

F. Gordon Wilson Fellowship for Public Housing Grant Application

1. Who We Are

pre:fab is a collaborator, educator, researcher, producer, promoter, publisher and (not-for-profit) practice; a collective of collectives; a framework to aggregate, cultivate and support alternative practices in Aotearoa New Zealand; a space to create and share resources, make stuff, produce research, be the audience for that stuff and that research, and generally create a collaborative, generative and convivial space for new and different modes of architectural practice. pre:fab is Future Belonging.

2. Stated Purpose

pre:fab will investigate the opportunities and challenges of *Radical Retrofit* of existing residential building stock as a public housing strategy in inner-city and satellite-centre suburbs in Tāmaki Makaurau. This strategy can be summarised as converting existing single family houses in residential suburbs into multi-occupancy shared living developments through alterations and small scale additions to the existing buildings or site rather than demolishing and rebuilding.

Radical Retrofit, in contrast to a design and construction culture all too ready to replace the old with the new, takes a light touch approach to new housing supply by imagining new ways our existing housing stock can be modified to accommodate a range of denser cohousing type scenarios, ownership and development models in otherwise low occupancy areas. These modifications could range from fully state supplied social housing, to state support for self-organised community projects that both increase density and lean into existing services, infrastructure, and local economies.

Supplementing new medium to high density ground-up development particularly in areas where this is not allowed, *Radical Retrofit* proposes a public housing solution that recognises the physical capacity of existing buildings to house people in a more resilient, healthy way, making these places more available, more diverse, and more connected, while preserving the architectural heritage of the existing urban environment. pre:fab would explore the multifaceted opportunities of *Radical Retrofit* through a mixed methods approach of empirical, sited, community-engaged and design-based research. Pakuranga and Ponsonby are good illustrations of the broad range of suburbs suitable for radical retrofit—low density satellite centres located close transport links with well developed local economies, services, and character.

Ongoing research and innovation into private and public housing supply through ground-up development, new construction practices, and limited profit controlled housing markets etc. is already taking place, and will continue to do so. As outlined in the below table, *Radical Retrofit* is a supplementary solution that supports these conventional public housing strategies by directly connecting public housing design with critical social, environmental, and economic issues using

architectural technologies and knowhow; Epochal challenges including limited resources, ageing populations, climate change, urban sprawl, spatial inequality, social dissolution, land banking, and profit driven development are all brought into sharp focus by *Radical Retrofit* which offers architectural practice a rare opportunity to respond to each:

Epochal challenges	Radical retrofit response	Architectural technologies of the response
Limited resources	Minimal intervention	Concept; detail; demo plan; procurement
Ageing population	Intergenerational	Program; site/plans; sections; elevations
Climate change	Climate resilience	Location plan; services; specification; LCA;
Ongoing sprawl	Density	Nonsite, master plan; site plan; land use
Spatial inequality	Diversity	Noli plan; client communities; site section
Social dissolution	Community	Codesign; ground plan; perspectives
Profit incentive	Controlled markets and state supported self organised development	Client; engagement; contracts; titles; fee

pre:fab anticipates growing demand for public housing as population, land value, and inflation increase while western globalised economies unsupported by extractive mining industries continue to stagnate. pre:fab has also noticed an emerging interest in cohousing across Aotearoa uniting a diverse range of ages, backgrounds, and experience. These observations are connected, but our experience leads us to believe that this interest is the aggregate expression of latent and widespread desires for more collective, more connected, and more intimate living arrangements that exceed simple financial causes.

As well as dedicated new social housing in otherwise low-density, highly sought after areas connected to public services, *Radical Retrofit* proposes a housing supply model that provides both social and subsidised housing together in cohousing type development scenarios to a newly emerging demographic increasingly excluded from secure long term housing options but not eligible for government support. As all aspiring cohousing communities discover, self-funded, ground-up, alternative ownership development is both challenging and risky. pre:fab sees the opportunity for this research to speculate on and evaluate how the policy innovations, regulatory changes, cultural practices, theoretical knowledge, and practical knowhow required to deliver and support the provision of traditional social housing through *Radical Retrofit* might also enable self-organised cohousing communities to undertake their own collective housing projects—both with or without

government support—with more certainty and less risk, thereby making new forms of collective living more accessible, more diverse, and more numerous.

Further consideration of ongoing innovation in ownership models, lending instruments, public/private partnership through land trusts and circular development funds, limited profit development, controlled housing markets, and complimentary taxation policy etc. means research around *Radical Retrofit* provides rich opportunity for prototyping new models of building, adapting, and living together, that integrates social housing with other present and future forms of state support, with the potential to radically alter our relationship to land, property, housing, design and construction, space, community, and each other.

3. Project Outputs

pre:fab understands *Radical Retrofit* as the intersection of three participatory design challenges each of which require potential public housing communities, existing neighbourhoods, managing agencies and regulating authorities to collaborate for success. These are:

- land acquisition and regulatory reform
- spatial design, demolition and construction
- cultural practices and support systems

We will tackle each of these challenges in parallel through a series of public events alongside literature reviews, case studies, consultation, and design research. Public events will consist of participatory workshops designed to share knowledge about the opportunities and challenges of *Radical Retrofit*, speculate on the nature of its realisation in specific contexts, and develop strategies and collectively imagined design propositions to support successful delivery, all leading to **a final case study by design** at one or more real world locations in Tāmaki Makaurau. These events will include participants representative of the five interest groups affected by our proposal:

- Regulatory/institutional community
- Local neighbourhood
- Existing social housing community / engaging Kāinga Ora or City Mission
- Diversification of social housing community (those not currently eligible for social housing but on the edge, without access to secure, affordable, long-term housing)
- Anyone interested in living a community like this, or invested in state-supported projects of this type

The concluding outputs of this project may include:

- A speculative design proposition for one or more real sites in Tāmaki Makaurau providing a case study in *Radical Retrofit*, that reflects the cumulative outputs of the research and engagement workshops;

- in situ live action role playing or other performance-based or participatory workshops designed to speculate on the realities of life within and around the proposed case study;
- a kit of parts/flexible design concepts—including material specification, assemblies, and standardised auxiliary buildings—for *Radical Retrofit* public housing projects;
- catalysing of self organised communities interested in pursuing cohousing through *Radical Retrofit*; toolkits outlining existing legislation and future policy—including land acquisition, lands trust, and circular funds—for enabling both public and private radical retrofit suburban development; the design of new complimentary ownership and lending instruments;
- a visual road map illustrating the potential effects of *Radical Retrofit* housing development on cultural practices, local economies, and the built environment with time.

This study will necessarily include consultation and collaboration with government agencies, and other professional organisations and will take maximum advantage of the existing relationships of Te Kāhui Whaihanga to enable this through introduction and support.

4. Programme

December	Interest launch event/announcement/workshop (research team alignment) hui
December/January	Site research and selection
February	Design of Monthly community events begin - located near to the site/s
March	Community events begin - monthly through to August. 5 events supplemented by public education and speculation opportunities.
March-August	Data collection and workshops.
September/October	Concluding events and presentation

5. Budget

Community Events	\$4-6k inc materials and travel
Time	\$14-16k or 400-460hrs@\$35/hr
Total	\$20k

6. Team

This submission has been made by the [pre:fab collective](#).

pre:fab is a platform for collective reimagining, resource and knowledge sharing, and experimentation in Architecture in Aotearoa. pre:fab has ten core organising members and a broader membership who attends events and contributes to the pre:fab field. It is likely that the contributors to this project may change over the course of the programme based on time and availability. We have experience with this collaborative working environment and have systems in place for managing it.

For this proposal we have submission organisers, research team and research advisors. The submission organisers will maintain accountability to realising the research and its outputs over the course of the programme. The research team have collectively developed the proposal and will contribute to the research to varying levels of involvement. The research advisors are pre:fab members who are likely to advise or contribute to the research project if selected but who have taken an advisory as opposed to an active part in the submission process.

Submission Organisers: [Tessa Forde](#)

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Research Team: [Sakina Ali](#)

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See attached researcher bios, CV, and portfolio.