

Impact so far
997
days down
to **77** days
(three house
project)

Productivity, Margins and Waste – Next stage

Time on Tools: The current level of **35%** is set to increase to a target of **80%**. That increased build partner productivity should reduce labour costs by a further **37%**, (**\$67,000** per unit). New commercial arrangements are being introduced to monetise this benefit.

Material Waste: “SKUing” up a house and purchasing only what is needed opens up a potential **25%** saving on materials – zero waste and shrinkage (**\$45,000** per unit).

Material Margins: Eliminating standard industry markups and creating scale through direct buying opens up a potential **25%** saving on materials (**\$45,000** per unit).

Rebate Culture: An overhaul of the existing rebate system aims to remove indirect costs previously embedded within material pricing structures.



win-win,
partners want to
work with us,
scope reduction
not a saving

Urban Development - delivery

Objectives

Improve speed

Waste and errors out

Bottom out cost

Cope with changing scope and specifications

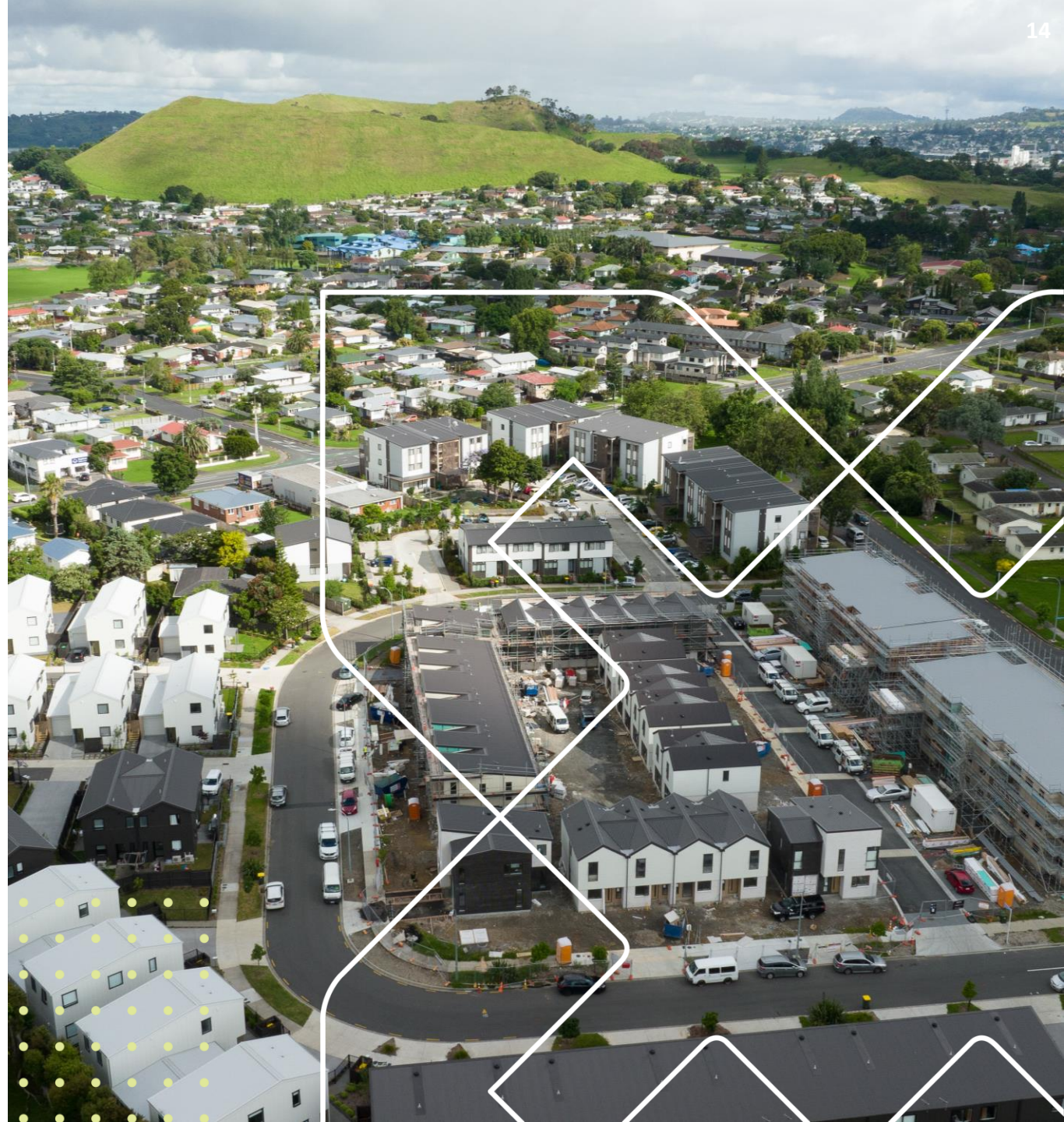
Discovery

Productivity low – sub 30%

Accept high level of errors

Little understanding of each disciplines needs

Loose coalitions



What do you accept as “the way things work” that you wouldn’t accept in any other part of your life?

