

Hoe ki angitū – Innovation Fund

3 NOVEMBER 2022

Round one successful applicants

Twenty-four applications have been approved for a total of \$4.2 million through round one of Hoe ki angitū Innovation Fund. The successful applications come from small community groups, iwi, start-up technology companies, to large research organisations and range in funding from around \$30,000 to \$500,000.

More than 110 applications were received for round one, which asked applicants to respond to three key challenges:

Challenge 1: Accelerating the use of recycled materials and sustainable practices in the construction, operation and maintenance of transport infrastructure

Applicant	Funding approved	Innovation summary
WSP New Zealand Ltd	\$145,000	Investigation into the feasibility of using lignin as a partial or 100% replacement for bitumen in New Zealand and to identify potential barriers to the implementation of such technology.
WSP New Zealand Ltd	\$141,000	Development of a sustainable recycling process for chipseal surfacing in which the bitumen and aggregate are separated and can be re-used in road surfacing.
UsedFULLY Ltd	\$182,238	Investigation into the feasibility of using recycled textile fibres in different types of asphalt, to understand why the application of polycotton fibre into chipseal has yielded such promising results, and to optimise the processing parameters to produce a reliable product at scale.
University of Auckland	\$88,435	Trial of several concrete mixes using various locally sourced waste materials and natural volcanic materials (pozzolana) to reduce the use of virgin aggregates and cement.
BECA Ltd	\$208,500	A study on the feasibility of a concrete recycling technology, owned by Taurus Concrete. The technology offers potential to accelerate the sustainable use of recycled materials by processing concrete waste back into its original components, with the objective of diverting thousands of tonnes of waste from landfill and creating a resilient local supply of materials.
Neocrete Ltd	\$240,000	Design of 'High Performing, Low-carbon Concrete' mixes, followed by two rounds of laboratory tests and scaled trials.
Higgins Contractors Ltd	\$88,400	'Blue-sky' research to perform a laboratory study that evaluates candidate materials from non-petroleum sources for use as a bitumen replacement.
Auckland University of Technology	\$80,420	Utilisation of local glass waste in an environmentally friendly, sustainable method for stabilisation of soft volcanic soil (e.g. pumiceous soils) in road construction.

Challenge 2: Integrating low-emission first-and last-mile travel solutions into the public transport system

Applicant	Funding approved	Innovation summary
University of Auckland	\$508,051.73	Pilot of a small micromobility hub at Auckland's Panmure Station and network of mini hubs in the surrounding neighbourhood.
Reureu Kotahitanga Ltd	\$250,000	Digital twining of existing railway track combined with real-time data from crossing sensors to build a 3D virtual model of an autonomous commuter service.
Jacobs New Zealand Ltd	\$299,800	Design of a "Concept of Operations" for a mobility hub trial via a planning and investigation study.
Mahu City Express	\$41,000	Trial of e-scooters for rental by coach passengers and the conversion of existing zero-emissions commuting coaches to include e-scooter charging capability as a first and last mile zero-emissions solution.
Ohmio Automotion Ltd	\$151,111	Development of performance-based requirements for testing and trialling an autonomous on-demand first-last mile solution in New Zealand.
Somar Digital	\$155,700	Development of an app that presents users with information about their travel choices in relation to the costs of private vehicle vs public transport use, including fuel, parking, and environmental costs.
Abley Ltd	\$183,375	Development of a minimum viable product for a commuter management platform ("OurCommute") for employers that incorporates a tool to capture information on travel behaviour, provide personalised travel planning, and incentives to change behaviour.
Shutl	\$297,000	Test and trial of Shutl's e-bike subscription service in Christchurch, allowing commuters to have an e-bike to call their own for or a simple weekly fee.

Challenge 3: Providing under-served communities with greater access to safer low-emission transport options

Applicant	Funding approved	Innovation summary
Big Street Bikers	\$98,384	Development of a low-cost e-bike subscription service model for underserved communities.
Mackie Research and Consulting	\$60,000	Development and testing of appropriate incentives for participants of the Māngere e-bike trial in South Auckland.
Eastern Bay Accessible Transport Charitable Trust	\$100,000	Trial of a community-led accessible transport scheme aimed at seniors and people with disabilities within the Whakatāne district.
MADE Group Ltd	\$368,000	Development of an activation program and campaign for change, to enable a new urban community to develop sustainable travel patterns from establishment, so that an entire community can demonstrate reduced reliance on private vehicle.
Liftango	\$164,000	Development of an 'On Demand' bus service to be designed in collaboration with iwi (Ngāi Te Rangi) for Matakana Island residents.
The Wednesday Challenge	\$176,200	Pilot of the The Wednesday Challenge (TWC), a challenge for people to use any mode other than a single occupancy car on Wednesdays, in Tairāwhiti.
Bike Auckland	\$27,258	A showcase of cycling options, enabling disabled people to try a cycle and identify current issues with accessibility to bike path networks.
Rebicycle Charitable Trust	\$105,247	Trial offering low-cost e-bikes or e-bike conversions to people who are underserved on a 'lease to buy' scheme, paying them off interest free over two years at a rate that is affordable to them.