Kāinga Ora Retrofit Programme

Building a Programme to Retrofit - in action, at scale

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Kāinga Ora
Homes and Communities

221 Riverside Drive, Lower Hutt– the Millennial Retrofit

Agenda

Retrofit

- Retrofit at Kāinga Ora

- History

- Programme

- Challenges

- Lessons

- Opportunities

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Retrofit: *the case for Kāinga Ora to do the work*

	Pre 1936	1937-49	1950-65	1966-85	1986-1999	2000+
Owned homes (number)	456	8,412	13,370	18,112	9,673	18,324
Owned homes (percentage)	1%	12%	19%	27%	14%	27%
Description	Villa & Californian Bungalow	Brick Weatherboard Native timber	Brick Weatherboard Native timber	Innovative Lightweight, low cost materials	Pre-modern	Modern code & specifications
Expected life (years)	80-100	70-90	70-90	40-50	50	50
Customer concerns	Cold & drafty	Cold & drafty	Cold & drafty	Cold & damp	Damp	Few
Operating costs	High	High	High	Moderate	Moderate	Low

- An aging portfolio, with the need for investment. 45,000 homes will require significant capital reinvestment in the next 20 years.
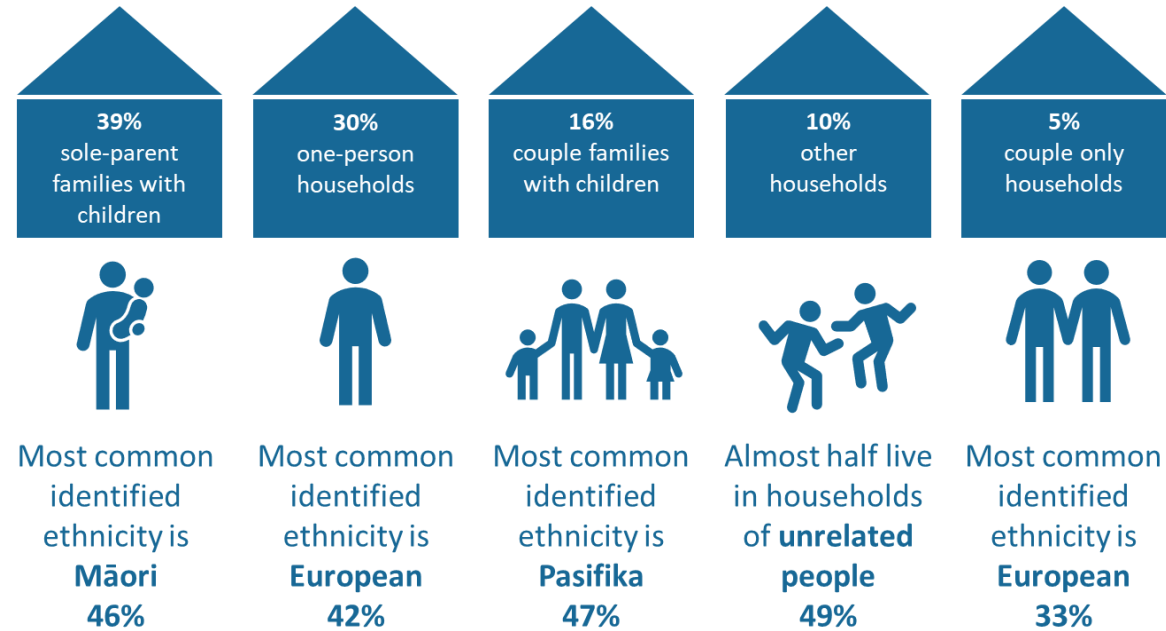
Retrofit: *the case for Kāinga Ora to do the work*

New Build — 50 Years → Old Home — Retrofitted Home — Another 50 Years
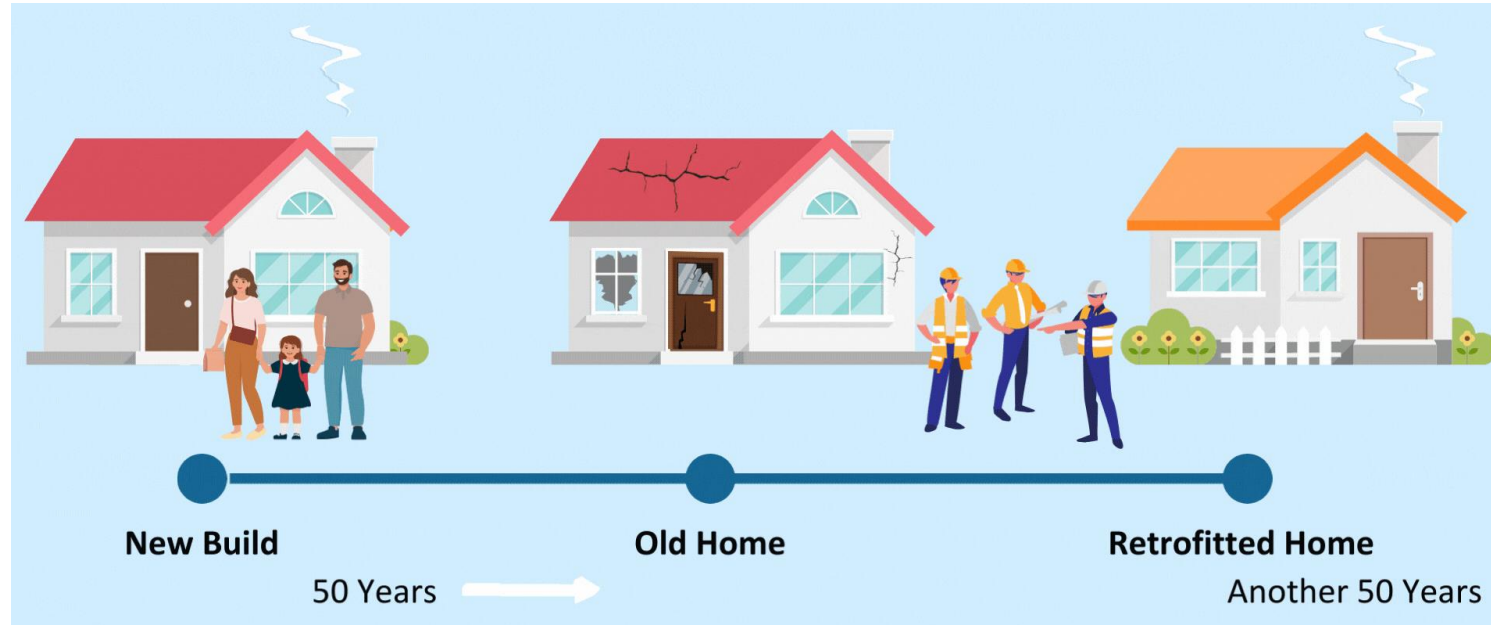
- Capital investment in an old home that has reached the end of its economic life – it has past the 'use by' date
- Retrofit Option: Re-set the life of the property, as near as practicable to a new one, ensure it is fit for purpose for our customers for our future.

Retrofit: *the case for Kāinga Ora to do the work*

Our household cohorts

39% sole-parent families with children	**30%** one-person households	**16%** couple families with children	**10%** other households	**5%** couple only households
Most common identified ethnicity is **Māori** **46%**	Most common identified ethnicity is **European** **42%**	Most common identified ethnicity is **Pasifika** **47%**	Almost half live in households of **unrelated people** **49%**	Most common identified ethnicity is **European** **33%**

- Our tenant's household demographics are diverse – fundamental need for all, is a safe, warm and dry home.

The Work: *what we do – scope*

- **Retrofit**: performance improvements – thermal or technology upgrade

- **Renovate**: Modernisation and utility Improvements – value and use improvements

- **Maintain**: Maintenance – fixing and replacing what is broken

The Work: *what we do – Standard*

Retrofit Standard

- Similar standard applied universally

  - **Retrofit**: Thermal performance improvement
  - Full insulation
  - High performance double glazing
  - Improved airtightness
  - Efficient heating
  - **Renovate**: Modernisation and utility Improvements
  - Open plan living / reprogramme house plan
  - Accessibility features
  - Replaced kitchens / bathrooms,
  - Updated finishes etc.
  - **Maintain**: Maintenance re-set
  - Asset "Birthday" – re-set the life of the asset.
  - Fix or replace what is broken


Speedy St Before
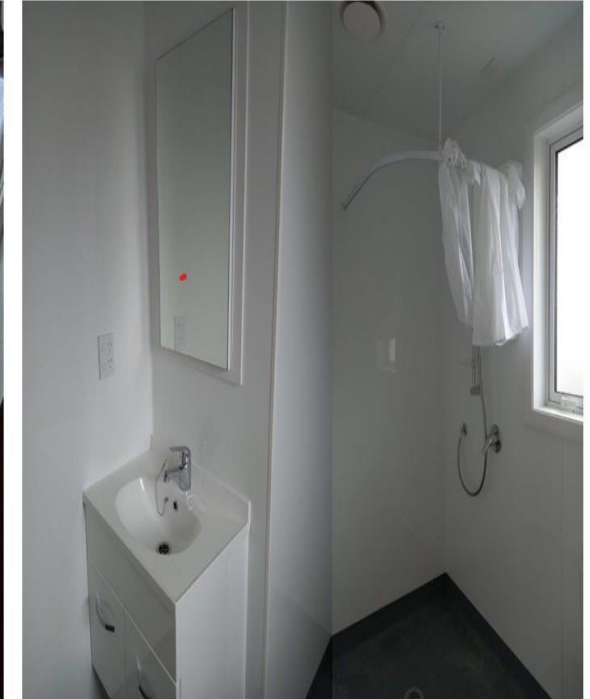
Speedy St After

Retrofit: *a History*

Programme Timeline

- **2018**: Retrofit pilot launched – thermal upgrades of 66 homes in the Hutt Valley

- **2019**: Stage 1 – more advanced work on 200 homes; scheme broadened to Bay of Plenty, Hawke's Bay, and Canterbury

- **2020**: Programme engages widely with market – seeking NZ-wide contractors for delivery in 18 towns

- **2020/21**: Comprehensive Retrofit Programme Scoping Guide resource developed

- **2023**: Scaled programme targeting 700 units/annum

- **2024**: Built a reliable and consistent pipeline and strong supplier relationships to enable both capability and capacity – fully national programme
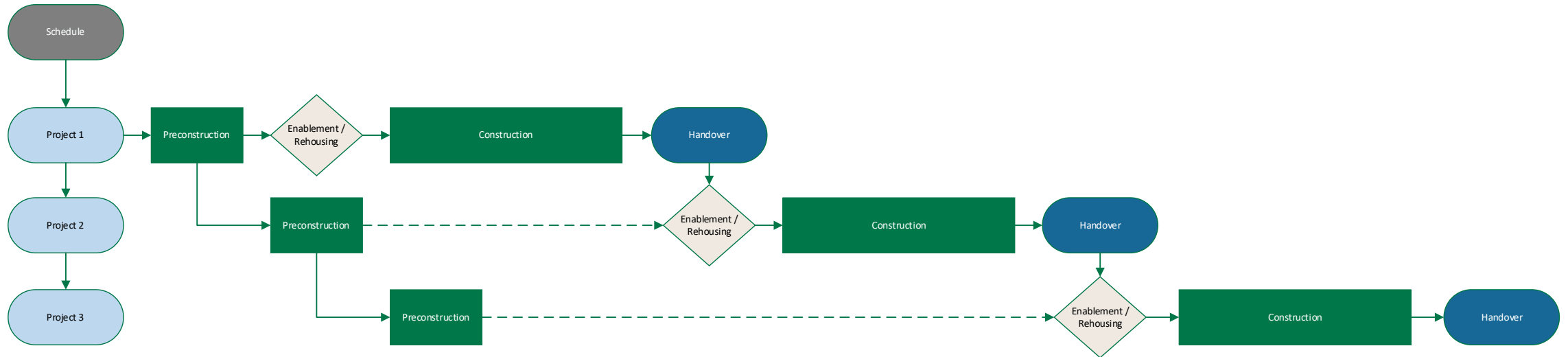
The Work: *how we do it – Project*
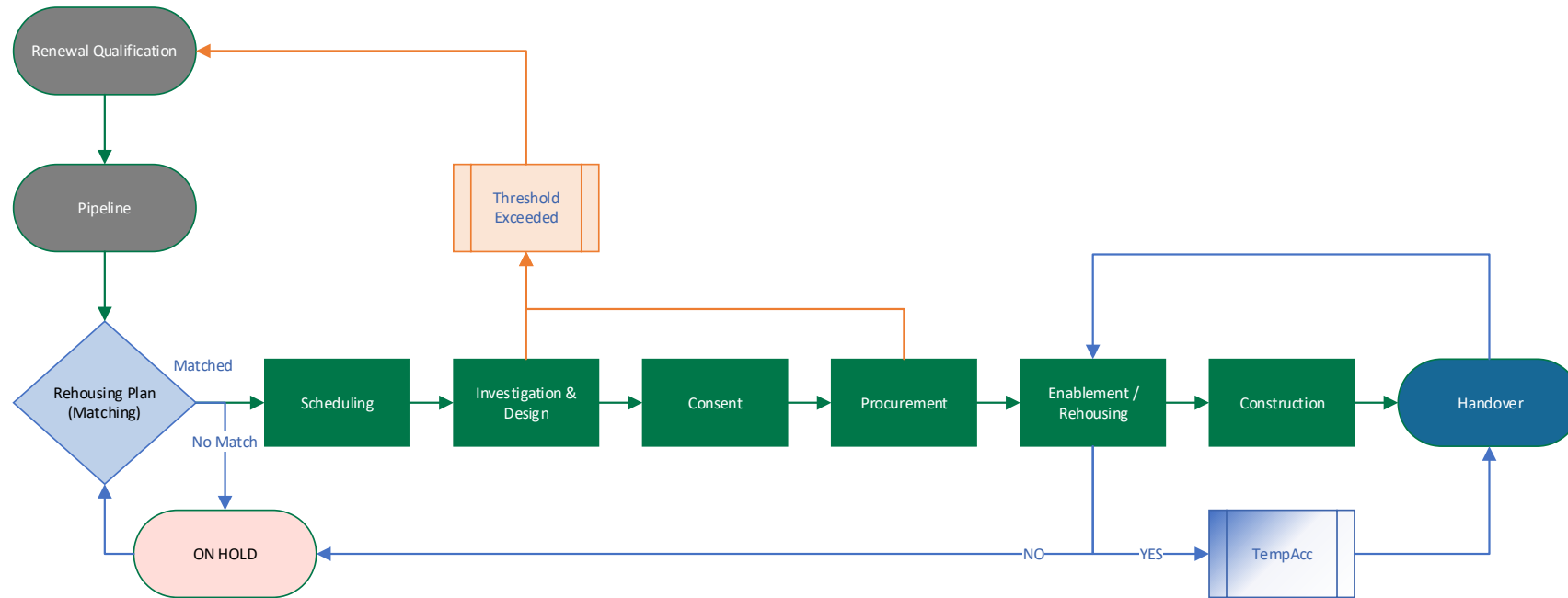
Project Lifecycle

- Plan, engage, schedule
- Prescribed milestones for every project, along logical, industry standards
- Re-housing a focus

The Work: *how we do it – Programme*

Programme

- Linked projects together with dependencies including rehousing options, capacity of resourcing (designers, builders, consenting officers, tenancy managers etc.)

The Work: *how did we go – Early Lessons*

- Disruptions to the lives of people are hard to do well

- Trust is earned

- Reliability is not a given

- Ambition to rise to the challenge is not that infectious

- What we do is misunderstood, priorities conflict.

- Constraints and risks are mis-assigned, or not well understood.

![Kāinga Ora — Homes and Communities logo]

The Work: *Broader Challenges*

Cost

- Making the case to invest
- Inherent bias towards other forms of renewal

Scope

- Perfect vs Pragmatic
- Scale

Industry

- Unproductive?

![Kāinga Ora Homes and Communities]

The Work: *Lesson(s) Learned*

- Be reliable.

The Work: *how we do it – Programmed Solutions*

Customers

- Schedule with focus on the most impacted – our tenants. Build some reliable comms and planning for them to work with.

Suppliers

- Focus on us, as a client – improve our reliability

- Schedule to provide consistent, reliable and sustainable pipeline of work

Materials

- Focus on unreliable materials, contract to make these reliable

Culture

- Building strong relationships - Common theme – be reliable, this goes for everyone in the supply chain!

- Appropriately allocated risk and issues management.

Barbara's Retrofitted Home

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The Work: *Programming for Change*

Strategy

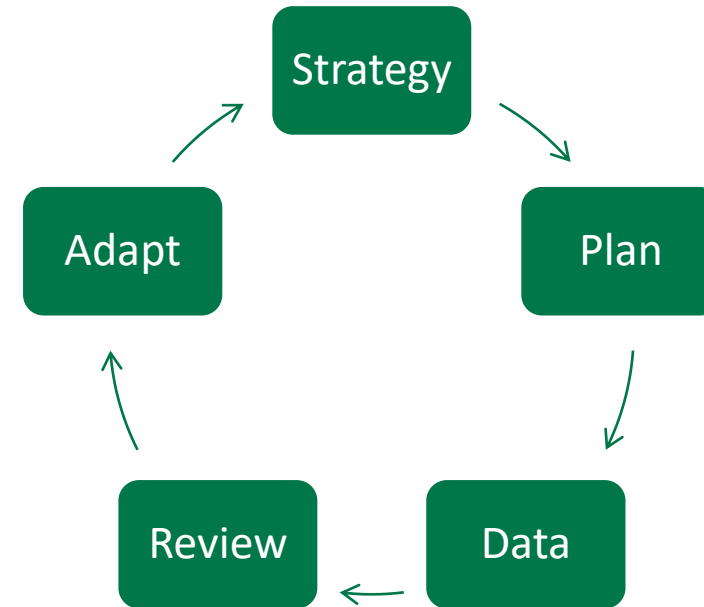- Clear Goals

Plan!

- Plan for reliability

Data

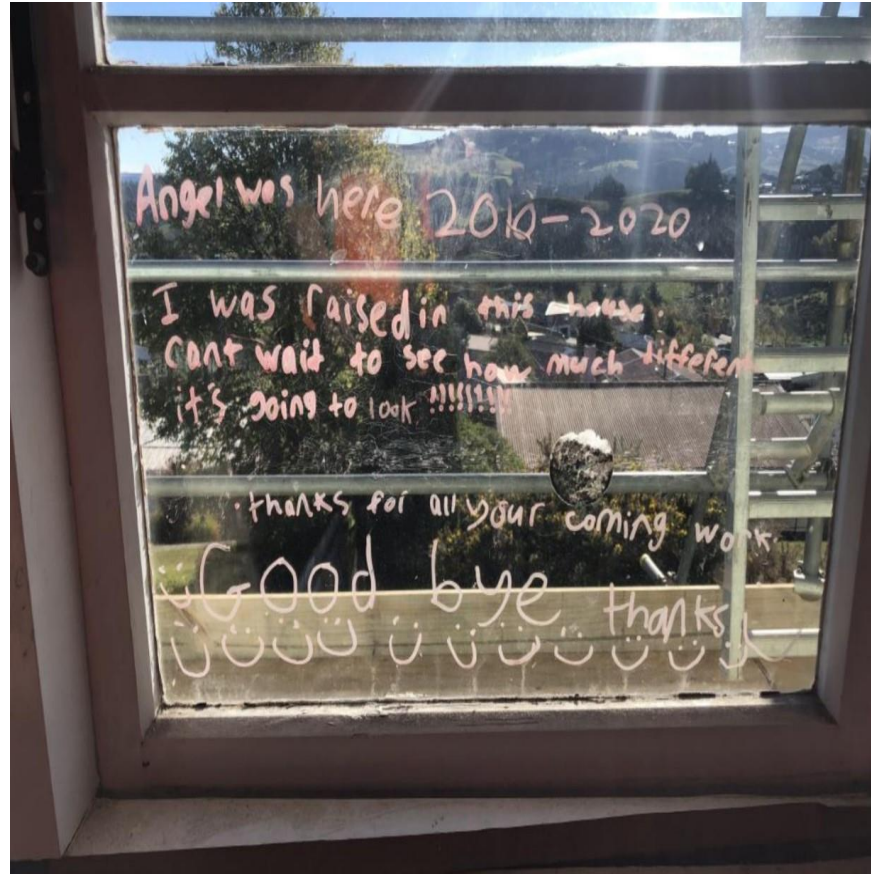- To be able to meaningfully review, you need good reliable data

Review

- How ever good your plan, it's also wrong, so keep looking and

Adapt

- Adapt and change as circumstances change.

Strategy → Plan → Data → Review → Adapt → (Strategy)

Opportunity

- Improve our housing – the need is there, the **why** is known, the **who** is known. But the **when** keeps being delayed - **What can we do about it?**